

“ Who Trains, Wins ”



Simulation, Training and Instrumentation Command

PM TRADE

***Paul Watson
Project Director***

***Live Training
Transformation (LTT) Core/
Common Training
Instrumentation Architecture
(CTIA)***

Product Line Development

Task Order Kickoff Brief





LTT Core /CTIA Government Team Leads

Army Materiel Command

LTC Ronald Harper	Product Manager, Digitized Training
Paul Watson	Project Director
Paul Rhodes	PCO
Felicia Kolb	Contract Specialist
Bob Dixon	Chief Engineer

“ Who Trains, Wins ”



LTT Core/CTIA TO Schedule

Army Materiel Command

ID	Task Name	Duration	Start	Finish	December	January	February	March	April
1	LTT Core/CTIA Source Selection	62 days	Fri 12/22/00	Mon 3/19/01					
2	STOC Contract Award	0 days	Fri 12/22/00	Fri 12/22/00					
3	Go Ahead to Release RFP	9 days	Fri 12/22/00	Wed 1/3/01					
4	LTT RFP Issued	0 days	Wed 1/10/01	Wed 1/10/01					
5	Proposal Preparation	22 days	Wed 1/10/01	Thu 2/8/01					
6	LTT Proposals Due	0 days	Thu 2/8/01	Thu 2/8/01					
7	Written Proposal Evaluation	10 days	Mon 2/12/01	Fri 2/23/01					
8	Invitations to Orals	0 days	Fri 2/23/01	Fri 2/23/01					
9	Issue Questions	1 day	Mon 2/26/01	Mon 2/26/01					
10	Conduct Orals	5 days	Mon 3/5/01	Fri 3/9/01					
11	Write PER	4 days	Mon 3/12/01	Thu 3/15/01					
12	Brief PCO	1 day	Fri 3/16/01	Fri 3/16/01					
13	Write SSDM	0 days	Fri 3/16/01	Fri 3/16/01					
14	Head of Contracts Approval	1 day	Mon 3/19/01	Mon 3/19/01					
15	Contract Award	0 days	Mon 3/19/01	Mon 3/19/01					

“ Who Trains, Wins ”



Assessment Criteria

Army Materiel Command

Award will be made to that offeror submitting the **best value to the Government**. The relative order of importance will be: **Technical Performance, Past Performance, Program Management, Cost**. A delivery order will be awarded to the offeror whose proposal is determined to best meet the needs of the Government after consideration of all factors. The Government may award the task to other than the lowest priced offer or other than the highest technical offer. **THE GOVERNMENT ANTICIPATES AWARDED THE DELIVERY ORDER BASED ON INITIAL OFFERS RECEIVED.**

“ Who Trains, Wins ”



RFP Components

Army Materiel Command

- Letter RFP
- Statement Of Objectives (SOO)
- Contract Work Breakdown Structure (CWBS)
- Outline for Statement of Work (SOW)
- Cost Spreadsheet and Staffloading Spreadsheet

Excel 97 compatible format

- Section B
- Instructions for Oral Presentations

“ Who Trains, Wins ”



Proposal Components

Army Materiel Command

- Concept Paper (25 pages)
- Cost Proposal including CWBS, completed Schedule B, and Spreadsheet
- Statement of Work

“ Who Trains, Wins ”



Technical Assessment Criteria

Army Materiel Command

- Approach for identifying commonality across the live training instrumentation domain.
- Approach for live, virtual and constructive simulation interoperability.
- Approach for integration and reusability with legacy systems and tactical weapons platforms.
- Knowledge of architectural methods, concepts and experiences
- Approach for maximizing the use of NDI (COTS, GOTS) and commercial standards.
- Approach for leveraging existing Government architectural efforts associated with the training domain.
- Approach to the simulation of the architecture (SOA).
- Approach for documenting CTIA architecture specification.
- How the test bed will be developed, maintained, expanded and utilized.
- How new technologies and standards will be assessed reviewed and evaluated.
- Approach for making Architectural trade off to meet the Statement of Objectives.
- Identification of known risks.

“ Who Trains, Wins ”



Past Performance Assessment Criteria

Army Materiel Command

- Identify similar past work efforts and current status. (This should not be a reiteration of STOC Live Domain efforts, but should address specific efforts which pertain to this acquisition.)

“ Who Trains, Wins ”



Program Management Assessment Criteria

Army Materiel Command

- Approach for managing Performance, Schedule, Costs and associated risks relative to the development.
- Approach for the Integrated Process and Product Development (IPPD) process, which implements and optimizes Integrated Product Teams to implement the IPPD principles.
- Approach for Configuration Management.
- Personnel assigned to the project have adequate expertise.

“ Who Trains, Wins ”



Cost Assessment Criteria

Army Materiel Command

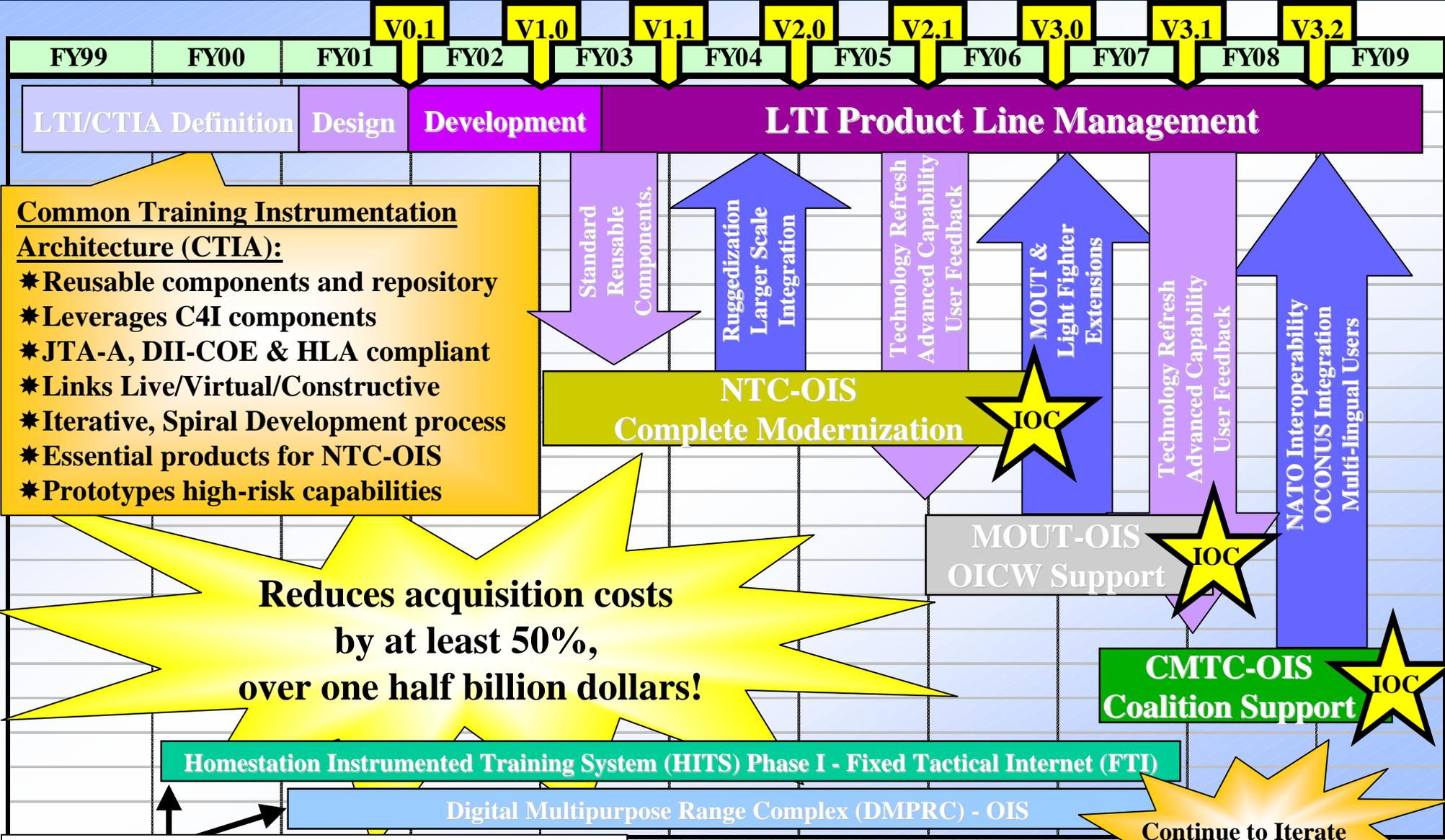
- Describe your plans for controlling costs on this program and any ideas you have for avoiding costs (this narrative information is in addition to and separate from the cost proposal requirements below).
- Cost will be evaluated for cost reasonableness.

“ Who Trains, Wins ”



Live Training Transformation (LTT) Product Line & Component-Based Development

Army Materiel Command



Common Training Instrumentation Architecture (CTIA):

- * Reusable components and repository
- * Leverages C4I components
- * JTA-A, DII-COE & HLA compliant
- * Links Live/Virtual/Constructive
- * Iterative, Spiral Development process
- * Essential products for NTC-OIS
- * Prototypes high-risk capabilities

Reduces acquisition costs by at least 50%, over one half billion dollars!

Live Training Support Infrastructure Programs

Continue to Iterate for JRTC and HITS!

"Who Trains, Wins"



Budget Range for this Task Order

Budget range estimate over 30 months:
\$22M to \$28M

Profile:

FY01	FY02	FY03
7%	59%	34%

NTC-OIS RDT&E funding profile begins in FY03 with over \$10M available.

“ Who Trains, Wins ”



Period 1, Contract Award (CA) to CA + 6 Months

Army Materiel Command

- Deliver CTIA Product Line Architecture Specification (PLAS) - CTIA Version 0.1 (V0.1).
- Establish the LTT Core/CTIA Integration and Development Environment at STRICOM.
- Document the Domain Analysis in Domain Analysis Technical Report (DATR)
- Develop LTT Core Reuse Plan (documented in DATR).
 - Analysis of current market capabilities.

“ Who Trains, Wins ”



Period 2, CA + 6 Months Through CA + 18 Months

Army Materiel Command

- Deliver Product Line Architecture Framework (PLAF).
- Baseline CTIA V1.0.
- Integrate a subset of the LTT Core common components.
 - Functionality will be determined during Period 1 by IPT.
 - Include developmental components as well as baseline COTS/GOTS components selected to implement the PLAF.
- Produce a limited Prototype of NTC-OIS.
 - Include analysis of the objective system within the SOA
 - Identify modular components for the non-CTC OIS instantiations.

“ Who Trains, Wins ”



Period 3, CA + 18 Months Through CA + 30 Months

Army Materiel Command

- Evolve NTC-OIS prototype focusing on critical functional requirements at the NTC.
- Evolve the CTIA to V1.1.
- Develop a larger subset of the common components.
- Deliver a migration plan of the NTC-OIS to IOC.
- Include OneTESS extensions within CTIA V1.1

“ Who Trains, Wins ”



Open Systems Approach

Army Materiel Command

- Ensure system design is sufficiently flexible and robust to allow responsiveness to changing technology and requirements.
- Develop a product line, component-based architecture that defines the key interfaces used in the system by widely used industry standards and those selected through a consensus process.
- Facilitate integration and use of COTS/GOTS products from multiple sources both in the initial design and in future enhancements.
- Enable technology insertion as currently available commercial products mature and new commercial products become available in the future.
- Allow for affordable interoperability, supportability and reliability.

“ Who Trains, Wins ”



CTIA Product Line Architecture Objectives

Army Materiel Command

- Promote the reuse of software artifacts across the LTT domain and rectify software mismatches.
- Strategize integration of architecture products and components.
- Simulation of the architecture - verify it is implementable and buildable.
- Maximize the use of COTS/GOTS.
- Select, adapt and extend existing architectures and standards.
- Leverage - TENA, MAIS C3, MOUT team, ABCS, ATIA, OneSAF.
- Extensibility.
- Support the separation of data from the application.
- Data standards must be part of the architecture.
- Define stable interfaces to ATIA compliant systems, ABCS, and HLA compliant simulations.

“ Who Trains, Wins ”



Live Training Transformation (LTT) Systems Objectives

Army Materiel Command

- Collect, analyze and use software metrics.
- Address complete life cycle of system.
- Promote commonality across the family of live training systems (e.g., CTCs, MOUT and HITS).
- Ensure that the design supports live, virtual, and constructive simulation interoperability.
- Leverage reuse from legacy systems as well as tactical systems (i.e., weapons platforms, ABCS, etc.)

“ Who Trains, Wins ”



Integration and Development Environment (IDE)

Army Materiel Command

- Utilize for prototyping, risk mitigation, trade-off analyses, software verification and validation, demonstration, integration, etc.
- Investigate and leverage state-of-the-art technologies.
- The IDE will be easily accessible to the government and contractor and it should take advantage of other testbed facilities efforts.
- IDE will be located at STRICOM

“ Who Trains, Wins ”



IDE Location - Technology Point 1

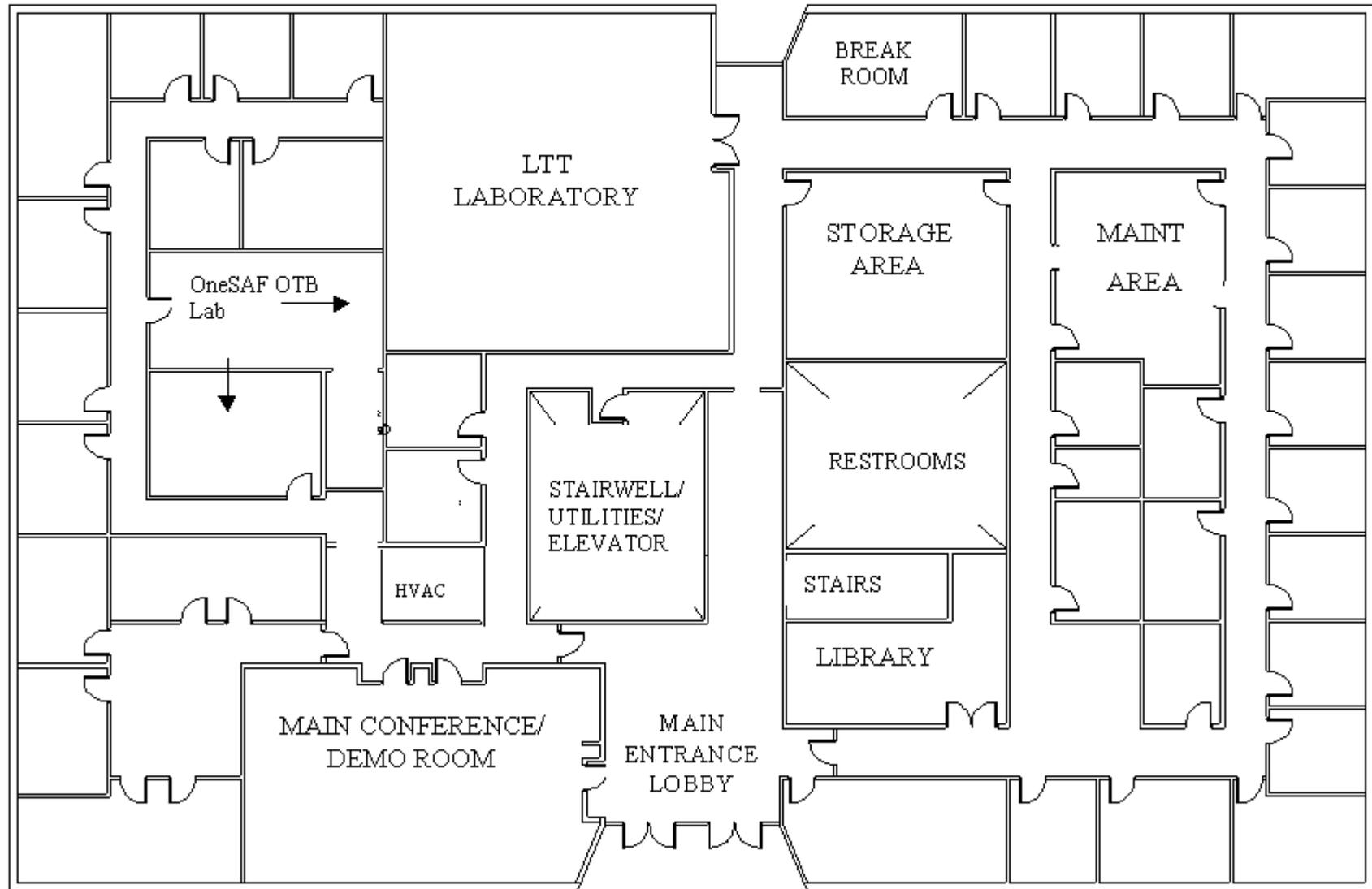
Army Materiel Command

- LTT Government team will move in Apr 2001.
- Space will be available immediately thereafter for LTT Core/CTIA team - roughly 20 offices, many of which could support two personnel.
- Permanent offices for the user representatives (ATSC).

“ Who Trains, Wins ”

DRAFT

TECHNOLOGY POINT I - FIRST FLOOR





Management Objectives

Army Materiel Command

- Comprehensive configuration management system
- Integrated Process and Product Development (IPPD) process
- Customer focus
- Maximum flexibility for optimization and use of contractor approaches
- Multidisciplinary teamwork and cooperation
- Empowerment
- Proactive identification and management of risk (cost, schedule and performance)
- Pre-planned conflict resolution.
- Use Earned Value Management processes to monitor and control costs.
- Partnering

“ Who Trains, Wins ”



Management Objectives (cont.)

Army Materiel Command

- Visibility of programmatic schedules, cost and performance information.
- Minimize program overhead.
- Proprietary hardware/software solutions will be worked through the IPT process.
- Planned migration of existing legacy instrumentation systems.

“ Who Trains, Wins ”



Oral Presentations

Army Materiel Command

The Contracting Officer may allow some or all of the offerors who submit written proposals to provide an oral presentation to the Government. However, the Government reserves the right to make an award decision based upon the written proposal.

- Random draw for sessions to begin approximately three (3) weeks after receipt of proposals.
- Each invited offeror will be allowed up to four (4) hours to present.
- Presentation will be interactive (questions may be asked during presentation).
- Use Power Point 97 - Government-provided electronic projector.
- Provide ten (10) hardcopies.
- Offeror may bring their own equipment if needed for other than slide presentations.

“ Who Trains, Wins ”



Reference Material

Army Materiel Command

- Detailed reference material is available to STOC Lot I Prime Contractors via STRICOM's Domino Docs application:
 - Contact Wanda Fuentes, ...
 - Most materials are deliverables from Applied Research Laboratory University of Texas (ARL:UT).
 - Offerors are NOT required to be knowledgeable with this material.

“ Who Trains, Wins ”



Army Materiel Command

Questions?

“ Who Trains, Wins ”