

Marine Corps Operational Test & Evaluation Activity

Kenneth R Lardie

Expeditionary Test Division



49th TARGETS, UAVS & RANGE
OPERATIONS SYMPOSIUM & EXHIBITION

26 October 2011





Agenda

- **Mission and Vision**
- **Organization**
- **Resources**
- **Programs**
- **Working Relationships**
- **Test and Evaluation Process**
- **Operational Testing Requirements and Objectives**
- **Budget Impacts on Test and Training**
- **Questions**



Mission & Vision



Mission

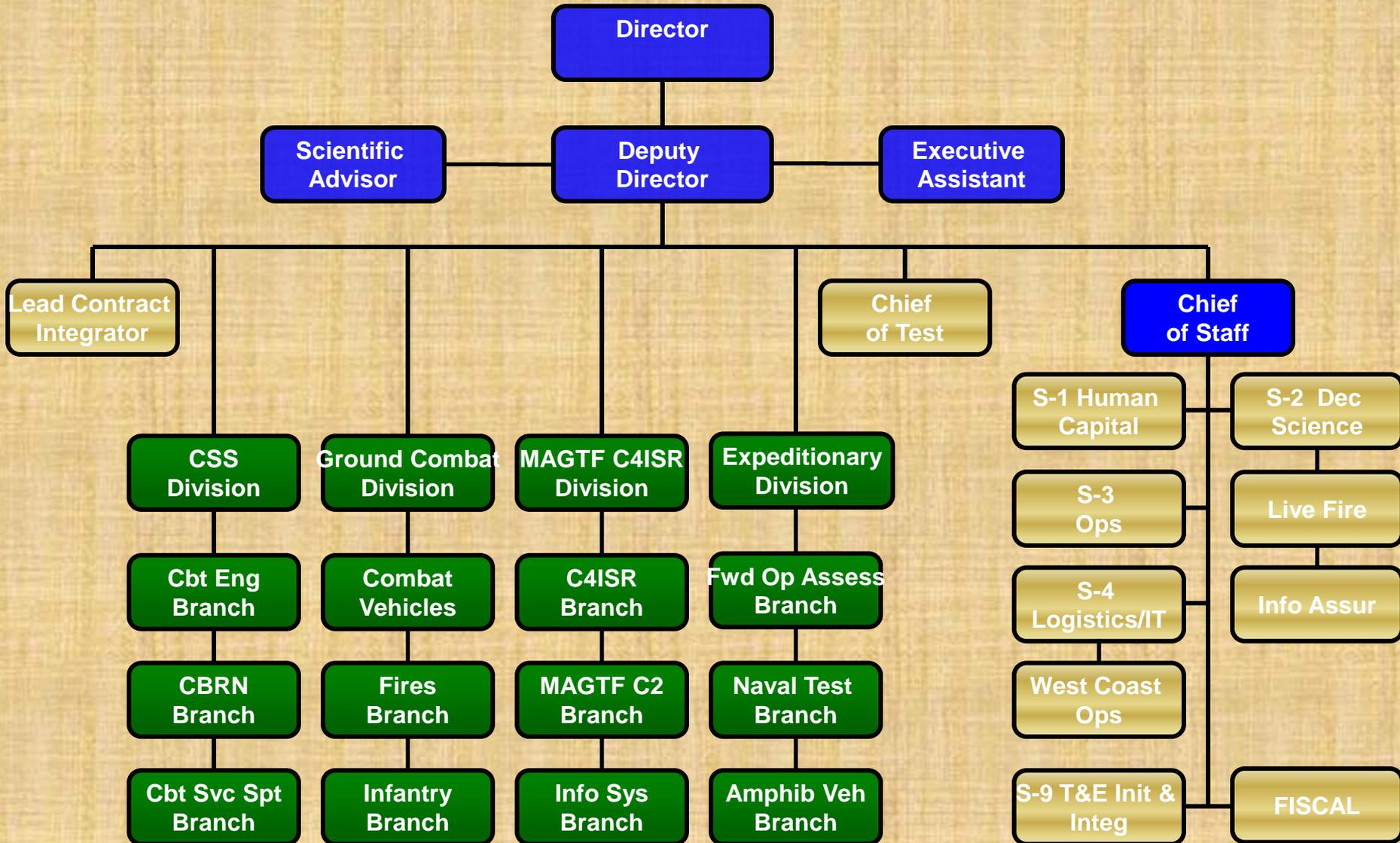
MCOTEA provides operational testing and evaluation for the Marine Corps and conducts additional testing and evaluation as required to support the Marine Corps mission to man, train, equip, and sustain a force in readiness.

Vision

- MCOTEA will be the Marine Corps leader in all aspects of realistic operational test and evaluation of material system capabilities throughout a material system's life cycle. Our highly trained, professional workforce will be a voice for the Operating Force Marine, enabling informed decision-making, and ensuring always that our test reports accurately and objectively describe what we know and don't know about the Operational Effectiveness and Suitability of the materiel solution we evaluate.**
- MCOTEA will be a source for objectivity in the Marine Corps and, where appropriate, DoD's acquisition process. Our expertise, professionalism, and integrity will make us a sought-after partner within the DoD acquisition community.**

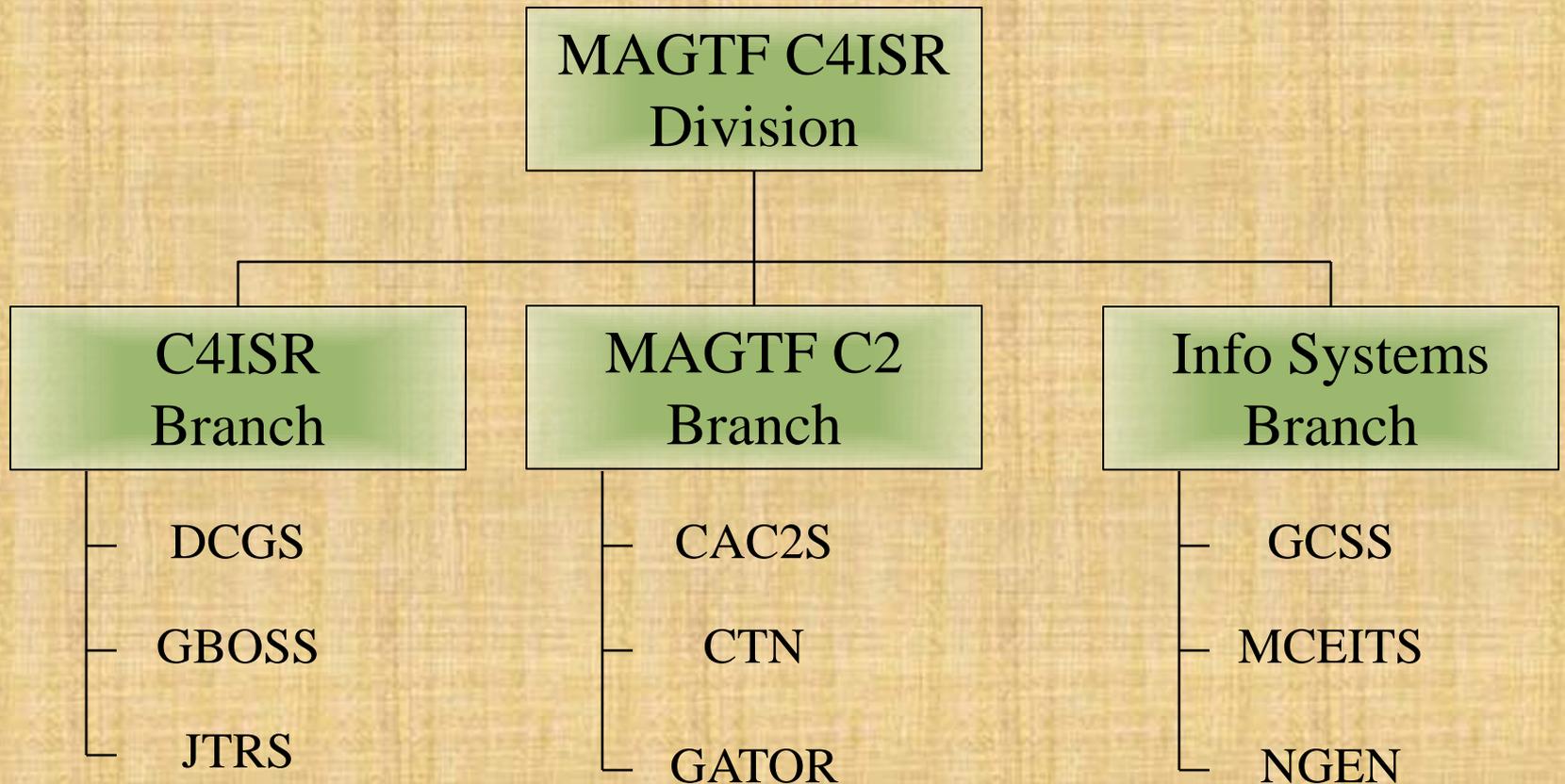


MCOTEA Organization



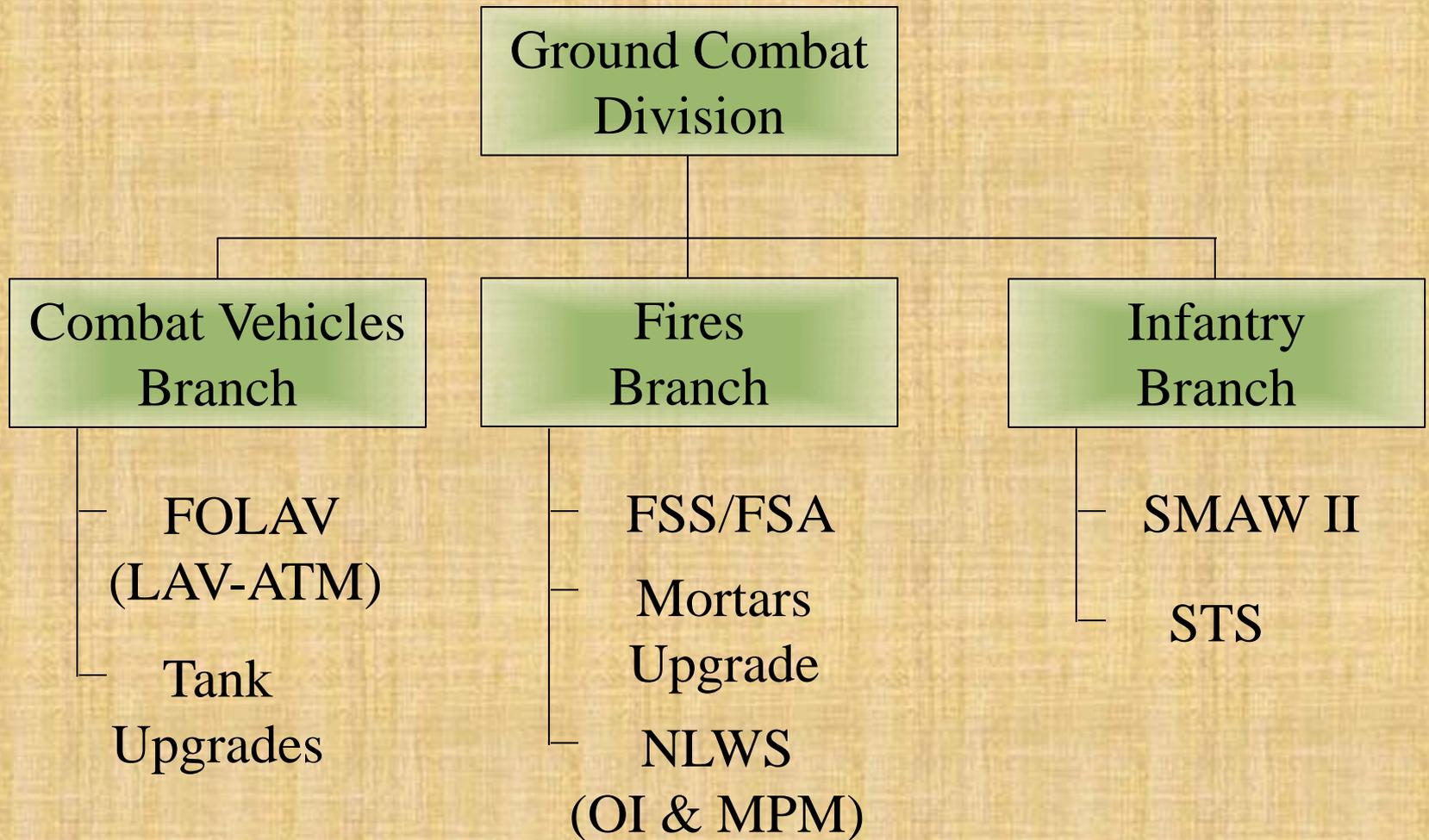


MAGTF C4ISR Division



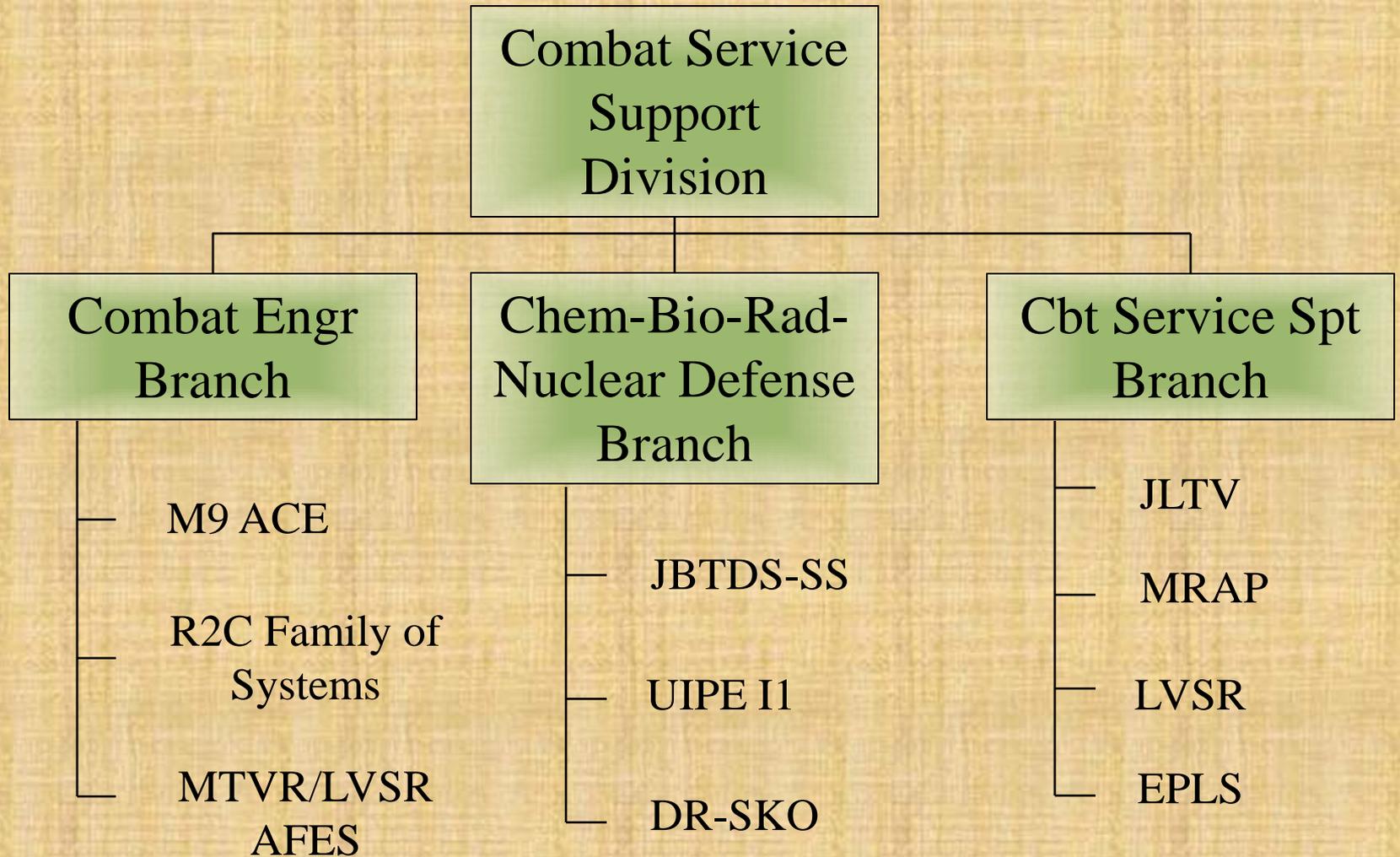


Ground Combat Division



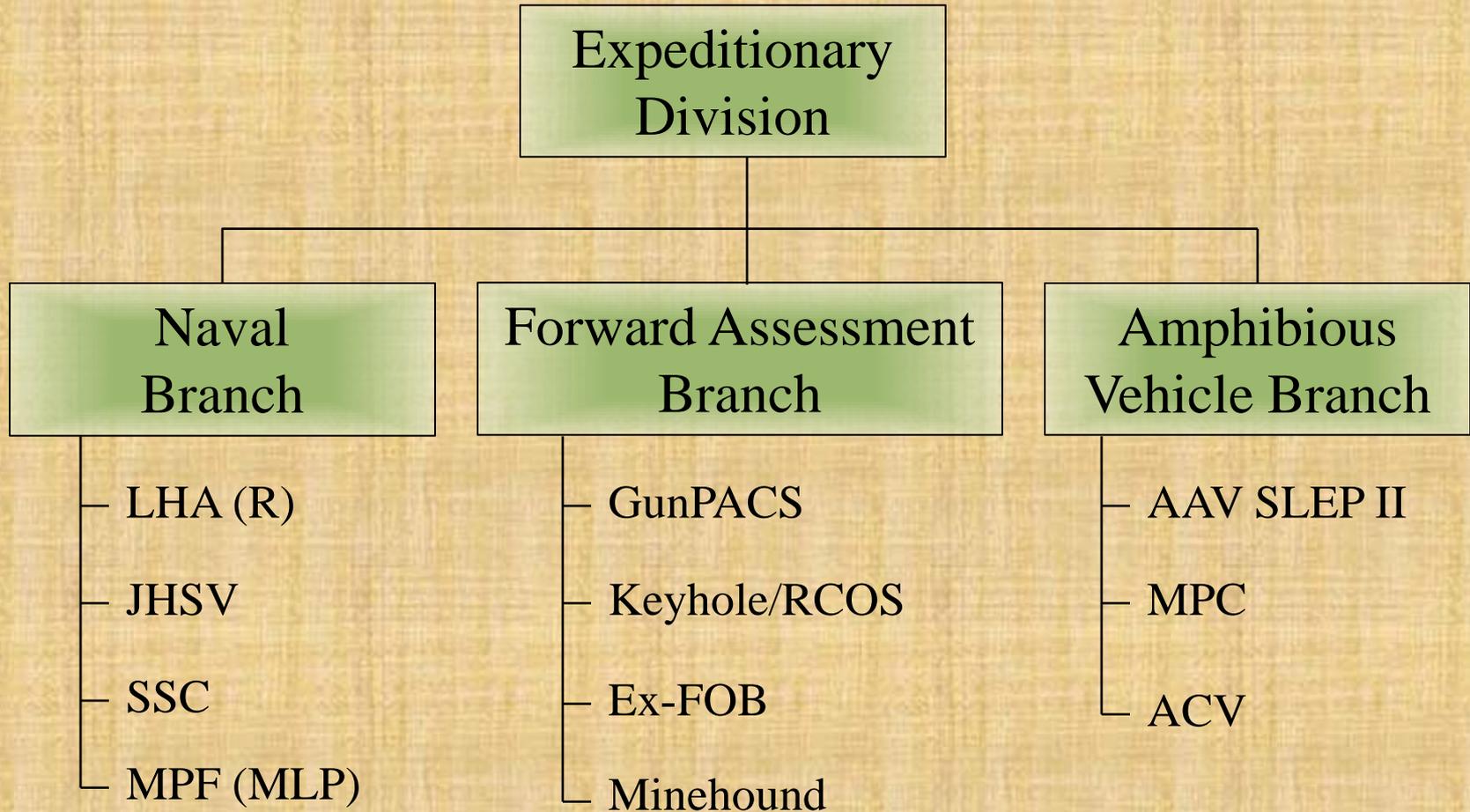


CSS Division



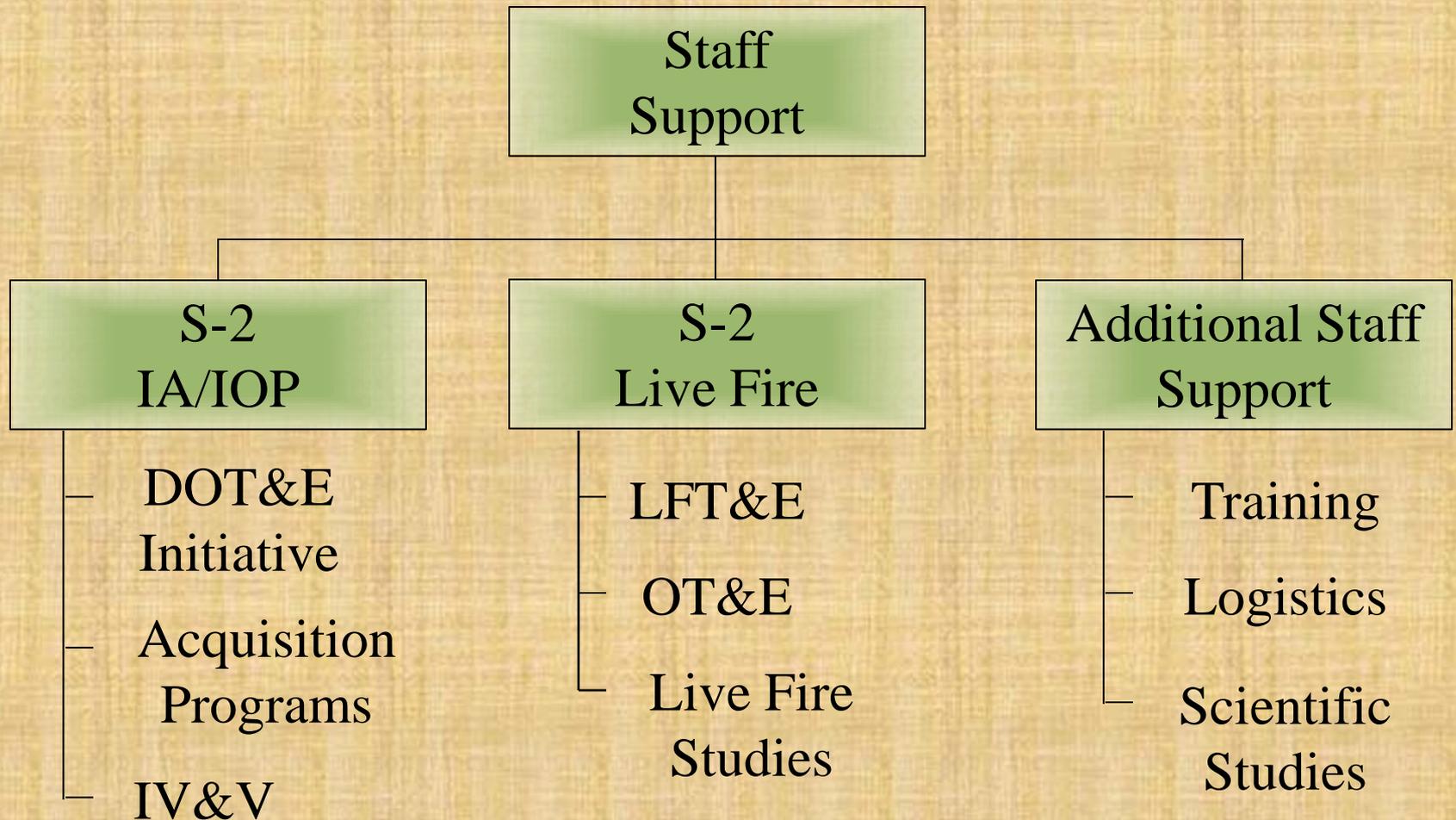


Expeditionary Division





Activity Level Support





RESOURCES

- **Facilities / Equipment**

- **Headquarters: Quantico, VA**

- **Test Support Facility at Camp Wilson, 29 Palms, CA**

- **Test Support Facility at Del Mar (21 Area), Camp Pendleton, CA.**

- **Test Instrumentation**

- **Portable Data Collection Suites**

- **Data Instrumentation Vehicle**

- **Web-based, data repository**

- **Personnel**

- **Mix of active duty Marines and government civilians**

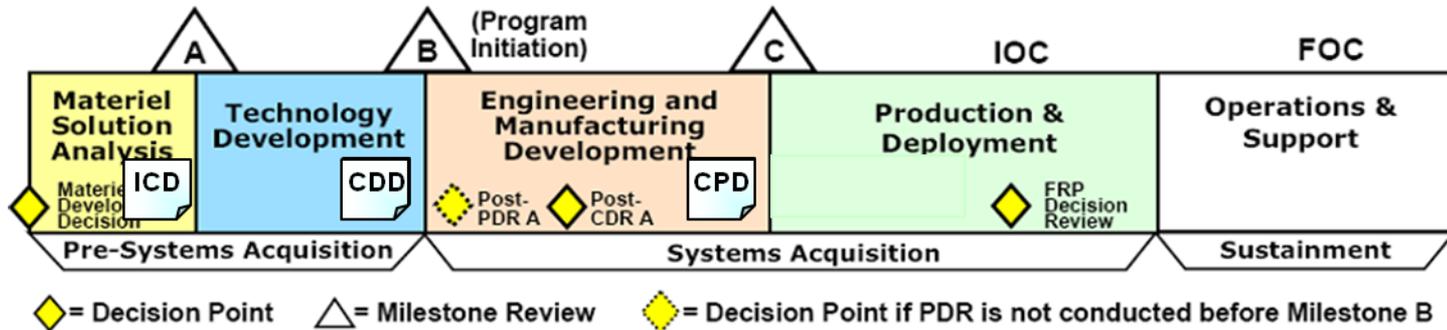
- **28 Active duty Marines**

- **42 Government civilians**





Distribution of T&E Efforts by Acquisition Phase



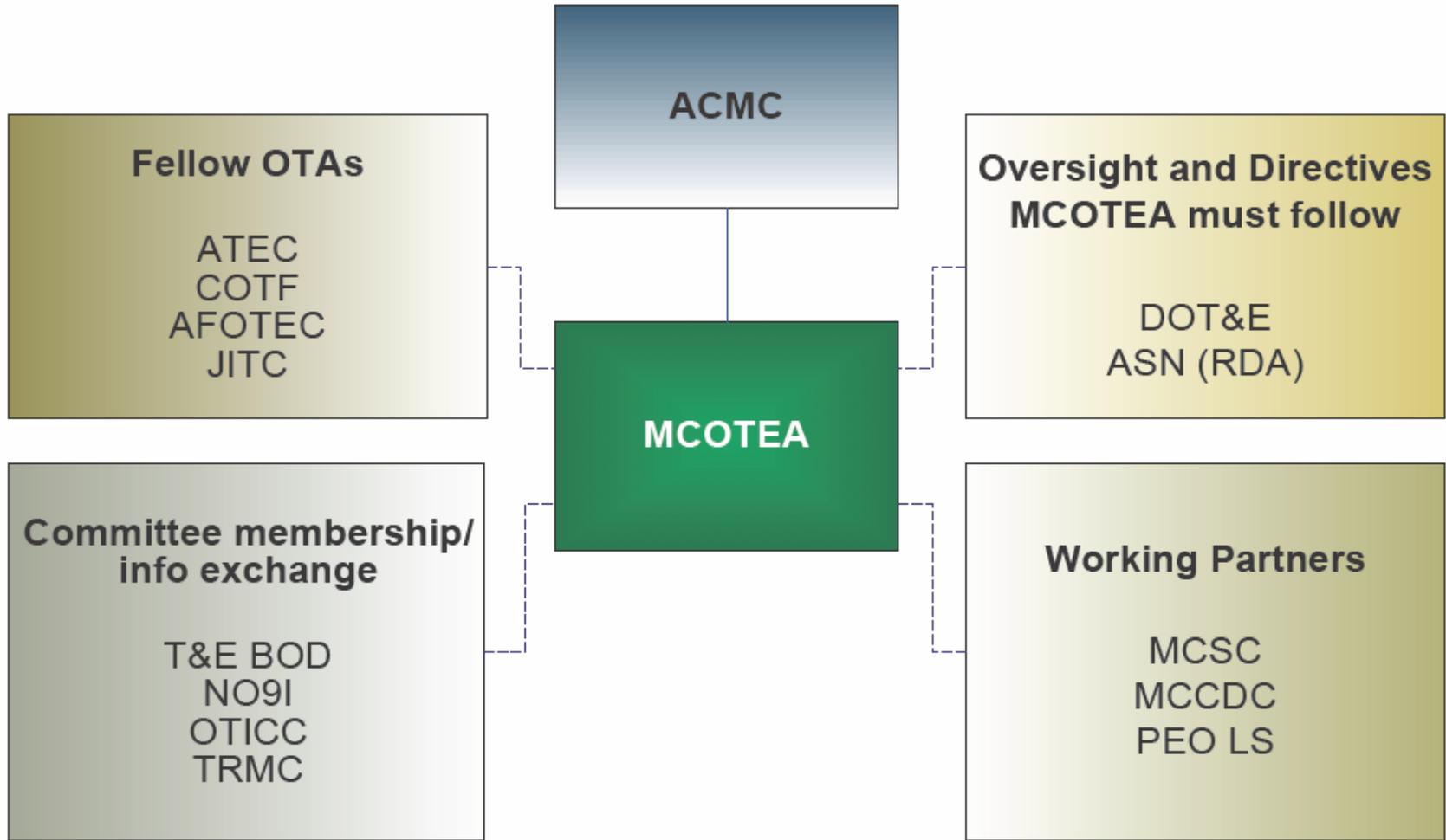
<ul style="list-style-type: none"> Technology Development Strategy (TDS) Test Evaluation Strategy (TES) ID emerging T&E capability requirements ID T&E resources Develop T&E requirements in RFP Reporting 	<ul style="list-style-type: none"> Systems Evaluation Plan (SEP) Test and Evaluation Master Plan (TEMP) Execute T&E Program CDD requirements for testability and evaluation TRL Evaluation Reporting 	<ul style="list-style-type: none"> SEP TEMP Execute T&E Program Support PDR/CDR CPD requirements for testability and evaluation TRL Evaluation CT / DT Discovery and correction OA Reporting 	<ul style="list-style-type: none"> SEP TEMP Execute T&E Program Characterize system capabilities and limitations T&E results to MDA AOTR / OTRR Support training for IOT&E IOT&E / FOT&E Reporting 	<ul style="list-style-type: none"> Follow-on DT and OT Verification of corrections for deficiencies Develop T&E programs to support upgrades, modifications, increments Reporting
4%	12%	38%	40%	6%

Programs Supported:

ACAT 1 thru ACAT IV, AAP's, UNS, USON, and Forward Operational Support
 Currently supporting 125 programs.



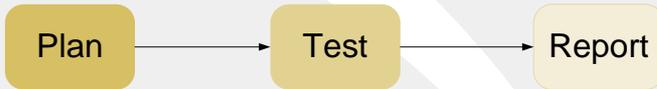
Organizational Relationships





Test & Evaluation Processes

MCOTEA's 6-step Operational Test and Evaluation Process



1 System Evaluation Plan
- Program Initiation
- SEP Development

2 Test Concept, Test and Evaluation Master Plan Input, and Failure Definition/Scoring Criteria Charter Development

3 Test Planning
Operational Test Plan and Logistics

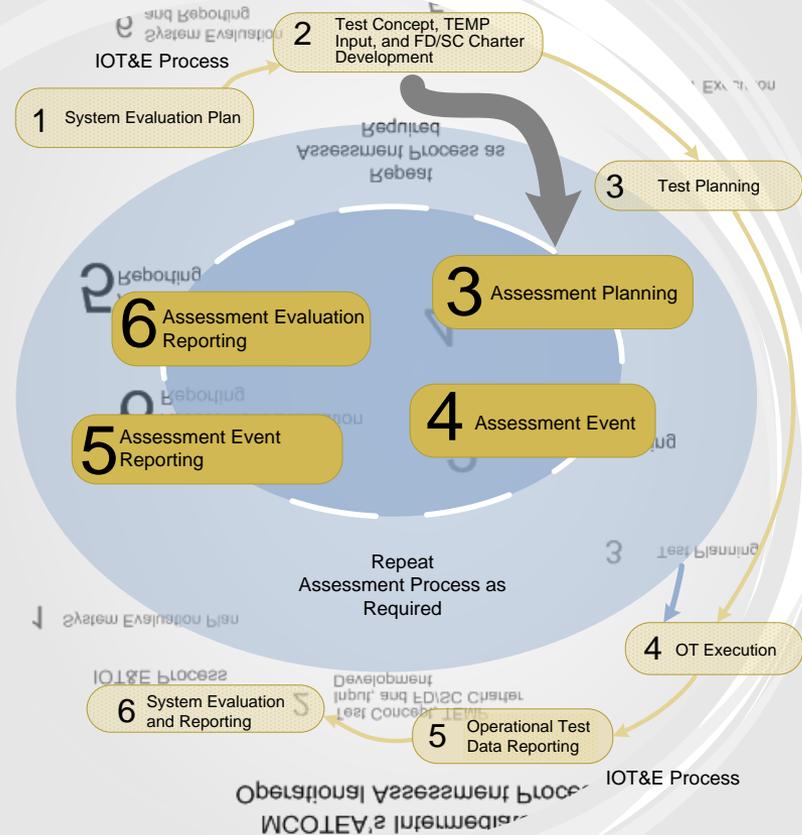
4 Operational Test Execution
- New Equipment Training
- Pilot Test
- Record Test
- Posttest Activities
- Test Data Report Development

5 Test Data Report
- Test Deviations
- Data (unanalyzed)

6 System Evaluation and Reporting
- Final evaluation
- Operational Test Agency Evaluation Report (OER)
or Operational Assessment Report (OAR)

Continuous Evaluation Occurs during *Integrated Testing*

MCOTEA's Intermediate and Operational Assessment Process





Operational Testing Requirements and Objectives

- **Top-level requirements for adequate operational testing:**
 - employ a production-representative system in realistic operating conditions with typical Marine operators and maintainers
 - collect data that accurately describes the test conditions and system performance results
 - analyze the data independently and without bias for use in system evaluation
- **Top-level requirements for objective system evaluation:**
 - collect and evaluate information from a variety of developmental and operational test events
 - determine if thresholds in the approved capabilities documentation and Critical Operational Issues have been satisfied
 - determine the system's Operational Effectiveness (OE), Operational Suitability (OS), and Operational Survivability (OSur)
 - assess system effects on combat operations
 - provide any additional information on the system's operational capabilities



Budget Impacts on Test and Training

- ❑ **Continue coordination with Program Managers (SuT & TRNG) and Training & Education Command (TECOM) in development of test resource assets that supports future training with the new SuT.**
- **Realistic Targets**
 - ❖ *REMTT – Full Scale 3D Realistic Electro-Magnetic Threat Target*
 - ❖ *TVST- Full Scale 2.5D Threat Vehicle Surrogate Target*
 - ❖ *RLCT- Full Scale 2.5 Realistic Low Cost Target*
- **Instrumentation**
 - ❖ *POESIS – Portable Oceanographic Environmental Sensor Instrumentation System: Surf Arrays; Wave Buoys, Digital Weather Stations, Low Light Video – RF / integrated to single command suite.*
 - ❖ *FOFTI – Force-On-Force Test Instrumentation: Laser engagement system for armored vehicle systems and supports gunner/crew training*



- **Questions?**

Semper Fidelis!





MCOTEA Organization

