



Unclassified



IW Training Simulators Integrated Product Team

DISTRIBUTION STATEMENT C

Distribution authorized to U.S. Government Agencies and their contractors

Other requests for this document shall be referred to:
Joint Irregular Warfare Center, U.S. Joint Forces Command
Attn: Timothy Bacon, Phone: 757-203-3365
115 Lakeview Parkway Suffolk, VA 23435-2697



Unclassified

Agenda



- **IPT Problem and Desired Outcome**
- **IPT Activities To Date**
- **IPT Activities and Milestones**
- **Methodology**
- **Training Documents**
- **Requirements Overview**
- **Requirements Categories**
- **Way Ahead**



Problem and Desired Outcome

Problem Statement

“We currently enjoy the best aviation and maritime training simulations in the world for our air and sea forces. Only the lack of focus and resources prevent our SOF, Army and Marine ground units from gaining the same advantages in simulating tactical and ethical decision making in ground combat. Simulators using gaming technology currently available can be resources to replicate the close combat where we take most of our casualties under the most ethically bruising conditions. Casualty reduction, fewer ethical missteps, PTSD reduction and enhanced mission success rates can be expected.

“Initial Anchor Points for Institutionalizing Irregular Warfare in DoD” Memorandum, 11 March, 2009, approved by the Chairman and Secretary of Defense

Objectives

- Identify DOD-wide needs, capabilities, & capability gaps.
- Develop courses of action and recommendations for near-, mid- and far- term investments.

Outcome

Common understanding across the Services and COCOMS of Department-wide needs and capability gaps related to small unit immersive simulation, and agreement on required materiel and non-materiel improvements that will address those gaps.

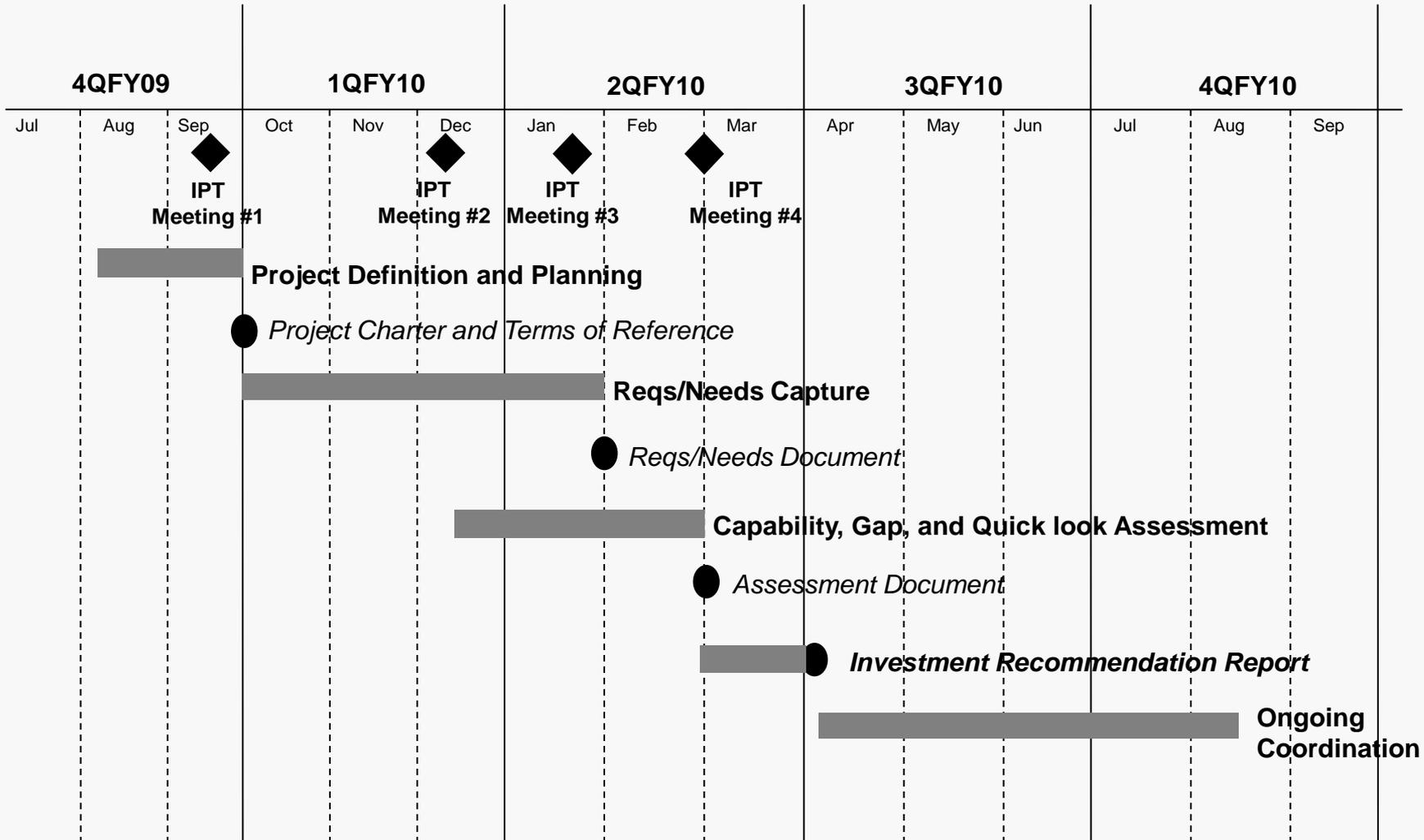


IPT Activities to Date

- **IWTSIPT Charter signed by Brigadier General Hix (Joint Staff J7) and Mr. O'Connell (JIWC) on 4 Jan**
- **Core Study Team met 12 Jan to discuss Service/COCOM requirements**
- **IWTSIPT met 21 Jan to approve methodology**
- **Core Study Team met 11 Feb to discuss capabilities analysis methodology**
- **JIWC meets w/ TECOM 19 Feb, other Services TBD**
- **Next Core Study Team meeting 25 Feb**
- **Next IWTSIPT meeting 19 Mar**



IW Training Simulator IPT Activities and Milestones





Methodology

- **Needs Assessment (NLT 31 JAN)**
 - Collect, assess, and document existing Service/Joint/agency training simulator needs
 - Establish a baseline of Department-wide requirements to identify gaps
- **Capabilities and Gaps Assessment (NLT 28 FEB)**
 - Survey current and projected future DOD capabilities for IW training simulators and compare to documented needs to determine persistent IW Training Simulator Gaps
 - Currently fielded capabilities
 - Programs of record
 - Joint Capability Technology Demonstrations and other funded initiatives
- **Gap Mitigation Quick look Assessment (NLT 31 MAR)**
 - Identify potential DOTMLPF solutions to gaps identified in previous phase and provide specific investment recommendations associated with those solutions (both material and non-material)



Training Requirements Documents

• USN

- Initial Capabilities Document (ICD) for Maritime Expeditionary Security Draft May 2007
- Combat Identification (CID) Mission Area ICD (MA-CID) August 2004
- Joint Explosive Disposal (JEOD) ICD June 2005
- JHSV CDD March 2007
- Assured Maritime Access (AMA) ICD January 2004
- Joint Non-Lethal Weapons (JNLW) ICD Draft
- CBRN Sensors for Application on Unmanned Platforms ICD Draft October 2006
- Littoral Combat Ship (LCS) CDD April 2004
- COMNECC Simulator Master Plan DTG 291217Z JUN 09
- NTA 4.8.5
- EOD/MDSU CONOPS 26 July 2008
- U.S. Navy Maritime Expeditionary Security Force Concept of Operations 11 April 2007
- NEIC CONOPS 26 November 2007
- RIVERINE CONOPS 28 September 2006
- 1NCD CONOPS Pre-Decisional Draft October 2008
- U.S. Navy Maritime Civil Affairs Group Concept of Operations 11 April 2007
- U.S. Navy Expeditionary Training Command Concept of Operations 11 April 2007
- Explosive Ordnance Disposal Expeditionary Support Unit TWO Concept of Operations
- Language Skills, Regional Expertise, and Cultural Awareness Message Traffic
- Navy Expeditionary Logistics Support Group Concept of Operations DRAFT 23 February 2009
- Navy Expeditionary Combat Command Expeditionary Medicine Concept of Operations 20 October 2007
- U.S. Navy Expeditionary Combat Command Force Operational Concept 20 August 2007
- Navy Expeditionary Combat Command Expeditionary Intelligence Concept of Operations 20 November 2007
- Operational Training Resources for Foreign Language and Culture

• US Army

- Capability Production Document (CPD) For Close Combat Tactical Trainer (CCTT)
- Individual & Small Unit Training 13 Aug 09 IW Conference Briefing
- Immersive Simulation Training for the Dismounted Soldier Study Report 2007 (U.S. Army Research Institute)
- Fiscal Year 10 (FY10) Warfighter Outcome (WFO) Analysis Results
- Analysis of Mission-Based Scenarios for Training Soldiers and Small Unit Leaders in Virtual Environments
- Stress Inoculation Forum Notes, 27 FEB 09
- Capability Development Document (CDD) for Live, Virtual, Constructive- Integrating Architecture (LVC-IA) and Infrastructure
- Capability Production Document (CPD) for Gaming
- Capability Production Document (CPD) for Joint Land Component Constructive Training Capability (JLCCTC)
- Appendix 1 Live Capstone Requirements Document version 2.3
- Constructive Environment's Capstone Requirements Document
- Virtual Capstone Requirements Document
- Engagement Skills Trainer II (EST II) Capability Production Document
- Reconfigurable Vehicle Tactical Trainer Capability Production Document
- Integrated Military Operations on Urbanized Terrain (MOUT) Training System (I-MTS)
- Capability Development Document (CDD) for Synthetic Environment Core (SE Core) DRAFT V1.3
- TEMO Virtual Asymmetric OPFOR Behaviors/Functionality Document
- GSXXI Inputs For JFCOM IWTSIPT CSG (11 Jan 10)
- Initial Capabilities Document (ICD) for Ground School XXI DRAFT V1.4
- U.S. Army Gaming Program Strategy (2008)
- OneSAF: Key COE Behaviors, Physical Effects, Equipment & Organizations Representation (Models) Document
- Army Live, Virtual, Constructive Integrating Architecture (LVC IA) Implementation Plan DRAFT
- Training Exercises & Military Operations (TEMO) Virtual Capstone Requirements Document (CRD)



Training Requirements Documents

- **USMC**
 - Squad Immersive Training Environment (SITE) Initial Capabilities Document (ICD)
 - Operational Training Ranges Required Capabilities
 - Training Simulation Road Ahead December 2009 Briefing
 - Joint Capabilities Integration and Development System (JCIDS) Analysis Capability Gap Analysis for the USMC Live, Virtual and Constructive - Training Environment (LVC-TE)
 - USMC Science and Technology Strategic Plan
 - USMC Irregular Warfare/ Small Unit Training Gaps Memorandum
 - Squad Immersive Training Environment (SITE) UNS
 - Navy Research Advisory Committee Immersive Simulation for Marine Corps Study/ Brief
- **USAF**
 - Expeditionary Air Advisor Course Syllabus
 - Lesson Plan Part II, Teaching Guide
 - Plan of Instruction (Expeditionary Training) Combat Airmen Skills Training
 - Distributed Mission Operations (DMO) Response
- **USJFCOM**
 - Future Immersive Training Environment (FITE) Joint Capability Technology Demonstration (JCTD) Management and Transition Plan (MTP)
 - FITE JCTD Implementation Directive
 - JIEDDO Support to FITE JCTD
 - Irregular Warfare Training Symposium (IWTS) Point Paper
 - IWTS Final Report
 - Irregular Warfare Training Site Survey Trip Report Brief DRAFT 0801003
 - Enhanced Ground Tactical Simulations Report
- **USSOCOM**
 - Training-related Capabilities Based Assessments (Classified)
 - SOF Ground 3D Requirements Spreadsheet
 - NSW Simulator Data Call 2010
- **Other**
 - COMISAF/ USFOR-A Counterinsurgency (COIN) Training Guidance Memorandum



Requirements Categories

1. Culture

- *“Human” elements of the environment. Language skills, social and cultural interactions, individual/crowd/population behaviors (including tactical)*

2. Environmental

- *Physical terrain, buildings, walls, weather effects, audio, tactile, visual (night/day), olfactory representation*

3. Realistic Systems Employment and Effects

- *Ability to represent real world systems use and effects and connectivity in the simulated environment*

4. Task Specific Training

- *Requirements related to cognitive learning and ethical decision making in the performance of specific tasks associated with Full Spectrum Operations*

5. Joint Enabler’s Integration

- *The ability to interact with organizations and capabilities outside the small unit framework*

6. Training Assessment

- *Requirements related to collecting, managing, analyzing and displaying information for a training event*

7. Systems Architecture/Training Systems

- *Implementation (Design and performance criteria to support the training system)*

8. Small Unit Training Capability

- *Overarching category designed to catch requirements too broad to fit other categories, yet may address requirements not expressed by other specific requirements*



Way Ahead

- **Complete Requirements Analysis by 23 Feb**
 - Further consolidate requirements/needs data
 - Complete analysis of trends and patterns
 - Begin identification of existing capabilities and development efforts leveraging previous analyses
- **Begin Gap Identification Process**
 - Core Study Team meeting 25 Feb, 1100-1400, JIWC
 - Capture capabilities/gaps documents (ongoing)
 - Define gap identification and assessment process (NLT 1 Mar)
 - Document persistent capability gaps
- **Next IPT meeting 18 March, Stafford, VA**