

Implementing the Training M&S Master Plan

Maj Walt Yates

for

Col Frank Kelley

PM Training Systems



Report Documentation Page

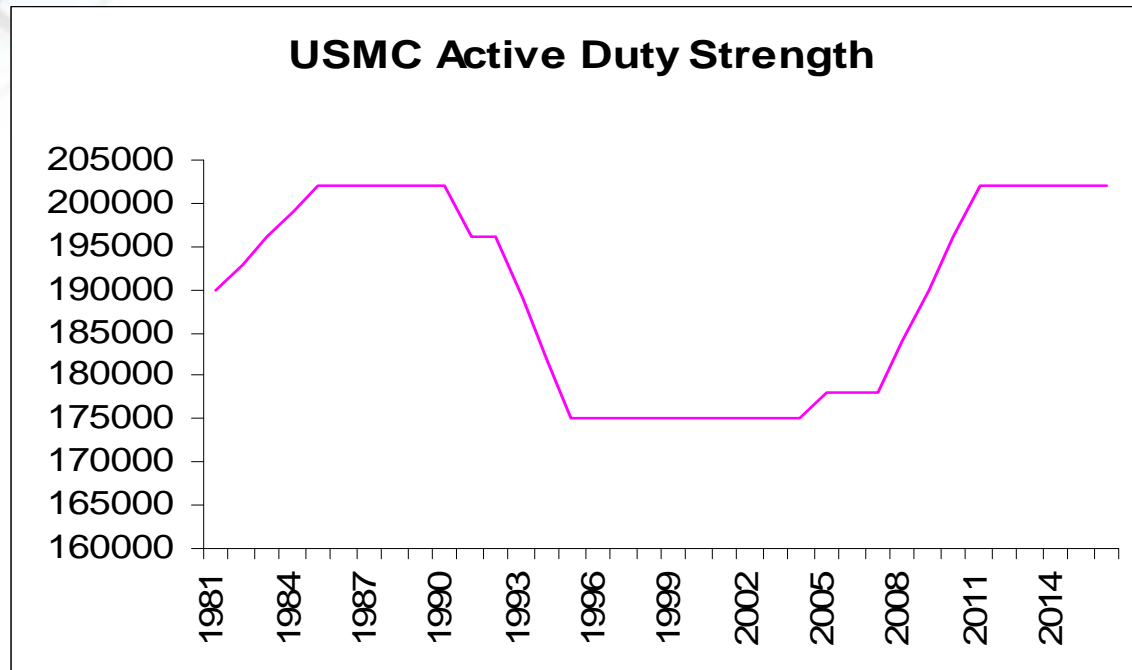
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THE MARINE CORPS IS GROWING

Marine Corps strength will increase to **202,000** in three years time to the same size as when the Berlin Wall came down



As budgets tighten, how do we ensure that the force is trained to standard?





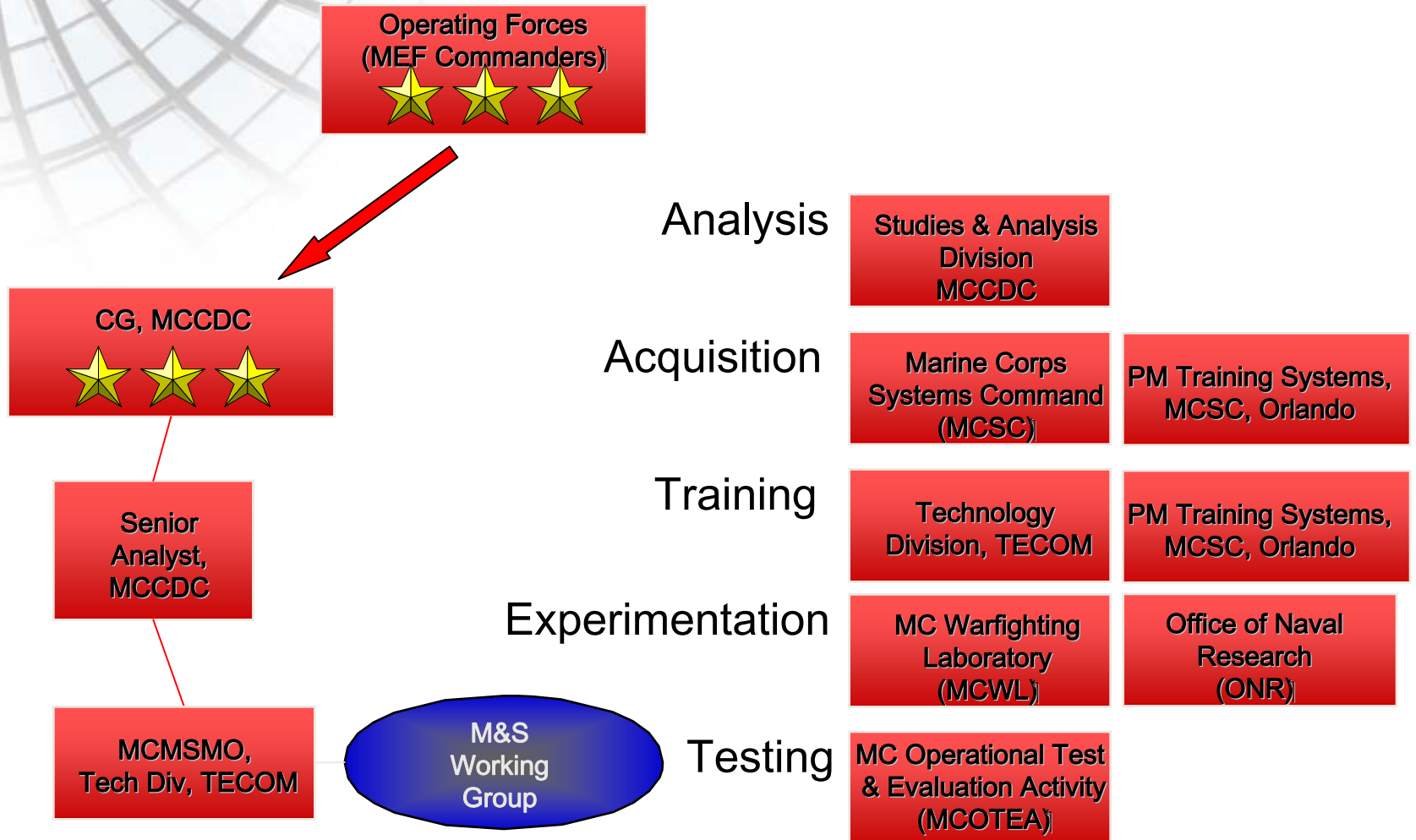
TRAINING WITHIN CONSTRAINED RESOURCES

- The increase in personnel strength does not come with a proportional increase in training resources i.e. ranges and training infrastructure
- Improved capability to train Marines using simulations across the domains of Live, Virtual, and Constructive is the only feasible path to achieve and maintain the readiness of the force

TRAINING SYSTEMS ACQUISITIONS

- The JCIDS process is the preferred context for deliberate acquisition of materiel solutions
- Unanticipated requirements submitted via Universal Needs Statements (UNS) require adaptability and innovation in acquisitions e.g. the HMMWV egress assistance trainer (HEAT) and MRAP driver and egress trainers

FROM REQUIREMENTS TO A FIELDED CAPABILITY



MARCORSYSCOM ORGANIZATION

COMMANDER

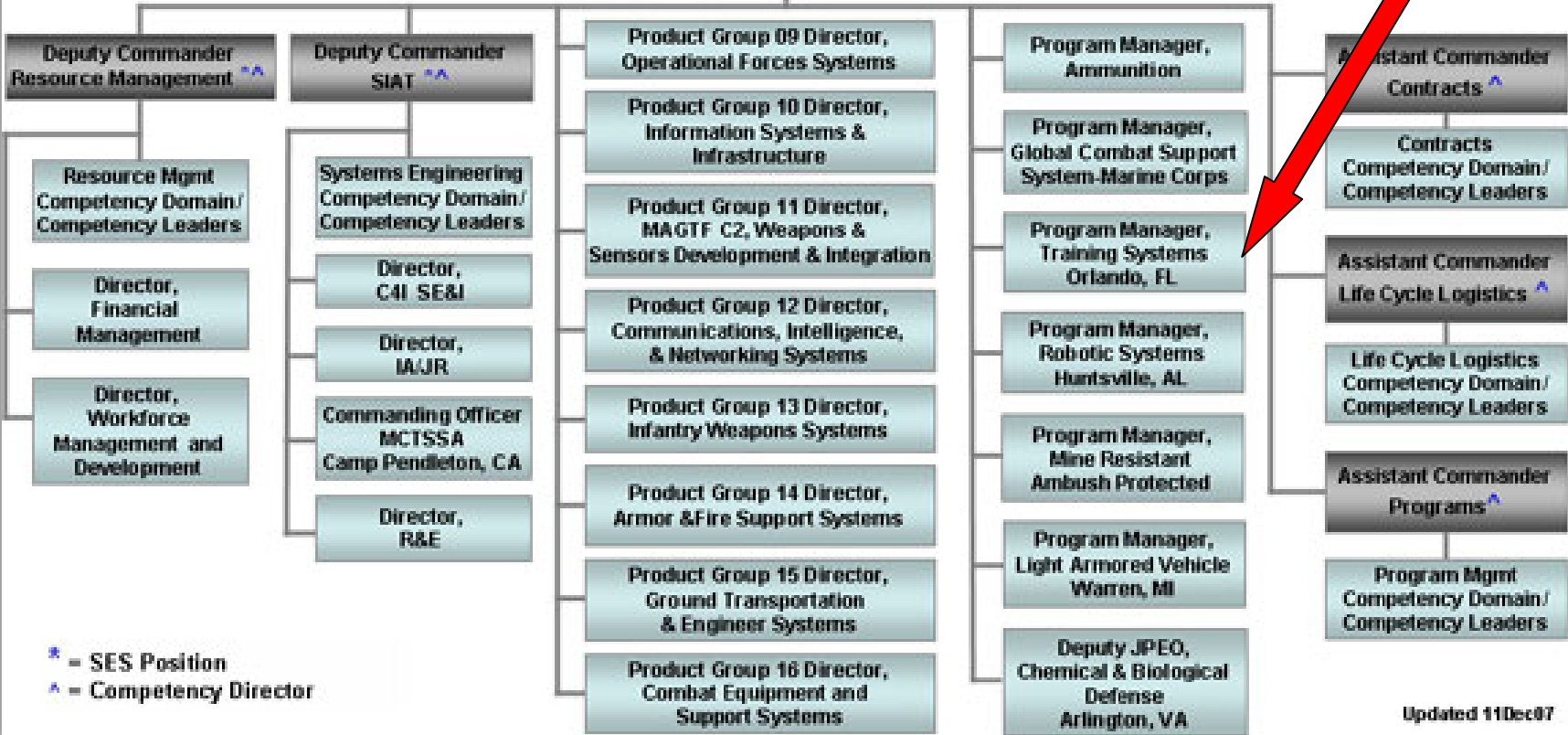
EXECUTIVE DIRECTOR *

PEO Land Systems
 PM Expeditionary Fighting Vehicle
 PM JPMO, Lightweight 155, Picatinny, NJ
 PM Light Armored Vehicle MPC
 PM LVSR
 PM JLTV
 PM MTVR
 PM G/ATOR
 PM CAC2S

Chief of Staff
 CIO
 Facilities & Services
 Operations Cell
 Reserve Affairs
 Security

Special Staff
 International Programs
 Counter-Improvised Explosive Devices
 Corporate Communications
 Counsel
 OSBP
 Strategic Change Management Center

Sergeant Major



* = SES Position
 ^ = Competency Director

TRAINING SYSTEMS ACQUISITIONS

- **TECOM Training Modeling & Simulation Master Plan**
 - **Signed by Commanding General, Training and Education Command, 18 Jan 2007**
 - ***“...a supporting document to Marine Corps strategic planning guidance and those documents guiding force capability development. It serves as the initial road map for developing training technology requirements and fully implementing Modeling and Simulation (M&S) in support of the MAGTF Capability List (MCL) and MAGTF Requirement List (MRL).”***
 - ***”...This plan serves both the Marine Corps and industry as a source document for current and objective capabilities for virtual and constructive simulation in support of the Marine Corps.”***

TRAINING M&S MASTER PLAN EXECUTION

- Near-Term. 2008 to 2009
 - Integrate training technologies capabilities development and advocacy processes.
 - Identify training standards and requirements appropriately satisfied by simulation.
 - Complete the USMC LVC-TE Initial Capability Document
- Mid-Term. 2010 to 2014
 - Improve simulation interoperability between bases and stations.
 - Achieve full operating capability for a live, virtual and constructive training environment that is compliant with JNTC requirements.
 - Integrate emerging training simulation technologies with advanced warfighting experiments.
 - Educate leaders in the application of training simulation technologies.
- Far-Term. 2015 to 2017
 - Achieve regular Marine training in a LVC-TE combined with larger JNTC exercises.
 - Achieve full operational capability for a fully netted M&S capability.
 - Embed simulation and simulator capabilities within all fielded operational C2, combat, and combat support systems and sensors capable of integrating with the LVC-TE.
 - Fully acculturate the use of M&S throughout all phases of Total Force training and operations.



LVC TOOLS

LIVE

- Integrated GPS Radio System (IGRS)
- Range Instrumentation System (RIS)
- Position Location In (PLI)
- IFF Tracking
- MILES 2000

VIRTUAL

- Deployable Virtual Training Environment (DVTE)
- Vehicle Simulators (HEAT, MTRV, Incidental Driver)
- Squad Immersive Training Environment (SITE)
- Aircraft Simulators
- Air Crew Simulators
- Air Crew Work Stations

CONSTRUCTIVE

- Combined Arms C2 Tactical Upgrade System (CACCTUS)
- MAGTF Tactical Warfare Simulation (MTWS)

Architecture/ Networks

- Training & Experimentation Network (TEN)
- Joint Training & Experimentation Network (JTEN)
- Training Enabling Architecture (TENA)
- C2PC
- AFATDS



S&T LONG POLES IN THE TENT

- Mission Planning and Rehearsal Rapid Terrain Generation**
- Targets for the LVC TE**
- Urban Structures and Objects for the LVC-TE**
- Human Representation & Interaction with LVC TE**
- Continuously Updated Scenarios**
- Non-kinetic Effects Simulation**

VALIDATION OF TRAINING SYSTEMS

- Training systems must satisfy the three R's
 - Relevant
 - Realistic
 - Rigorous
- It is critical that the operating forces validate the systems we acquire by measuring the effectiveness of the training they facilitate i.e. ***Did we field the right training system?***



Training Management System

- Comprehensive coordination of training
 - Visibility of the TEEP from MSEs down to the company/detachment level
 - Scheduling and allocation of training resources e.g. operator & SME support, maintenance on ranges and simulators
 - Readiness metrics
- Maximize usage
- Quantify the ROI

TRASYS Financial Growth

\$M

