Training and Education 2030

Orientation Brief

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Agenda

- TE2030 Introduction
- TE2030 Major Themes
- TE2030 Approach
- Project Tripoli
- Project Triumph
- Project Trident
- Conclusion
- Questions and Comments

TE2030 Introduction

- TECOM executes the following mission essential tasks:
  - **Transform Civilians into Marines**
  - Provide Initial and Advanced MOS Training / Force Generation
  - Provide Professional Military Education (PME) and the tools for leaders to sustain the transformation
  - Develop Training Standards; assess Individual and Collective training readiness; and report Marine Corps training readiness to commanders and CMC (Provide Support to Unit Level Training)
  - Support Service Level Training Exercises (SLTE)

- TECOM: shapes the force by developing Marines who are cognitively agile, intuitive problem solvers, capable of rapidly making bold and consequential decisions in an uncertain environment per our maneuver warfare philosophy.

- The tasks within the document are ambitious, with a majority of tasks front loaded
  - Total of 37 Directed Actions and 17 Issues Requiring Further Analysis
  - 29 directed actions with due dates March-July 2023

"Transform TECOM into a three-star command that is capable of implementing and sustaining the guidance and direction contained in this document."

TE2030 Vision

Modernization

➢ Training in support of emerging concepts and mission sets will require new, converted, or repurposed training areas

➢ Reimagining training and education requires the application of information-age learning tools such as technology-enabled classrooms, digitized courseware, and robotic targets

➢ Modern learning methods and a student-centered approach requires a talented instructor cadre and yields high-caliber Marines

Training Reimagined

➢ Create a globally connected live-virtual-constructive training environment that enables realistic training for all-domain warfare

➢ Expand integrated naval training to prepare Marines to seamlessly deploy and employ integrated fires in the naval and joint fight

➢ Encourage Marines to accelerate and expand their learning through incentivized skills progression

TE2030 Vision (continued)

Standards

➢ Rigorous and repeatable standards will continue to form the foundation for all training, education, and assessment

➢ We will hold-fast to our immutable high standards to continue building upon the legacy of the generations of Marines who came before us

➢ The title "Marine" is always earned and we will not compromise the standards that define what it is to become a Marine

Goal –The Marine Corps training and education ecosystem leverages technology, is data-driven, and effectively utilizes available resources to develop Marines who are cognitively agile, intuitive problem solvers, capable of making bold and consequential decisions in an uncertain environment.
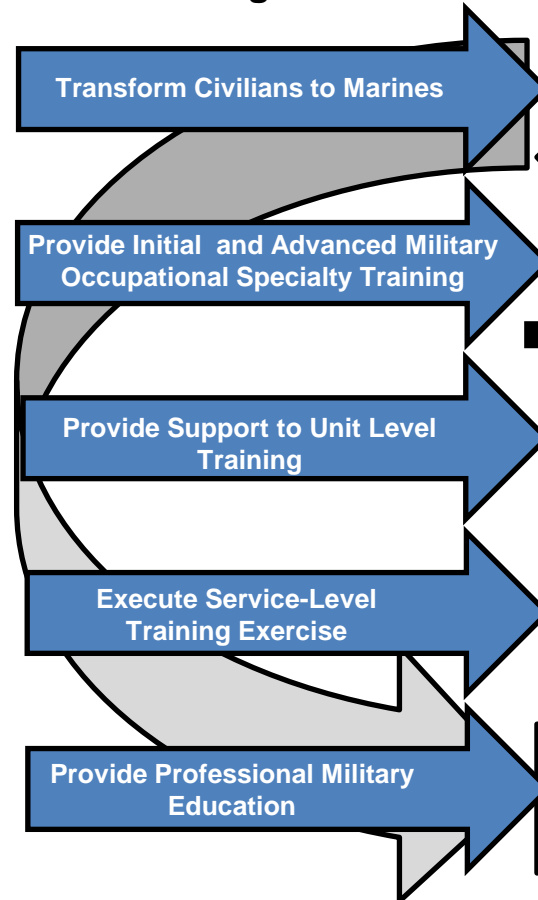
TECOM Approach (5-2-2)

Approach –The TECOM Enterprise sustains the organization's five mission essential tasks, while conducting an iterative and holistic modernization of the Marine Corps training and education (T&E) enterprise, aligned with FD 2030, to ensure the force is prepared to meet the requirements of the current and future operating environment.

CURRENT STATE

- Advancing pacing threat

- Speed of technological change

- Resource competition (time, people, fiscal)

- Requirement to maintain readiness while aligning modernization to Force Design and Development efforts

- Iterative transformation of T&E methods to information age approach

5 PILLARS:
Enduring Missions

- Transform Civilians to Marines
- Provide Initial and Advanced Military Occupational Specialty Training
- Provide Support to Unit Level Training
- Execute Service-Level Training Exercise
- Provide Professional Military Education

2 CHANGE VECTORS:
Modernization + Force Design

- Project Tripoli
- Project Trident
- Project Triumph

2 GUIDING PRINCIPLES:
- Combat Lethality
- Rigorous + Repeatable Standards
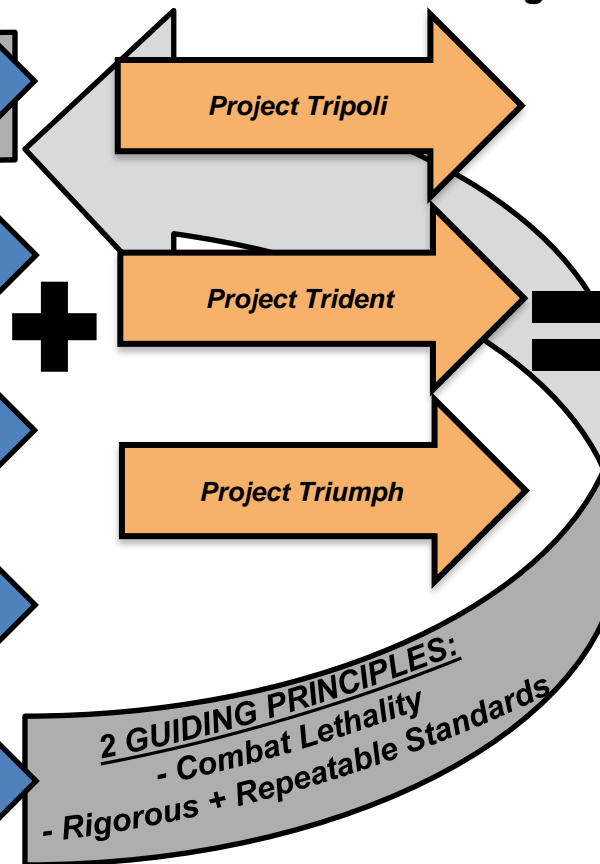
DESIRED STATE

- T&E continuum postured to support Marine formations requirement to operate in the dynamic and complex contemporary and future security environment

- Combat credible force comprised of cognitively agile and intuitive problem solvers capable of rapid and consequential decisions

- TECOM efforts synchronized with supported commands and coordinating authorities' capabilities development

- Standards updated, clarified, and established

Project Tripoli

Mission. Project Tripoli creates the training environment capable of supporting a scalable, all-domain immersive training that meets the needs of today's force, and supports the development and advancement of concepts in support of future requirements.

- Provides a distributed and deployable, Live, Virtual, and Constructive Training Environment (LVC-TE) representing the current and future battlefield and threat.

- LVC-TE is a persistent network of training systems that allow legacy and emerging simulators, simulation systems, and operational systems to integrate into a complete training capability. LVC-TE will provide a federation that allows distributed units to train simultaneously meeting the training objectives of FD2030 and TE2030.

- LVC-TE blends L, V, and C training into a single, multi domain training environment that enables robust, realistic, and repeatable training.

- LVC-TE provides FMF units at all echelons a single point of coordination, bringing together training resources, contextual scenarios, tools, repositories, and a common battlespace.

Live Training
Marines training live using their operational equipment
Ranges
Integrated Live Training Areas
Force on Force Training
Integrated Aviation
Integrated Weapon Platforms

Virtual Training
Marines operating simulated systems
Flight Simulators
Fires Simulators
Platform Simulators
AR VR XR
All Domain Ranges

Constructive Training
Marines making inputs into computer based simulations
Command Post Exercises
Computer Generated Forces (AI)
Wargame Informed Training

Tying Resources to Readiness
Training Support to LVC-TE
Instructional Materials
METs T&Rs
Training Support Centres (TSC)
Evaluation
ROI

LVC-TE

Desired End State: Individual, Unit, Service, Joint and Combined warfighters enabled to realistically train and rehearse operations, across all warfighting functions, in a contested all-domain environment against a peer adversary

Project Tripoli

➢ NLT 1 September 2024, TECOM (supported by MCICOM and DC I) will fully employ Project Tripoli as the means to develop a USMC, all domain training construct, aligned with the CMC's planning guidance, that fully integrates training at all echelons. This capability will include a network architecture that integrates real-time data from ranges, devices, simulators, and constructive forces while enabling interaction between geographically dispersed USMC, Joint, and partnered nation units around the globe, achieving initial operating capability.

Project Triumph

➢ Project Triumph is the overarching Marine Corps approach to shaping and elevating doctrine, outcomes based learning, analysis and assessments, and human performance while simultaneously maintaining momentum to orchestrate, form, standardize and modernize T&E pathways to improve the abilities of individual Marines.

   o 24 Directed Actions
   o 8 Issues Requiring Further Analysis

➢ Endstate: A training and education continuum that produces **physically fit**, **mentally agile** Marines that are **able to adapt** to rapidly changing and chaotic conditions in order to have decisive effect and win in future battlefields.

Project Triumph

Updates and Additions:

✓ NLT April EOS, TECOM will provide a tentative schedule to EOS members identifying the tentative sequencing and release of the new and revised doctrinal publications

✓ NLT 1 March 2023, TECOM will build on the current successes of IMC by identifying appropriate opportunities to apply the methods and lessons learned throughout Entry-Level Training (ELT) and our formal schools in order to accelerate change

❑ NLT 1 October 2023, TECOM will develop methodologies and pilots to improve training and experiment with asynchronous learning in order to facilitate individual learning and MOS development

❑ NLT 1 July 2023, TECOM will evaluate our current MOS production capabilities in order to support the development of the future force and remedy persistent shortfalls

❑ T&R standards and Service Level Training Events (SLTE). Should SLTE results inform T&R standards reviews in any way? We have nearly three years of data, findings, and lessons learned from FoF experimentation in support of FD 2030. Has this influenced T&R standards?

Project Triumph

Updates and Additions (Continued):

➢ Talent Identification. What is the most effective way to identify those individuals across the force predisposed to be highly effective instructors? What special skills or talents correlate with success as an instructor?

➢ Instructor Incentives. Talent retention remains a challenge across the entire force. How will we incentivize the retention of talented instructors? Which incentivizes are the most effective, and which are the least effective?
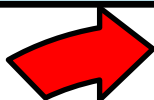
Removals and Streamlining:

➢ NLT 1 March 2023, DMCS will oversee a review of all annual training requirements to determine their relevance and effectiveness, with results briefed to EOS NLT April 2023. EOS brief will include recommended deletions, additions, and adjustments. TECOM, in coordination with DMCS, will institute a biennial review process to evaluate the value and necessity of all annual training requirements

➢ MarineNet. What is the return on investment of Marine Net training? Which training is causing the desired outcomes? Which training is least effective?
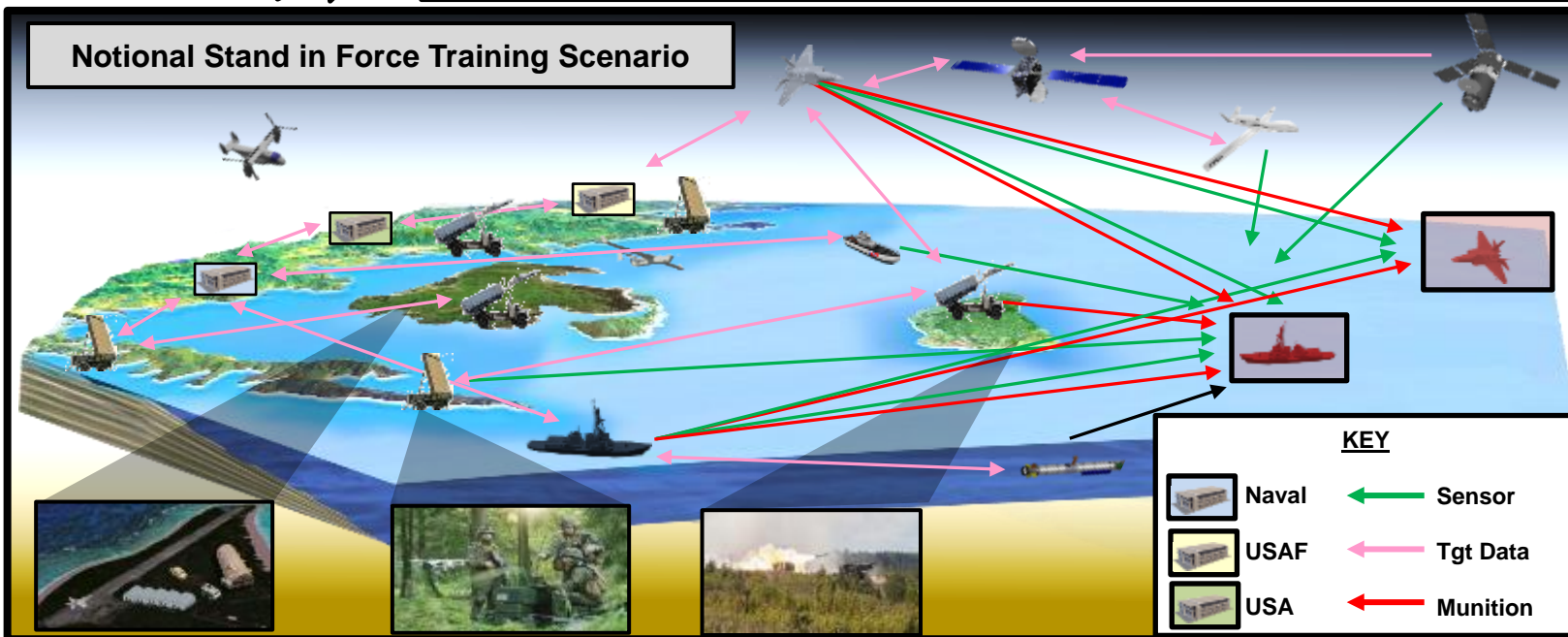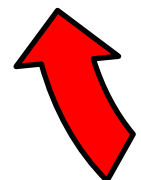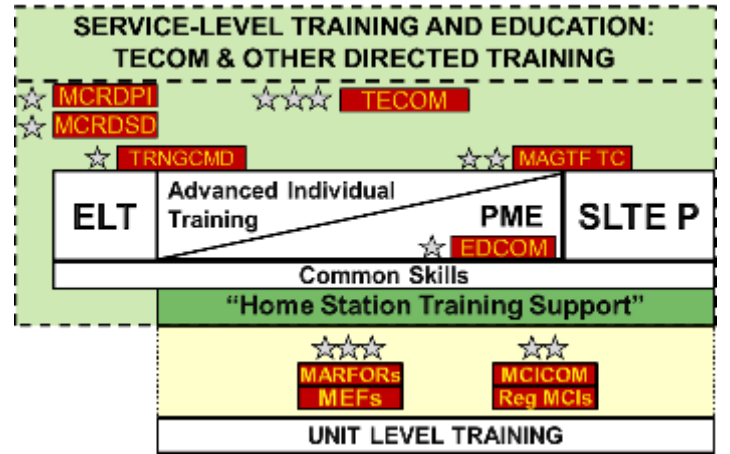
Project Trident Vision and Approach

"**Today, as in Nelson's time, all tactical elements must fight as a cohesive team, and tactics must integrate into the whole the best that can be brought to bear by individual teams**" *Fleet Tactics and Naval Operations, 1st Edition*

Rigorous and Repeatable Standards that Increase Combat Lethality

Notional Stand in Force Training Scenario

KEY

	Naval	→ Sensor (green)
	USAF	→ Tgt Data (pink)
	USA	→ Munition (red)

USMC Training and Education Continuum

SERVICE-LEVEL TRAINING AND EDUCATION:
TECOM & OTHER DIRECTED TRAINING

MCRDPI
MCRDSD
TRNGCMD   MAGTF TC
TECOM

ELT | Advanced Individual Training | PME | SLTE P
EDCOM
Common Skills

"Home Station Training Support"

MARFORs MEFs   MCICOM Reg MCIs

UNIT LEVEL TRAINING

Project Triumph: (21st Century Learning)

Doctrine | Outcomes Based Learning | Human Performance | Analysis and Assessment

Project Tripoli: LVCTE

Live Training Environment | Virtual Training Environment | Constructive Training Environment

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Project Trident

- ✓ NLT 1 April 2023, CG TECOM – supported by the MEF Commanders – will provide the EOS options and a recommendation for leveraging the unique functions of our EWTGs and EOTGs in order to improve and expand standards-based integrated naval training and education at all levels. Part of this presentation will include a preliminary estimate of fully-burdened costs / total cost of ownership

- ✓ NLT 1 April 2023, TECOM will formalize a fleet support program in order to facilitate the integration with and support of ULT conducted within the MEFs

- ❑ NLT 1 May 2023, CG TECOM will publish revised Marine Corps Water Survival Training (MCWSTP) and Underwater Egress Training (UET) policies

Conclusion

- ➢ TE2030 articulates the vision for the training and education enterprise in enabling development of the 2030 force.

- ➢ Project Tripoli is our vehicle for delivering fully-integrated, networked LVC-TE to enable realistic training aligned to our operating concepts.

- ➢ Project Triumph is the overarching concept for training and education modernization which includes student-centered learning, technical upgrades to classrooms, and asynchronous learning.

- ➢ Project Trident is oriented on building and expanding Naval integration in training and education.

Questions

Making Marines

Directed Actions

5. ***M&RA***, in coordination with TECOM, will develop a method to screen, train, and transition individuals with specialized skills into the Marine Corps at competitive ranks in order to facilitate talent management. [**1 MAR 24**]

6. TECOM will build on the successes of IMC by identifying appropriate opportunities to apply the methods and lessons learned throughout ELT and our formal schools in order to accelerate change. Be prepared to brief the EOS on pending changes driven by these lessons learned, and provide Communications Directorate and the Office of Legislative Affairs an info paper on IMC lessons learned for use in Service-level communications.   [**1 MAR 23**]

Issues Req Further Analysis

B. Predictive Analysis and MCRD Attrition: Non-EAS attrition continues to drain talent from the force, and continues to impose massive cost burdens on the enterprise. Advances in artificial intelligence (AI) may help us make sense of the past decade of entry-level attrition data to identify risks factors. We can then utilize that data to preemptively mitigate risks. Do we have a full understanding of attrition during entry-level training? How can we utilize AI to our advantage?

Making Marines (2)

Directed Actions

7. TECOM will evaluate our current MOS production capabilities in order to support the development of the future force and remedy persistent shortfalls. This includes several sub-tasks: [1 JUL 23]

    7.1 Identify opportunities to leverage technology to better enable learning.

    7.2 Evaluate our existing process for managing and assessing formal schools.

    7.3 Determine methods for improving the professional development of instructors and staff at our formal learning centers.

    7.4 Develop options for reducing the MAT backlog.

8. TECOM will develop methodologies and pilot programs to improve training and experiment with asynchronous learning in order to facilitate individual learning and MOS development. [1 OCT 23]

9. TECOM, in partnership with DC for Information (DC, I) and Marine Corps Installations Command (MCICOM), will equip all formal learning centers with the (wired and wireless) connectivity and devices necessary to maximize the use of digital courseware. [1 JAN 25]

10. *DC M&RA* will identify options to incentivize MOS skills progression and expand MOS improvement opportunities – to include micro-credentialing and industry certifications – across all communities. [1 MAR 23]

11. TECOM will complete an evaluation of our formal school and unit training management methodologies, and recommend any changes to policy that would improve the quality of both and linkages between. [1 JUL 23]

Issues Req Further Analysis

C. F-35 Pilot Shortfall. TECOM, in coordination with DC, Aviation and DC, M&RA, will assess what combination of recruiting, training, and retention is required to reduce the F-35 pilot shortfall, and subsequently sustain the necessary population across all grades.

D. MQ-9 Operators. Should the Marine Corps consider other options besides commissioned officers to become qualified as naval aviators?

E. TBS Quality Spread Policy. What evidence or analysis supports the continuation of the quality spread model for MOS selection used at TBS? Are we discouraging achievement and performance by giving preference to Marines in the top of the bottom third of the class over Marines in the bottom of the top third?

F. Second Marine Division Leader Evaluation. Do we have the evidence or analysis to support expanding the division leader assessment program for infantry company commanders to other divisions? Other major subordinate commands? Other MOSs?