

US Special Operations Command



Operational Test & Evaluation Overview

HQ USSOCOM J8-O
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The overall classification of this briefing is:
UNCLASSIFIED



Agenda

- OT&E Authority
- Mission and Tenants
- Responsibilities
- Operationally Effective, Suitable, & Safe
- Documentation
- Environment
- T&E Implementation
- Examples
- Conclusion





Authority

Concurrent with Title 10 USC Authority and Head of Agency responsibilities, USSOCOM ensures that the systems, products, and equipment fielded to Special Operations Forces (SOF) are operationally effective, suitable, and safe. These assurances are gained through the test and evaluation process.

USSOCOM Directive 71-5, Operational Test and Evaluation
10 USC 139



Mission

WHAT WE DO.....

Ensure that USSOCOM Acquisition Program System Capabilities, Independently Evaluated, are Measured Against Validated Requirements Under Realistic Operational Conditions to Determine a System's Operational Effectiveness, Suitability and Survivability Prior to Fielding to Special Operations Forces



T&E Tenants

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T&E Tenants – “Flexibility”

Operational Test Agencies

SOCOM	ARMY	NAVY	AIR FORCE	MARINE CORPS
All Services: AFOTEC ATEC COMOPTEVFOR MCOTEA	Army Test & Evaluation Command (ATEC)	Commander, Operational Test & Evaluation Force (COMOPTEVFOR)	Air Force Operational Test & Evaluation Center (AFOTEC)	Marine Corps Test & Evaluation Activity (MCOTEA)
JITC National Assessment Group (NAG)	JITC	JITC	JITC	COMOPTEFOR JITC
USASOC Test & Evaluation Division (TED)				
18 th Flight Test Squadron (AFSOC)				
MCPD, NAVSEA NAVAIR, SPAWAR, WARCOM				

UNLIKE MOST OF THE SERVICES, USSOCOM HAS MULTIPLE SOURCES FOR OT&E



J8-O Responsibilities

- **Oversee OT&E for SOF Acquisition Programs**
- **Develop and Implement OT&E Policy via USSOCOM Directive 71-5**
- **Assess and Determine system:**
 - Effectiveness
 - Suitability
 - Interoperability
 - Safety
- **With J4 and PEO, issue a System Production Certification (SPC) and/or Fielding and Deployment Release (F&DR)**
- **Review Requirement Documents for Relevancy and Testability**
- **Assist / Approve the Test Strategy in the Single Acquisition Management Plan or the Test and Evaluation Master Plan**
- **Coordinate w/ Program Manager in Selection of the Operational Test Agency**
- **Observe Critical Operational Test Activities**
- **Validate New Equipment Training (NET)**
- **Independent of SORDAC; Directly communicate with CDR USSOCOM**



Operationally Effective

- The overall degree of mission accomplishment of a system when used by representative personnel in the environment planned or expected for operational employment of the system considering organization, doctrine, survivability, vulnerability and threat.

- **SOCOM OT&E Focus**
 - **Linked to Mission Accomplishment**

 - **What Operational Capabilities are Critical to Mission Accomplishment**

 - **Test Environment Adequate**

Meets Technical and Operational Performance Requirements



Operationally Suitable

- The degree to which a system can be satisfactorily placed in field use, with consideration given to availability, compatibility, transportability, interoperability, reliability, wartime usage rates, maintainability, safety, human factors, manpower, supportability, logistics supportability, documentation, and training requirements

- **SOCOM OT&E Focus**
 - **Linked to Mission Accomplishment**

 - **What Operational Capabilities are Critical to Mission Accomplishment**

 - **Test Environment Adequate**

Compatible With U.S./DOD/Service Processes and Facilities



Operationally Safe

- **Identify Hazards and Eliminate or Mitigate those Hazards to an Acceptable Level**
- **Concurrently Satisfy the Technical Performance Parameters in CPD, CDD, or equivalent**
- **USSOCOM System Safety Risk Assessment**
- **Safety Certification Authorities**

Safe to Use, Handle, Transport, Store and Demilitarize



Documentation- F&DR

Fielding and Deployment Release (F&DR) is the Final Documentation Required to Certify that a SOCOM System is Ready for Fielding:

- J4 Document (Logistics)
- Certification to the Milestone Decision Authority that all Issues Identified in SPC are Satisfied – Addressing Primarily the Effectiveness, Suitability, Reliability, Safety.
- Can be a Combined SPC/F&DR Depending upon how System is Managed



SOCOM T&E Environment

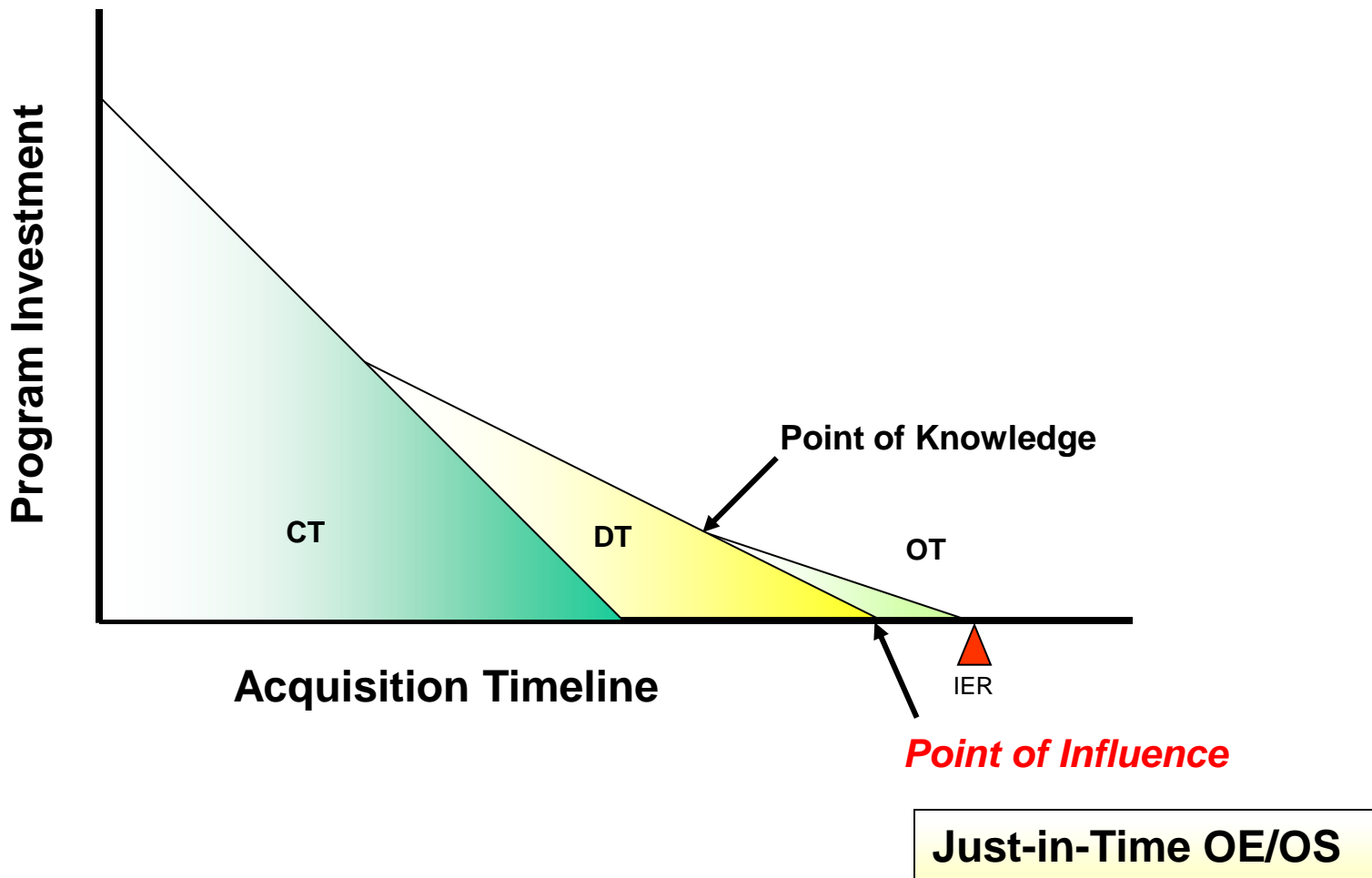
- **High Risk Environment**
 - **Delayed Point of Knowledge**
 - **Further delayed Point of Influence**

- **Medium Risk Environment**
 - **Delayed but synchronized Point of Knowledge and Point of Influence**

- **Low Risk Environment: Integrated DT/OT**
 - **Up-front/ Early Point of Knowledge and Point of Influence**

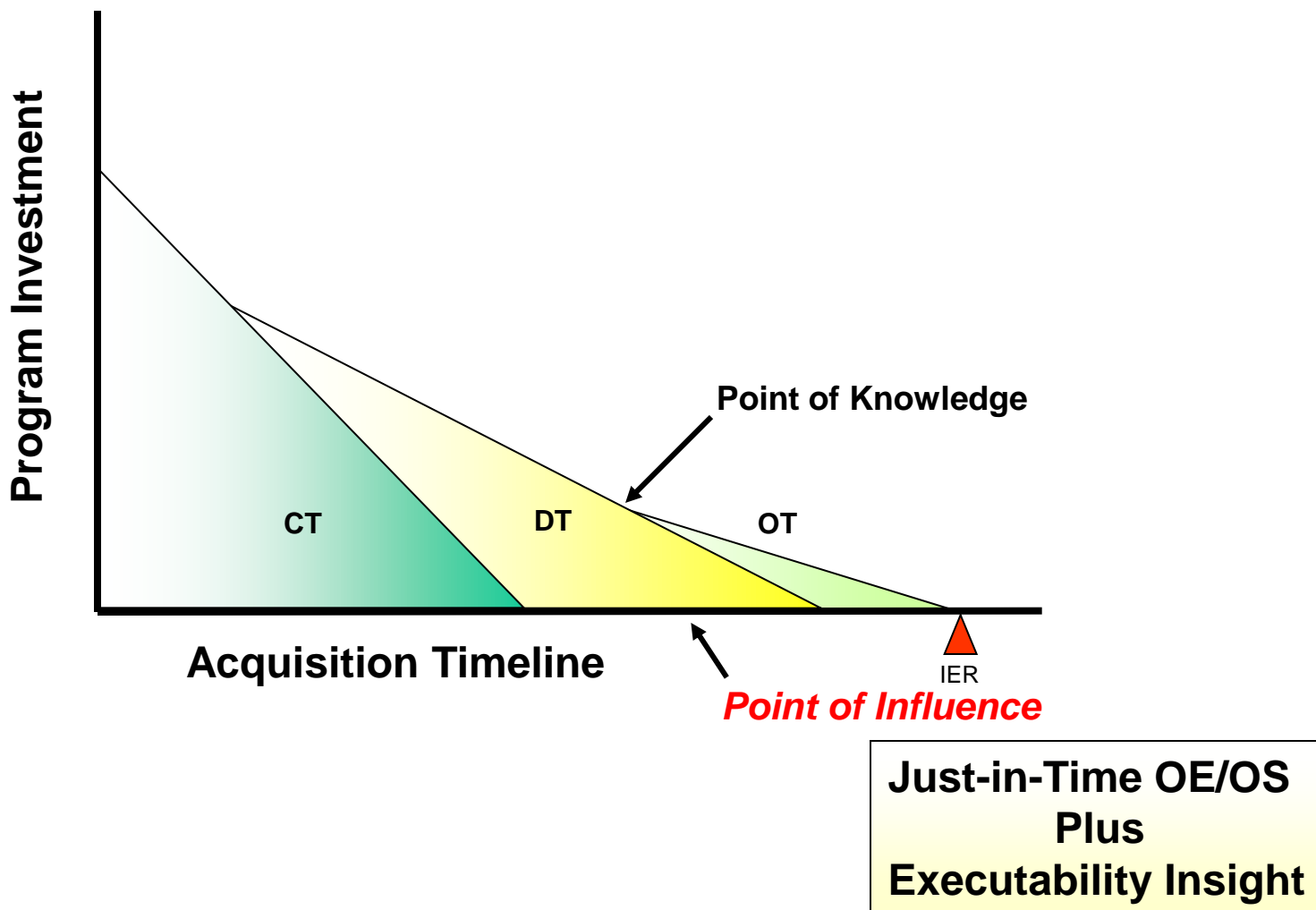


High Risk Environment



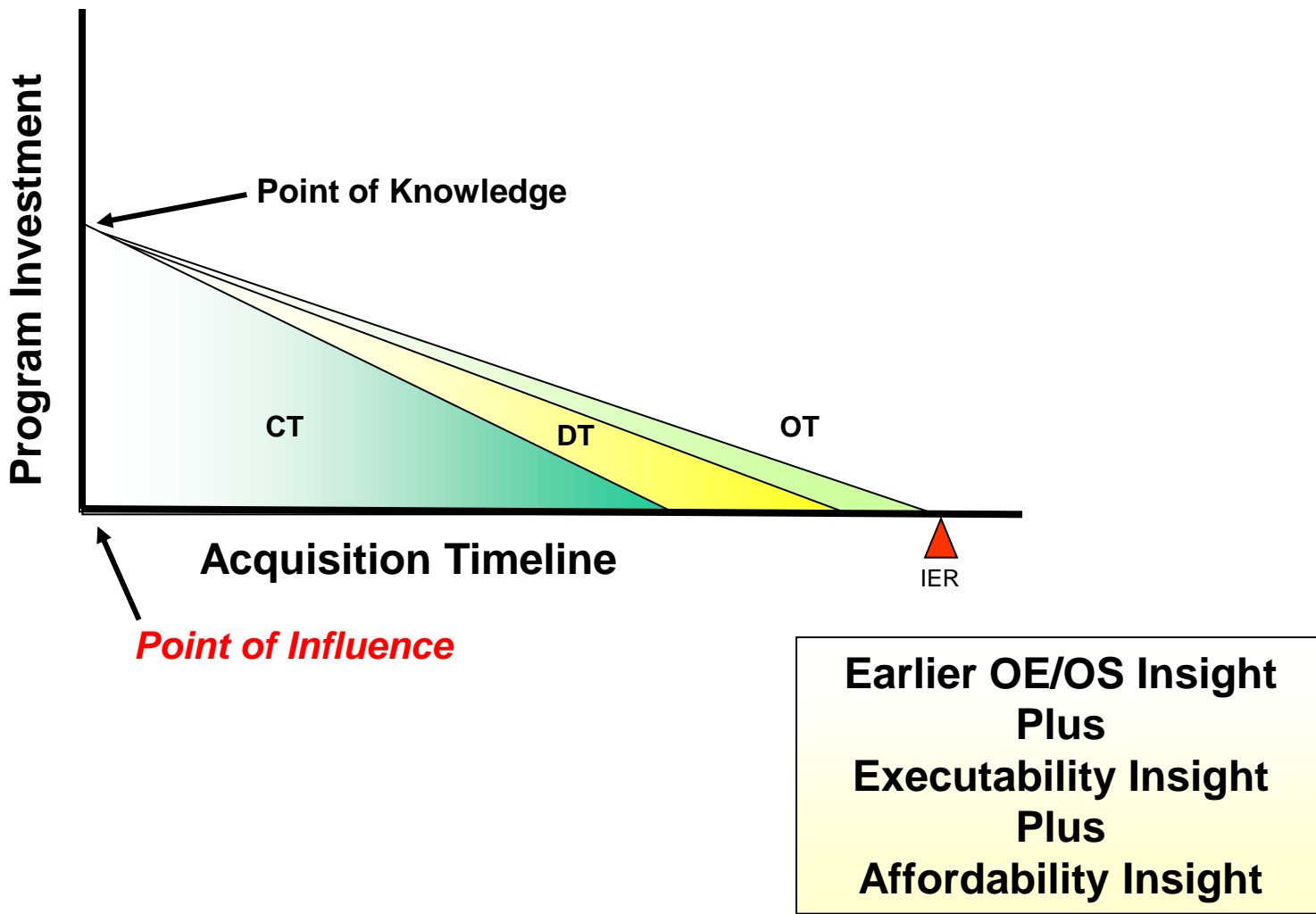


Medium Risk Environment



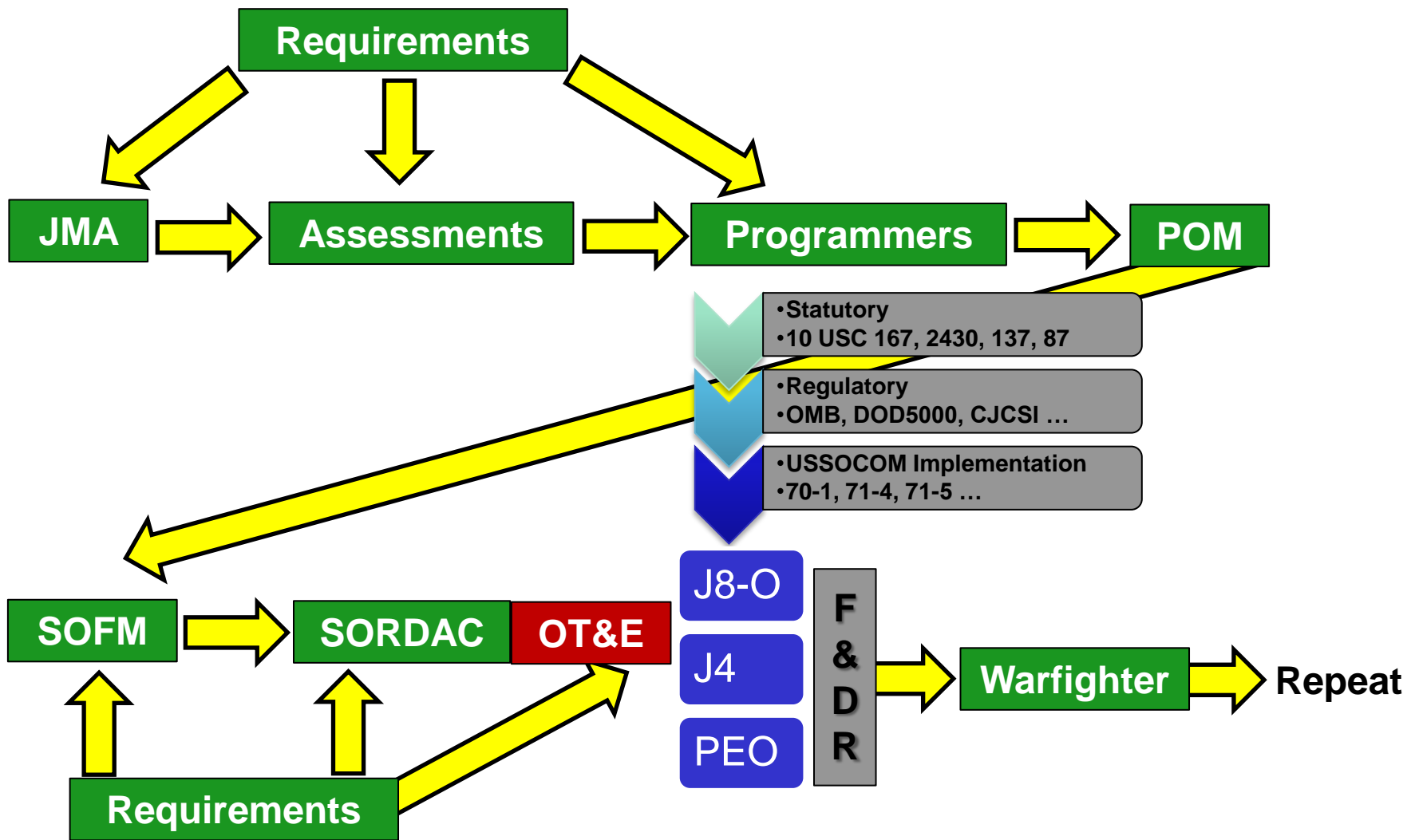


Low Risk Environment- *Integrated T&E*





T&E Implementation





Example:

MK 20 MOD 0 Sniper Support Rifle (SSR)





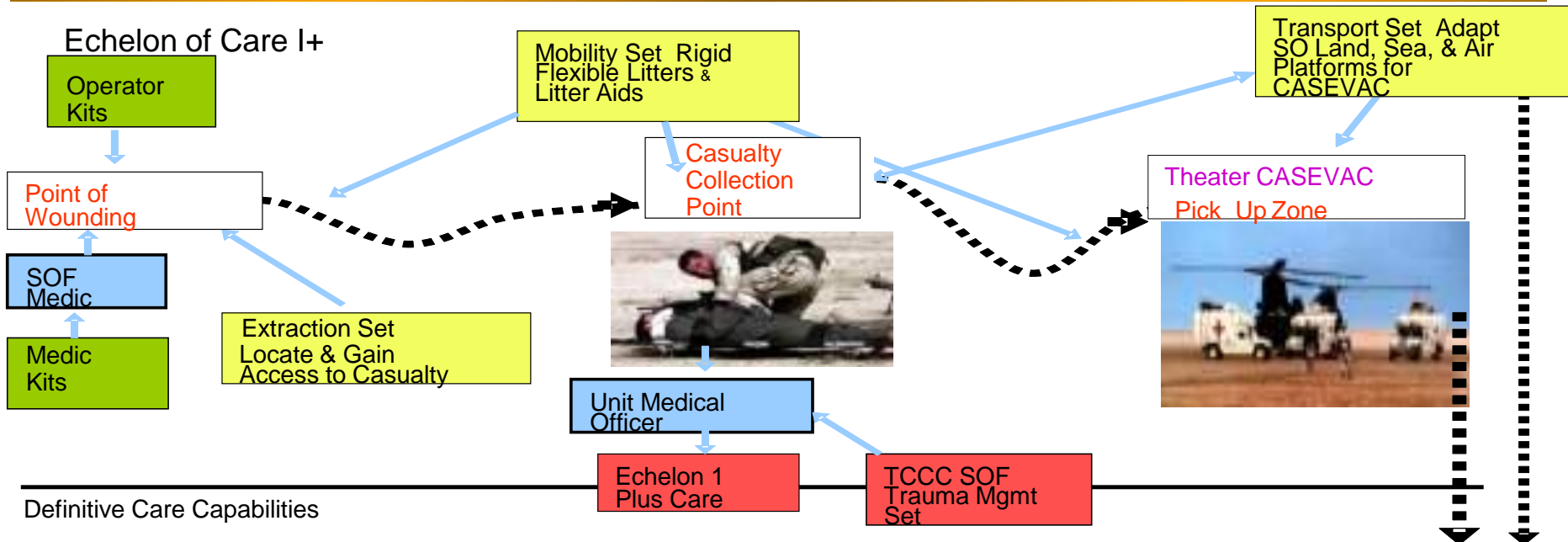
Example:

MK 20 MOD 0 Sniper Support Rifle (SSR)

- Originally competed as “SV” in CAR Solicitation
- User Assessment (UA)
 - Conducted at Camp Billy Machen, CA: 22-27 Feb 2009
 - 9 Test Operators
 - NSW, USASOC & MARSOC
- Developmental Test (DT)
 - Conducted (Endurance) at FNMI, Columbia, SC: 8-11 Nov 2009
 - NSWC Crane Personnel Participated
- Operational Test & Evaluation (OT&E)
 - Conducted at Camp Billy Machen, CA: 6-18 Dec 2009
 - 10 Test Operators
 - NSW, USASOC & MARSOC
- Achieved Joint Safety Approval on 1 June 2010
- Achieved F&DR on 18 Aug 10
- Note: Core Operators continued throughout this process



Example: SOF Tactical Combat Casualty Care



Definitive Care Capabilities

Extraction

Locate & Gain Access

- * Water & Night
- * High Angle
- * Pry & Cut

Mobility

Litters & Aids

- * Transport
- * Various Vehicles

Sustainment

Stabilization

- * Vitals
- * Cardiac
- * Inspired Oxy
- * Blood/Fluid
- * Hypothermia
- * Secure Equipment

Transport

Land, Sea, Air

- * Blood Loss
- * Advanced Airway



Example:

SOF Tactical Combat Casualty Care (TCCC)

- **PMO involved with J8-O early, during establishment of Acquisition Program Baseline, to ensure OT adequately included in plan**
 - **J8-O test input reflected in Section M of Contract Solicitation**
- **Source Selection Evaluation Board (SSEB) conducted 7-18 Jun 2010**
 - **9 members with user reps from: NSW, AFSOC, MARSOC & USASOC**
- **Developmental Testing (DT)**
 - **Received DTC Safety Release ISO Operational Testing: Nov 2010**
 - **USAARL: Air Worthiness and environmental (ongoing)**
 - **USAAMA: Medical Sustainability (ongoing)**
- **Operational Test & Evaluation (OT&E)**
 - **Conducted product demonstration Phase 1: Fort Carson, CO - Jan/ Feb 11**
 - **15 Test Operators: NSW, AFSOC, MARSOC & USASOC**
 - **Conduct product demonstration Phase 2: Crawfordsville, AR – Mar/ Apr 11**
 - **16 Test Operators: NSW, AFSOC, MARSOC & USASOC**



Conclusion-

USSOCOM Acquisition Challenges

- **Diversity of Platforms, Users, Systems, Operating Environments, and Program Management Structures**
- **Mandate to Rapidly Respond to Emergent Warfighter Requirements**
 - **80% Solutions**
 - **Take Risk and Manage It**
 - **Many SOCOM Systems Installed in Platforms Owned and Developed by Others (Services, MILDEPS)**
 - **Contractor-off-the-shelf / Non-developmental Items**

Our Reason for Being

Questions?

