



*Project Manager
Combined Arms Tactical Trainers*

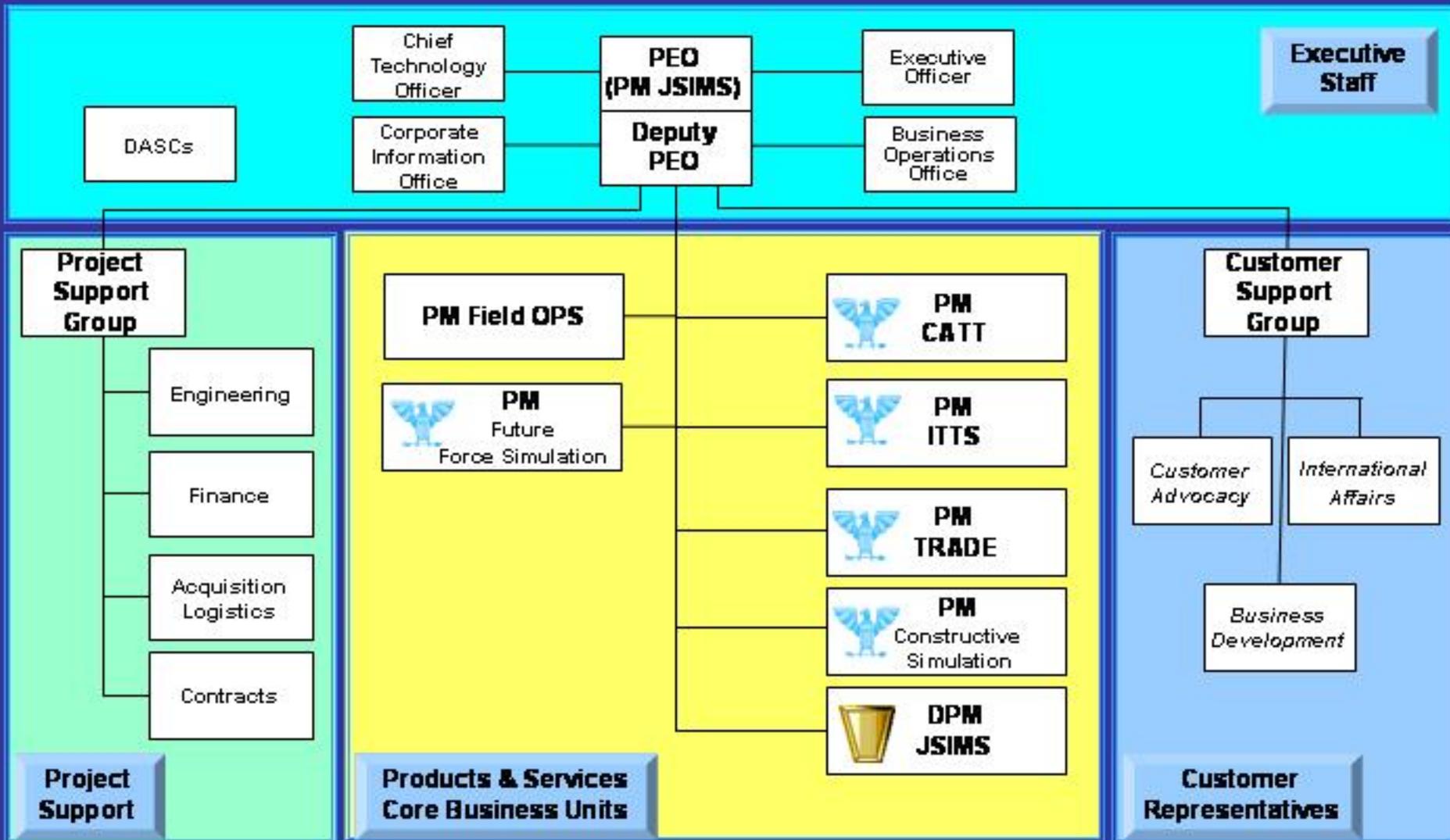
*Information Briefing
AFCEA Luncheon*

*COL Kevin S. Noonan
Project Manager
28 October 2003*





PEO STRI Organization





PEO STRI Strategy Articulation Map



Drivers



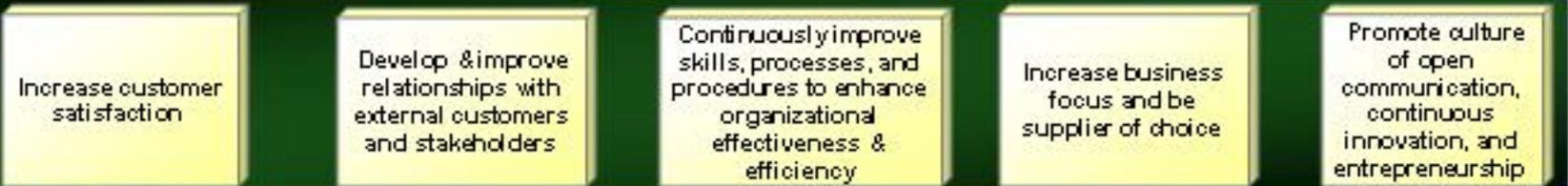
Vision
"Putting the power of simulation in the hands of the warfighter"

Mission
"Provide life-cycle management of interoperable training, testing and simulation solutions for soldier (warfighter) readiness and the defense community"

Guiding Principles

- We are warfighter focused
- Our employees are trained, respected & empowered
- We excel at SMART tools & capabilities
- We ensure soldiers have the best training environment possible
- We develop & maintain a professional & motivated workforce
- We provide our workforce the tools and environment to excel

Strategic Goals



Increase customer satisfaction

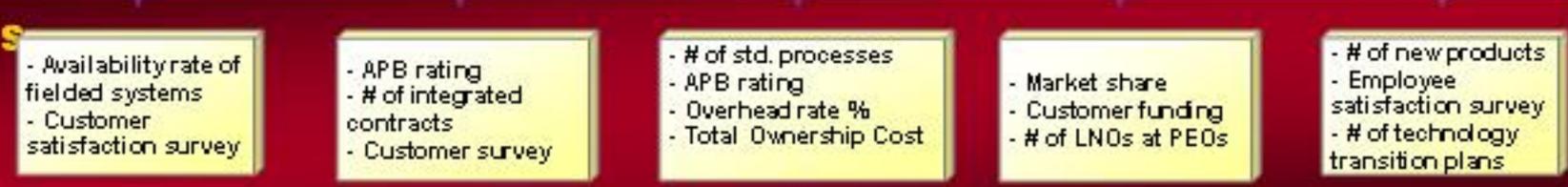
Develop & improve relationships with external customers and stakeholders

Continuously improve skills, processes, and procedures to enhance organizational effectiveness & efficiency

Increase business focus and be supplier of choice

Promote culture of open communication, continuous innovation, and entrepreneurship

Objectives / KPI's



- Availability rate of fielded systems
- Customer satisfaction survey

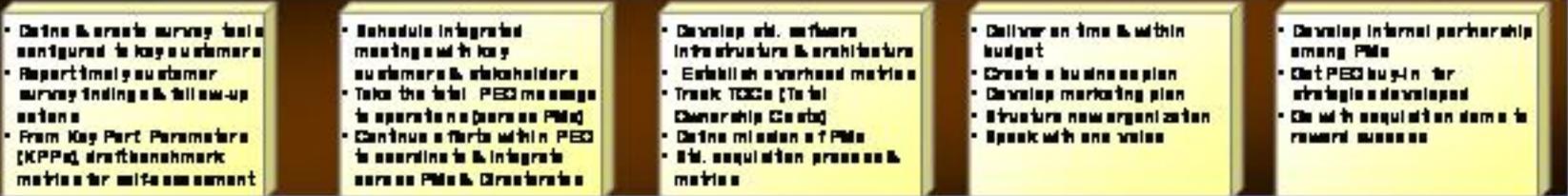
- APB rating
- # of integrated contracts
- Customer survey

- # of std. processes
- APB rating
- Overhead rate %
- Total Ownership Cost

- Market share
- Customer funding
- # of LNOs at PEOs

- # of new products
- Employee satisfaction survey
- # of technology transition plans

Critical Initiatives



- Define & create survey tool configured to key customers
- Report timely customer survey findings & follow-up actions
- Form Key Part Parameters (KPPs), draft benchmark metrics for self assessment

- Schedule integrated meetings with key customers & stakeholders
- Take the total PEO message to operations (serve as PMO)
- Continue efforts within PEO to coordinate & integrate across PMOs & Directorates

- Develop std. software infrastructure & architecture
- Establish overhead metrics
- Track TOCCs (Total Ownership Costs)
- Define mission of PMOs
- Std. acquisition process & metrics

- Deliver on time & within budget
- Create a business plan
- Develop marketing plan
- Structure new organization
- Speak with one voice

- Develop internal partnership among PMOs
- Get PEO buy-in for strategies developed
- Do with acquisition items to reward success



Project Manager Combined Arms Tactical Trainers



Mission

Acquire, Field, and Life Cycle Manage the Virtual Synthetic Environment and Interoperable Training Aids, Devices, Simulators, and Simulations (TADSS) to Support Individual, Institutional, and Collective Training Requirements for the Current, Stryker, and Future Force.



PM CATT Organization





PM CATT Organization



Project Manager
CATT
COL Kevin S. Noonan

Deputy
Project Manager
Patrick Spangler

Admin
Jane Knapp
Frank Fielder

Business Manager
Al Boudreaux

**PSG-Assigned Program Analysts,
Budget Analysts, and Cost Analyst**



PM CATT Program Overview



**> \$250M
FY04 \$**

**1 ACAT II Program; 5 ACAT III Programs
- 35 Customer Programs
- 7 Future ACAT (III) Programs**

**> \$1.6B
FY04-09 \$**



Mission: Provide Focused Management of the Close Combat Tactical Trainer (CCTT) Program To Meet Program Cost, Schedule, and Performance Requirements and to Produce a Reusable Synthetic Environment For Future CATT and Other Virtual Training Systems.

1 ACAT II Program; 1 Customer Program; 2 Future ACAT III Program



Develop, Field, and Sustain High Quality Virtual Training Devices for Special Operations Forces that Meet or Exceed our Warfighters' Requirements.

PEO STRI Single Point of Contact to USSOCOM – Single Customer; 5 Customer Program Initiatives



Develop, Field, and Sustain High Quality Airborne and Command Virtual Training Devices that Meet or Exceed our Warfighters' Requirements.

3 ACAT III Programs; 5 Customer Programs; 2 Future ACAT III Programs



Develop, Field, and Sustain High Quality Ground Combat Virtual Training Devices that Meet or Exceed our Warfighters' Requirements

2 ACAT III Programs; 24 Customer Programs; 3 Future ACAT III Programs

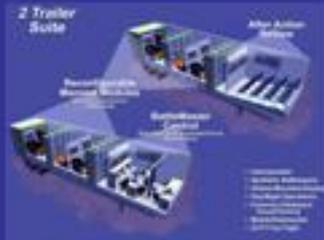


Virtual Simulation

Today  Tomorrow



Collective/Combined Arms/Specialty Tasks



Embed In
Tactical Systems



Seamless Interfaces
Across

Virtual, Constructive & Live



Specialty and Focused Training Tasks





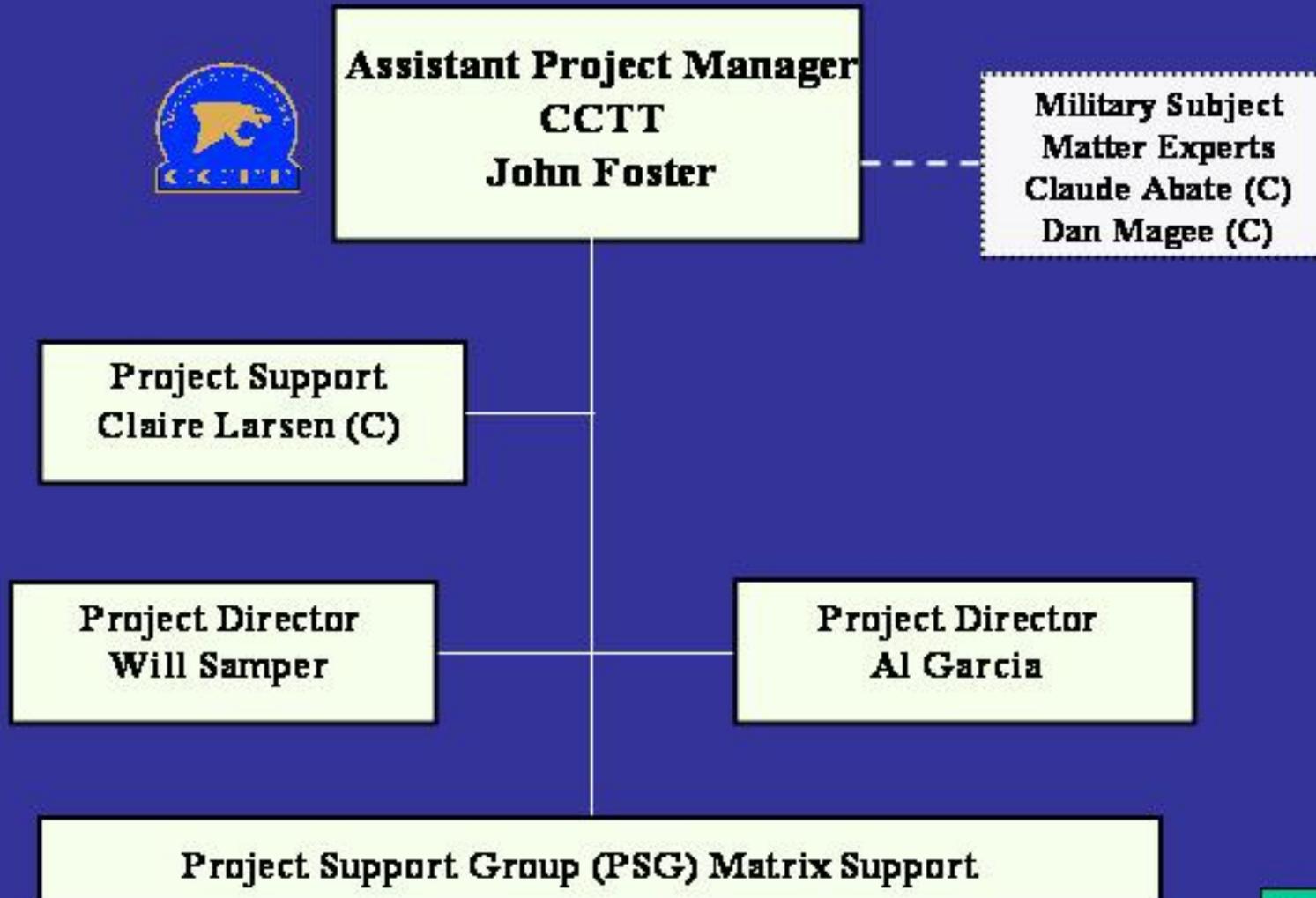
Assistant Project Manager (APM) Close Combat Tactical Trainer (CCTT)



Mission: Provide Focused Management of the Close Combat Tactical Trainer (CCTT) Program To Meet Program Cost, Schedule, and Performance Requirements and to Produce a Reusable Synthetic Environment For Future CATT and Other Virtual Training Systems.



PM CATT Organization



C - Contractor
N - Navy



APM CCTT Program Portfolio



APM CCTT

Program Long Name

Category

Close Combat Tactical Trainer

ACAT II

Synthetic Environment Core

Pre MS B

Soldier Combined Arms Tactical Trainer

Pre MS B

SIMNET Re-Host for NGB

Customer



Close Combat Tactical Trainer



ACAT II Program

Fixed and Mobile Configurations

- 9 Fixed Sites For Active Component
- 12 Mobile Sets for National Guard/Reserves; 2 USAREUR Company-Level Mobile Systems



Operator Control



Dismounted Infantry



M2/M3



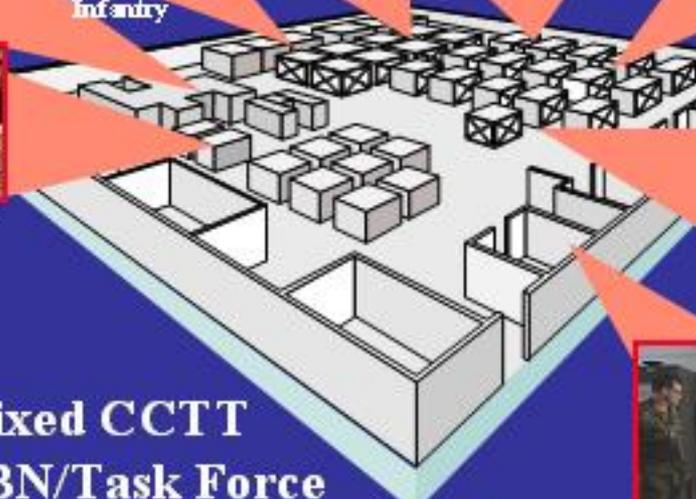
M1A2



M1A1



HMMWV



Fixed CCTT
CO/BN/Task Force



M113



After Action Review

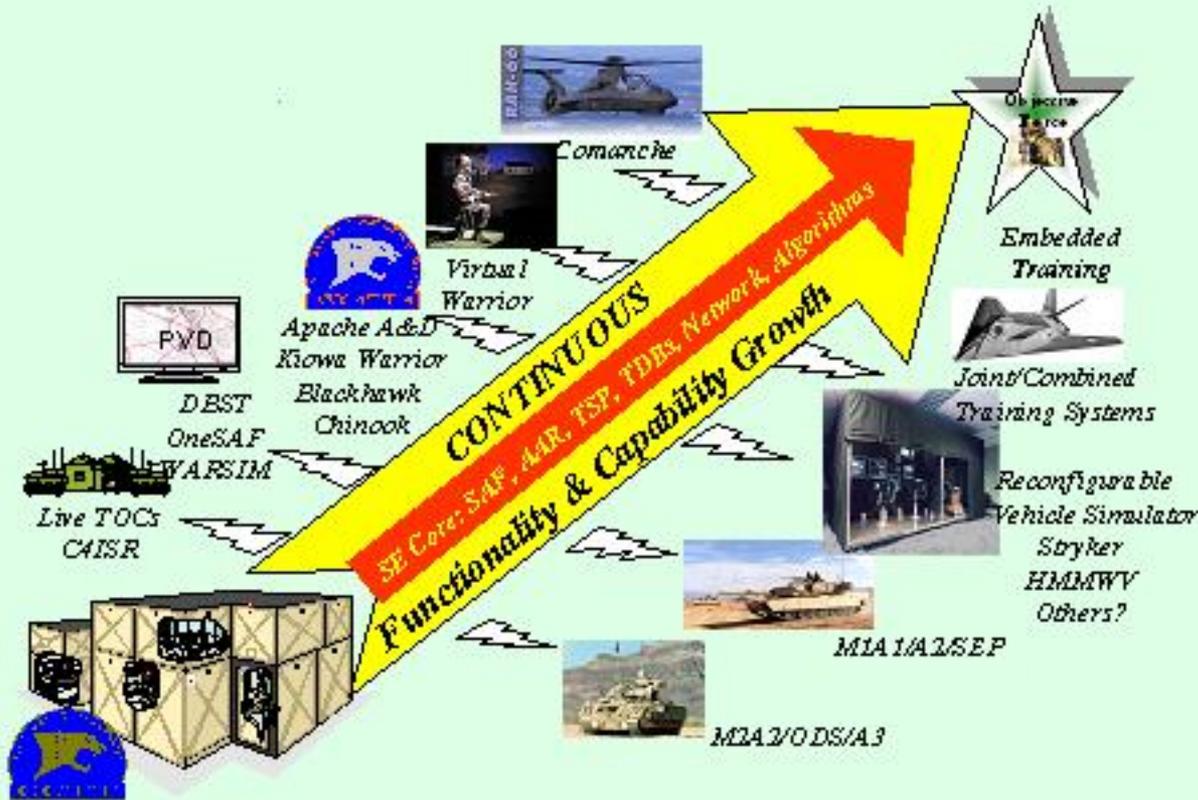


Mobile CCTT Platoon

Collective training of Armor, Mechanized Infantry, and Cavalry Units from Platoon through Battalion/Squadron Echelon, Including the Staff.



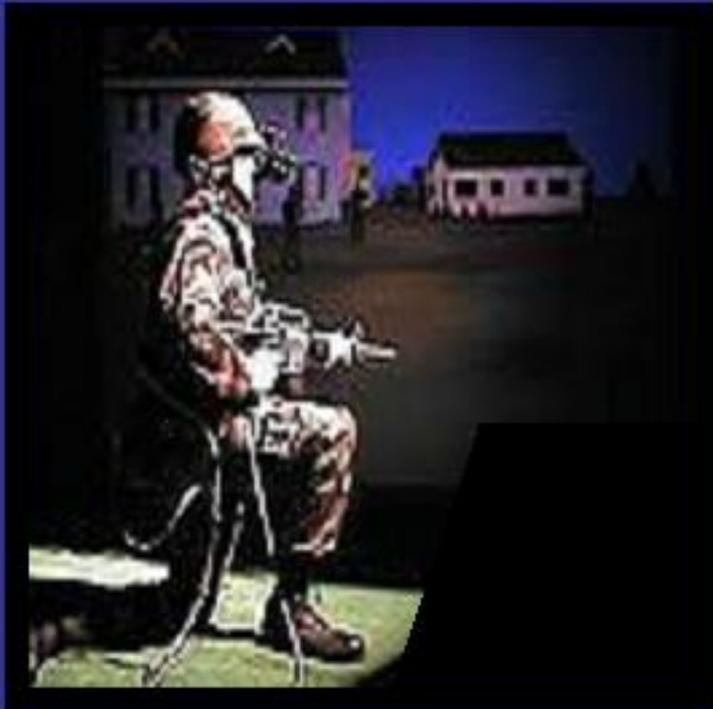
Synthetic Environment (SE) Core



Enables the Army's Common Virtual Environment (CVE) to link virtual training simulations into an integrated and interoperable training system with fair fight capability for Legacy, Interim, and Objective Forces; enables linkage of the CVE to the live and constructive environments.



Soldier - Combined Arms Tactical Trainer (Soldier CATT)



Soldier-CATT will provide a dismount-centric, combined arms, collective training capability to prepare soldiers and leaders to fight effectively throughout the full spectrum of military operations in the Contemporary Operating Environment and in urban/complex terrain.



Product Manager Air and Command Tactical Trainers



Develop, Field, and Sustain High Quality Airborne and Command Virtual Training Devices that Meet or Exceed our Warfighters' Requirements.

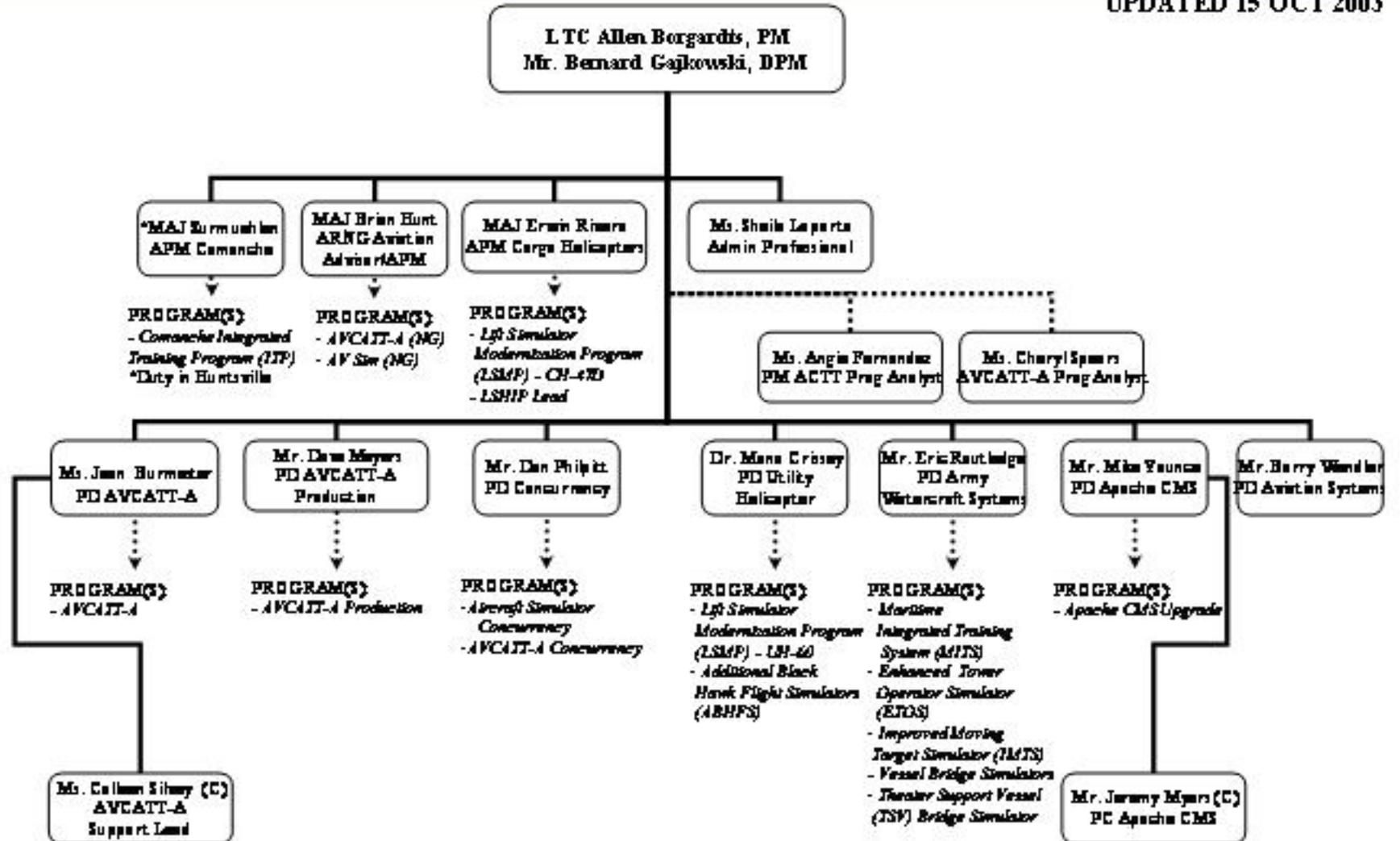




PM ACTT Organization



UPDATED 15 OCT 2003



C - Contractor
N - Navy



PM ACTT Program Portfolio



PM ACTT	
Program Long Name	Category
Additional BlackHawk Flight Simulator	Customer
AH 64A CMS	Customer
LSMP (CH-47D) - Lift Simulator Modernization Program	Customer
LSMP (UH-60A/L) - Lift Simulator Modernization Program	Customer
Maritime Integrated Training System	Customer
Aviation Combined Arms Tactical Trainer - Aviation Rec	ACAT III
Enhanced Tower Simulator (ETOS)	ACAT III
Advanced Morse Mission Trainer	Pre MS B
Satellite Principles Transformation Trainer	Pre MS B
Improved Moving Target Simulator	ACAT III
Comanche Training Device System (TDS)	PM Support

Aviation Combined Arms Tactical Trainer - Aviation Reconfigurable Manned Simulator (AVCATT-A)



Manned Simulators



Conventional TOC



Digitized TOC



Apache AH-64A



Kiowa Warrior OH-58D



Chinook CH-47D



Black Hawk UH-60A/L



Longbow AH-64D



Comanche RAH-66

Synthetic Environment



- Semi-Automated Forces (SAF)
- Terrain Databases
- Validated Models and Algorithms
- Network Design and Protocols
- Training Support Packages

Combined arms collective training and mission rehearsal system operating in a simulated battlefield. Affordable and enhanced capability to train for joint air/ground arms operations for active and reserve component Army Aviation Units worldwide.



Aviation Combined Arms Tactical Trainer – Aviation Reconfigurable Manned Simulator



2 Trailer Suite



**Reconfigurable
Manned Modules**
Attack/Reconnaissance
Utility/Cargo

**BattleMaster
Control**

Role player/Semi-Automated Forces
Work Stations

**After Action
Review**

- Interoperable
- Synthetic Battlespace
- Helmet Mounted Display
- Day/Night Operations
- Common Databases
Visual/Tactical
- Mobile/Deployable
- CCTT Fair Fight

AVCATT-A



AVCATT-A Fielding*



* Initial Program 18 Suites– Evolving Requirement is 22 Suites



Additional Black Hawk Flight Simulators (ABHFS)



Develop and provide 3 additional high fidelity UH-60A/L flight simulators, one each for Fort Drum, Eastern Army National Guard Aviation Training Site (EAATS) and Western Army National Guard Aviation Training Site (WAATS) to train individual and crew tasks to standard



Enhanced Tower Operator Simulator (ETOS)



Air Traffic Control Tower Training System to Meet U.S. Army Air Traffic Control School Requirements for MOS 93C (Air Traffic Control Specialist).



Product Manager Ground Combat Tactical Trainers



PM GCTT

Develop, Field, and Sustain High Quality Ground Combat Virtual Training Devices that Meet or Exceed our Warfighters' Requirements.

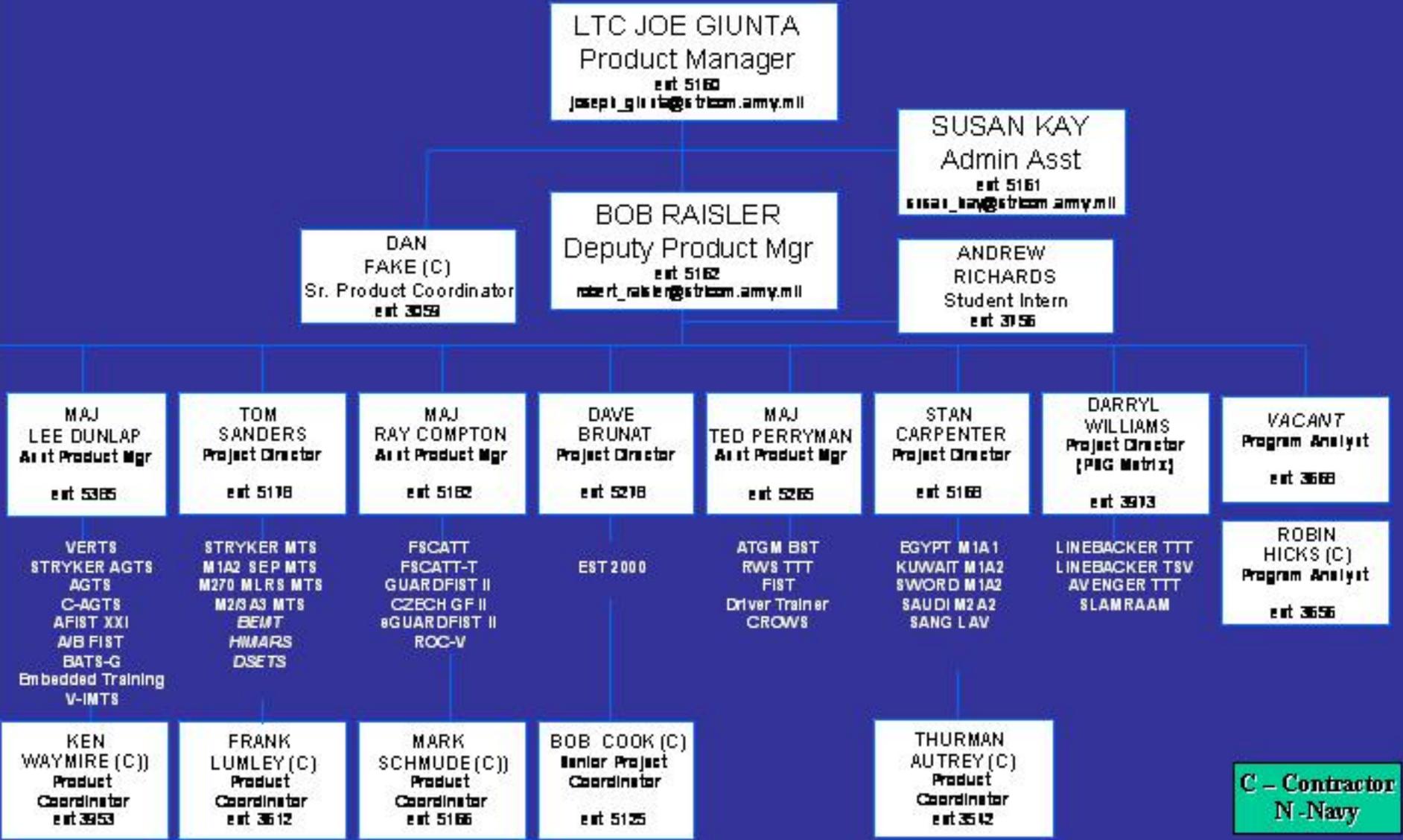


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PM GCTT ORGANIZATION



**C - Contractor
N - Navy**



PM GCTT Program Portfolio

Page 1 of 2



PM GCTT	
Program Long Name	Category
Engagement Skills Trainer 2000 (EST)	ACAT III
Forward Observer Exercise Simulation	Pre-MS B
Basic Electronics Maintenance Trainer	Pre-MS B
Laser Marksmanship Training System (LMTS)	Pre-MS B
Fire Support Combined Arms Tactical Trainer	ACAT III
FMS Czech Rep GUARDFIST II	Customer
FMS EGYPT M1A1 AGTS	Customer
FMS EGYPT M60A1/A3	Customer
FMS KUWAIT OVERSIGHT	Customer
FMS SANG LAV AGTS	Customer
FMS SAUDI M1A2 TANK (SWORD)	Customer
Guard Unit Device Full-Crew Interactive Simulation Tra	Customer
Recognition of Combat Vehicles - Virtual (ROC-V)	Customer
SABOT (Bradley Advanced Training System (BATS))	Customer



PM GCTT Program Portfolio

Page 2 of 2



PM GCTT	
Program Long Name	Category
STRYKER Anti-Tank Guided Missile Basic Skills Trainer	Customer
STRYKER Main Gun System Advanced Gunnery Training System	Customer
ABRAMS Full-Crew Interactive Simulation Trainer XXI	Customer
Advanced Bradley Full Crew Interactive Simulation Trainer	Customer
Conduct of Fire Trainer Rehost Advanced Gunnery Training System	Customer
AVENGER Table Top Trainer (ATTT)	Customer
Abrams Full-Crew Interactive Simulation Trainer (AFIST)	Customer
Advanced Gunnery Training System (AGTS) M1A2	Customer
High Mobility Artillery Rocket System Maintenance Training System (H)	Customer
LINEBACKER Table Top Trainer	Customer
M1A2 MTS (SEP)	Customer
M1A2 Maintenance Trainers	Customer
M2A3 Bradley Maintenance Training System	Customer
MLRS (M270A1) Maintenance Trainers	Customer
STRYKER Maintenance Trainer	Customer
STRYKER Remote Weapon Station	Customer



Engagement Skills Trainer (EST 2000)



**Supports Individual and Squad Training in Three Training Modes:
Marksmanship, Squad/Tactical Engagement, and
Shoot-Don't Shoot/Judgmental Use of Force**



Laser Marksmanship Training System (LMTS)



The TR-900 target detects the laser "bullet" hit, and communicates to the computer its exact location plus additional real-time information. Gives elapsed time of fire between shots and total time, maximum dispersion within a shot group, mean point of impact, and total score.

The MP-400 laser transmitter has adjustments for both windage and elevation. Pulling the trigger causes the transmitter to send out a laser pulse which can be detected by any BEAMHIT target. Powered by one standard "AA" battery.



-VCSA Guidance: 6 Aug 03

- **Directed that the LMTS technology and capability be institutionalized, as appropriate, throughout all three components of the Army as rapidly as possible, but no later than End Of Year FY 05**
- **The LMTS training system will be a supplemental marksmanship trainer to the EST 2000**



Call for Fire Trainer (Enhanced GUARDFIST II)



- Technology upgrade of the current Window Based GUARDFIST II training system.
- Realistically tactile Simulated Military Equipment (SME).
- Realistic DIS compliant, high fidelity virtual environments and intelligent Friendly, Opposing and non-Combatant Simulated Forces.
- CLS / BOIP supported POM
- Multiple viewfinder images



Call For Fire Trainer (CFFT)

- USSOCOM evaluating for potential inclusion into the SACIS Joint ORD



COMMON DRIVER TRAINERS



Market Survey

- Phase I: Intranet Search / Request for Information
- Phase II: APBI
- Phase III: Market Research - Ongoing / RFI (Released)
- Phase IV: RFP with Tech Demos



Stakeholders

- TRADOC / ATSC / TSMs
- / DOTs
- AMC / PEOs / PMs
- ARMY / USMC
- FMS

Potential Contractors

- | | |
|-----------------------------|-----------|
| Raytheon | Fidelity |
| Lockheed Martin | STN-Atlas |
| Perceptronics | ISIM |
| Research Triangle Institute | Raydon |
| INDRA | ANTEON |
| *FAAC | |

*Currently has contract with USMC; has already fielded 18 trainers for Transportation School and additional Driver Trainers for USMC

Target Driver Trainers

- STRYKER
- Tactical Wheeled Vehicle
- Tank Driver Trainer
- BFIST
- HMMWV
- MP Vehicle
- FGS
- FMS



FIXED-BASE, STUDENT TRAINING STATION



3-DOF SEAT SHAKER MOTION CUEING



6-DOF MOTION BASE STUDENT TRAINING STATION

Possible Configurations



PM GCTT FOREIGN MILITARY SALES (FMS)



- **PM GCTT has a significant amount of FMS procurements which includes the support upgrade of fielded systems and the development/procurement of new training systems.**
- **KUWAIT MIA2 Program - \$88M**
 - 3 PCOFTs, TDT, PRIME, MILES, & Maintenance Trainers
 - \$12M PCOFT/TDT upgrade effort underway
- **SAUDI ARABIA (Includes SWORD MIA2, SANG LAV & INF CORP) - \$208M**
 - P/UCOFTS, AGTS, TDT, MILES, TWGSS, VIGS, TOW-II PGTS, & Maintenance Trainers
 - 2 M60A3 PLT AGTS currently being procured
 - P/UCOFT & TDT upgrade effort projected to begin this year
- **EGYPT MIA1 & M60A3 Program - \$60M**
 - UCOFTs, AGTS, & TDT
 - Additional MIA1 Platoon AGTS, TDT and upgrade effort projected to begin this year
- **BAHRAIN - \$3.5M**
 - M60A3 Platoon AGTS contract to be awarded in NOV 03
- **CZECH EPUBLIC - \$2.5M**
 - Forward Observer Trainer scheduled to be delivered in DEC 03



Product Manager SOF Training Systems

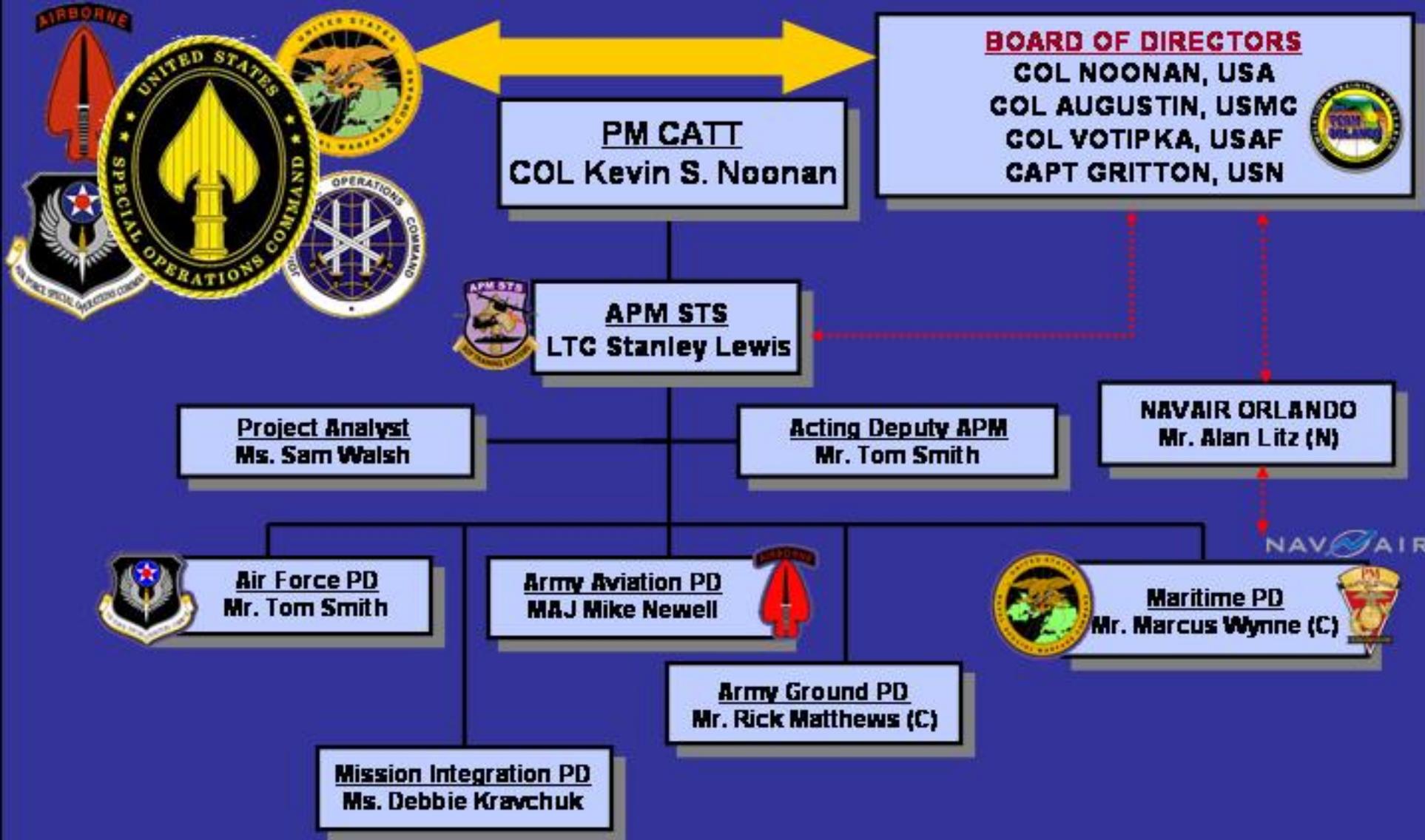


**Develop, Field, and Sustain High Quality
Virtual Training Devices for
Special Operations Forces that Meet
or Exceed our Warfighters' Requirements.**





PM STS Organization





PM STS Program Portfolio



APM CATT (STS)

Program Long Name

Category

Light Assault/Attack Reconfigurable (LASAR) Combat Mission Simulator	Customer
MH-47G & MH-60M Combat Mission Simulators	Customer
Simulator Block Updates	Customer
SOF Air Ground Interface Simulator (SAGIS)	Customer
Special Tactics Air Traffic Control Simulator (STATC)	Customer



AH/MH-6 Light Assault/Attack Reconfigurable CMS Phase II



High-fidelity, reconfigurable cockpit replication of MH-6 Mission Enhanced Little Bird (MELB) including weapons firing and effects. Correlated sensor simulation, high-fidelity, motion system, flight, performance, threat and environmental models. Out-the-window scene to support the field of view of the A/C. Mission rehearsal IG compatible with the 160th Database Production. DIS/HLA compliant.



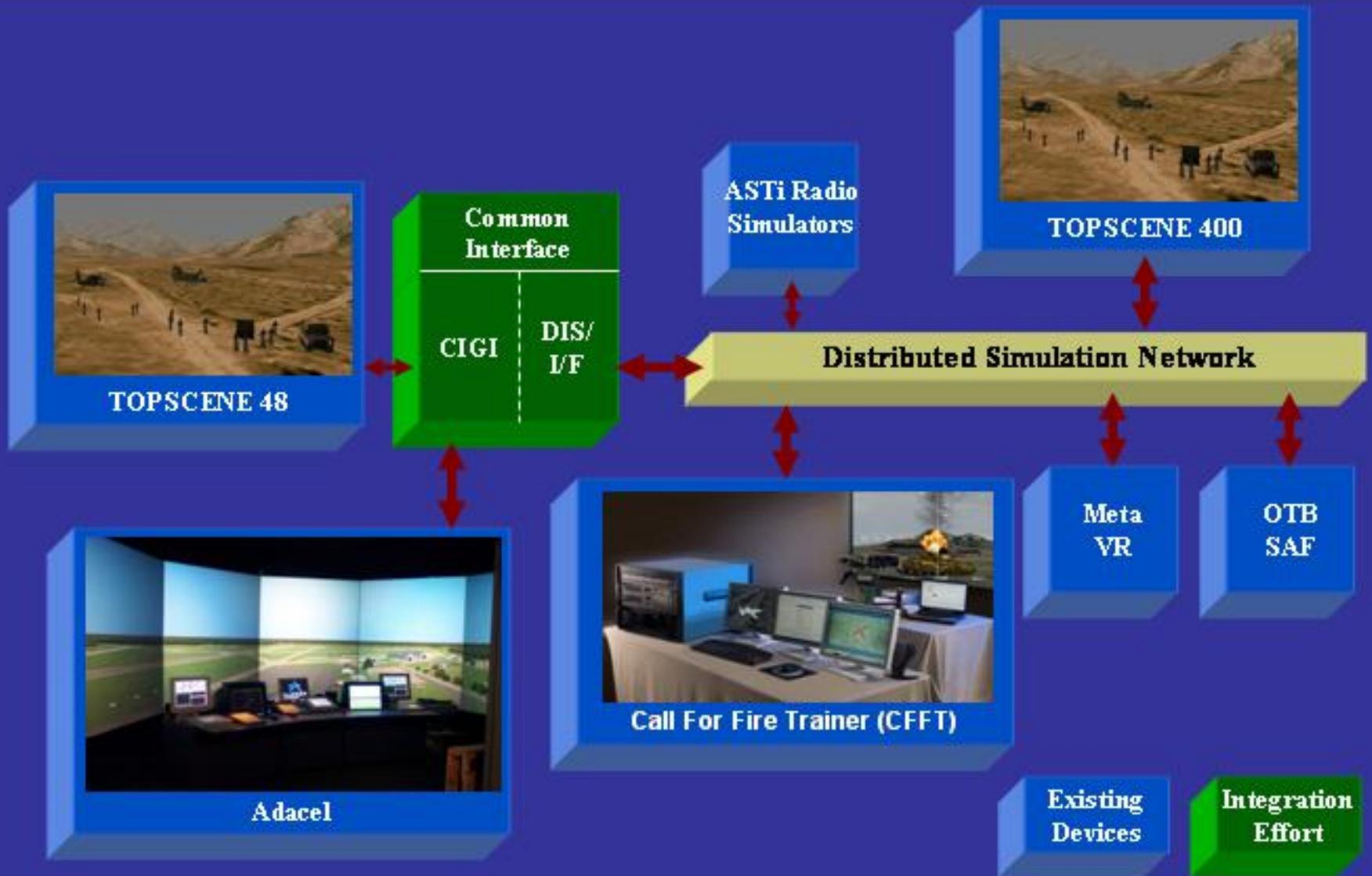
Special Operations Forces Air Ground Interface Simulator (SAGIS)



Training capabilities for CAS, call for fire, terminal attack control, forward observation, air traffic control and support battlefield air interdiction missions in both conventional and tactical environments, including mission rehearsal.



Demonstrated System





MH-47G/MH-60M Combat Mission Simulators



High-fidelity, cockpit replication of MH-47G and MH-60M (reconfigurable) including weapons firing and effects. Out-the-window scene to support the field of view of the A/C. Mission rehearsal environment operating on a Common Database. DIS/HLA compliant. Correlated sensor simulation, high-fidelity, motion system, flight, performance, threat and environmental models. Part Task and Desk Top trainers (PTT/DTT) for Common Avionics Architecture System (CAAS) training.



PM CATT Points of Contact



The Contracting Officer is POC for Programs in Solicitation Phase

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