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28 July 2023

Training and Education
Informing Resourcing Systems

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History. This publication is a major revision to TRADOC Pamphlet 350-70-9. The summary of changes lists the portions affected by this revision.

Summary. This pamphlet provides fundamental purposes, descriptions, and procedures of Army systems and processes, which enable training and educational course resourcing requirements identification, development, processing, and validation. The Army Program of Individual Training results from these systems and processes that are uniquely linked at key intervals to culminate in the projected student load requirements established for courses and new courses by fiscal year when published. The Army Program of Individual Training is the Army's training mission, entered into the Program Objective Memorandum for funding. The Army integrated and synchronized the Army Program of Individual Training resource requirements for training and education with Army systems such as: structure and manning decision review; Total Army Centralized Individual Training Solicitation; Army Training Requirements and Resources System; training resources arbitration panel; Total Ammunition Management Information System; and Training Resource Management Information System. Integration and synchronization of these systems occur at different levels, but each system addresses one or more pieces necessary to build the mission. The structure and manning decision review integrates annual force requirements for student load by course in relation to school location and training capacity, which refines the overall mission. The Training Requirements Analysis System integrates external systems of Total Army Centralized Individual Training Solicitation, training resource arbitration panel, Training Resource Management Information System, and training

*This pamphlet supersedes TRADOC Pamphlet 350-70-9, dated 12 October 2012.

aids, devices, simulators, and simulations with the training development and implementation process. In addition, the Training Requirements Analysis System enables accurate data insertion into the Army Training Requirements and Resources System to maintain the integrity and currency of course and student data. For specific policy guidance in the management of the Training Requirements Analysis System, see TRADOC Regulation 350-70 (Army Learning Policy and Systems). Training and education information systems include the Army Training Requirements and Resources System and the Army Training Development Capability. The Army Training Requirements and Resources System is the Army's system of record for all Army courses and stores course data by school, proponent, and fiscal year. The Army Training Development Capability is the primary training development tool for training and education developers and managers. The Institutional Training Mission Management Tool helps Training and Doctrine Command manage the Training Requirements Analysis System staffing.

Applicability. This pamphlet applies to U.S. Army Training and Doctrine Command activities and the Army School System training institutions responsible for managing, developing, and implementing learning products. It also applies to non-Training and Doctrine Command agencies and organizations possessing memoranda of understanding or agreement and contracts for developing learning products for Training and Doctrine Command and Army School System agencies and organizations.

Proponent and exception authority. AR 350-1 (Army Training and Leader Development) assigns the Commanding General, U.S. Army Training and Doctrine Command the responsibility for Army learning (training and education) guidance and procedures contained within. The proponent of this pamphlet, Headquarters, U.S. Army Training and Doctrine Command, Deputy Chief of Staff G-3/5/7, Training Operations Management Activity, is the authority to approve exceptions or waivers to this pamphlet consistent with controlling law and regulations, unless otherwise designated. The proponent grants exceptions to this pamphlet on an individual basis. Activities may request a waiver to this pamphlet by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. The commander or higher senior leader of the requesting activity will endorse all waiver requests and forward through the higher headquarters to the pamphlet proponent. Requests must include requestor contact information; type of request (initial, extension, modification, appeal, or cancellation); specific pamphlet line items requested for waiver; unit, institution, or center/school affected; proposed alternative; justification; impact; expected benefits; anticipated effective dates; and duration requested. The proponent continually seeks innovation and process improvement. The proponent will consider significant process improvements and global exceptions for addendum to this pamphlet prior to the next revision.

Suggested improvements. Submit changes for improving this publication on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through channels to Headquarters, U.S. Army Training and Doctrine Command, Deputy Chief of Staff G-3/5/7, Training Operations Management Activity, ATTN: ATTG-TRI-MP, 950 Jefferson Avenue, Fort Eustis, Virginia 23604-5700. Additionally, individuals and organizations may send comments electronically using usarmy.leavenworth.tradoc.mbx.armyu-policy-and-governance@army.mil.

Distribution. This pamphlet is available in electronic media only at the TRADOC Administrative Publications website, <https://adminpubs.tradoc.army.mil>.

Summary of Change

TRADOC Pamphlet 350-70-9
Informing Resourcing Systems

This major revision, dated 28 July 2023 -

- o Changes the pamphlet name from Budgeting and Resourcing to Informing Resourcing Systems.
- o Updates procedures and processes to comply with TRADOC Regulation 350-70.
- o Includes Automated Training Requirements Analysis System Abbreviated Cost Benefit Analysis.
- o Provides an overview of resourcing Army learning products and doctrine publications development (chap 1).
- o Provides detailed information concerning workload management (chap 2).
- o Provides information concerning resource commodity areas (chap 3, sec II).
- o Provides additional information on structure and manning decision review (chap 4, sec IV).
- o Provides clarity of the Training Requirements Analysis System process (chap 4, sec I).
- o Provides guidance and standardizes Army training and education learning product development to inform resourcing systems.

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Contents

	Page
Chapter 1 Introduction	7
1-1. Purpose	7
1-2. References	7
1-3. Explanation of abbreviations and terms	7
1-4. Records management requirements	7
1-5. Scope	7
1-6. Army learning product development overview	7
1-7. Training Requirements Analysis System overview	8
Chapter 2 Resourcing Army Learning Products to Enhance Army Readiness	10
2-1. Learning products	10
2-2. Learning product workload management	12
2-3. Training and education development workload management process responsibilities	13
2-4. Workload databases	17
2-5. Doctrine development process	17
Chapter 3 Resource Models and Commodities	18
Section I Resource Model Interfaces	18
3-1. Course Level Training Model description	18
3-2. Course Level Training Model Benefits	18
3-3. Web-based Course Level Training Model	19
3-4. Institutional Training Resource Model description	19
3-5. Institutional Training Resource Model component costs	19
3-6. Input interfaces to Institutional Training Resource Model	21
3-7. Information interfaces from Institutional Training Resource Model	21
3-8. Aviation Training Resource Model	21
Section II Resource Commodity Areas	22
3-9. Areas of resource commodities	22
3-10. Equipment	22
3-11. Facilities	22
3-12. Training aids, devices, simulators, and simulations	22
3-13. Ammunition	22
3-14. Dollars	23
3-15. Manpower	23
Chapter 4 Resourcing Institutional Individual Training and Education	24
Section I General	24
4-1. Training Requirements Analysis System	24
4-2. Training Requirements Analysis System Product Relationships	27
4-3. Training Requirements Analysis System document submission requirements	27
4-4. Course version	31
4-5. Business rules for TRADOC course growth process (less basic combat training)	31
4-6. Course resourcing	36
4-7. Managing course growth	38
4-8. Course implementation and course deletion	39
4-9. Accounting for distributed learning	40
Section II Course administrative data	42
4-10. Course administrative data description	42
4-11. Course administrative data approval authority	44

Contents (cont.)

	Page
4-12. Course administrative data revision and submission requirements.....	44
Section III Program of instruction	45
4-13. Program of instruction description	45
4-14. Program of instruction approval authority	45
4-15. New program of instruction and revision submission.....	46
4-16. Program of instruction format/automation	48
4-17. Special instructions.....	49
Section IV Structure and manning decision review.....	50
4-18. Structure and manning decision review process	50
4-19. Structure and manning decision review scheduling.....	51
4-20. Conducting the structure and manning decision review.....	53
4-21. Post structure and manning decision review	55
4-22. Quality control criteria	55
Appendix A References	56
Appendix B General Information	58
Appendix C Formats.....	69
Glossary	74

Table List

Table 4-1 Training Requirements Analysis System documents submission.....	29
Table 4-2 Training and education course resources	37
Table 4-3 Course implementation framework.....	39
Table B-1 Distributed Learning Instructor/Facilitator-to-Student interaction factor matrix.....	60
Table C-1 Section titles and paragraph headings in Appendix C.....	69

Figure List

Figure 2-1. The Army workload management process.....	11
Figure 2-2. Estimated time values	12
Figure 2-3. Phase 1, Workload management process training	13
Figure 2-4. Phase 2, Training and education development workload management data collection	14
Figure 2-5. Phase 3, Training and education development workload management data analysis.....	15
Figure 2-6. Phase 4, Training and education development workload management data reporting.....	16
Figure 2-7. Phase 5, Training and education development workload management process update.....	17
Figure 4-1. Product relationships.....	27
Figure 4-2. Course growth flow.....	36
Figure 4-3. Recording time in Army training requirements and resources system	41
Figure B-1. Peacetime course length in week formula.....	65
Figure B-2. Calculating days	65
Figure B-3. Mobilization course length formula in weeks	66
Figure B-4. Converting minutes to tenth of hours	66
Figure C-1. CAD/ POI MOT request format.....	70
Figure C-2. Distributed Learning supplemental information	73

Chapter 1 Introduction

1-1. Purpose

This pamphlet provides detailed guidance for developing and documenting resource requirements for Army learning products. It includes the integration and synchronization of resource requirements generation into Army systems and processes. Training Requirements Analysis System (TRAS) is the Army's requirements and resourcing management system providing timely documentation of Army learning product resource requirements for inclusion into resource acquisition systems. TRAS ensures students, instructors/facilitators, facilities, ammunition, equipment, and funds converge at the right place and time to implement approved training strategies.

1-2. References

See appendix A for required and related publications and referenced forms.

1-3. Explanation of abbreviations and terms

Explanations of abbreviations, special terms, and acronyms are in the glossary.

1-4. Records management requirements

The records management requirement for all record numbers, associated forms, and reports required by this pamphlet are addressed in the Army Records Retention Schedule-Army (RRS-A). Detailed information for all related record numbers, forms, and reports are located in Army Records Information Management System (ARIMS)/RRS-A at <https://www.arims.army.mil/>. If any record numbers, forms, and reports are not current, addressed, and/or published correctly in ARIMS/RRS-A, see DA Pamphlet 25-403 for guidance.

1-5. Scope

This pamphlet contains guidance for Army learning products to inform resourcing systems in the institutional training domain. Guidance provided in this pamphlet's chapters reinforce other chapters in this pamphlet. Users should cross-reference these chapters to accomplish their purposes. The procedural checklists, product templates, product samples, and information papers found in the appendices will assist the user in producing work products.

1-6. Army learning product development overview

The Army's peacetime mission is to prepare for war. The analysis, design, development, implementation, and evaluation (ADDIE) process is a vital mission component that provides mission-focused and task-based training and education. The ADDIE process produces effective and efficient instruction that promotes transfer of learning from the instructional setting to the job. The ADDIE process is a systematic approach to making decisions regarding Army training and education (refer to TRADOC Regulation (TR) 350-70, Army Learning Policy and Systems). This process determines the need, audience, subject, tasks, learning objectives, outcomes, setting, delivery method, and resources required to produce and implement relevant, effective, efficient, and current instruction.

1-7. Training Requirements Analysis System overview

a. TRAS is a planning and management process to validate and document commander/commandant-approved courses/phases for submission into the various resource systems for timely acquisition of necessary resources. TRAS integrates the outputs of the ADDIE process with planning, programming, budgeting, and execution (PPBE) by documenting learning plans, courses/phases, learning objectives, individual and collective tasks, and related resource requirements. TRAS documents capture the resource requirements (students, instructors/facilitators, facilities, ammunition, equipment, and funds) for learning product implementation. Proponents prepare all required TRAS documents and upload TRAS in the Training Development Capability (TDC). The validation process merges data input into various resource systems to obtain the assets necessary to implement courses/phases in a timely manner.

b. Centers of Excellence (CoEs), non-TRADOC schools and centers, and all basic combat training (BCT) conduct course administrative data (CAD) and program of instruction (POI) internal validations through all their supporting organization, command, and the reserve component (RC) (includes all Army National Guard (ARNG) and the United States Army Reserve (USAR)). Training Operations Management Activity (TOMA) will not staff CADs or POIs to subordinate agencies for validation. CoEs and schools submit requests for validation and prioritization of course growth to TRADOC core functional lead (CFL) Commanding General (CG), Combined Arms Center (CAC). CoEs, for which CAC is not considered the TRADOC CFL, and non-TRADOC CFLs submit requests for course growth through their supporting command to TOMA. All BCT course growth comes through the Deputy Commanding General, Initial Military Training (IMT)/CG, Center for IMT (CIMT) to TOMA. All course growth associated with advanced individual training, one-station unit training (OSUT), or Basic Officer Leader Course (any phase) staffs for concurrence and acknowledgement before submission to the CFL. TRADOC validated TRAS actions do not mean TRADOC is obligated to provide resourcing.

c. TRAS products result from either the design or development phase of the ADDIE process. Their submission and validation are separate and distinct from the ADDIE process. TRAS documents are requirements documents. TRAS submission and TOMA validation result in recognition of resource requirements only, and do not constitute a TRADOC obligation to provide resources. Proponents acquire resources using appropriate systems including, but not limited to: PPBE; the command plan; military construction, Army; and the training resources arbitration panel (TRAP). Proper use of TRAS ensures students, instructors/facilitators, facilities, ammunition, equipment, and funds converge at the right place and time to implement approved training strategies.

d. Changes in doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P) that affect long-range individual training strategies and/or efforts to improve efficiency and effectiveness generate changes to training and education programs.

e. Through planning, a manager develops a realistic estimate of the resources required to implement individual training and education, establishes milestones, and allocates available resources to the project. Initial learning product development planning begins with a training and education requirement resulting from a needs analysis or a new/updated training strategy. The

proponent's training and education development plan is the process by which proponents internally identify all relevant training and education requirements and resources.

f. Automation support. Developers use the TDC that supports the ADDIE process and maintenance of proponent learning product development plans. Each learning product proponent has a point of contact (POC) in their organization to assist with obtaining and using the system.

(1) TDC provides uniformity of information, format, and procedures. The system enables information standardization across TRADOC proponent schools and participating installations.

(2) TDC reduces the time required to process and staff TRAS documents such as POI and CAD. A combination of computer hardware, software, and communication enhancements reduces response time from the proponent school to TOMA, TRADOC staffing elements, and vice versa. Schools and CoEs submit all POIs and CADs in TDC. POIs and CADs are learning products; the management of learning products includes prioritizing, integrating, and synchronizing Army training and education policies, processes, systems, and resources to inform decision making for the learning enterprise of the Army. Proponents review learning products at least once every three years after DOTMLPF-P triggering events (see TR 350-70).

g. The Institutional Training Mission Management Tool (ITMMT) (at <https://www.atrrs.army.mil>) provides two primary capabilities: TOMA uses ITMMT to staff and validate TRAS documents with organizations across the Learning Enterprise. ITMMT is common access card enabled, web-based, and leverages the current functionality available in the Army Training Requirements and Resources System (ATRRS). ITMMT is an integrated visualization tool that synchronizes training and resource management data from systems of record that support the Learning Enterprise. ITMMT interfaces with TDC and captures Institutional Training Resource Model (ITRM) requirements within the POI. Course Level Training Model (CLTM) imports only TRADOC validated POI course data from TDC, in a web-based one-way exchange of data. An ITRM pre-process routine generates a CLTM course equipment file and that file feeds into ITRM to produce the direct operational tempo (OPTEMPO) equipment cost. This exchange of data enables ITMMT to perform predictive analysis of equipment summaries in POIs.

h. The automated TRAS abbreviated cost benefit analysis (ATAC) is a mandatory submission for all course growth and new courses (formerly TAC-BA as described in TR 350-70). Active component and RC universally apply ATAC across institutional training and education curricula/training support initiatives to better enable and inform senior leader and staff analysis, and resource and prioritization decision making from school, center, subordinate commands, TRADOC, and Headquarters, Department of the Army (HQDA) levels. The ATAC generates a readiness and risk assessment that determines the likelihood and severity of risk to the operational force if new course or course growth initiatives are not funded. The risk assessment focuses on the new capability, gap associated with a new course, or a targeted capability/gap that is triggering the specific course growth (vice the rationale for the original course). The ATAC enables Army senior leaders and staff to make informed cost benefit and prioritization decisions. Staff reconcile senior TRADOC/Army leader approved ATAC recommendations, as necessary, with the corresponding CAD/POI for their formal submission to HQDA for formal programming and budgeting.

Chapter 2

Resourcing Army Learning Products to Enhance Army Readiness

2-1. Learning products

Relevant and accurate learning products – whether for the generating force or the operational force – are key enablers for Army Readiness. The development and sustainment of learning products depends on a cohort of highly trained and knowledgeable training developers. As with training, equipping, and other factors leading to Army readiness, the PPBE resources training developers and the various sub-systems and established procedures to fund all Army requirements.

a. Using the training developer (TD) workload management reporting process for Army learning product development, centers, schools and activities build and submit the annual program objective memorandum (POM) submission. Schools staff these requirements through CAC Deputy Chief of Staff (DCS) for Resource Management (G-8) to TRADOC G-8 to HQDA, DCS, Operations, Plans, and Training (G-3/5/7)—who ultimately funds the school and center training developer requirements.

b. Use the workload management reporting process illustrated in Figure 2-1 (below) to develop the requirements for the POM. This process identifies the requirements to develop and sustain learning products against the available manpower (that is, adjusted capacity). Define the adjusted capacity in terms of man-years and based on the table of distribution and allowances (TDA) as it is projected for that specific POM year (for example, fiscal years (FYs) 23, 24, and 25).

(1) Key acronyms unique to figures in chapter 2: FMSWeb (Force Management System Website); GTA (graphic training aid); ICTL (individual critical task list); METL (mission-essential task list); OFS (officer foundation standards); STP (Soldier training publication); STRAP (system training plan); TADV MDEP (training development management decision package); TC (training circular); TED (training and education developer); (TD) training developer strength; TDC (Training Development Capability); TEM (training event matrix); TSP (training support package); TT PEG (Training Program Evaluation Group); WB (workbook); WM (workload management).

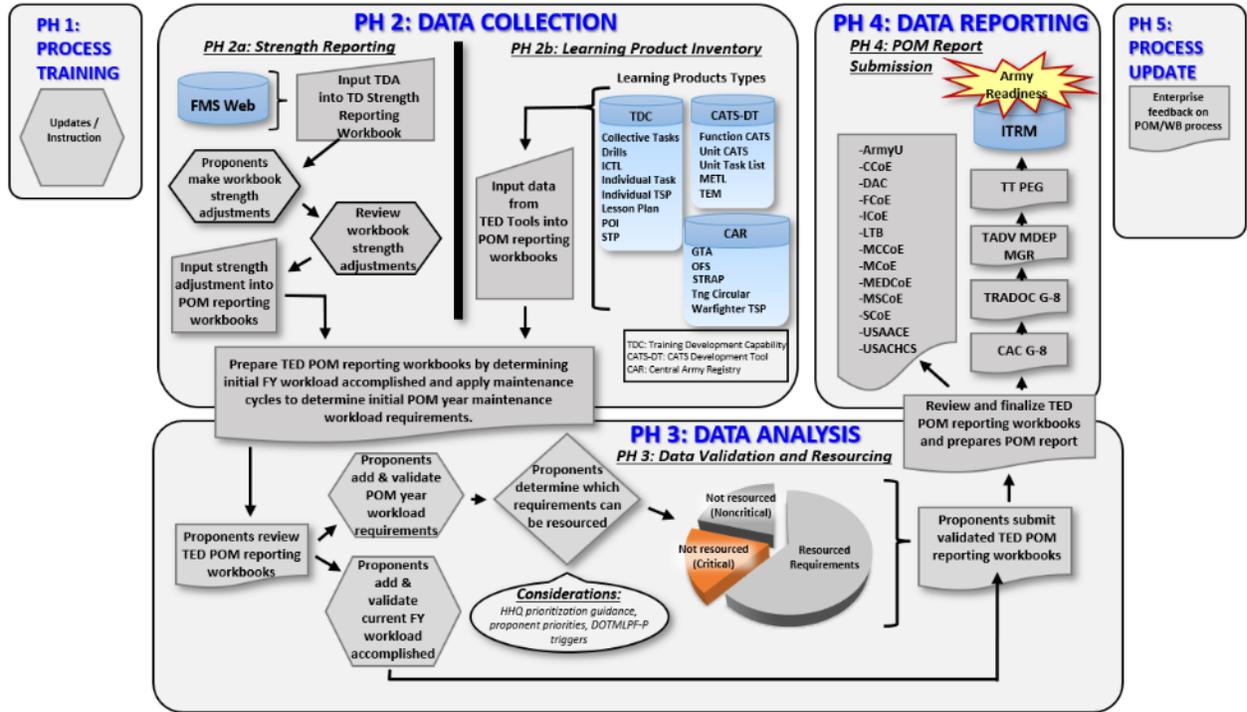


Figure 2-1. The Army workload management process

c. There are four major factors used to estimate the POM year projected requirements for training developers. Those factors are:

- (1) The number of products approved in the reporting year. This provides a baseline for estimating workload in the POM year estimate of the workload at the three-year mark.
- (2) The type of work needing accomplished (that is, new, review, revise).
- (3) Associated maintenance cycle and estimated time value (ETV) (see Figure 2-2) with learning product development timelines and associated sustainment requirements. ETVs only cover those products outlined in the TRADOC G-8 approved ETV table. Additionally, all training developers receive credit for 240 hours per year per developer for other documents/tasks.
- (4) The number of training developers available to do the work.

Product Type	Source Database	Maintenance Cycle (Years)	Unit of Measure	New (Hours)	Revise (Hours)	Review (Hours)	Maint (Hours)
Collective Task	TDC	3	Per Product	240	180	20	92
Drill	TDC	3	Per Product	340	230	24	116.7
Function CATS	CATS-DT	3	Per Product	240	180	20	92
GTA	CAR	3	Per Product	80	60	5	29.75
ICTL	TDC	3	Per Product	440	230	20	114.5
Individual Task	TDC	3	Per Product	80	60	8	31.4
Individual TSP	TDC	3	Per Product	122	90	14	48.2
Lesson Plan	TDC	3	Per Academic Hour	17	10	8	8.9
METL	CATS-DT	3	Per Product	160	130	20	69.5
OFS	CAR	3	Per Product	160	110	24	62.7
POI	TDC	3	Per Product	57	40	12	24.6
STP	TDC	3	Per Product	160	110	24	62.7
STRAP	CAR	3	Per Product	240	180	12	87.6
TC	CAR	3	Per Product	2040	1530	84	734.7
Training Event Matrix	CATS-DT	3	Per Product	240	180	20	92
Unit CATS	CATS-DT	3	Per Product	240	180	20	92
UTL	CATS-DT	3	Per Product	160	130	20	69.5
WTSP	CAR	3	Per Product	490	330	74	189.2
DL/BL Simple	-	3	Per Academic Hour	229	29	29	29
DL/BL Moderate	-	3	Per Academic Hour	394	51	51	51
DL/BL Complex	-	3	Per Academic Hour	1178	155	155	155

Figure 2-2. Estimated time values

2-2. Learning product workload management

Learning product workload management is the execution of current and planned future learning product development and sustainment, a key enabler to support Army readiness. The workload management process:

- a. Determines adjusted capacity through reporting strength adjustments (vacancies, diversions, over hires, contractor manpower equivalent, and augmenters) to authorized MDEP.
- b. Draws current workload accomplishments and future requirements from the three authoritative databases measured against adjusted capacity.
- c. Input from TRADOC proponent schools validates critical learning product requirements are resourced.
- d. Prioritizes proponent training strategy decisions and applies appropriate maintenance cycles as defined in TR 350-70 and ETVs to determine workload requirements and capacities available to execute those requirements.
- e. Identifies shortfalls to Army readiness from proponents and schools identifying learning products that proponents cannot produce or sustain because of resource constraints. This is product managed risk (PMR) or simply “risk”. Proponents identify two types of shortfalls. They are:

- (1) Critical shortfall – A resource allocation category designating critical, not-resourced training and education development (TED) workload requirements critical to operational force

mission accomplishment that necessitate additional MDEP TADV POM funding. Lack of funding could result in operational force mission failure.

(2) Non-critical shortfall – A resource allocation category identifying learning product requirements that the adjusted TADV authorized personnel cannot accomplish. Proponents accept risk for delaying product maintenance.

2-3. Training and education development workload management process responsibilities.

a. During Phase 1, as illustrated in Figure 2-3 below, centers and schools provide instruction of any updates, modifications, and improvements to the tools and/or the WM processes.



Figure 2-3. Phase 1, Workload management process training

b. During Phase 2a., as illustrated in Figure 2-4 below:

(1) Download TRADOC TDA data from Force Management System (FMSWeb at <https://fmsweb.fms.army.mil>) and prepares proponent strength reporting workbooks for strength adjustment reporting.

(2) Download approved learning products data from the 1) TDC, 2) Combined Arms Training Strategy (CATS) Development Tool--also known as the Army Training Management System (ATMS) Development Tool, and 3) the Central Army Registry. Prepares proponent POM Reporting Workbooks.

(3) Apply ETVs to the approved learning products based on maintenance cycles to determine current FY accomplishments and future FY requirements.

(4) Determine initial PMR learning product workload. PMR is defined as previous year TED workload requirements not performed due to resource constraints; normally expressed as the number of man-years attributed to learning products that are past due for some sustainment action as determined by the application of maintenance cycles to learning products in the learning product inventory.

(5) TED POM reporting workbooks proponent review and validation.

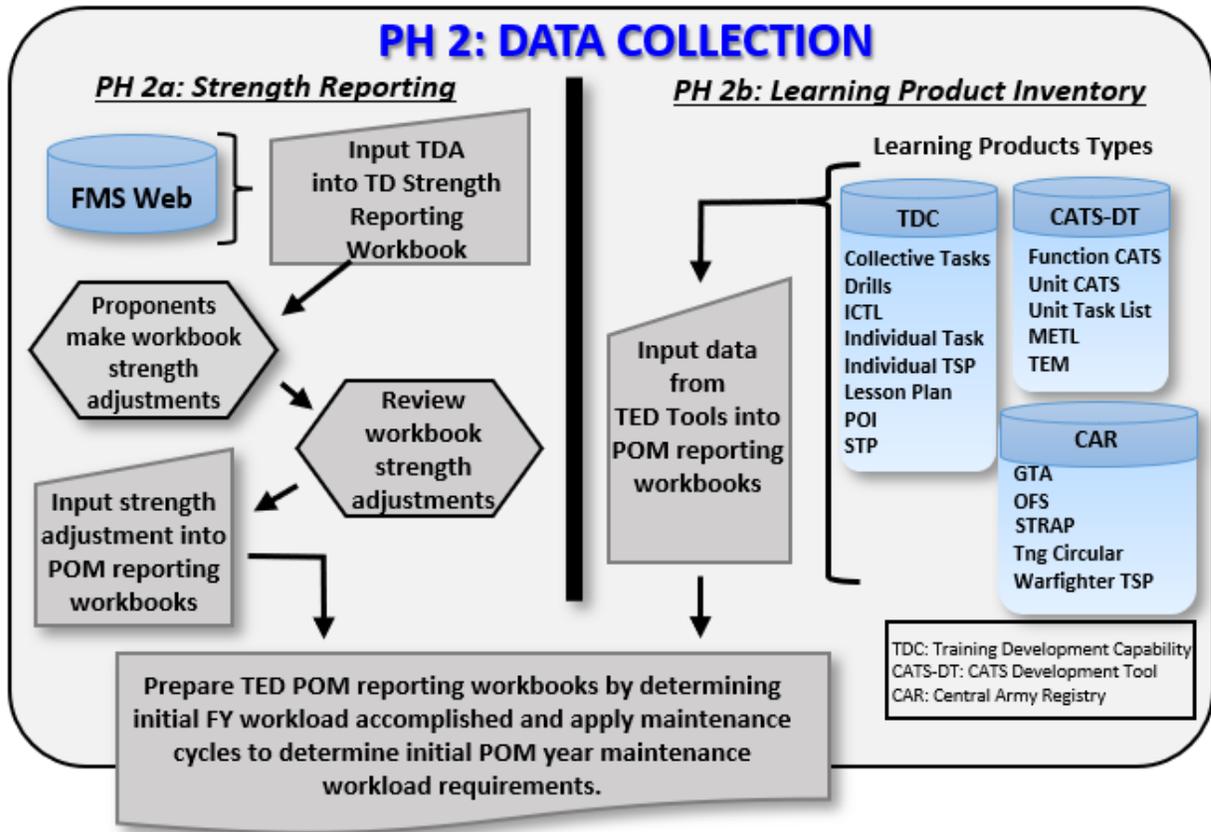


Figure 2-4. Phase 2, TED workload management data collection

c. As illustrated above in Figure 2-4, Phase 2, TRADOC CoEs, schools, and activities (proponents):

- (1) Identify adjustments to their authorized strength for the reporting period in the TED strength-reporting workbook.
- (2) Validate the data in their TED POM reporting workbooks including current FY accomplishments and future FY requirements.
- (3) Edit the POM reporting workbook as necessary to account for new or missing learning products.
- (4) Determine the resource allocation, resourced, critical shortfall (not resourced), or non-critical shortfall (not resourced), for the next three FYs POM TED workload requirements. Critical shortfall justification memorandums are necessary for any critical shortfalls identified in the third FY (the POM year).

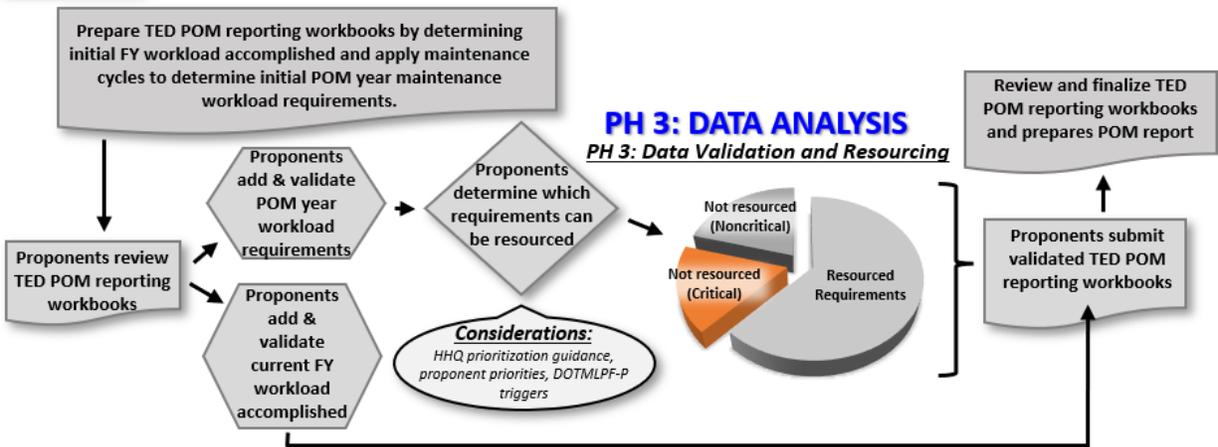


Figure 2-5. Phase 3, Training and education development workload management data analysis

d. In Phase 3, as illustrated in Figure 2-5 above:

- (1) Consolidate and analyze the strength adjustment reports.
- (2) Consolidate the accomplished learning product developments, requirements, and PMR workloads from the TED POM reporting workbooks.
- (3) Identify the total command learning product workload accomplishments for the FY.
- (4) Calculate the capacity utilization rates for the proponents and total command of the FY.
- (5) Identify to CAC/TRADOC where proponents will take risk by identifying which products have PMR.

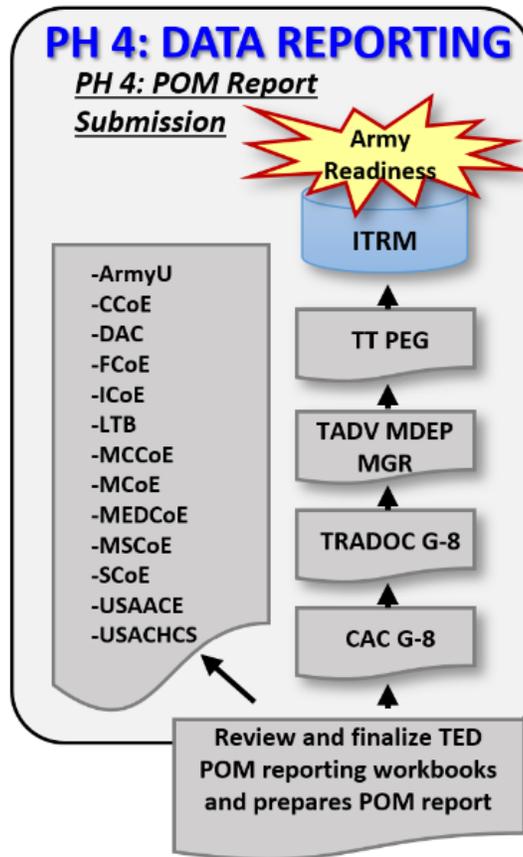


Figure 2-6. Phase 4, Training and education development workload management data reporting

e. In Phase 4, as illustrated in Figure 2-6 above, CAC/TRADOC:

- (1) Develops the POM input for the training development MDEP requirements.
- (2) Identifies to HQDA what TRADOC can and cannot accomplish with current resources.
- (3) Justifies requirements for additional learning product development funding.
- (4) Supports resource decisions and distribution.

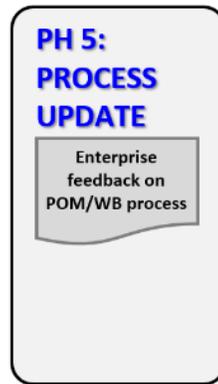


Figure 2-7. Phase 5, Training and education development workload management process update

f. Phase 5, as illustrated in Figure 2-7 above, begins at the conclusion of the POM report submission and runs to the start of the next FY training. Focus during this phase on specific comments addressing the strength-reporting workbook, POM reporting workbook, and the TED WM Process Guide.

2-4. Workload databases

a. The three HQDA approved authoritative databases for workload management of Army learning products are the Central Army Registry, CATS, and TDC. These databases contain the 21 types of learning products used to determine workload. Schools and proponents use these databases to capture and prioritize product development requirements to remain consistent with Army priorities.

b. The annual TRADOC Commanding General's guidance and most relevant, critical, and labor-intensive doctrine development milestones establish learning product prioritization. The model calculates the work effort in accordance with established ETVs per product type over each year of the execution, budget, and product POM cycle.

2-5. Doctrine development process

For more information on the Army doctrine development and management of Army doctrine using the above resourcing model, see TR 25-36 (The U.S. Army Training and Doctrine Command Doctrine Publishing Program).

Chapter 3

Resource Models and Commodities

Section I

Resource Model Interfaces

3-1. Course Level Training Model description

a. CLTM dovetails with the Army's training development processes and systemically links to TDC that provides the type and usage of ammunition, equipment, facilities, training aids, devices, simulators, and simulations and other relevant POI information. The CLTM provides the readiness linkage to the training standards of institutional schoolhouse training of AC Soldiers and RC Soldiers. CLTM supports the POI process used in the ITRM by using information generated from tasks in the POI as the metric that links individual readiness requirements to levels of funding.

b. Web-based CLTM, in a one-way exchange, imports POI course data from TDC utilizing the TRADOC validated POI. Currently, only feed equipment data into ITRM for costing; however, CLTM also imports ammunition, facilities, and training aids from TDC. All POI information imported into CLTM reflects the most current TRADOC validated POI.

c. An ITRM pre-process routine generates a CLTM course equipment file, and ITRM processes that file to produce the direct OPTEMPO equipment cost. Direct OPTEMPO costs are based on pricing the POI requirements of equipment to meet the training and education standard. OPTEMPO data is calculated against workload and cost factors to derive an annual cost at a given institutional training and education readiness level. OPTEMPO is the rate at which a single system is projected reasonably used for training in a single iteration (lesson) of a designated course. Rates are expressed in miles or hours depending on the piece of equipment.

d. The CLTM administrator extracts the TRADOC validated POI equipment data in the form of a course equipment report, which has a direct effect on funding. Data sent to ITRM is calculated against workload and cost factors to provide an annual cost for direct OPTEMPO equipment usage.

3-2. Course Level Training Model Benefits.

The CLTM model provides HQDA, Headquarters (HQ) TRADOC and TRADOC schools a common platform to view POI data. In addition to POI equipment information, CLTM also allows schools the ability to view their POI information in an organized and easy to understand format; thereby, allowing them to make adjustments prior to their POI validation in TDC. CLTM reports provide the following information:

- a. Course number.
- b. Delivery method.
- c. Course name.
- d. Status date.
- e. Training location.
- f. Management category.
- g. Optimum class size.

- h. Course length.
- i. Instructor actions (IA).
- j. Total academic hours.
- k. Equipment report, facilities report, ammunition report and training aids, devices, simulators, and simulations (TADSS) report rolled up by lesson number, by course, and by installation.

3-3. Web-based Course Level Training Model

a. The CLTM homepage is <https://cprobe.army.mil/TRMIS>. CLTM managers, TDC administrators, and select personnel have access to CLTM. Once granted access, the user can do the following:

(1) View and run reports for all courses in CLTM, regardless of installation or school. Users will not have the ability to change any TRADOC validated POI data in CLTM.

(2) View an in-progress POI in a CLTM format before sending it to TOMA for validation by running comparison between User loaded POI and TRADOC approved POI. CLTM has embedded instructions to view an in-progress POI and the POI for comparison as the source. CLTM dramatically improves the accuracy of POI information in TDC. Accurate and current POI data in TDC and CLTM will improve ITRM's direct OPTEMPO requirements.

b. TRADOC schools keep their TRADOC validated POI data current in TDC and conduct periodic checks of that data in CLTM to ensure their TRADOC validated POI data in TDC is reflected in CLTM.

3-4. Institutional Training Resource Model description.

ITRM is a HQDA, G-3/5/7 sponsored model used to calculate and cost institutional training and education requirements and associated resource requirements. It identifies the total cost (school operation cost and OPTEMPO cost) and life-cycle data of equipment required to teach each course as documented in the POI. Additionally, this model assists with integrating the training and education development manpower requirements with PPBE. ITRM is:

- a. A resource-packaging tool.
- b. A force-to-course model that determines learning product requirements by primarily using structure and manning decision review (SMDR)/Army Program for Individual Training (ARPRINT) data.
- c. ITRM has the capability to respond to changes in the force structure and HQDA policy in developing workload requirements.

3-5. Institutional Training Resource Model component costs

- a. Component costs. ITRM calculates the requirements for training and education dollars from the POI, TDA documents, and known fixed commodities, such as maintenance contracts.
- b. Cost factors. The factors that comprise the total cost of training and education are:

(1) Requirement-based areas: civilian payroll, direct OPTEMPO, and special items of interest; for example, service contracts, automation, one-time procurements, and Institutional Training-Temporary Duty (TDY).

(2) A Direct OPTEMPO cost definition, sub-component "B" of ITRM component cost direct OPTEMPO is the rate at which a single system (vehicle, radio, generator) is projected reasonably used for training in a single iteration/lesson of a designated course (rates expressed in miles or hours).

(3) Indirect OPTEMPO cost factors. TRADOC G-8 Planning Analysis and Evaluation (PAE) Directorate develops the factors (per capita rates) sub-component "M". Cost factors are based on a four-year average of expenditures in travel, contracts (not covered in special interest items (SII)), nuclear, biological, chemical supplies and equipment, organizational clothing and equipment, rents, printing, supplies and materials and equipment purchases that support the total training cost.

(4) Special clothing and equipment and Class IX non-moving equipment (CAT-B), sub-component "M" of ITRM is menu driven-cost per Soldier-course specific. Special clothing and equipment are items needed to conduct the training in a course but do not have a Deputy Assistant Secretary of the Army–Cost and Economics cost factor. Schools/CoEs identify these items. TRADOC G-8, PAE, approves items placed in ITRM on a cost per Soldier-course specific basis. Items include Class IX non-moving equipment. In order for a school to put miles in their POI against a piece of equipment the piece of equipment must move. In many cases a piece of equipment capable of moving is used to teach future mechanics but does not move. During the course of the year, schools lose or break parts teaching these courses—schools capture these costs and once approved by TRADOC G-8 PAE costs are placed in ITRM on a cost per Soldier basis.

(5) SII definition, sub-component "C" of ITRM component cost. SII are requirements for products or services in direct support of training corroborated by training requirement documents (for example, POI, STRAP, and HQDA Directive) and not costed by the ITRM cost drivers. SII products are typically non-standard equipment or supplies required for training listed in the POI but not priced. SII includes a description, justification, costing methodology, output metrics, and impact to the Army if not resourced. HQ TRADOC validates SII via TRADOC's Mission Resource Board, Senior Resource Committee, and Board of Directors, and approved by HQDA, Assistant Chief of Staff for Operations and Plans (G-3). Review SII annually to ensure the requirement is still valid, costs are accurate, and requirement is not subsumed by ITRM cost drivers.

(6) Combat Training System Lifecycle Replacement is a joint TRADOC G-8 and TRADOC Deputy Chief of Staff for Signal (G-6) effort to collect the inventory of computers, printers, monitors, software, accessories, and IT services to determine the cost for the lifecycle replacement requirement. CoEs and schools provide an inventory of all computers, printers, monitors, accessories and services to TRADOC G-6. Using the Computer Hardware, Enterprise Software and Solutions contract (CHESS), TRADOC G-6 provides the cost of each type of computer to the TRADOC G-8 to develop the cost in accordance with AR 25-1; the Lifecycle replacement rate is 20% annually or once every 5 years. TRADOC G-8 provides the breakout of

the Combat Training System Lifecycle Replacement to the ITRM contract team to include the ITRM Coordinator.

3-6. Input interfaces to Institutional Training Resource Model.

The proponent participates in the ITRM process on a daily basis. The following interfaces feed ITRM to generate the cost requirements for institutional learning products:

a. CLTM is an on-line interface transactions model that enables POI based pricing.

b. Per Capita Validation (Formerly WEB-PC). This program reflects schoolhouse indirect costs that assist ITRM by allowing resource managers to view and adjust financial accounting data so that indirect OPTEMPO rates project future requirements and not historical errors (such as accounting errors and double counting).

c. SII. Unique requirements identified by the school and submitted to the G-8 during the POM build year.

3-7. Information interfaces from Institutional Training Resource Model.

b. ITRM provides data to the field for mass dissemination of resourcing and funding for locked budget cycles.

a. Training Resource Management Information System (TRMIS). TRMIS displays programming information by year to enable yearly comparisons and cost factor analyses. It also enables budget formulation and the alignment of courses by the MDEP and Army management structure among the Army's training/education, manpower, and costing systems. TRMIS also displays the cost and workload results from ITRM and the Aviation Training Resource Model (ATRM) available at the lowest level of detail for cost and workload analyses. Only load official results viewed by HQDA, HQ TRADOC, CoEs, and TRADOC schools (that is, course level is the lowest level of detail for ITRM).

3-8. Aviation Training Resource Model.

The Aviation Training Resource Model (ATRM) is a HQDA, G-3/5/7 sponsored model used to calculate and cost the Aviation Flying Hour Program for operational training and institutional training requirements and associated resource requirements. It identifies the Flying Hour OPTEMPO funding to teach each aviation course that requires flight hours as documented in the POI. Additionally, this model assists with integrating the Aviation Direct OPTEMPO requirements with PPBE. ATRM is:

a. A resource-packaging tool.

b. A force-to-course model that determines Flying Hour OPTEMPO requirements by primarily using SMDR/ARPRINT data and the Deputy Assistant Secretary of the Army–Cost and Economics rates by type of aircraft.

c. ATRM has the capability to respond to changes in the force structure and HQDA policy in developing workload requirements.

Section II

Resource Commodity Areas

3-9. Areas of resource commodities

Resource commodity areas include equipment, facilities, TADSS, ammunition, dollars, and manpower to support proponent long-range training strategies (see para. 4-3.a.), CAD, and POIs. ITMMT dashboards, reports, and ATAC provide commodity area requirements and inventories as well as predictive analysis, costing, and “what if” capabilities (see para 1-7.g.).

3-10. Equipment

Equipment refers to an item of tactical or non-tactical equipment or components used for training purposes in which the pieces of equipment do not lose their identity as end items for operational purpose, for example rifles, vehicles, communications equipment, and aircraft. Subject to availability, convert operational equipment already in the Army inventory to training equipment by executing a change to the gaining organization’s TDA, thereby authorizing the equipment’s issuance to the organization. Procure operational equipment required for training that is not in the Army inventory as items of TADSS in accordance with AR 70-1 (Army Acquisition Policy) and AR 350-38 (Policies and Management for Training Aids, Devices, Simulators, and Simulations).

Note. There is an acquisition and accountability process for non-Standard equipment/material accounted for as equipment and not TADSS (for example computers, monitors, projectors); they can fall under other training support devices but are not accounted for, technically managed, or supported by the Training Support-Material Army-wide Tracking System (TS-MATS) and are not Army wide supported.

3-11. Facilities

Facilities are permanent or semi-permanent. Examples include classrooms, auditoriums, laboratories, firing ranges (range towers, scoring benches, lane markers, and range signs), confidence courses, military operations on urbanized terrain complexes, aircraft mock-ups, jump school towers, or training areas. When documenting facility requirements in TRAS documents, it is important to include classroom technology requirements in the remarks section. Use DA PAM 415-28 (Guide to Army Real Property Category Codes), to obtain the facility codes. TRAS managers should consult installation managers to ensure facility codes match the facility in use. When developing a POI for multiple locations, the training developer may add a comment "or similar location" in order to meet the facility requirements of multiple training locations.

3-12. Training aids, devices, simulators, and simulations

TADSS include battle simulations, targetry, training-unique ammunition, dummy, drill and inert munitions, casualty assessment systems, GTAs, and other training support devices. All of these are subject to the public laws and regulatory guidance governing the acquisition of materiel.

3-13. Ammunition

a. Training ammunition managers act as the single POC to receive training ammunition authorizations from HQ TRADOC. Training ammunition managers sub-authorize to the supported TRADOC activities using the Total Ammunition Management Information System

(TAMIS) and allow supported TRADOC activities to request authorization changes as needed. The TRAS provides planning data for determining training ammunition requirements for all institutional training in TRADOC. Under TRAS, CAD and/or POI support the ammunition resource requirements.

(1) Proponents submit a CAD one to three years prior to the implementation FY and is the first resource document submitted in the SMDR/POM process. Proponents can use a CAD to provide an estimate of ammunition requirements. Proponents submit estimates of ammunition requirements with the CAD in the ammunition summary format of a POI.

(2) Proponents submit POIs not less than one year prior to implementation if there is no increase in resources, and submit POIs with increased resource requirements not less than two years from implementation. The POI determines short-range requirements and provides a list of all ammunition resources necessary to support the resident training program. This information is pivotal to determining accurate current year requirements. Proponents only use TRADOC validated POIs to compute training ammunition requirements. While the validated POIs establish the ammunition requirements, the proponent will then pursue the resourcing of those munitions through presentation to the Army Munitions Requirements Working Group and Council of Colonels (AMRWG/AMRCoC). Only through the AMRCoC do ammunition requirements gain HQDA approval and upload approval into TAMIS for resourcing.

b. Training ammunition managers manage short supply ammunition, verification of requirements, and day-to-day management of training ammunition for the TRADOC resident school system, U.S. Army Forces Command, Noncommissioned Officer Academies (NCOAs), and RC schools. Training ammunition managers work closely with installation ammunition managers, schools, and training developers to distribute training ammunition authorizations to installations and activities based on historical usage and requirements; to identify methods to narrow the authorizations versus usage gap; and to recommend cross-leveling and substitutions to sustain training.

c. Training ammunition managers can utilize ITMMT dashboards, predictive analysis, and report capabilities to view TDC and TAMIS data in order to plan, analyze, and adjust ammunition requirements as well as develop POI resourcing strategies.

3-14. Dollars.

This commodity area includes requirements such as: additional money for RC pay and allowances; student travel cost, TDY, permanent change of station (PCS); medical and base operations; additional maintenance; special duty pay (airborne, flight, drill pay, and any other additional allowances); and any other additional cost due to new course changes (that is, follow-on course, additional mandated training, certification requirements).

3-15. Manpower.

Through the application of manpower staffing models, TRADOC determines manpower requirements annually for several training functions. These applications generally follow the programming of student learning requirements as part of the SMDR process. Manpower staffing models establish requirements only and do not produce authorizations or dollars; HQDA, TRADOC, and CoEs distribute these resources through separate processes. Staffing models are currently applied for the following training functions:

a. Instructors/facilitators. In most cases, instructor staffing models generate manpower requirements for instructors/facilitators utilizing SMDR programmed student numbers and POI specific course data. Calculations are made generally at the course level.

b. Structure. SMDR programmed trainee loads and standardized company sizes determine manpower requirements for initial entry training student companies. These applications include requirements for initial entry training drill sergeants.

c. Direct Support to the Training Event (DSTE). Programmed students with POI identified field training days serve as the computation basis for DSTE manpower requirements. Proponents submit a commandant-approved POI to HQ TRADOC to validate, establish, or change DSTE requirements. All POI submissions with DSTE workload include data specified in TRADOC DSTE Model Implementation Guidance.

(1) No standard organization exists for DSTE. Support personnel reside primarily within the training structure. The DSTE model does not establish additional structure, overhead, supervision, command, or control for personnel performing POI support.

(2) Currently, there is no formula for estimating DSTE for new or revised courses. Proponents complete the new/revised POI and gain approval prior to DSTE workload credit. For questions concerning DSTE, contact TRADOC G-8, Manpower and Force Analysis Directorate (MFAD). Organizations request DSTE changes (usually expressed in terms of field training days) as part of a POI submission package, which received by TOMA is then staffed to TR G-8 MFAD. G-8 MFAD is the point of contact for DSTE Model Implementation Guidance, DSTE manpower issues, and TDA documentation.

Chapter 4

Resourcing Institutional Individual Training and Education

Section I

General

4-1. Training Requirements Analysis System.

a. The TRAS is a series of requirements documents (CAD and POI) used by the proponents to identify and articulate resource requirements by course. Proponents submit TRAS documents to HQ TRADOC G-3/5/7 TOMA. HQ TRADOC validates the resources required to conduct training and education. TRAS products result from either the design or development phase of the ADDIE process by a proponent enabling HQ TRADOC, schools, and other activities to plan and support the implementation of individual training and education. Submission requirements for TRAS are specific and followed to ensure identification and validation of resources for learning implementation.

b. POI/CAD, memorandums of transmittal (MOT), and other supporting enclosures as applicable (that is, course management plan, ATAC and TRAS quad chart (referred to as

Request of Additional Course Resources Brief in TR 350-70), RC and sister service concurrence memorandums, course comparison worksheet, HQDA or TRADOC tasking order or memorandum, and emails) are dated and signed within a six-month period prior to submission to TOMA. When proponents submit TRAS actions to TOMA that have exceeded the date (six months), or that have no date, an invalid signature, no signature, or incorrect information/data, TOMA sends TRAS back to the proponent with no action taken.

(1) Proponents coordinate TRAS documents with HQ TRADOC for validation of resource requirements.

(2) TOMA acts as the HQ TRADOC gatekeeper which processes, staffs, and maintains the approved TRAS documents.

(a) Staffing of proponent submissions includes conformance to policy, guidance, and validation of resource requirements.

(b) TOMA initiates coordination with the proponent to resolve issues following HQ TRADOC staffing, unless proponents withdraw documentation.

c. CFL, Army command (ACOM), Army service component command (ASCC), or direct reporting unit (DRU) may require proponent schools to coordinate TRAS documents with them before submission to HQ TRADOC:

(1) Integrate and synchronize the ADDIE process with the PPBE by documenting the long-range individual training strategies, identifying courses for implementation, and identifying individual training and education resource requirements.

(2) Engage related acquisition systems for students, instructors/facilitators, ammunition, equipment, training devices, dollars, and facilities to support individual training and education programs.

(3) Provide data input to the following systems and processes:

(a) ATRRS. The Army uses the ATRRS system of record as the key basis to develop resource requirements for the conduct of individual training and education. TRAS documents provide data for the ATRRS. ATRRS is the system of record for managing individual training and education for Soldiers, Army Civilians, and others attending Army quota managed courses (see AR 350-10 for more information on ATRRS).

(b) SMDR. The Army uses the SMDR process to establish training and education requirements for the first and second POM years and reconciles those requirements to an affordable, acceptable, and executable training and education program which the Army publishes using the ARPRINT. The purpose of the SMDR is to reach a consensus within the Army for the institutional training and education program two years out and reconcile any major changes for the upcoming budget year. HQDA Assistant Chief of Staff for Personnel (G-1) and G-3 conducts the SMDR annually in the September/October timeframe.

(c) TRAP. The Army uses the TRAP process to adjust the execution and budget year institutional training and education requirements including personnel, equipment, facility, and dollar resources (see AR 350-10 for more information on TRAP).

(d) Total Army Centralized Individual Training Solicitation (TACITS). Department of Defense agencies, the Total Army, other services, foreign, military, and civilian agencies submit their individual training requirements for the fiscal year for eventual input into ATRRS using the TACITS process.

(e) ARPRINT. The Army uses the ARPRINT mission and resourcing document for training base, Army recruitment, and professional development education. The ARPRINT identifies projected individual training and education requirements for established courses and for task-based instruction requiring new courses for the fiscal year.

(f) ITRM. The Army uses this model for calculating and costing institutional training and education requirements.

d. TRAS consists of two related documents: CAD and POI.

(1) The CAD is the proponent's initial estimate or projection of resource requirements such as equipment, ammunition, facilities, and instructor contact hours (ICH). The proponent prepares a CAD for each course. The CAD can also serve as a change document for submission of administrative changes to a specific course or course phase. A CAD accompanies a Military Occupational Classification System (MOCS) proposal for validation of estimated resources required to support impacted courses. The CAD is an administrative product generated by TDC. The CAD data, when entered in ATRRS, provides critical planning estimates enabling the recruiting, quota management, and personnel systems to function in order to ensure students and instructors/facilitators are on-station in sufficient time to meet training and education requirements. This action:

(a) Facilitates the development of quantitative individual training and education requirements addressed at the SMDR.

(b) Provides the basis for annual solicitation of individual training and education requirements (student input) through the TACITS survey for new and revised courses or course phases for use during the SMDR.

(c) Enables the development of the ARPRINT.

(2) The POI is the proponent's refined resource requirements document. The POI provides a detailed description of the course or course phase content; duration of instruction; instructional methods and techniques; and a list of required resources to conduct peacetime and Individual Ready Reserve (IRR) mobilization training and education based on a single course iteration using its optimum class size. The proponent is responsible for developing a separate POI for peacetime and mobilization use and must produce a POI for each course/phase identified in their proponent long-range training strategies (see para. 4-3.a). The course design data input into TDC generates the POI. The POI is a report output of the development phase of the ADDIE process.

Proponents enter lesson information into TDC to compile the POI. The POI refines and details the resource estimates provided by the CAD.

4-2. Training Requirements Analysis System Product Relationships

a. The TRAS provides a linkage between numerous Army systems, particularly the ADDIE process and various resourcing systems. See TR 350-70 for more information about TRAS related interfaces with systems and processes, such as the requirements determination and acquisition process, labor, Human Systems Integration, and PPBE.

b. There is a positive relationship between long-range individual training strategies, CAD, POI, and training and education design. Figure 4-1 shows these relationships. As they are not a TRAS document, proponents may use any form of long-range training strategies to articulate the proponent’s career-long training strategy for a military occupational specialty (MOS), area of concentration (AOC), or separate functional area (FA).

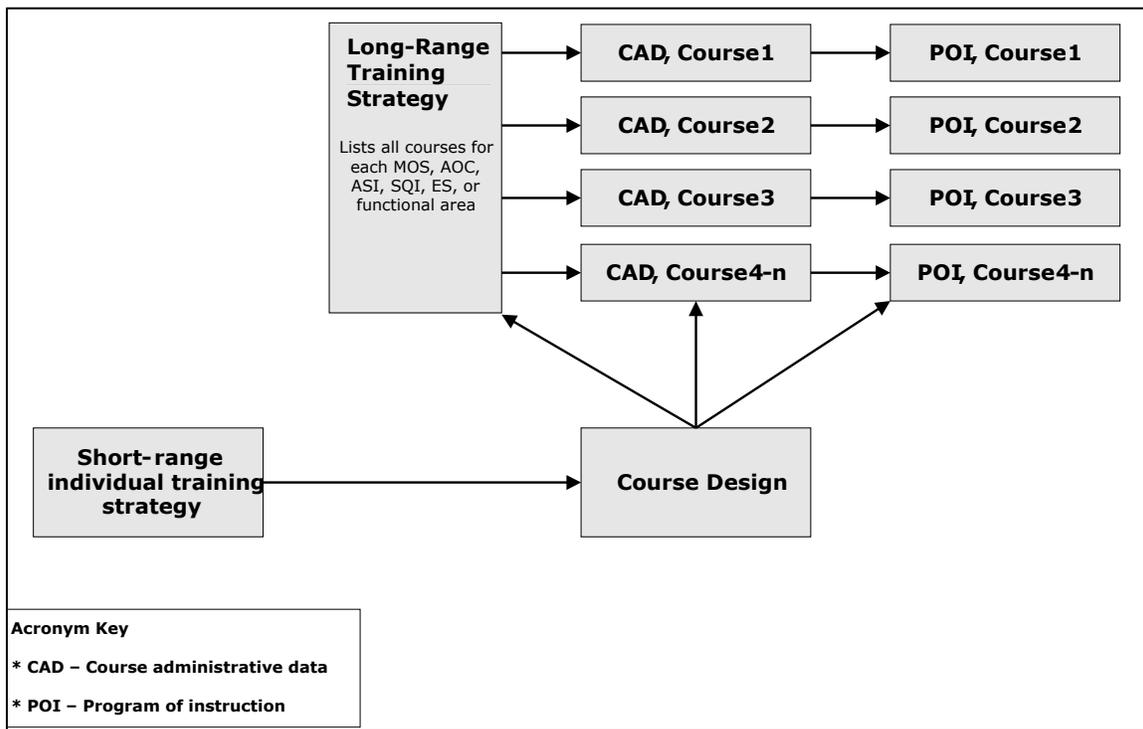


Figure 4-1. Product relationships

4-3. Training Requirements Analysis System document submission requirements

a. Proponents are not required to submit long-range training strategies to TRADOC as part of a TRAS action. However, the proponent locally maintains a proponent long-range training strategy for record that affects MOS, AOC, or separate FA as sub-components of the proponent long-range training strategy.

b. CAD and POI proponent submission:

(1) Prepared and submitted for all Army courses conducted by service schools, training centers, NCOAs, Reserve Component Training Institutions (RCTI), U.S. Army Cadet Command (USACC), and other training activities.

(2) Submitted in support of Inter-service Training Review Organization (ITRO) courses attended or instructed by Army personnel at TRADOC schools and other service school locations.

(3) In accordance with AR 351-9 (Inter-Service Training), obtain the other services' endorsement of changes to a CAD or POI (before the change takes place). If changes impact other services' training requirements per the current ITRO agreement or resources, schoolhouses request that the Army Inter-service Training Office facilitate ITRO studies to determine the impact on other services. If changes are relatively insignificant and do not impact course length, ITRO can sanction changes at the lowest possible level through an informal curriculum review board. If other services disagree with changes, they may deconsolidate from portions of training and education or all of the instruction. Participating services give the lead service (curriculum owner) one year's notice to deconsolidate.

(4) Contact HQ TRADOC, DCS, G-3/5/7, TOMA, Inter-service Training Organization, ATTN: ATTG-TRI-GI for more information about consolidated course policies and procedures.

(5) Proponents submit a MOT to TRADOC, TOMA via TDC outlining proposed change(s) and providing justification for the new or revised course (see Appendix C).

(6) Submit AC and RC courses concurrently to TOMA.

(7) Once TOMA validates the CAD or POI, proponents (if a revision is necessary) revise and provide draft prerequisite and scope in ATRRS for TOMA to approve. TOMA compares data in ATRRS with the most current CAD and POI data. If the data is found the same, TOMA approves the draft prerequisite and scope data. For new courses, the TRADOC approval memorandum is the trigger for proponents to initiate entering prerequisite and scope data to ATRRS within 30 days. The prerequisite data guidelines document is available on the ATRRS "Portal Help" page at <https://www.atrrs.army.mil>.

(8) When there is a different version of a course or course phase(s) for the AC and the RC, proponents staff and submit the supporting CAD or POI simultaneously with Course Comparison Worksheet (CCW) depicting courses differences. Proponents can use one MOT, but proponents also provide the differences, course data, and justification for two separate courses. A CCW example is on the Training and Education Developer Toolbox website under Job Aids/Resourcing.

(9) When a change is documented by submission of a POI, a separate CAD is not required. The POI contains CAD data.

c. Table 4-1 shows a minimum timeline for TRAS document submission.

**Table 4-1
Training Requirements Analysis System documents submission**

Document	Submission Requirements
1. CAD	1-3 years before the implementation FY for new or revised training and education, to allow for validation of changes during the SMDR and TRADOC review of manpower.
2. POI	Not less than one year prior to implementation if there is no increase in resources and not less than two years from implementation for POIs with increased resource requirements.

d. Proponents coordinate TRAS documents with appropriate school elements, installation staff, other centers/schools, ACOMs, RC, other services, and teaching organizations which attend, support, co-develop, or implement any portion of the course/phase prior to proponent command approval and submission to TOMA. Proponents obtain RC concurrence for RC courses; concurrence includes impact on RC students. Proponents include coordination documentation in TDC and on the MOT prior to TRAS submission to TOMA. Submissions for existing non-growth TRAS actions are submitted prior to the SMDR (refer to yearly SMDR tasking order for course timeline submissions to TOMA for validation). TRADOC, TOMA cannot process multiple concurrent CAD/POI for the same course/phase due to information systems reliance upon FY increments. Before submitting another CAD/POI for the same course/phase, proponents must complete the previous document, TOMA closes the previous document out, or the proponent withdraws the previous document.

e. Proponents keep TRAS documents current. Submit TRAS actions for equivalent AC and RC courses simultaneously. Concurrence memorandums from RC document the full coordination of equivalent courses taught at RC training institution locations, and any AC course that includes RC in the target audience. Proponents utilize course comparison worksheets when submitting courses that have an AC/RC training strategy. Managers of AC and RC phased courses requesting ATRRS administrative change(s) or increase in resourcing submit all phases of the course regardless of last validated phased POI.

f. Changes require the development of new or revised TRAS documents. Events listed below cause changes in courses/phases:

- (1) DOTMLPF-P changes.
- (2) Updated training strategies.
- (3) Results of a needs analysis.
- (4) The need to eliminate student performance deficiencies.
- (5) The need to improve the efficiency and effectiveness of instruction.
- (6) Changes to the course scope and prerequisite data that expand or restrict the target audience.
- (7) Resource increase or decrease changes, including all changes (increases and decreases) to facilities, equipment, OPTEMPO, field training days/DSTE, TADSS, land and ranges, and ammunition.

g. The magnitude of course/phase change dictates actions to revise and submit TRAS documents. There are three levels of TRAS document changes: major, minor, and administrative:

(1) Major change. Any change (increase or decrease) of resources is a major change. Proponents can initially submit major changes as a CAD then followed up by the revised POI. Proponents identify these changes during the course design phase and submit a revised POI. Examples of major changes include an increase or decrease in ICH, IA, optimum class size (OCS), course length in weeks (CLIW), ammunition, dollars, equipment, and/or facilities. Major change in increased resources require appropriate CFL, ACOM, ASCC, or DRU approval for validation and prioritization prior to TOMA consideration.

(2) Minor change. A change to ATRRS information such as changes to the course/phase prerequisites with no change in target audience or that does not affect resource requirements is a minor change. These minor changes require submission of a revised CAD and TOMA approves them. Proponent schools enter any changes to prerequisites and course scope into the ATRRS prerequisite data collection system.

(3) Administrative change. These changes do not affect resource requirements. These administrative revisions to the lesson content do not affect the CAD or change resource requirements.

h. However, in accordance with course resource increase policy, commanders and/or commandants submit a MOT for POI that initiates a new course or course growth through their CFL, ACOM, ASCC, or DRU for validation and prioritization prior to submitting to TOMA for resource validation.

i. Creation of a new course or a POI revision that will result in course growth requires additional justification with proponent commander/commandant approval. Course growth could result from creation of a new course or a number of changes, such as an increase in ICHs, IAs, optimum class size, increase in course length, course type code, any increased number of potential students participating, manpower, ammunition, equipment, facilities, or TADSS. In accordance with course resource increase policy, commanders and/or commandants submit a MOT for POI that initiates a new course or course growth through their CFL, ACOM, ASCC, or DRU for validation and prioritization prior to submitting to TOMA for resource validation.

j. Proponents document a proposed change for implementation in the current budget year only with a POI and submit to TOMA.

k. Temporary course variations or adjustments for local validation purposes that do not affect resources or ATRRS (including individual trials, group trials, and organizational tryouts) do not require TRAS or pilot request submission to TOMA. If ATRRS updates are required or there are changes that would affect resources, schools submit a pilot request for TOMA approval. If schools require external resourcing to conduct a pilot course, schools submit TRAS to TOMA and wait for approval before conducting a pilot course. The proponent secures resources before implementing pilot classes. Proponents fully coordinate changes and gain approval from HQ TRADOC, DCS, G-3/5/7 (ATTG-TRI-MP). Schools and centers conducting the pilot course satisfy training and education requirements within available resources. Upon completion of TOMA approved pilot, schools and centers provide an after-action review with metrics and a way-ahead 30 days after completion of the last pilot class; contact TOMA for AAR template. Ammunition requirements for the pilot course do not exceed the currently approved course

version requirements approved for resourcing. Changes to courses that last longer than six months are not variations, but enduring changes, and require regular submission of TRAS documents. Schools that require training deviations or adjustments that exceed six months submit a waiver requesting an exception from TOMA.

4-4. Course version

a. Changes to courses often result in several versions of a course existing simultaneously. For example, a school may teach an old version at the same time the school implements a newer, revised version; it is possible to design a third version to incorporate additional changes. Also, the AC school may teach a version and the RC school another version. To help manage this, the proponent assigns a course version number to all courses and include that number in the supporting CAD and POI.

(1) The course proponent assigns the version number.

(2) The version number is expressed as 01.0 through 99.0. The baseline version is always a whole number and in numerical sequence (for example, 01.0, 02.0, and so forth). Proponents only submit whole number CADs or POIs to TOMA for validation.

b. Proponents locally manage minor changes that do not affect resources or changes to ATRRS. The version number for these revisions change the decimal number only and indicate commandant approval (for example, 01.0 baseline version changes with the first doctrinal change that does not affect resources and become 01.1). There are no more than nine minor changes before a new baseline POI is required for submission.

c. Major changes are any changes that simultaneously affect one or more resource items or the tenth local change that does not affect resources. Major changes are always a whole number. Two examples follow:

(1) Example 1: baseline version 01.0 has changed locally four times, making the current version 01.4. The next change affects course length, which is a resource item. This triggers an immediate whole number change to version 02.0, and submission for validation.

(2) Example 2: baseline version 01.0 locally changed nine times, making the current version 01.9. The next change, whether minor or major, will trigger an immediate whole number change to version 02.0, requiring validation.

4-5. Business rules for TRADOC course growth process (less basic combat training)

a. All CoE CFLs for schools and centers conduct CAD and POI internal validations through all their supporting organizations and command prior to submission to TOMA (see appendix paragraph B-2 reference proponent coordination).

b. TRADOC operates within a constrained resourcing environment to achieve training and education objectives that support the operating force's requirement for trained and ready Soldiers to fill units. TRADOC CoEs and school proponents periodically identify additional resources required to adapt professional military education (PME), Functional Training, and IMT course

growth, to changes in the operational environment. If these initiatives are not synchronized across all CoEs and school proponents, they may not necessarily account for impacts to RC instruction and could potentially delay the delivery of trained Soldiers to the operating force. The missing element is a senior leader dialogue that facilitates a shared understanding of course growth requests across the TRADOC learning enterprise and the potential fiscal constraints affecting these requests. The process described below enables TRADOC leadership to guide, evaluate, and prioritize CoE/school proponent course growth requests prior to consideration by the HQDA Training General Officer Steering Committee (TGOSC) and HQDA Training Program Evaluation Group (TT PEG) for approval and funding. This process results in sufficient information for CAC G-3 to explain and, if necessary, defend each submission.

c. A collaborative approach using business rules and procedures for school commandants, CoE CGs, the CG, CAC, CG, CIMT, and Deputy Commanding General, TRADOC is instituted to submit, endorse, validate, and prioritize CoE and school proponent course growth requiring TRADOC or DA level validation and approval (see Figure 4-2 course growth flow). The following directives provide authorities for the course growth process: AR 350-1, TR 10-5, TR 350-70, TR 11-20, the Army Learning Coordination Council (ALCC) Charter, and associated TRADOC orders.

(1) Business rules support the TRADOC course growth process that affects AC and RC-delivered training and education, to include courses attended by reserve and national guard Soldiers. Any new course or change to an existing course that increases course length or any AC course change that has a direct impact to the RC falls in the course growth category (see para. 4-7 for additional considerations).

(2) The business rules apply to all TRADOC CoEs and school proponents which have PME, functional training or IMT course growth. Typically, course growth affecting BCT courses, BCT portions of OSUT and BCT portions of split training option courses remain under the purview of CG, IMT.

d. The school proponents identify potential PME, functional training, and IMT branch technical requirements that exceed their ability to innovatively manage and meet the definition of course growth above, or directly impact RC implementation, and thus may necessitate submission into the course growth process. Key considerations for CoEs include: specific justification that is driving course growth (the specific, documented requirement, for expanding a particular course); available delivery means (resident, distance learning, IMI, etc.); impacts to the RC; possible training elimination or reduction (trade-space considerations, prioritize other tasks, eliminate lower priority course or lessons, reduce level of learning outcome (knowledge, comprehension, analysis, etc.)); ability to leverage the One Army School System (OASS) to prevent unnecessary duplication of courses across the AC and RC; shared HQDA Equipping Program Evaluation Group EE PEG costs (if related to new equipment training) or joint funding sources (if joint requirement) to reduce unnecessary TRADOC TT PEG bills; the process to bill ACOMs for institutional support of the operational force training requirements; and identification of uncontrollable restraints (for example, distributed learning (DL) is infeasible due to top-secret content).

(1) Schools prepare draft TRAS documentation for each proposed course growth, in accordance with published TRADOC guidance and school commandant guidance. TRAS

documents include the ATAC, CAD/POI, RC concurrence letters, and TRAS quad chart (TR 350-70 requires the TRAS quad chart and refers to the document as the “Request of Additional Course Resources Brief” required to identify resource increases such as manpower; funding; equipment; facilities; land; ranges; ammunition; training aids, devices, simulators, and simulations; lodging; RC pay and allowances).

(2) CoE CGs discuss proposed growth requirements, resource impacts, and identify potential CoE-wide bill payers to offset any growth with their associated school commandants. The CoE CGs ensure proposed growth is necessary to support delivery of learning outcomes and there are no other offsets or mitigating strategies to support a defined requirement.

(3) CG, CAC discusses the proposed course growth requests with the CoE/school commandants and commanders during a Fall senior leader forum each year. CoEs depict their proposed course growth submissions by category (PME, Functional Training, IMT) and describe the rationale for growth. The discussion focuses on: describing the necessity for each course growth requirement; understanding the breadth of these requests across TRADOC; sharing innovative ways to potentially mitigate course growth; and obtaining CG, CAC guidance for continued development, alternative options, or to internally resource or cancel proposed course growth. School staffs submit draft TRAS quad and CoE briefing charts to the CAC POI growth repository (include site ID in the POI Growth order or separate correspondence) no later than one week prior to the Fall CAC senior leader forum.

(4) Schools use this guidance to further refine endorsed/draft concepts into resource-informed requirements that account for Total Force integration. Schools leverage their G-8 to accurately identify resource requirements. The CAC and Army University staff, with assistance from TRADOC, review these products and provide constructive feedback to support required adjustments prior to submission to TRADOC HQ in February.

e. CoEs assess all proposed course growth from their associated schools for internal bill payers. CoEs only submit a new course or a change (increase) to current course length, that is not used as a bill payer, for consideration into the growth process. This information is of sufficient detail for CAC G-3 to explain, and if necessary, defend each submission. CoEs/schools obtain National Guard Bureau (NGB) and U.S. Army Reserve Command (USARC) concurrence for all course growth affecting components (COMPOs) 2 and 3. Component (COMPO) 1 refers to Regular Army (RA), Human Resources Command (HRC); COMPO 2 refers to ARNG, NGB; COMPO 3 refers to USAR, Office of the Chief of Army Reserve.

f. Typical NGB and USARC staffing requires 60 days to evaluate submissions and provide a concurrence letter. Schools provide TRAS Quad (referred to as Request of Additional Course Resources Brief in TR 350-70), ATAC, and CAD/POI that affects the RC components through the single points of entry for each component listed below to facilitate effective tracking of actions. The NGB and USARC Chiefs for Individual Training staff the documents with appropriate subject matter experts and provide either a letter of concurrence for supported actions or non-concur memo. TRADOC and CAC only accept letters of concurrence signed by those POCs (or their designated representative). All TRADOC POI changes with RC resource requirement increases adhere to the guidelines and responsibilities outlined in AR 350-1.

g. CoEs consolidate and submit component COMPO 1 (COMPO 2 and 3 if required), PME, functional training, and IMT (less BCT) course growth proposals, endorsed by the CoE CG, for new and existing courses each year (refer to yearly SMDR tasking order for course timeline submissions) through TDC to TOMA. Documentation includes TRAS quad, ATAC, CAD/POI, and USARC and NGB concurrence letters. TRADOC G-3/5/7, TRADOC G-8, TOMA and CAC G-3, CAC G-8, and Army University staffs analyze the course growth requests and provide a consolidated recommendation on categories and priorities:

(1) Will Fund: Those courses, after CAC/TRADOC/TOMA staff analysis, that are resource-neutral (already funded, have identified bill payers) and have no USARC or NGB impacts; do not require submission through TGOSC process.

(2) Must Do: Safety, certification, Joint/DA mandated, or growth resulting from transition to multi-domain large scale combat operations.

(3) Core: Build readiness, close assessed gaps. Also consider more appropriate, alternative approaches than growth.

(4) Defer: Valid, but not a current priority.

h. In preparation for the ALCC General Officer Steering Committee (GOSC), the CAC G-3 presents the draft 1-N list in the Spring ALCC Council of Colonels to receive input from stakeholders within the learning enterprise. CAC G-3 briefs the final 1-N list at the Spring ALCC GOSC session for situational awareness across the TRADOC learning enterprise. CoE/school proponents assess course growth not submitted for HQDA Institutional Training Council of Colonels (IT CoC) consideration, for internal resourcing or resubmission in the following POM cycle.

i. Using the validated priority list, TRADOC G-3/5/7 submits requests, in accordance with annual published timelines, through the IT CoC to the TGOSC process and TT PEG for final validation and approval. Schools publish approved POIs/CADs reflecting validated and funded course growth in TDC.

j. Additional business rules.

(1) TRADOC

(a) TRADOC G-3/5/7 represents TRADOC position to HQDA and stakeholders during the IT CoC/TGOSC; validates POI resource requirements affecting course growth; provides status updates to the USARC and NGB POCs through the One Army Training Management Forum.

(b) TRADOC G-8, in coordination with HQDA DCS, G-8, provides common costing factors and formulas to support school calculation of resource requirements; provides information/training as needed to support school G-8 understanding of course growth resource costing information requirements; reviews all costing data and validates the costs in conjunction with known resources and priorities.

(2) Combined Arms Center

(a) CAC G-3/5/7 leads the course growth process, to include integration of CAC analysis; analyzes and validates proposed functional training course growth; recommends category placement and priority for each course; integrates course growth data to prepare final IT CoC presentation.

(b) CAC G-8 reviews all costing data and validates the costs in conjunction with known resources and priorities; recommends category placement and priority for each course.

(c) CAC G-3 analyzes and validates proposed PME course growth; analyzes and validates proposed IMT (less BCT) course growth in coordination with IMT; and recommends category placement and priority for each course. Army University supports topic discussions during ALCC CoC and GOSC sessions.

(3) CIMT supports CAC and Army University assessment of categorization and prioritization for IMT (less BCT) course growth.

(4) Centers of Excellence

(a) Consolidate all proposed course growth proposals from associated schools and determine growth necessity, internal bill-payers, and prioritization for submission to TRADOC and CAC.

(b) Coordinate all actions with USARC and NGB representatives for courses affecting COMPO 2 and 3 participation.

(c) Brief CAC CG on proposed CoE course growth at the Fall CAC Senior Leader Forum.

(d) Ensure identification and appropriate reporting for AC courses that result in a change to an RC course.

(5) National Guard Bureau

(a) Evaluate course growth proposals within 60 days of submission to determine feasibility (course length and costs), suitability (valid NGB requirement), and acceptability (supports COMPO 1 and 2 courses).

(b) Provide a concurrence memorandum, signed by the designated approval authority to commit NGB resources, to affected CoEs that either concurs with the proposed course growth (course length, learning outcomes, costs, etc.), concurs with comments (cite specific points of contention), or non-concurs.

(6) U.S. Army Reserve Command

(a) Evaluate course growth proposals within 60 days of submission to determine feasibility (course length and costs), suitability (valid USARC requirement), and acceptability (supports COMPO 1 and 3 courses).

(b) Provide a concurrence memorandum, signed by the designated approval authority to commit USARC resources, to affected CoEs that either concurs with the proposed course growth (course length, learning outcomes, costs, etc.), concurs with comments (cite specific points of contention), or non-concurs.

k. Refer to yearly SMDR orders for course submission timeline (see Figure 4-2 below (Course growth flow) as an example timeline) (SLF refers to Senior Leader Forum).

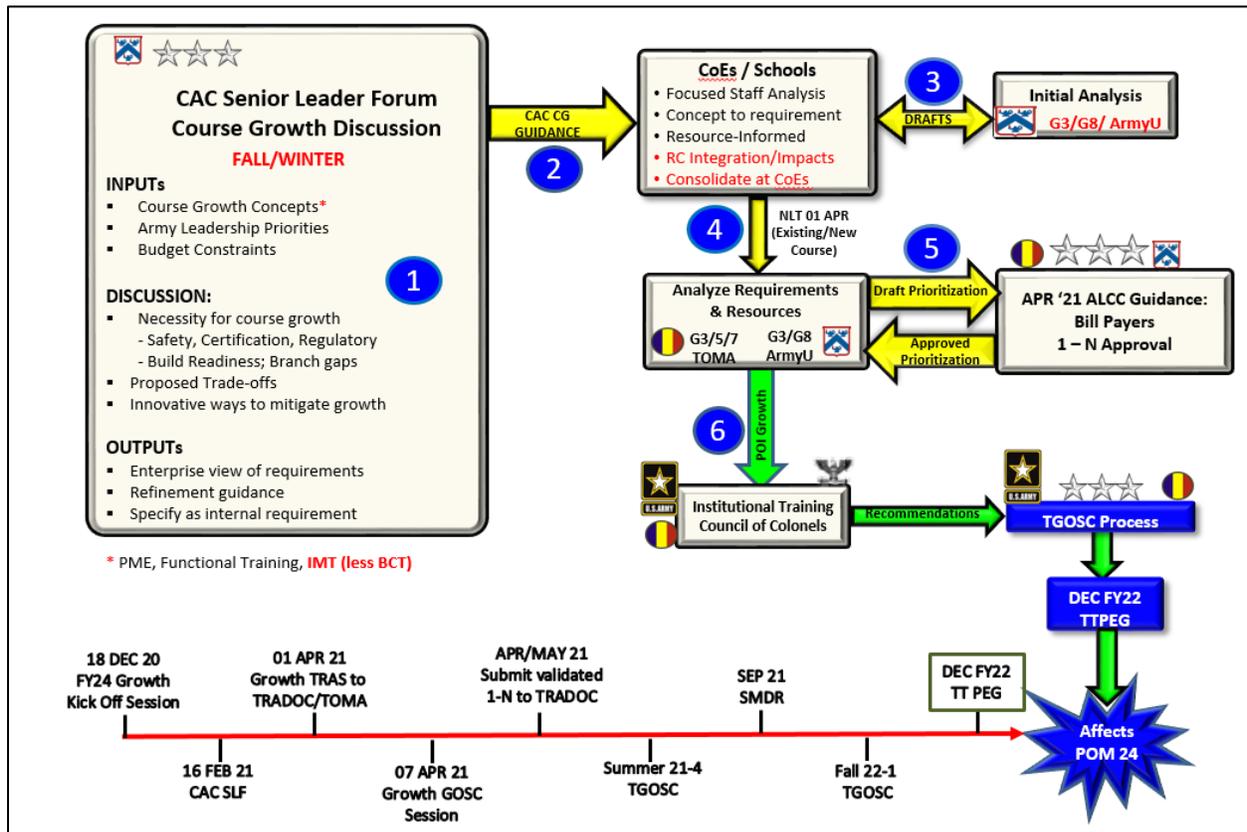


Figure 4-2. Course growth flow

4-6. Course resourcing

a. TRAS has an important role in course resource management for equipment, facilities, supplies, and personnel needed to conduct training and education. The Army accreditation standards assess institution implementation of TRAS. To accomplish this, it is critical that the proponent:

- (1) Designs the courses and inputs resource requirements in lesson plans in TDC.
- (2) Compiles and builds the POI from the lesson plan data from TDC.
- (3) Implements courses/phases using identified resource requirements contained in a validated POI.

b. Proponents acquire resources using appropriate resource acquisition systems and within parameters and timelines established. The result is the arrival of instructors/facilitators, students, ammunition, equipment, devices, course materials, dollars, and facilities in time to conduct courses/phases as planned.

c. Table 4-2 indicates the resource requirements identified in the TRAS document and acquisition systems implicated. Failure to identify requirements results in failure to acquire necessary resources.

**Table 4-2
Training and education course resources**

TRAS Document	Resource Acquisition System
1. CAD	<ul style="list-style-type: none"> a. SMDR b. Instructors/facilitators, budget load, structure load c. POM d. Equipment, TADSS, facilities, and ammunition
2. POI	<ul style="list-style-type: none"> a. SMDR/TRAP b. Instructors/facilitators, budget load, and structure load c. Unfunded requirements d. Equipment, TADSS, facilities, and ammunition

d. Following a decision to pursue action to obtain resources, the proponent school submits appropriated requirements to TRADOC G-8 for resourcing consideration. A Mission Resource Board reviews the requirements for submission in the POM (see chapter 4, section IV for more information about the SMDR).

e. Proponents document the instructor-to-student ratio (ISR). The ISR takes other components into account (that is, ICH, non-instructor hours, etc.).

(1) The proponent is responsible for establishing the ISR for each learning step/activity in a lesson. Establishment is recorded in TDC and published in the POI. TDC needs accuracy because the ISR is one factor used to calculate instructor/facilitator requirements.

(2) TRADOC G-3/5/7 documents validated ISRs in ATRRS at the master course level for RC taught courses.

(3) The RC documents class sizes at individual Total Army School System (TASS) Training Centers and Reserve Training Institutes and validates school proposed ISR during the staffing process for courses taught by RC. RC representatives at the proponent location actively participate in course design and coordinate with the RC as appropriate.

4-7. Managing course growth.

The objective is zero course growth, recognizing that this has a direct impact on a course's quality, efficiency, effectiveness, and the relevance of the content it provides.

a. Course growth is defined as any action that results in increased resources including: addition of new courses or revisions to existing courses that change ICH, IA, optimum class size, increased course length, changes to the training strategy that affects DSTE or target audience and any resource increase (that is, manpower, ammunition, equipment, facilities, dollars, or TADSS). TRADOC can control all these variables except programming the number of students to attend instruction.

b. Commanders/commandants manage course revisions and new courses within the prescribed baseline and the priority established by TRADOC in command training guidance. TOMA provides the baseline to proponents after publication of the ARPRINT. Center/school commanders/commandants submit CAD/POI showing how course revisions impact design and resources including, at a minimum, all resource areas identified in chapter 3.

c. Commanders/commandants manage the design of their courses (new or revised) to the aggregate instructor/facilitator, support personnel, and budget load requirements for all courses conducted at the school/center within this baseline.

d. TOMA analyzes, staffs, and makes recommendations to the assistant DCS, G-3/5/7 for approval of CAD/POI based upon justification provided for increased resources.

e. Resource tradeoffs.

(1) Schools/centers submitting CAD/POI for courses with resource increases identify and justify growth. Schools recommend specific course tradeoffs in the MOT and provide supporting TRAS (see Appendix C, figure C-1 for an example of a MOT).

(a) Resource savings generated by course eliminations or revisions may, within the same FY, pay for subsequent course growth.

(b) After course change approval, document tradeoffs to ATRRS accordingly.

(c) A CAD/POI with growth requesting an external bill payer, requires appropriate ATAC and appropriate TRAS quad chart brief ("Request of Additional Course Resources Brief" in TR 350-70) submission with the CAD/POI.

Note. TOMA will only accept appropriate ATAC and TRAS quad chart documentation. Contact TOMA for current formatting.

TOMA will not accept CFL, ACOM, ASCC, or DRU ATAC or brief deviation. The proponent keeps a record of all changes on file by changing the fourth character in the version number (for example, a minor change to version 01.4 becomes version 01.5 — the "." is considered a character).

(2) When schools require resource increases for which tradeoffs are not available within the school's baseline, the center/school includes a memorandum signed by the commandant or assistant commandant with the CAD/POI which:

(a) Identifies the school commandant's priority for the reallocation of resources compared to other increases requested.

(b) Provides justification for the growth, such as transformation, HQDA-directed change, recruiting initiative, etc.

(c) Identifies the direct impact to the field commander if the Soldier does not receive this instruction.

(d) Explains whether DL can support some of, or the entire, requirement.

f. Submit appropriate ATAC, TRAS quad chart brief and CAD/POI for course(s) identified as the internal bill payer at the same time as the course with resource increases. Schools will coordinate with the CoE, and TOMA will coordinate CAD/POI for all courses with the appropriate command (for example, CFL, ACOM, ASCC, or DRU) as required. TOMA's training strategy and plans analyst for the respective school documents that school's course growth approved by the TGOSC in ATRRS. Resource requirements compete with all other TRADOC school courses for additional resources during the SMDR. The HQ TRADOC, DCS, G-8 distributes resources received during the SMDR for courses across TRADOC based on the priority established in the annual command training guidance and the intent of SMDR decisions.

4-8. Course implementation and course deletion

a. To help minimize turmoil in the student management arena, proponents coordinate with TOMA before changing course implementation dates, changing variable CAD, or adding or deleting courses. See table 4-3 (below) for actions.

**Table 4-3
Course implementation framework**

Submission	Reason
1. 36 months	Permits adequate planning for an orderly adjustment of resource and management mechanisms, identify these changes in normal CAD submissions (may submit course deletions by memorandum).
2. 14 months	A minimum lead-time of 14 months for courses attended by other services or international students. This allows sufficient time for publication of assignment instructions and will prevent last-minute changes to Soldiers' orders.
3. 12 months	If it is not possible to submit CAD prior to 36 months, submit CAD/POI changes (with justification) to Director, TOMA a minimum of 12 months before implementation of requested changes for courses/phases.

b. Course length changes resulting in a change in the status from TDY to PCS, or PCS to TDY requires HQDA approval. Students attend a course less than 20 weeks long in TDY status; students attend a course 20 weeks long or longer in PCS status.

Note. Travel rules do not apply toward enlistees attending BCT/OSUT (refer to The Joint Travel Regulations (JTR), 1 June 2022).

4-9. Accounting for distributed learning.

The Vice Provost for Digital Education (VPDE), Army University, is responsible for the Army's Distributed Learning Program (TADLP), in accordance with AR 350-1; Chapter 8-1. TADLP is an integral component of the institutional, operational, and self-development training domains (also see TP 350-70-12, The Army Distributed Learning Program).

a. DL is the delivery of standardized individual, collective, and self-development learning products to Soldiers and units at the right place and right time through the application of multiple means and technologies. Proponents can use DL in either resident or non-resident training and can involve either synchronous or asynchronous or a combination of both (blended) training.

b. Proponents can use non-resident DL as a pre-requisite prior to attending resident training courses or as a phased approach for a functional or PME course. For directed and self-development non-resident DL quota managed courses, training locations document student input and graduates within ATRRS.

c. TOMA reviews, validates, and documents TRAS actions for non-resident DL, resident, active duty for training (ADT), and inactive duty training (IDT) courses. TOMA's purpose is to ensure accurate course strategy documentation in ATRRS and all necessary resources required to conduct training are captured during the annual SMDR.

(1) Using lessons that apply DL technology internally to a resident course/phase/module does not mean phase/course designation as DL. For example, administering lessons through a computer lab during a resident course utilizing DL content as part of the training strategy does not make the course DL (non-resident).

(2) Schools can instruct a resident course and a non-resident course at the same time within a resident class setting (some students in class with the instructor while other non-resident students use DL to communicate with the resident class). However, due to resourcing, separate CAD/POI are required, and ATRRS will reflect separate courses with the same dates.

(3) A completed supplemental information sheet accompanies CAD/POI submission of a stand-alone non-resident DL course/phase. Development and submission of DL supplementary information provides answers to address to whom, how, when, and where provided (see Appendix C, figure C-2, for the stand-alone non-resident DL supplementary information requirements that provide information needed to document the course/phase in ATRRS).

(4) A non-resident DL course/phase has a "(DL)" placed at the end of the course number. Use this number in all TRAS documents.

d. The Army’s centralized contract for DL requires registration, prioritization, and approval process of Army University Provost managed by VPDE. VPDE encourages proponents to use the Army's centralized contract for DL, however, proponents may elect to leverage other contract vehicles. Proponents complete and manage their own Acquisition Management Oversight (AMO) packages following guidance on the TADLP website. In order to catalog DL products and prevent duplication, all proponents register their intent to develop DL regardless of in-house or contracted development.

(1) The proponent obtains approval for the course by submitting the CAD/POI with supporting current supplemental information for the entire course (non-resident DL and resident portions) to TOMA. Supplemental information submitted with the CAD/POI is critical to ensure the proponent documents the course/phase correctly in ATRRS and to manage the implementation of the non-resident DL course/phase. The academic hours are a normal part of the CAD/POI submission. Proponents compute "maximum time to complete" for each self-paced module/lesson within a DL non-resident phase and the total expected time for the phase is reported in the CAD of the POI or is a standalone CAD. If the DL non-resident phase also includes group-paced training, the time for the self-paced adds to that of the group-paced for one total time scheduling. If the DL phase also includes group-paced video tele-training (VTT), the proponent adds the time for the self-paced to that of the VTT for one total time scheduling. If the self-paced module/lesson is a prerequisite for the VTT, the proponent reports "maximum time to complete" for the self-paced portion separately.

(2) The TOMA TRAS analyst enters the revised course in ATRRS as a proposed course until the proponent informs TOMA that the courseware is ready for implementation.

(3) The Army Learning Content and Management Capability delivers DL. The Army Learning Content and Management Capability includes Army Learning Management System (ALMS), Enterprise Lifelong Learning Center, and other approved delivery platforms.

e. Maximum time to complete. This is the maximum time allowed for a student to complete a phase of self-paced instruction. It is defined as 130 percent of the computed academic time for the self-paced instruction, plus, in the case of max phase time, any non-self-paced instruction in the phase. The 30 percent add-on time allows for scheduling difficulties beyond the control of the students or instructor/facilitator.

f. For reporting purposes in ATRRS, figure 4-3 shows how time is recorded and which fields are used.

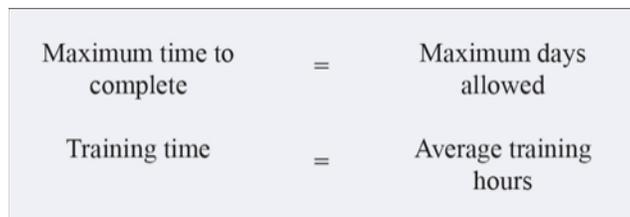


Figure 4-3. Recording time in Army training requirements and resources system

g. Non-resident synchronous DL involves geographically dispersed students accessing the same website at the same time as an instructor. The instructor facilitates the class while the students participate via a conference website. Students ask questions or provide comments through the phone line or through a chat window. Synchronous courses receive resourcing for ICH and instructor action hours (IAH).

h. During non-resident asynchronous DL, unlike synchronous DL, students do not need to schedule their time around the instructor/facilitator's predetermined agenda. Asynchronous DL receives no resourcing for ICH, but may receive IAH if required (that is, discussion boards, grading assignments, etc.).

i. Non-resident blended DL is the combination of instructing a course through both non-resident synchronous and asynchronous methods. Only the synchronous portion of the course receives ICH but both may receive IAH resourcing.

j. Resident instruction that utilizes synchronous DL products has those hours documented as part of the academic hours, ICH, and IAH for resourcing.

k. Resident instruction that utilizes asynchronous DL products does not have those hours documented as part of the academic hours or ICH but may receive IAH if required (that is, discussion boards, grading assignments, etc.)

l. Resident instruction that uses both synchronous and asynchronous instruction documents that instruction in accordance with the paragraphs above.

m. The planned levels of interactivity are binned to facilitate resource requirements of the products. The four bins are Simple, combining levels 0 and 1; Moderate, level 2; Complex, level 3, and Artificial and Virtual Reality (AR/VR), level 4. Combining levels 0 and 1 with similarities in number of production hours and cost is more practical for identifying resource requirements. Gaming and VR which is overly complex in design with many production hours, stands alone in its own category for resource requirements. Distributed and blended learning resource planning includes requirements associated with the development, transmission, and sustainment of distributed and blended learning products.

Section II

Course administrative data

4-10. Course administrative data description

a. The CAD is a requirements document that provides critical planning information about a course. Combined with the ARPRINT, the CAD information estimates the required resources to implement a course and provides personnel resource requirements as input to the POM. Submit equipment and ammunition requirements 36 months before implementation in accordance with the appropriate programming and budget processes. Submit new ammunition requirements to TOMA. Upon HQ TRADOC validation, new strategy training requirements are presented to the AMRWG/AMRCoC for approval of resourcing before entered into the POM. New equipment requirements are identified as an initial estimate of training equipment required for instruction and match the estimates provided in the basis of issue plan as applicable.

b. The CAD is:

- (1) Prepared for each resident and non-resident course/phase.
- (2) Used to prepare the course administrative data of the POI.
- (3) A valid requirements document for a maximum of two years unless course training start date is extended.
- (4) Superseded by a CAD extending course implementation date or a POI.
- (5) Prepared for each ITRO course (collocated on Army installation or attended by Army personnel at sister service locations) and is accompanied by sister service CAD or POI equivalent document.

c. The CAD provides:

- (1) Critical planning information about a resident or non-resident DL course, which enables the recruiting, quota management, and personnel systems to take the actions needed to have students and instructors/facilitators on-station in sufficient time to meet Army requirements.
- (2) New or revised IMT course descriptions and prerequisites to the AC and RC.
- (3) Course information needed for the ATRRS online catalog.
- (4) Administrative data for each course/phase.

d. The CAD may:

- (1) Provide initial identification of training resources required to execute.
- (2) Supersede a CAD when course implementation is slipped or extended.

e. A course will have no more than three phases unless TOMA grants an exception. Submit waiver requests to HQ TRADOC (ATTG-TRI-MP).

f. The CAD establishes:

- (1) Basis for solicitation of course/phase requirements (student input) through the TACITS for new and revised course versions for use during the SMDR and the development of the ARPRINT.
- (2) Estimated course version data elements (optimum class size, ICH, etc.) used to determine instructor/facilitator requirements during the SMDR.
- (3) Course/phase data in the ATRRS database.

4-11. Course administrative data approval authority

a. The proponent is the approval authority for course content for all courses that do not have resource changes.

b. TRADOC subordinate commands (CFL, ACOM, ASCC, or DRU) validate and prioritize new courses and courses with growth prior to submitting to TOMA for validation. Proponents must fully justify changes to resource increases in accordance with HQ TRADOC resource increase policy.

c. During development, a CAD without growth may require direct coordination with TRADOC subordinate commands before submission to TOMA.

4-12. Course administrative data revision and submission requirements

a. A CAD is revised when:

(1) There are changes projected in training strategies and course content.

(2) There are changes in CAD data fields and/or other course resource requirements, except for temporary deviations as indicated in paragraph 4-3.k.

b. A CAD is submitted:

(1) At least 12 to 36 months before the beginning of the FY for new or revised course/phase implementation. Course changes planned for implementation in budget or execution years require submission of a POI.

(2) When minor changes are required, which will not affect enlistment contracts and schools accommodate using existing resources, no CAD is required. Instead, the POI will contain the CAD when prepared or revised.

c. Information is available in sufficient detail to prepare the CAD midway through course design phase of ADDIE (after determining course length, overall course objectives, and entry levels).

d. A separate CAD is required for:

(1) Different conditions and standards of the terminal learning objective (TLO) in a RC course.

(2) Each enlisted MOS, warrant officer MOS, commissioned officer AOC or Civilian Education System (CES) course, PME, functional courses, skill qualifications identifier (SQI) and Additional Skill Identifier (ASI) granting courses.

(3) All phases of a course where a non-resident DL phase is developed.

e. If information presented in the CAD is not consistent with the data in DA PAM 611-21 (Military Occupational Classification and Structure), proponents identify the inconsistent information, provide rationale, and identify actions to eliminate the inconsistency. The proponent then submits changes to DA PAM 611-21 to reflect changes in the MOS/AOC for which they are proponent.

f. A MOT, ATAC, and TRAS quad chart (“Request of Additional Course Resources Brief” in TR 350-70) is prepared stating why changes require and justify course growth. Appendix C, figure C-1 is an example of a MOT.

g. CAD validation is an analysis of proposed course length, optimum class size, and estimated ICH and academic hours, instructor/facilitator requirements, and changes as compared to the existing HQ TRADOC validated POI. CAD validation is conducted by TOMA.

Section III

Program of instruction

4-13. Program of instruction description

A POI is a proponent developed requirements document that provides a detailed description of the course/phase content, duration of instruction, and resources to conduct both peacetime and mobilization courses/phases.

a. Proponents prepare a POI for each version of a course, including peacetime/IRR mobilization training and education programs that are developed and conducted by TRADOC service schools, training centers, NCOAs, RC training institutions, Reserve Officers' Training Corps (ROTC), USACC, ADT/IDT programs and all non-resident DL. In addition, proponents prepare a POI for ITRO consolidated courses conducted at TRADOC schools and co-located (Army unique) phases of courses conducted at other service locations.

b. A POI lists resources required to provide instruction for a specific version of a course, including non-resident DL phases of the course.

c. A POI provides a detailed description of course content, duration of instruction, a list of TLOs, and methods of instruction and delivery techniques for a particular version of a course.

4-14. Program of instruction approval authority

a. The center/school commander/commandant is the approving authority for the POI for the courses for which they are the proponent. In addition, they can approve changes in a POI that have no resource impact.

b. TRADOC major subordinate commands may direct coordination with their staff during development of the POI and before submission to TRADOC. TRADOC vets new or revised courses which impact resource changes through the training portfolio manager during the IT CoC; then, if warranted, sends these changes to the Training Integration Forum for submission to the TGOSC for consideration.

c. HQDA TGOSC is the final approving authority for new or revised POI with resource impact changes.

4-15. New program of instruction and revision submission

a. POIs are learning products. Management of learning products includes prioritizing, integrating, and synchronizing Army training and education policies, processes, systems, and resources to inform decision making for the Learning Enterprise of the Army. Review POIs at least once every three years after creation (new) or update (revision) from an Army learning triggering event (see TR 350-70).

b. Submit new POI and revisions when there are significant changes projected in training strategy and course content, except for temporary deviations, as indicated in paragraph 4-3.k.

c. Submit new POI and revisions when there are changes to resource requirements, such as changes to the ISR, new equipment, or new ammunition.

d. Submit POIs not less than one year prior to implementation if there is no increase in resources and submit POIs with increased resource requirements not less than two years from implementation. In order to reduce student turbulence and allow time to adjust currently programmed students and resources, changes requested within one year of execution are strongly discouraged. To change the course length or class size less than one year from implementation, requires a written request by the commander/commandant or their designated representative, with HQDA approval (see AR 350-1).

e. Submit TRAS actions (POI) for equivalent AC and RC courses simultaneously with a course comparison worksheet. Equivalent courses taught at RC training locations require full coordination with the USARC and the NGB (refer to paragraph 4-17 Special Instructions).

f. Submit new POI and revisions for a phased course requesting ATRRS administrative change(s) or increase in resourcing; submit all phases of the course regardless of the last validated POI.

g. When HQ TRADOC, DCS, G-3/5/7 receives a POI, it is staffed to TRADOC, G-8 for resource validation. If the proponent has a dispute with the TRADOC G-8 validation, a request for reconsideration is submitted to TOMA within 30 days of notification. The request for reconsideration includes justification for the disputed validation (for example, safety reasons, ICH discrepancies, etc.) and provides the level of detail needed to determine the specific content module in dispute.

h. Resource requirements not previously recognized by a timely CAD submission may not resource for two to three years due to the nature of the budget cycle.

i. When minor changes are required that will not affect enlistment contracts and schools can accommodate within existing resources, capture changes in a commandant/commander approved POI revision and do not submit to TRADOC. Proponents can make up to nine such version revisions without submission before it is considered a major revision, which requires POI submission to TRADOC.

j. For courses conducted by other services and for which the Army provides instructor/facilitator or developer support, provide one copy of that service's POI equivalent document with a CAD to HQ TRADOC, DCS, G-3/5/7 allowing course entry/update in ATRRS.

k. Proponents coordinate the proposed POI with all training and education locations to ensure implementation is feasible for courses conducted at locations other than the proponent's location. Proponents coordinate POI documents with those who conduct the training and education to enable them to acquire needed resources.

l. Temporary course variations or adjustments for local validation purposes that do not affect resources or ATRRS (including individual trials, group trials, and organizational tryouts) do not require TRAS or pilot request submission to TOMA. If ATRRS updates are required or changes that would affect resources, schools submit a pilot request for TOMA approval. If schools require external resourcing to conduct a pilot course, a school submits TRAS to TOMA and waits for approval before conducting pilot course. Schools that require training deviations or adjustments that exceed the six months submit a waiver requesting an exception to policy to TOMA.

(1) Changes to courses that last longer than six months are not variations, but enduring changes, and require regular submission of TRAS documents. The proponent secures resources before implementing pilot classes. Fully coordinate the change and approval with HQ TRADOC, DCS, G-3/5/7. Schools and centers conducting the pilot course satisfy resource and training and education requirements.

(2) Upon completion of a TOMA approved pilot, schools and centers provide an after-action review with metrics and a way-ahead 30 days after completion of the last pilot class. Ammunition requirements for the pilot course do not exceed the currently approved course version requirements approved for resourcing.

m. Proponents are not required to submit to TRADOC if (including permanent modifications to the training and education program) POI changes have no effect on any of the following: the course version's resource requirements, variable course data, instructor/ facilitator train-up time (at other schools or ACOMs), or no significant changes to course content.

n. Proponents revise and submit other POI changes including changes to the CAD that affect resource requirements and/or changes significantly affecting course content. A significant change to course content is the addition and/or deletion of critical tasks and/or changes to the standards to which critical tasks are taught.

o. DSTE is intended to capture support to field training (field training exercises (FTX), situational training exercises (STX), training events conducted at ranges/training areas/etc. to include critical mission enablers like fire-fighters, refuel/defuel capabilities, etc.). DSTE is not intended for classroom support. DSTE typically involves the transport of equipment/supplies/food/water/students etc. to and from the training site. DSTE should not duplicate functions performed by instructors in support of a training event; capture those instructor functions in support of a training event in the POI as either ICH or IAH. DSTE is primarily composed of support tasks/work hours necessary to complete POI training events not

resourced through the instructor/facilitator manpower staffing standard or other manpower staffing criteria. To validate, establish, or change DSTE requirements, proponents submit a commandant-approved POI to HQ TRADOC. To assist in validation, all POI submissions with DSTE workload include data specified in HQ TRADOC DSTE model implementation guidance. DSTE manpower requirements are computed annually as part of the SMDR process using an HQDA approved manpower staffing model. For questions concerning DSTE, contact TRADOC G-8, MFAD.

4-16. Program of instruction format/automation

a. General.

(1) POIs are formatted in accordance with TDC and submitted to TOMA with a MOT, Course Management Plan, Course Map, ATAC and TRAS quad chart (“Request of Additional Course Resources Brief” in TR 350-70 for new course or course with growth), RC concurrence, DL Supplemental Sheet, and Service concurrence memorandums (when required). When there is a different version of a course or course phase(s) for the AC and the RC, proponents staff and submit the supporting POI simultaneously with a CCW.

(2) Proponents prepare and use the MOT to describe the proposed change(s) and provide rationale for growth (refer to Appendix C, figure C-1, CAD/POI MOT request format).

b. System requirements. Proponents submit all POI and CAD TRAS documents to TOMA using TDC. TOMA coordinates new release implementation dates with proponents.

(1) When proponents submit the POI, the information on the CAD (as described in Chapter 4, paragraph 4-12) contains revised data from the previously approved CAD, with the following exceptions:

(a) Proponents recommended course number and title or changes to the purpose, which reflect changes to DA PAM 611-21 or notification of future change announcing changes publication.

(b) Proponents change the service-remaining requirement in the prerequisites to conform to the change in course length (see AR 350-100 (Officer Active Duty Service Obligation) for officer students and AR 614-200 (Enlisted Assignments and Utilization Management) for enlisted students).

(2) As data is entered into each field, proponents check for proper format and value to ensure certain functions are performed in proper sequence. In this manner, TDC information is standardized across TRADOC proponent schools and participating installations. TDC provides uniformity of information, format, and procedures.

(3) It is critical that proponents enter lesson data into TDC in order to substantiate resource requirements captured in the POI. POI data influences future funding to TRADOC and ultimately to subordinate schools. Accurate POI data is essential to produce reasonable resource estimates.

4-17. Special instructions

a. The RC taught POI is:

(1) A requirements document providing a detailed description of Total Army Training System course content, duration of instruction, and delivery methods and techniques.

(2) A course designed to train the same MOS/AOC/ASI/language identifier code/SQI/Skill Identifier (SI) within the Army. When the course hours and media vary because of time constraints of the RC, a separate POI is required. The course ensures standardization by teaching all course critical tasks or learning objectives to task performance standard. Schools may teach the course at different sites and may involve the use of different media and approaches to teach the various phases/modules/lessons. For duty MOS qualification, the challenge is to redesign and develop single-year POI that maximize the proper mix of IDT, ADT, and non-resident DL. Schools may use non-resident DL in IDT and ADT. If used as self-paced instruction, proponents document this portion as a course phase, entered into ATRRS, as at least a prerequisite for course graduation.

(3) A POI developed as ADT/IDT. This is a variation from the proponent-trained POI. All POI variations are reflective of the proponent-trained course. TDC will generate a different POI report of the course that is resourced based on ICH (AC school course), or on the most restrictive ISR (RC school course).

b. The definition of a Total Army Training System year for RC training is a 13-month window consisting of a maximum of two ADT periods across 2 FYs, with a maximum of 8 weekends of IDT periods available between the two ADTs.

c. Non-resident DL.

(1) Each non-resident DL phase in the course requires a separate POI.

(2) Resident courses often use DL technology for blended learning, conducting both the in-class and DL portions of a course. When schools teach the student in resident, document the course/phase as resident. When the student is not in class, schools document the course/phase as non-resident DL.

(3) A course that has a resident course and a standalone version non-resident DL course has separate POIs.

d. ROTC.

(1) The USACC prepares model POIs for the Basic Course (MS I/MS II), Advance Course (MS III/MS IV), and Basic Camp and Advanced Camp for the Senior ROTC (SROTC) program.

(2) POI for the SROTC Basic and Advance Courses on campus do not require TRADOC G-8 validation.

e. Troop schools.

(1) POI proponents develop, revise, and provide POI to ACOMs for the courses authorized taught by ACOM schools. Proponents also provide standardized certification assessments and course prerequisites for these courses.

(2) POI for ACOM school courses, which are developed but not conducted by TRADOC schools do not require mobilization information or Force Requirements Division validation.

(3) Proponents prepare training support packages for exported courses, including courses exported during mobilization.

(4) Use the collective task summary only for troop school POI. The Digital Training Management System (DTMS) records individual training acquired in troop schools, and units and organizations use DTMS to record unit collective task proficiency and crew qualifications.

(5) See TR 350-70 for additional proponent and troop-school agreement requirements.

Section IV

Structure and manning decision review

4-18. Structure and manning decision review process

The objective of the SMDR is to build the annual training and education mission within realistic resource projections. The process validates Army resource requirements and then reconciles those requirements to an affordable, acceptable, and executable training and education program.

a. The HQDA G-3/5/7 and G-1 co-chair the SMDR. Changes in accessions, structure, and end strength, as mandated by HQDA, ACOM, other services and agencies, and state Adjutants General, drive annual training and education requirements. The SMDR processes the total training and education requirements against TRADOC's capability to execute the training and education mission.

b. The TGOSC must approve courses, regardless of proponent or component, requesting partial/full bill-payer for a new course, course length increase, manpower, funding, equipment, facilities, land, ranges, ammunition, training aids, devices, simulators, and simulations, lodging, RC pay and allowances prior to the SMDR with the exceptions of courses directly managed by HQDA MDEP Managers (that is, USACC and the US Army War College). Proponents vet new or revised course resource changes through the training portfolio manager during the IT CoC, then if warranted to the Training Integration Forum for submission to the TGOSC for consideration prior to the SMDR.

c. Refer to yearly TRADOC SMDR tasking orders for course timeline submissions to TOMA for validation.

d. The SMDR is annual. The SMDR validates proponent training and education requirements for the third POM year, records validated requirements for the second POM year (the primary focus of the SMDR) and refines requirements for the first POM year.

e. The SMDR covers institutional training and education taught by TRADOC schools, RC, as well as the Defense Language Institute (DLI), NCOAs, and those non-TRADOC schools for which TRADOC is identified as executive agent (EA).

f. Identifies training and education programs that are constrained due to requirements exceeding available resources and school capacities.

4-19. Structure and manning decision review scheduling.

Chairs hold the SMDR annually in the late September/early October timeframe to determine training and education requirements for the first 3 years of the POM. For example, an SMDR held in September/October 2022 determines training and education requirements for FY 25, 26, and 27. The SMDR compares Army training and education requirements, as identified for each course for a given FY, to the training and education capability of the applicable RC School, training center, and institution. HQDA G-1/G-3, with support from TRADOC and the USAR/ARNG, holds the RC/SMDR (Phase 3 Training Coordination Council Workshop) in mid-June.

a. SMDR preparation. In the SMDR process, TRADOC schools' primary responsibility is to submit course data in the form of CAD and POI. Additionally, TRADOC schools determine their training and education capability based on equipment, ammunition, personnel, and facilities. This information provides SMDR participants with the school's training strategy, including its capacity and constraints.

b. The ATRRS summary sheet is the primary working document for the SMDR. It records the input agencies' training and education requirements and variable course data extracted from the CAD or POI. Approximately 30 days prior to the SMDR, the Army G-1 locks the ATRRS displays. During this time, input agencies provide each school an ATRRS message with an information copy (to HQ TRADOC and Chief of the Training Requirements Office, Military Personnel Management Directorate, HQDA/Director of Program Analysis and Evaluation-Military Personnel Training) listing all changes to training and education requirements that occurred after HQDA G-1 locked ATRRS. Input agencies record final changes in ATRRS no later than the following day. HQDA G-1 completely locks ATRRS 10 working days prior to the start of the SMDR, restricting access to schools and TRADOC course managers. The HQDA G-1 notifies TRADOC through a memorandum of instruction of ATRRS summary sheet data availability. TOMA provides the schools with this information.

<p>Note. Generate ATRRS summary sheets only for SMDR preparation.</p>
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c. After notification that summary sheets are available, proponents:

(1) Confirm that the following data elements listed on the summary sheets match those contained in the TRADOC-validated CAD/POI. Do not make administrative changes during the SMDR. Schools notify TOMA analysts as soon as possible of any errors in the following data elements:

(a) ICH.

(b) IA.

(c) Maximum, optimum, or minimum class size.

(d) CLIW.

(e) Total number of non-Army instructors/facilitators provided for this course.

(f) Annual capacity.

(g) Non-ICH. Limit this field to courses training programs deem standard ICH-based instructor/facilitator equations inadequate to determine instructor/facilitator requirements. A value appearing in the non-ICH field may override the ICH-based instructor/facilitator calculation, or may add to it, depending on the specific course. Training programs requiring non-ICH instructor/facilitator adjustment are typically highly unique in nature (for example, flight training) and may require positional rather than variable instructor/facilitator staffing. The vast majority of TRADOC courses within ATRRS require no non-ICH adjustment.

(h) Training/education hours and individual school requirement. Proponent schools verify the training/education hours and the individual school requirement for courses taught at RC training institutions.

(i) The installation G-8 (or directorate of resource management) reviews unit identification codes, Army management structure codes, and MDEP data on ATRRS.

(2) Based on the SMDR summary sheets, coordinate, identify, and resolve proponent and functionally aligned RC training and education capability discrepancies prior to the SMDR.

(3) Considering the number of available training and education weeks in a year, re-compute annual training capacity if training strategy changes affect course length, class size, training equipment, or facilities.

(4) Determine if it is within the school's capability to accept the training and education load. Attempt to resolve any inconsistency or constraint with the appropriate components before the SMDR. Determine the capacity of one course related to capacities of other courses. For example, if courses x, y, and z have a maximum capacity of 120, as long as the training and education requirement for the three courses does not exceed 120, the school can train the requirement.

(5) Develop information papers describing course constraints when training and education requirements identified in the ATRRS summary sheet exceed school capability. HQDA uses these information papers to determine annual training requirements reduction or a critical need to pursue actions and find resources to resolve the constraint.

(a) At a minimum, the information paper contains the constraint issue, a detailed discussion of costs, analysis of courses of action to teach the requirement, and a recommendation. In addition, the proponent addresses its attempt to resolve these constraints. Each paper addresses only one course: short, concise, self-explanatory, and signed by the director of training and education or colonel-level equivalent. Email a signed copy of the

information paper to TRADOC G-3/5/7 no later than two weeks before the start of the SMDR for TRADOC staff coordination.

(b) The information paper shows the resource bills, to include needed HQDA DSTE, and essential equipment and facilities for the school to meet the requirements identified in the summary sheet. Coordinate installation resource bills with both U.S. Army Installation Management Command for the delivery of base support and U.S. Army Material Command (AMC) for delivery of material readiness solutions:

o Facility constraints. For a facility constraint, the information paper identifies the project number for the military construction, Army project. Identify interim solutions while waiting for project funding. If the interim solution includes a relocatable building, the paper states how long the relocatable is required. Projects that fail approval at the installation level cannot constrain training and education. During constraint identification, consider total RC billeting requirements.

o Equipment constraints. Schools do not constrain training and education unless there is a shortage of mission critical equipment, the shortage will stop training, and the shortage is not currently projected on an approved basis of issue plan or equipment TDA. TRADOC G-3/5/7 RC reviews school-recorded shortages and approves those the SMDR will identify. Proponents identify and request additional equipment to resolve equipment constraints for approval by TRADOC G-3/5/7 before addressing at the SMDR. Coordinate with AMC for required equipment they maintain.

(c) Proponent schools notify TOMA for each constrained course identified during the initial review. TOMA recommends that schools, training centers, and institutions use the approved ARPRINT for the previous year's SMDR to determine course constraints for HQDA published draft summary sheets because the HQDA G-1 and G-3 refer to the requirement TRADOC accepted the previous year before accepting a new constraint.

(d) HQ TRADOC representatives support only school issues submitted before the SMDR to establish a HQ TRADOC position.

4-20. Conducting the structure and manning decision review

a. TRADOC broadcasts the SMDR to SMDR proponent and participant locations via video teleconference (VTC) or like platforms.

b. School participate in SMDR via VTC. Schools schedule a VTC facility at their respective locations during their scheduled time period. The school scheduled to start each day reserves the room for a minimum of two hours beyond the scheduled time period. The follow-on schools anticipate early starts and possible late finishes.

c. The TRADOC training and education program is developed based on identified requirements, past performance, and each school's projected ability to execute the program given appropriate resources. Prior-year show rates (as identified in ATRRS) are a major factor in considering requirements.

d. The SMDR process emphasizes maximum utilization of training and education capacities within the school system. Using training base capacity for constrained courses, proponents recommend how to overcome course constraints and where.

(1) In applicable cases, the SMDR asks input agencies (HRC, RC, etc.) to reduce their program requirements voluntarily.

(2) If the AC schools are unable to accommodate the projected load, they recommend alternate solutions. If input agencies do accommodate voluntary cuts and the course is not critical, HQDA (Chief of the Training Requirements Office with the concurrence of DCS G-3/5/7) levies reductions to the input agency's training and education program based on HQDA priorities. The no-show rates for previous years are a major factor in considering training and education requirement reductions when the total training and education program exceeds course capacity. Part of the analysis will include RC institutions for training any excessive AC load.

e. Refer requirements for critical courses not resolved during the SMDR or the action officer meeting to the IT CoC and/or the TGOSC for resolution.

f. Support aviation training and education requirements with the following information from all input agencies:

(1) The current and projected numbers of both commissioned and warrant officer aviators, including specific ASI data.

(2) The current pilot force structure across the Army, including specific ASI data.

(3) The number of aircraft on hand or projected on hand (for example, new fielding plans) by component.

(4) Commissioned and warrant officer rates of separation that generate requirement increases.

(5) Justification for refresher courses versus in-unit training and education beyond what is required to position students for additional flight courses.

g. Resources:

(1) The TRADOC G-8, MFAD determines manpower requirements and allocates authorizations at the Army management structure code/MDEP/unit identification code level for the appropriate proponents and schools. Coordinate exceptions with TOMA and TRADOC G-8, MFAD. The G-8 Budget Directorate allocates dollars by course location regardless of the POI proponent.

(2) TRADOC's final training and education program does not exceed the baseline as measured in training and education man-years and budget loads for the SMDR program; therefore, input is limited in selected courses and/or recommended courses for elimination or reduction in length. The SMDR may review training and education loads on two fronts to adjust financial targets. Input agencies adjust inputs to remain below the baseline or, if inputs have not

grown, the training and education ACOM prepares to resource through course deletions and/or course length reductions, with recommendations made at the SMDR with final approval at the IT CoC and TGOSC.

4-21. Post structure and manning decision review

a. As schools complete each SMDR period, TOMA and the senior school representative compare information to determine unresolved issues.

b. Within five working days of the completed SMDR, proponents respond to TOMA addressing all unresolved SMDR issues. Prepared using an information paper format, responses identify solutions or actions initiated to resolve each issue. Each information paper addresses a separate course issue and provides sufficient detail for a stand-alone document. At a minimum, the information paper contains the issue, recommendation, and a detailed discussion. These papers are addressed during the action officer and IT CoC meetings to resolve SMDR issues. The TGOSC may also review these papers if required. TOMA uses the information papers to scope the magnitude of the problem and facilitate the HQDA G-3 decision process.

c. SMDR co-chairs decisions to validate training and education requirements, as stated in the SMDR session, beyond the school's capacity require proponents to input the issue as an un-resourced requirement with the appropriate priority in the POM. The information paper does not do this. In addition, proponents track these issues through the resourcing process to ensure that resource decisions are made to train the ARPRINT. If problems arise, proponents notify TOMA of the issue.

d. Proponents develop class schedules for all courses and enter them into ATRRS no later than 60 days after publication of the ARPRINT and receipt of scheduling guidance for TRADOC.

4-22. Quality control criteria

a. To ensure the quality of the TRAS products and the management of the system, each individual involved continuously applies the procedures, as appropriate, listed in this chapter.

b. All individuals involved in the development of the proponent long-range individual training strategy exercise quality assurance (QA) and quality control (QC) over the process and products produced.

c. All individuals involved in the development of the training strategy represented in the CAD concept ensure it is cost-effective and consistent with established training and education policy and guidance.

d. All individuals involved in the development of a course and compiling the POI exercise quality QA and QC over the process and POI publication. Proponent schools develop QC standards by product or product elements to assist individuals in performing their QC responsibilities.

e. The MOT reflects Quality Assurance Office (QAO) verified IAs for new POIs only.

Appendix A

References

Unless otherwise indicated, all TRADOC publications and forms are available at <https://adminpubs.tradoc.army.mil/>. Army publications and forms are available on the Army Publishing Directorate website at <https://armypubs.army.mil/>.

Section I

Required Publications

AR 350-10

Management of Army Individual Training Requirements and Resources

AR 350-100

Officer Active Duty Service Obligations

AR 351-9

Inter-Service Training

AR 614-200

Enlisted Assignments and Utilization Management

DA PAM 25-403

Army Guide to Recordkeeping

DA PAM 415-28

Guide to Army Real Property Category Codes

DA PAM 611-21

Military Occupational Classification and Structure

DFAS-IN Manual 37-100

The Army Management Structure (Available at <https://www.asafm.army.mil>)

TR 10-5

U.S. Army Training and Doctrine Command

TR 11-20

Cost-Benefit Analysis to Support Army Enterprise Decision-making

TR 11-21

TRADOC Implementation of the Army Quality Assurance Program

TR 37-2

Temporary Duty Travel Policies and Procedures

TR 350-70
Army Learning Policy and Systems

Section II
Related Publications

A related publication is a source of additional information. The user does not have to read a related reference to understand this publication.

AR 5-13
Army Munitions Requirements, Prioritization, and Authorizations Management Policy

AR 25-1
Army Information Technology

AR 70-1
Army Acquisition Policy

AR 71-32
Force Development and Documentation-Consolidated Policies

AR 350-1
Army Training and Leader Development

AR 350-38
Policies and Management for Training Aids, Devices, Simulators, and Simulations

AR 420-1
Army Facilities Management

AR 570-4
Manpower Management

AR 602-2
Human Systems Integration in the System Acquisition Process

Section 508 of the Rehabilitation Act (29 United States Code 794d), as amended by the Workforce Investment Act of 1998 (Public Law 105-220)
(Available at <https://www.section508.gov>)

TR 25-36
The U.S. Army Training and Doctrine Command Doctrine Publishing Program

TR 350-18
The Army School System

TR 350-71
Enterprise Classroom Program

TR 385-2 with Change 1

U.S. Army Training and Doctrine Command Safety and Occupational Health Program

Section III

Prescribed Forms

This section contains no entries.

Section IV

Referenced Forms

DA Form 2028

Recommended Changes to Publications and Blank Forms

DD Form 2977

Deliberate Risk Assessment Worksheet

Appendix B

General Information

B-1. Introduction

This appendix provides general guidance. See TR 350-71 for additional information on the Enterprise Classroom Program (ECP).

B-2. Proponent coordination

a. The POI proponent coordinates the development of TRAS documents with the following entities who will conduct the course:

- (1) Schools.
- (2) Centers.
- (3) Academies.
- (4) Organizations.
- (5) RC.

b. The proponent coordinates course/event development with the:

- (1) Training departments.
- (2) Proponency office.
- (3) Capabilities Development and Integration Directorate.
- (4) Garrison command (Installation Management Command).
- (5) Logistics Readiness Center.
- (6) CoE general staff elements.
- (7) Branch safety office or supporting safety professional.
- (8) Office of Foreign Disclosure.
- (9) Environmental Office.
- (10) Directorate of Public Works.

- (11) QAO.
- (12) Life-cycle management command Fleet Management Expansion.
- (13) Other organizations or installations having responsibility for learning product content and support of the peacetime or IRR mobilization training and education program.

B-3. Class size

- a. Class size is the number of students in a class.
- b. Maximum class size is the largest number of students in a class taught, for a short period of time, without unacceptable degradation in the effectiveness of instruction due to manpower, facility, equipment, or other limitations. The organization conducting the course sets the maximum class size, which is normally greater than the optimum class size. Compelling justification is required to make optimum and maximum the same, such as equipment size constraints.
- c. The availability of manpower is not considered when determining the optimum class size for programming purposes. Optimum class size is the largest number of students in a class indefinitely trained with no degradation in the effectiveness of instruction. The available or projected equipment and facilities are the constraining factors in determining the optimum class size, with equipment the primary constraint. The optimum class size is considered when developing ICH, scheduling classes, and determining total resource requirements. For example, optimum class size is the basis for determining a course's equipment and ammunition requirements. Optimum class size changes are normally based on the most effective, efficient, and reasonable approach to developing student proficiency as constrained by projected availability of equipment and facilities. Changes in optimum class size (smaller) normally cause course growth and require justification from the school.
- d. Minimum class size is the smallest number of students in a class economically taught. The organization conducting the course sets the minimum class size, which is normally less than the optimum class size.

B-4. Instructor/facilitator contact hours and instructor actions

- a. ICH is based on the course academic time. An ICH represents one instructor work hour during which an instructor/facilitator is in contact with a student or students and is conducting, facilitating, or performing instruction using acceptable methods of instruction (see TR 350-70).
- b. IAs are types of instructor tasks that generally occur outside of classroom/academic hours and are not considered ICH but captured separately within the POI as IA. IA are utilized within the TRADOC instructor formula known as the Instructor Requirements Model. Update all POIs to reflect appropriate IAs (see some examples below), which contribute to the instructor manpower requirements produced by the Instructor Requirements Model.

- (1) Classroom setup and breakdown.
- (2) Conduct of pre-entry assessment.
- (3) Conduct of remedial instruction and assessments.
- (4) Grading assessments.

- (5) Instructor to student performance counseling.
- (6) Evaluating student written assignments.

c. The following personnel are not recognized when documenting ICH and IA in ATRRS:

- (1) Drill sergeants.
- (2) Company cadre.
- (3) Support personnel necessary to present instruction, including contractor instructor(s).

d. ICH and IA are not used to determine resource requirements for RCTI courses and for mobilization POI or CAD but are data elements.

e. The ICH for one POI file or lesson is calculated by multiplying the number of academic hours times the number of student groups by the number of instructors/facilitators required per group. Compute the number of student groups by dividing the optimum class size by the optimum number of students trained in a group. Divide the student group size into the course's optimum class size to determine ICHs accurately. For example, a course has an optimum size of 32 students. Divisible numbers include 1 instructor per 32 (1:32) students (or 1:16, 1:8, 1:4, 1:2 or the most restrictive at 1:1). Any number not divisible by the optimum size is usually reflective of an error and will result in a decimal outcome for ISR. For example, 1 instructor to 15 students (1:15), calculates a requirement for 2.13 instructors to an optimum size of 32 students.

f. The one-time ICH is the number of ICHs required to conduct the course/phase for one iteration at the optimum class size.

g. DL ICH. The matrix in table B-1 (below) calculates DL ICH when producing POI. The matrix provides multiple entry points for determining TDC calculation reductions. This allows schools and centers to reflect the instructional course design when determining the DL ICH.

Table B-1
Distributed Learning ICH Instructor/Facilitator-to-Student interaction factor matrix

DL ICH Instructor/Facilitator-Student Interaction Factor Matrix							
Instructor/Facilitator-Student Interaction							
				Very Low	Low	Moderate	High
Cognitive	Sample	Method of	Student	Primary	Instructional	Instructional	Instructional
	Tasks Verbs	Instruction	interacts with	student	design	design uses	design uses
			computer-	interaction is	incorporates	instructor-	instructor-
			generated	with	increased	student	student
			lesson and	computer-	instructor-	interaction	interaction as
			information.	generated	student	through a	a primary
			Instructor-	material.	interaction	blended	learning
			student	The nature	requirement.	requirement.	vehicle;
			interaction is	of the			structures
			limited to	material is			asynchronous
			answering	sufficiently			learning along
			questions and	difficult or			a university
			remedial	technical			model.
			requirements.	that a greater			
				number of			
							< 1:50

**Table B-1
Distributed Learning ICH Instructor/Facilitator-to-Student interaction factor matrix**

				> 1:175	questions and remedial requirements anticipated.		
		Write, List, Label, Name State, Define Bookmark Search	Brainstorming, Guest Speaker, Lecture, Panel, Discussion, Seminar, Tutorial		> 1:100 < 1:175		
		Explain, Summarize, Paraphrase, Recognize Comment Annotate	Role Playing, Study Assignment	.25			
		Use, Compute, Solve, Demonstrate, Apply, Construct Linking Validate	Demonstration, Gaming, Role Playing, Conference, Student Panel, Assessment		.50		
		Analyze, Categorize, Compare, Contrast, Separate Moderate Collaborate	(Low, if application; Moderate, if analytical)			.75	
DL ICH Instructor/Facilitator-Student Interaction Factor Matrix							
Instructor-Student Interaction							
				Very Low	Low	Moderate	High
		Create, Design, Hypothesize, Invent, Develop Produce Publish	Practical exercise (PE)-non-hardware, Research/Study				1.0
		Judge, Recommend, Critique, Justify	Case Study, Assessment Review				
Psychomotor		Begin, Assemble, Attempt, Copy,	Brainstorming, Lecture, Demonstration				

**Table B-1
Distributed Learning ICH Instructor/Facilitator-to-Student interaction factor matrix**

	Follow, Repeat					
	Acquire, Complete, Conduct, Make, Perform, Use	Demonstration	.25			
	Exceed, Master, Refine	PE-hardware, Assessment		.50		
	Adapt, Alter, Change, Rearrange, Revise	Gaming, PE-hardware			.75	
	Arrange, Combine, Compose, Construct, Create	PE-hardware, Assessment Review				1.0
For additional guidance see learning domains such as Bloom (1956), Krathwohl (1973), Harrow (1972) and Churches (2007)						

(1) Determine the expected level of interaction between the instructor and student (or ISR) based on the course's instructional design.

(2) Determine the types of tasks the course expects the student to perform at a level of intellectual behavior. Types of tasks include but are not limited to:

(a) Cognitive tasks in which the course expects the student to think about or analyze a topic.

(b) Psychomotor tasks in which the course requires the student to manipulate objects.

(3) Locate the intersection of ISR interaction and the level of intellectual behavior.

(4) Extract this value and multiply it by the ICH determined by TDC.

h. Table B-1 provides sample tasks and instructional methods used to reach a level of intellectual behavior. The columns provide examples, not complete lists, of the tools available.

B-5. Instructor/Facilitator-to-student ratio for reserve component training institutions

a. a. RCTI are not resourced using ICH. RCTI are resourced based on ISR. When developing a POI taught in a RCTI, proponents record the most restrictive ISR on the CAD/POI. Validate the ISR figure during staffing with RC.

b. Obtain the most restrictive ISR (for at least ten consecutive academic hours) by reviewing ISR for each module of the instruction and recording the lowest ISR in the course. For example, the phase of a course has the following ISR: 1:20, 1:16, 1:8, and 1:10. The most restrictive ISR recorded on the CAD of the POI is 1:8.

B-6. Course Lengths

a. Course length is expressed in weeks and days. The course length is determined by the total academic hours required to conduct the course/event. TOMA validates, manages, and enters TRADOC-approved course lengths into ATRRS.

b. An academic hour is the amount of instruction the average student can complete in 50 minutes—plus an allowance of an average of 10 minutes for break time per each 50-minute segment. Also, an academic hour is the total length of time actually required to present instruction and includes conducting instruction, assessment, and an after-action review. Identify academic hour(s) for each method of instruction (MOI) for each lesson. If the lesson plan has more than one type of MOI, identify each type individually. When using self-paced instruction, use the teaching time necessary if taught in residence. Types of MOI below:

- (1) Brainstorming.
- (2) Case study.
- (3) Conference/discussion/panel discussion/student panel.
- (4) Demonstration/practical exercise (performance).
- (5) Flight dual or solo.
- (6) Gaming/simulators/TV/video.
- (7) Guest speaker/lecture/seminar.
- (8) Research/study assignment (conducted during normal training day/hours within the school/classroom setting).
- (9) Role playing.
- (10) Large and small group instruction.
- (11) Field trip.
- (12) After action reviews.
- (13) Laboratory.

c. Administrative time is the total time in a course a student spends performing activities unrelated to the learning objective of the course during the duty day; types of administrative time below:

- (1) In-processing.
- (2) Course overview/orientation.
- (3) Graduation/out-processing.
- (4) Guard detail.
- (5) Commandant's time.
- (6) Awareness training and education.
- (7) Unit commander's orientation.
- (8) Remedial instruction.
- (9) Reassessment.

- (10) Army combat fitness test pre and post.
- (11) Payday activities.
- (12) Independent study/study-hall.
- (13) Physical readiness training.

d. Mandatory Training. Initial Military Training courses (BCT, advanced individual training, OSUT, and warrant/officer basic courses) conduct AR 350-1 mandated training during the academic time. For TDY length PME courses, AR 350-1 mandated training is a unit commander's responsibility; therefore, proponents do not modify the curriculum to add mandatory training subject matter. For PCS length PME courses, commandants conduct mandatory training as much as possible as part of administrative time. However, for both TDY and PCS length PME courses, commandants retain the discretion to incorporate specific AR 350-1 subject matter into the curriculum if related to the learning outcomes of the course.

e. The academic week consists of the required number of academic hours taught during any given training week. The minimum AC peacetime five-day academic week is 36 hours. The minimum AC mobilization week is 60 hours. The minimum AC peacetime six-day academic week is 44 hours.

(1) Proponent schools/centers may establish training weeks with more than 36 academic hours per five-day or 44 academic hours per six-day training week respectively. HQ TRADOC, DCS, G-3/5/7, TOMA, approves training weeks of less than 36 or 44 hours.

(2) HQ TRADOC, DCS, G-3/5/7 may direct that the academic week includes more than 36 academic hours for specific courses.

(3) The minimum RC peacetime academic week is 48 hours, based upon an 8-hour training day, six days a week or the maximum of 60 hours based on a 10-hour academic, 6 days a week (exception to rule, United States Army Reserve Readiness Training Center and ARNG Professional Education Center schools operate on a 40-hour 5-day week schedule). HQ TRADOC, DCS, G-3/5/7, TOMA, approves 7-day, 56-hour work weeks.

f. Administrative time consists of all non-academic time included in a course and is represented as the total hours necessary to perform administrative activities. Training schedule development requires the identification of both administrative and academic time.

g. Add AC administrative time of 4 hours to 36 hours and equal 40 hours a week. Add RC administrative time to 44 hours and equal 48 hours a week. Do not calculate administrative time exceeding 4 hours per week into the course length. ICHs are not generated or supported by administrative time within a course.

h. An AC training week consists of the total number of training hours conducted during any given week. A normal 5-day training week is 40 hours. When directed to use a 6-day training week, the normal AC training week is 48 hours. Figure B-1 shows the formula for calculating peacetime CLIW.

<p>Total academic hours</p> <hr style="border-top: 1px dashed black;"/> <p>Course academic week in hours (normally 36)</p> <p>Acronym Key: CLIW = Course length in weeks</p>	<p>=</p>	<p>Peacetime CLIW</p>
---	----------	------------------------------

Figure B-1. Peacetime course length in week formula

(1) Example 1: Course version that has 324 academic hours and a 36-hour academic week would have a course version length of 9 weeks (324 divided by 36 equals 9.0). If the course has a 44-hour academic week, the course length equals 7 weeks, 2 days (324 divided by 44 equals 7.3). Figure B-2 shows the formula for calculating days.

(2) Example 2: Course version with continuous (Command Post Exercise, FTX, STX, or Lane Training Exercise) operations. POI list 400 academic hours and a 36 hour work week with a 72 hour continuous FTX. 400 minus 72 (3 Days) equals 328 divided by 36 equals 9.1 (9 weeks and 1 day). Add back in the 3-day FTX and the total course length is 9 weeks and 4 days. If the course has 270 academic hours and a 44 hour work week with a 72 hour continuous FTX. 270-72 (3 days) equals 198 divided by 44 equals 4.5 (4 weeks and 3 days). Add back in the 3-day FTX and total course length is 5 weeks. BCT, OSUT, ROTC junior and senior programs, and Ranger School are excluded from this rule.

5 Day	6 Day
.2 = 1 Day	.1 = 1 Day
.4 = 2 Days	.3 = 2 Days
.6 = 3 Days	.5 = 3 Days
.8 = 4 Days	.6 = 4 Days
1. = 5 Days	.8 = 5 Days
	1. = 6 Days

Figure B-2. Calculating days

(3) When a proponent believes the course version length generated by the formula above will result in insufficient time for necessary administrative activities (for example, in-processing), the proponent may request a longer course version length. The request for exception is fully justified, to include why courses cannot accomplish administrative activities before or after normal duty hours or why a longer instruction week is not acceptable.

i. During mobilization, a normal week is 60 hours (10 hours per day, six days a week). No five- or seven-day training weeks are authorized without a waiver. Proponent commanders/ commandants may establish a longer training week by exercising their option to increase the number of academic hours trained in a week. The training week must include academic and administrative time. Determine mobilization CLIW by dividing a course version's total number of academic hours by the course version's academic week in hours (normally 56). Figure B-3 shows how the formula is used in calculating the mobilization CLIW.

<p>Total academic hours</p> <p>----- = Mobilization CLIW</p> <p>Course academic week in hours (normally 56)</p> <p>(Four hours of administrative time during course week is not added to CLIW)</p> <p>Acronym Key: CLIW = Course length in weeks</p>

Figure B-3. Mobilization course length formula in weeks

j. Training days are the actual number of days within a training week (depending upon training on a five-, six-, or seven-day training calendar). For example, a 2-week course that trains on a 5-day calendar would have 10 training days.

k. AR 350-1 requires HQDA approval for new courses or increased course resourcing, including the Institutional Training Directed Lodging and Meals Program.

B-7. Academic hours. Indicate duration academic hours by instruction for each POI file. When using more than one type of lesson instruction, identify each type individually. For self-paced instruction, use the average time required to complete the class instruction. When a POI file requires less than one hour, convert minutes to tenths of hours, as shown in figure B-4.

Minutes	Tenths
1-5	0.10
6-10	0.20
11-15	0.30
16-20	0.40
21-25	0.50
26-30	0.60
31-35	0.70
36-40	0.80
41-45	0.90
46-50	Full hour

Figure B-4. Converting minutes to tenth of hours

B-8. Schoolhouse Information

a. Schoolhouse information is critical; it affects all students attending Army schools and is reported in the ATRRS on the schoolhouse introduction screen. This information details:

- (1) Availability of quarters.
- (2) Availability of mess and transportation.
- (3) Uniform requirements.
- (4) Reporting guidance.
- (5) Sources from which to obtain additional information.

b. To reduce inaccuracies in school information, proponents provide all changes to schoolhouse data utilizing the following procedures:

- (1) Copy and paste ATRRS data in a digitally deliverable format.
- (2) Once proponents make changes, submit the digitally deliverable document to TRAS analysts via e-mail.
- (3) TOMA will staff information with appropriate organizations and enter it into ATRRS.

B-9. Mobilization.

Execute training in support of mobilization in accordance with the TRADOC Training Base Expansion (TBE) plan. The 108th and 80th Training Commands activate to execute TBE in order to provide existing service schools, U.S. Army training centers, and CoEs with additional trained trainers. TBE's main two efforts are increasing the citizen to Soldier mission as well as training activated IRR personnel and retiree recalls.

a. Branch proponents:

(1) Provide TRADOC G-33 Mobilization with subject matter experts (SME) to assist in developing comprehensive branch training strategies that support TBE. TBE includes developing plans to expand training and education operations, as necessary, to support continued mobilization of programmed peacetime training and education. Additionally, the proponents implement mobilization courses (for example, IRR refresher training and education) using mobilization POIs during either partial/full mobilization.

b. Mobilization training strategy. Branch proponents identify and develop courses required for filling and sustaining branch requirements during contingency situations. These course lists comprise the proponent's mobilization training strategy, and determine the training that individual schools conduct during each level of mobilization. The MOS/AOC proponent, in conjunction with TRADOC G-33 mobilization and HRC, utilizes HQDA deployment criteria to certify IRR and Retiree Recall Soldiers for their next unit of assignment.

c. POI submission requirements. POI proponents develop IRR rapid train-up or refresher courses for all active enlisted and warrant officer MOS and officer AOC. Immediately after completion of reception battalion processing, designated mobilization centers conduct warrior task and battle drills for IRRs in all MOSs and AOCs. The infantry school is proponent for the warrior tasks and battle drills course for enlisted IRR taught at four designated mobilization U.S. Army training center sites. Proponents develop two-week courses to re-train all IRR enlisted Soldiers on MOS critical tasks, as required, to validate MOS proficiency. Conduct rapid train-up program courses for IRR personnel at skill level 10/20 and skill level 30/40. Proponents also develop three-week courses at proponent school sites to re-train and certify AOC/MOS proficiency of officer/warrant officer IRRs by providing refresher training in critical AOC/MOS tasks. Up to one week of the course may contain leadership skills refresher training.

B-10. Course waivers and proponent risk assessment

Paragraph B-10 addresses the risk associated with the deviations of the course and not the identification of the hazards associated with conducting the training (see TR 350-70 for more on Risk Management).

- a. The DD Form 2977 (Deliberate Risk Assessment Worksheet) considers:
 - (1) impact to unit readiness.
 - (2) loss or damage of personnel and equipment (while designated safety officials are trained to assess personnel injury risk and equipment damage risk, unit leadership is uniquely qualified to assess unit readiness impacts using deliberate risk assessment).

- b. Deliberate risk assessment should include all impacts to a training and education proponent's DOTMLPF-P responsibilities. For example, manning diversions for training instruction could result in a negative impact to material testing. As another example, unpredicted changes to personnel, equipment, or facilities could negatively impact instruction and student learning outcomes.

- c. As part of the effective and safe delivery of critical learning requirements to Soldiers and Army Civilians, commandants approve POIs and document necessary resource requirements. Commandants require a course waiver when there is deviation from approved POI resourcing or established POI learning requirements. POI deviations that require course waivers also potentially impact associated course risk assessments.

- d. While conditions below are not exclusive, schools produce course waivers when there is a failure to:
 - (1) Reach the learning outcomes by completion of the course.
 - (2) Meet instructor rank requirements (see AR 614-200).
 - (3) Meet POI ISR.
 - (4) Meet POI resource to student ratios (equipment, ammunition, facility, etc.).

- e. Course waiver approval authorities correspond to the residual risk approval authorities. Risk decision authorities approve the residual risk of an activity after application of control measures. CG, TRADOC establishes risk acceptance authorities (see TR 385-2, U.S. Army Training and Doctrine Command Safety and Occupational Health Program). Though commanders/commandants may delegate risk acceptance authority in accordance with designated limits, the commandant remains the approval authority for all course waivers--as the commandant remains the approval authority for all POIs. CG, TRADOC establishes general officer risk acceptance requirements (see TR 385-2).

- f. Waiver memorandums include:
 - (1) Waiver implementation and expiration dates.
 - (2) Courses, classes, and number of students impacted.
 - (3) Deliberate Risk Assessment Worksheet.
 - (4) Readiness assessment justification and mitigation efforts.
 - (5) Impact to unit, impact to student, and impact to operational force.
 - (6) Resources required to avoid the waiver.

- g. Archive all course waivers in accordance with AR 25-400-2 (ARIMS) and within a center/school/academy designated office for audit purposes. Headquarters, U.S. Army Training and Doctrine Command, Deputy Chief of Staff G-3/5/7, TOMA maintains a copy of all approved waiver requests.

**Appendix C
General Formats**

C-1. This appendix provides standardized formats for supporting documents that accompany TRAS submissions to TOMA.

a. All notes and information in brackets are intended for the developer, not the instructor/facilitator. Include all other "notes" in the documents and direct them to the instructor/facilitator.

b. Table C-1 lists the formats shown in this appendix.

c. A course comparison worksheet example is on the Training and Education Developer Toolbox website under Job Aids/Resourcing.

**Table C-1
Section titles and paragraph headings in Appendix C**

Section	Figure	Learning product
I. General		
	C-1	CAD/POI MOT format
	C-2	DL supplemental information format

C-2. As described in Chapter 4, see figure C-1 for an example Course Administrative Data or Program of Instruction Memorandum of Transmittal (CAD/POI MOT) request format. See figure C-2 for the stand-alone non-resident DL supplementary information requirements that provide information needed to document the course/phase in ATRRS.

	DEPARTMENT OF THE ARMY ORGANIZATIONAL NAME/TITLE STANDARDIZED STREET ADDRESS CITY STATE 12345-1234
[OFFICE SYMBOL (Record Number)]	[Date]
MEMORANDUM FOR Commander, U.S. Army Training and Doctrine Command, ATTN: ATTG-TRI-MP, Fort Eustis, VA 23604-5700	
SUBJECT: Course Administrative Data or Program of Instruction for [Course Name, Course Number, Course Phase (Resident or Mobilization)]	
1. References:	
a. [Other references that support this action, if needed].	
b. TRADOC Regulation 350-70 (Army Learning Policy and Systems)	
c. TRADOC Pamphlet 350-70-9 (Informing Resourcing Systems)	
2. The reason for submission of this action is [provide synopsis of the change and reason]. (Use "NA" for fields that are not applicable)	
3. Training strategy or changes to the currently existing training strategy. [Explain strategy or changes. Provide other additional information required to support this submission, if needed].	
4. Legacy strategy required (if applicable). [Explain what is required, the fiscal years (FYs), and rationale].	
5. Impact to other phases or courses (if applicable). [Identify/explain whether this submission impacts other phases or courses].	
6. Identification of Course Administrative Data (CAD) or Program of Instruction (POI) that this course supports:	
a. Date of last TRADOC validated CAD: [DD Month YYYY]	
b. Date of last TRADOC validated POI: [DD Month YYYY]	
7. Course specific data is as follows:	
a. Requested training/education start date: [DD Month YYYY – only administrative changes during the year of execution].	
b. This CAD/POI is effective for: [Example, "First Quarter FY23 and out" - only administrative changes during the year of execution].	

Figure C-1. CAD/POI MOT Request Format

SUBJECT: Course Administrative Data or Program of Instruction for Course Name, Course Number, Course Phase (Resident or Mobilization)

- c. This phase/course [is/ is not] contract taught. [If yes, explain and include contract number].
- d. This phase/course [is/ is not] an Inter-service Training Requirements Organization (ITRO) course. [If yes, explain]
- e. This course [is/ is not] a refresher course. [If yes, provide justification]
- f. This course [is/ is not] a transition course. [If yes, provide justification]
- g. Skill Code data: [Identify which functional area, military occupation specialty code, branch, skill identifier, additional skill identifier, special qualification identifier will be awarded by the successful completion of this course, if applicable].
- h. Specific course data: (From ATRRS C8/C9 on the requested implementation FY only, and To data is from the submitted POI (if multiple phases, list to and from data for each phase sequentially)).

	FROM (ATRRS Verified)	TO
(1) Length:	__Weeks, __Days	__Weeks, __Days
(2) Class Sizes (Max/Opt/Min):	_/_/_	_/_/_
(3) Government Instructor Contact Hours:	[hrs]	[hrs]
(4) Contractor Instructor Contact Hours:	[hrs]	[hrs]
(5) Instructor Action Hours:	[hrs]	[hrs]
(6) Academic Hours:	[hrs]	[hrs]
(7) Instructor Student Ratio (Reserve only):	[#]	[#]
(8) Annual Capacity:	[#]	[#]
(9) Estimated Student input (new courses only):		[#]
(10) Class Frequency (new courses only):		[#]

8. List all resource changes (to and from data), including rationale and whether resourcing is required. This includes all changes (increases and decreases) to facilities, equipment, operational tempo, field training days/ Direct Support to the Training Event (DSTE), training aids, devices, simulators, and simulations (TADSS), land and ranges, and ammunition. [Provide requested information].

Figure C-1. CAD/ POI MOT request format (continued)

SUBJECT: Course Administrative Data or Program of Instruction for Course Name, Course Number, Course Phase (Resident or Mobilization)

9. The following documents are provided as enclosures: (list applicable items below)

a. Justification for course growth and bill-payer information (if needed; growth requires commandant, assistant commandant, or equivalent signature, automated TAC-BA Concept and growth slide).

b. Supplemental information worksheet (if distributed learning (DL) phase/course).

c. Reserve component (RC) concurrences (required for RC-taught courses, any course that incurs RC pay and allowance increases, and active component (AC) courses that require a course comparison worksheet).

d. Course comparison worksheet (required for RC and AC equivalent courses).

e. *[List all training locations]*

f. Out-of-cycle justification (if needed; requires commandant, assistant commandant, or equivalent signature).

g. These documents *[do/ do not]* require ITRO coordination.

h. The course scope, prerequisites, and special information data *[has/ has not]* been updated in the Army Training Requirements and Resources System.

10. Instructor Action Hours were validated by local Quality Assurance Officer *[name, email, and phone number]* for new POIs only.

11. My point of contact for this matter is *[name, position title]* at *[telephone number, email address or organizational email address]*.

Encl

[Signature Block]

Figure C-1. CAD/ POI MOT request format (continued)

<p style="text-align: center;">DL Supplemental Information</p> <p style="text-align: center;">School Information</p> <p>1. Proponent School DL Phase/course Point of Contact: [<i>Name, e-mail, phone number</i>]</p> <p style="text-align: center;">Course Administrative Data</p> <p>2. What is the course title and course number, if known.</p> <p>3. Is the DL phase/course Quota Managed (Y/N).</p> <p>4. Can the DL phase/course also be used as Self-Development (Y/N). (Explain Yes.)</p> <p>5. Total hours - Academic/Asynchronous or Synchronous.</p> <p>6. Maximum Allowable time to complete the course in days.</p> <p>7. Requested Training Start Data.</p> <p>8. DL ICH Instructor/Student Matrix Factor.</p> <p>9. Requested DL ICH.</p> <p>10. Justification for DL ICH.</p> <p>11. Requested DL IA.</p> <p>12. Justification for DL IA.</p>

Figure C-2. Distributed Learning Supplemental Information Format

Glossary

Section I

Abbreviations and Acronyms

ACOM	Army command
AC	active component
ADDIE	analysis, design, development, implementation, and evaluation
ADT	active duty for training
ALCC	Army Learning Coordination Council
AMRCoC	Army Munitions Requirements Council of Colonels
AMRWG	Army Munitions Requirements Working Group
AOC	area of concentration
AR	Army regulation
ARNG	Army National Guard
ARPRINT	Army Program for Individual Training
ASI	additional skill identifier
ASCC	Army service component command
ATAC	Automated TRAS Abbreviated Cost Benefit Analysis
ATRM	Aviation Training Resource Model
ATRRS	Army Training Requirements and Resources System
BCT	basic combat training
CAC	Combined Arms Center
CAD	course administrative data
CATS	Combined Arms Training Strategy
CCW	course comparison worksheet
CFL	core functional lead
CG	commanding general
CLIW	course length in weeks
CLTM	Course Level Training Model
CoE	Center of Excellence
DA PAM	Department of the Army pamphlet
DCS	Deputy Chief of Staff
DL	distributed learning
DOTMLPF-P	doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy
DRU	direct reporting unit
DSTE	Direct Support to the Training Event
DTMS	Digital Training Management System
ETV	estimated time value
FMSWeb	Force Management Systems Website
FTX	field training exercise
FY	fiscal year
G-1	Assistant Chief of Staff for Personnel
G-3	Assistant Chief of Staff for Operations and Plans
G-3/5/7	operations, plans, and training
G-6	Assistant Chief of Staff for Signal
G-8	Assistant Chief of Staff for Resource Management

GOSC	general officer steering committee
GTA	graphic training aid
HQ	headquarters
HQDA	Headquarters, Department of the Army
HRC	Human Resources Command
IA	instructor actions
IAH	instruction action hours
ICH	instructor contact hours
ICTL	individual critical task list
IDT	inactive duty training
IMT	initial military training
IRR	individual ready reserve
ISR	instructor-to-student ratio
IT CoC	Institutional Training Council of Colonels
ITMMT	Institutional Training Mission Management Tool
ITRM	institutional training resource model
ITRO	Inter-service Training Review Organization
MDEP	management decision package
METL	mission-essential task list
MFAD	Manpower and Force Analysis Directorate
MOS	military occupational specialty
MOT	memorandum of transmittal
NGB	National Guard Bureau
NCOA	Noncommissioned Officer Academy
OFS	officer foundation standards
OPTEMPO	operational tempo
OSUT	one station unit training
PAE	TRADOC G-8 Planning Analysis and Evaluation
PCS	permanent change of station
PME	professional military education
PMR	product managed risk
POC	point of contact
POI	program of instruction
POM	program objective memorandum
PPBE	planning, programming, budgeting, and execution
QC	quality control
RC	reserve component
RCTI	Reserve Component Training Institution
ROTC	Reserve Officers' Training Corps
RRS-A	Records Retention Schedule-Army
SII	special interest items
SMDR	structure and manning decision review
SQI	skill qualifications identifier
SROTC	Senior Reserve Officers' Training Corps
STRAP	system training plan
STP	Soldier training publication
STX	situational training exercise
TACITS	Total Army Centralized Individual Training Solicitation

TADSS	training aids, devices, simulators, and simulations
TADLP	The Army Distributed Learning Program
TADV MDEP	training development management decision package
TAMIS	Total Ammunition Management Information System
TC	training circular
TD	training developer
TDA	table of distribution and allowances
TDC	Training Development Capability
TDY	temporary duty
TED	training and education development
TEM	training event matrix
TLO	terminal learning objective
TOMA	Training Operations Management Activity
TP	TRADOC pamphlet
TR	TRADOC regulation
TRADOC	U.S. Army Training and Doctrine Command
TRAP	training resources arbitration panel
TRAS	Training Requirements Analysis System
TRMIS	Training Resource Management Information System
TSP	training support package
TT PEG	Training Program Evaluation Group
USACC	United States Army Cadet Command
USAR	United States Army Reserve
USARC	U.S. Army Reserve Command
VPDE	Vice Provost for Digital Education
VTC	video teleconference
WB	workbook
WM	workload management

Section II

Terms

Academic time

Academic time is the total time in a course a student spends towards achieving the learning objectives of the course during the academic day.

Administrative time

Administrative time is the total time in a course a student spends performing activities unrelated to the learning objective of the course during the duty day.

Analysis, design, development, implementation, and evaluation

The Army's instructional design framework, ADDIE, used by training developers to build learning products. The process involves five interrelated phases: analysis, design, development, implementation, and evaluation. It determines whether training and education is needed; what is instructed; who receives the instruction; how, how well, and where the instruction is presented; and the support and resources required to produce, distribute, implement, and evaluate those learning products (TR 350-70).

Annual capacity

Estimated FY capacity for all course/phases with regard to Base Operations support (billeting, dining, medical), facilities, ranges, classrooms, training equipment, and any installation scheduling issues in order to determine estimated maximum unconstrained Annual Capacity.

Army Learning Management System

A management administration system designed to track learner performance over time, provide information concerning performance trends, record individual and group performance data, schedule instruction, and provide support for other learning product management functions (TP 350-70-12).

Army management structure

Provides a management language based on congressional appropriations. It relates program dollars and manpower to a standard classification of activities and functions per DFAS-IN Manual 37-100-XX (where XX stands for the current FY (for example, 22 or 23)).

Army Program for Individual Training

A mission, planning, and resourcing document produced by ATRRS that identifies by fiscal year projected individual training requirements for established courses and for skills where new courses are necessary (AR 350-1).

Army Training Requirements and Resources System

The Department of the Army's major online information system for support of institutional training missions during peacetime, partial or full mobilization, and subsequent reduction to the training base. Consisting of a centralized training management database with interactive terminals supporting the HQDA, HRC and its RC counterparts; Army schools and training centers; and others service or government agency schools and training centers (AR 350-1).

Combined Arms Training Strategy

A CATS provides a descriptive holistic and METL focused, task-based, event-driven strategy for all TOE units, developed by the proponent to provide the unit commanders with a training strategy designed to assist them in developing unit training plans that build or sustain unit training readiness throughout the training cycles. (Function CATS. Task-based event driven training strategies that are designed to assist the unit commander in planning, and executing training events that enable the unit to build and sustain Soldier, leader, and unit proficiency in collective tasks that support a mission or a functional capability common to multiple units and echelons). (TR 350-70)

Course administrative data

A TRAS document and the proponent's initial estimate or projection of a course's administrative data and resource requirements. A course document that provides critical planning information used to determine learner input requirements for new and revised courses. It serves as a change document for submission of administrative and resource changes to a specific course or course phase.

Course growth

Any action that results in increased resources including addition of new courses or revisions to existing courses that change ICH, IA, optimum class size, increased course length, changes to the

training strategy that affects DSTE or target audience and any resource increase (that is, manpower, ammunition, equipment, facilities, dollars, or TADSS).

Course Level Training Model

An interface, on-line transactions model that enables POI-based pricing. CLTM dovetails with the Army's training development processes and links systemically to TDC model that provides the type and usage of ammunition, equipment, facilities, training aids and devices, and other relevant POI information.

Distributed learning

The delivery of standardized individual, collective, and self-development training to units, Soldiers, leaders, and Civilians at the right place and right time, using multiple means and technologies, with synchronous, asynchronous, and blended student-instructor interaction (TP 350-70-12).

Human systems integration

A comprehensive management and technical strategy, initiated early in the acquisition process, to ensure that human performance, the burden the design imposes on manpower, personnel, and training, and safety and health aspects are considered throughout the system design and development processes. Human Factors Engineering requirements are also established to develop effective human-machine interfaces and minimize or eliminate system characteristics that require extensive cognitive, physical, or sensory skills; to require excessive training or workload for intensive tasks; or to result in frequent or critical errors or safety and/or health hazards. The capabilities and limitations of the operator, maintainer, repairer, trainer, and other support personnel will be identified prior to program initiation (usually materiel development decision and/or Milestone A) and refined during the development process. Incorporates Soldier survivability considerations into that process as well (see AR 602-2).

Institutional Training Resource Model

A model used for calculating and costing institutional training and education requirements. Applying the ITRM links individual training and education requirements to training and education resource requirements by identifying OPTEMPO funding and life-cycle data of equipment required to teach the course as documented in the POI. Additionally, this model assists with integrating the training and education development manpower requirements with PPBE.

Institutional Training Mission Management Tool

A CAC-enabled, web-based capability that TOMA utilizes to staff and validate TRAS documents with organizations across the Learning Enterprise. It leverages the current functionality available in the ATRRS.

Instructor contact hour

The work hour an instructor devotes to the delivery of learning content to students to accomplish the course learning objectives during the academic day.

Management decision package

Describes a particular organization, program, or function and records the resources associated with the intended output. An individual MDEP applies uniquely to one of the following six

management areas for the AC and RC: mission of modified table of organization and equipment units; missions of TDA units and Army-wide standard functions; missions of standard installation organizations; acquisition, fielding, and sustainment of weapon and information systems; special visibility programs; and short-term projects.

Operational tempo

The rate at which a single system is projected to reasonably use for training in a single iteration of a designated course. Rates are expressed in miles, hours, or systems. Direct OPTEMPO costs are based on POI pricing which will include ammunition, equipment, facilities, and manpower. Indirect OPTEMPO includes travel, contracts, supplies, and equipment.

Product managed risk

Previous year TED workload requirements not performed due to resource constraints; normally expressed as the number of man-years attributed to learning products that are past due for some sustainment action as determined by the application of maintenance cycles to learning products in the learning product inventory.

Program of instruction

A requirements document that covers a course/phase. It provides a general description of the course content, the duration of instruction, the methods of instruction, and the delivery techniques. It also lists resources required to conduct peacetime and mobilization training.

Proponent training and education development plan

A proponent's internal living document that includes requirements for both resourced and not-resourced requirements. If a new training/educational requirement is identified or an existing one is changed, the proponent must adjust the training and education development plan. The proponent training and education development plan is a roll-up of the requirements outlined in the proponent training and education development project management plan. It is a long-range document covering multiple years and provides data to various resource, budget, and manpower reports such as the strategic management system, POM, and command operating budget.

Short-range planning and management process

Initial training strategy or changes to an approved training strategy that will become effective in the execution or budget year.

Structure and manning decision review

An annual process that compares the total Army individual training seat requirements against the training capability of a given TASS school or training battalion. The SMDR culminates in validating the individual training seat requirements for the first 3 years of the program objective memorandum (AR 350-1).

Terminal learning objective

The main objective at the lesson-level or an objective at the course or module level. The TLO describes what the learner must do at the end of the lesson/course or module to demonstrate acceptable performance in observable, measurable, and achievable terms. A TLO may be identical to the task/skill/knowledge it covers (TP 350-70-14).

The Army Centralized Individual Training Solicitations

The solicitation of U.S. military personnel to attend TRADOC or other training and education commands accomplished via the TACITS survey subsystem of ATRRS. The HRC distributes the TACITS survey annually with the primary individual training and education solicitation surveys distributed in March each year. This solicitation includes all courses for which the training and education requirement is determined by solicitation (normally functional courses) that are attended by HQDA personnel regardless of the training and education provider; or all courses conducted by the Army that are attended by other than Army personnel.

Total Ammunition Management Information System

Official Army system for establishing, maintaining, and managing requirements, authorizations, forecasts, requests, and expenditures of ammunition to achieve a full trained and ready force.

TRADOC Review of Manpower

An annual process where TRADOC schools submit manpower requirements. TRADOC staff validates and recognizes these requirements, and allocates available manpower to meet TRADOC priorities.

Training Requirements Analysis System

TRAS integrates the training development process with PPBE by documenting training strategies, courses, and related resource requirements. The TRAS integrates external resource acquisition systems for students, instructors, equipment and devices, ammunition, dollars, and facilities with the training development and implementation process. TRAS documents enable Army training institutions to plan and support the development and implementation of individual training courses.

Training resources arbitration panel

One process the Army uses to adjust the execution and budget year institutional training and education requirements including personnel, equipment, facility, and dollar resources. The TRAP separates by AC/Department of Defense school systems and RC schools.

Training Resource Management Information System

Program that allows availability of the cost and workload results from ITRM, the training resource model, and the flying hour program at the lowest level of detail for cost and workload analyses.

Triggering event

A change in Joint or Army doctrine, organization, training, materiel, leadership, and education, personnel, facility, and policy (DOTMLPF-P), or operational environment (OE) that identifies a gap in readiness and initiates a reaction or response from the learning environment (TR 350-70).

Section III

Special Abbreviations and Terms

This section contains no entries.