The Enterprise Team: The United States Modeling and Simulation Collaboration Assistance Effort

A U.S. Program to Improve Interoperability in Support of Global Networking, Modeling & Simulation, and Peace Support Initiatives

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In the year 2000 representatives from the U.S. Joint Forces Command (USJFCOM), U.S. NAVAIR Orlando Training Systems Division (TSD), and U.S. Army Simulation, Training, and Instrumentation Command (STRICOM), working on different programs but supporting the same Partnership for Peace (PfP) nations, discovered that they had overlapping goals and were using common resources. Representatives from these organizations decided they could better serve U.S. interests, save resources and provide more capable, integrated and interoperable systems if they coordinated their efforts. Another impetus to working cooperatively was the establishment of USJFCOM as the lead agent for the Regional Security Cooperation Network [1] (RSCN). The RSCN was designed to facilitate coalition-based distributed education and training, building on existing information technology efforts. As a result, representatives from these three organizations decided to form the "Enterprise Team" to better cooperate while implementing their individual programs.

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This informal team meets periodically to brief the members on their individual programs and look for ways to support each other's security assistance programs. The Enterprise Team's primary product is integrated, interoperable systems that support national security objectives and facilitate international cooperation. The U.S. Air Force Electronic Systems Center and U.S. Modeling and Simulation Information Analysis Center (MSIAC) joined the team in 2001 and 2002, respectively. Of note, each organization maintains control of its programs while supporting the overall team objectives, whenever the benefits of doing so are clear.

The benefits of Enterprise Team activity are clear: each organization brings unique capabilities and different perspectives, resulting in a "Big Picture" approach to meeting national and regional security objectives. As representatives of their parent military organizations, Enterprise Team members operate with professionalism, commitment, and mutual respect to provide the best capability to support PfP nation objectives.

KEY CONCEPT

The Enterprise Team will use a teaming concept and leverage all resources, funding, and programs wherever possible to achieve individual and collective goals and objectives in the spirit of mutual cooperation in the global security environment.

TEAM MEMBERS

The following sections outline the key security assistance programs supported by the Enterprise Team organizations:

U.S. Joint Forces Command (USJFCOM)

Headquartered in Norfolk, Va., U.S. Joint Forces Command is one of ten unified commands in the Department of Defense. USJFCOM's functional responsibilities reflect a role in transforming US military forces to meet the security challenges of the 21st century. As the lead Joint Force Integrator, USJFCOM is responsible for combining Service and Defense agency capabilities to enhance interoperability and joint and combined capabilities by recommending changes in doctrine, organization, training, material, leadership and education, personnel, and facilities. As the lead agent for Joint Force Training, USJFCOM is responsible for managing the combatant commander's portion of the CJCS exercise program, conducting and assessing joint and multinational training and exercises, and leading the development and operation of systems and architectures that directly support the distributed joint training requirements.

The Defense Planning Guidance (UDP) 04-09 [2] states that unified commands will continue to strengthen alliances and partnerships. As emphasis, UDP 04-09 also states, "the [U.S.] Defense Strategy is premised on strengthening America's alliances and partnerships and developing new forms of security cooperation.

Deputy Secretary of Defense [3] identified USJFCOM as the lead for the advanced distributed learning Regional Security Cooperation Network (RSCN), which leads the development and operation of systems and architectures that directly support the distributed joint training requirements of other regional combatant commanders, joint task forces and defense agencies.

One of the Enterprise Team's key cooperative activities is the support of USJFCOM in its PfP leadership role, especially in organizing PfP computer-assisted exercises (CAXs). USJFCOM provides systems engineering,

technical assistance, funding, and equipment to support numerous PfP CAXs conducted on a regional scale. Other Enterprise Team members often support communications, modeling and simulation, and training initiatives in nations participating in these regional exercises. This presents opportunities for sharing resources, planning programs that are mutually supportive, and integrating systems that have cross-program and regional compatibility. Mr. Dan Collins, Senior Systems Analyst notes that, "the ET makes small adjustments to resources to yield increased capabilities for nations."

USJFCOM provides support through the NATO PfP Training and Education Enhancement Program (TEEP). The TEEP's objective is:

> …to provide a structured approach to optimize and improve training and education in the Partnership. Its principal aim is to increase the ability of training and education efforts to meet current and future demands of an enhanced and more operational Partnership, focusing specifically on the achievement of interoperability. It also seeks to promote greater cooperation and dialogue among the wider defence and security communities in NATO and Partner nations. [4]

USJFCOM recently supported or currently supports the following PfP and "In the Spirit of" PfP initiatives and computer-assisted exercises: PfP Simulation Network (PfP SIMNET), Baltic Simulation Network (BALTSIM), Viking 01, Rescuer/MEDCUR 02, Southeastern Europe Simulation Network (SEESIM), SEESIM 02, Cooperative Telos 03, Cooperative Osprey 03, and Viking 03. The goals of these exercises are to enhance regional security cooperation, provide staff officer training and provide experience in using CAXs to support training.

BALTSIM is a regional application of the USJFCOM -developed PfP SIMNET within the Baltic nations of Estonia, Latvia and Lithuania. The Baltic Defense College serves as a distribution hub with response cells in each of the three nations. The PfP SIMNET supports the distribution of the exercise throughout the region, allows the joining of other distributed international CAXs, and can be used for distance learning when not being used for a CAX.

The Viking exercise series is a biennial Swedish-led peace support operation (PSO) CAX. USJFCOM provides the primary technical support through a U.S. and Sweden memorandum of understanding. Seventeen nations and 450 personnel participated in Viking 01.

Rescuer/MEDCEUR 02 was a U.S. Navy Europe (USNAVEUR) –led exercise sponsored by the Chairman of the U.S. Joint Chief of Staff. The scenario was humanitarian assistance and disaster relief (HA/DR). Key activities included a disaster relief effort in Lithuania, a search and rescue effort in Latvia, and a medical capability element in Estonia. Other participants were Finland, Germany, The Netherlands, Norway, Sweden, Poland, United Kingdom and the United States. The exercise used existing national training facilities with additional communications links added, as needed. Command and control was conducted through video teleconferencing and Voice Over Internet Protocol (VoIP) telephones. USJFCOM functioned as the technical systems integrator.

In October 2000, the ministers of the South Eastern Europe Defence Ministerial (SEDM) agreed to move forward on a Southeastern European Simulation Network (SEESIM) as a tool for integrating several related SEDM initiatives through a series of simulation-based exercises, with the first exercise planned for 2002. The ministers' mandate to establish SEESIM fulfills both SEDM regional initiatives and NATO's Southeastern Europe Initiative. For the first SEESIM exercise, SEESIM 02, USJFCOM provides a co-chair for the Technical Working Group, and this representative is an Enterprise Team member.

The first exercise, SEESIM 02, will involve three (3) earthquake scenarios, where the natural disaster affects more than one country and requires a coordinated regional response effort. The training objectives include the response of National Civil Protection agencies within each nation and their use of assets from other nations, to include personnel and other resources organized under the Ministry of Defense. To assist in planning the participation of Civil Protection organization, the U.S. Office of the Secretary of Defense (International Security Affairs/Southeastern Europe) has tasked leaders of the Civil-military Emergency Planning team (CMEP). The exercise will stress regional cooperation and the sharing of other-nation assets in disaster relief efforts. The magnitude of the simulated earthquakes provides a realistic framework where integration of the South-Eastern Europe Brigade (SEEBRIG) and the resolution of regional interoperability and communications issues are essential to a successful relief effort. For the SEESIM 02 exercise, Greece is serving as the network hub with simulation centers in Albania, Bulgaria, Croatia, Macedonia, Romania, Slovenia, Turkey and SEEBRIG (headquartered in Plovdiv, Bulgaria). USJFCOM functions as the technical systems integrator. STRICOM, another Enterprise Team member, has established a constructive simulation capability in six of the participating nations, and these national training facilities are being leveraged for the SEESIM 02 exercise.

U.S. Navair Orlando Training Systems Division (TSD)

TSD is headquartered in Orlando, Florida. The mission of TSD is to be the principal Navy center for research, development, test and evaluation, acquisition and product support of training systems, to provide interservice coordination and training systems support for the Army and Air Force, and to perform such other functions and tasks as directed by higher authority Its vision is to be the Navy and Marine Corps center for learning and simulation technologies, methods, processes and systems to further develop the National Center of Excellence for Simulation and Training in partnership with Army, Air Force, DoD, other Government Agencies, Industry and Academia.

The TSD Program Director for International Programs (PDI) manages the Defense Security Assistance Program; distributing policy guidance and standardized procedures; executing Foreign Military Sales (FMS) cases and monitoring programs for training systems and equipment sold to allies; coordinating foreign disclosure, export licensing and foreign visit requests; and assisting the Navy International Program office and the Naval Air Systems Command Headquarters. One of the responsibilities of PDI is to execute the Enhanced International Peacekeeping Capabilities (EIPC) program.

EIPC is a State Department program supporting peacekeeping training in other than NATO nations. Currently, the program supports 27 nations. Its goal is to increase the effectiveness of international peacekeeping operations through the provision of equipment and training. The recipient nations use the equipment and training to increase the pool of qualified peacekeeping forces using a "train the trainer" concept. Training equipment is tailored to the type of force the recipient nation is expected to field, the level of existing technical expertise in the country, and the country's ability to maintain and operate the equipment during its service life (EIPC provides start up costs, but not maintenance). For the most technologically capable countries, EIPC training equipment can include establishing Local Area Networks and electronic classrooms, mobile communications equipment, staff training software and models, exercise media and connectivity, driving simulators and optical equipment. EIPC provides funds for attending training seminars and conferences, procuring manuals, books and library materials and provisioning English language laboratories.

EIPC can provide, using a common operating architecture, electronic training environments (ETE) that are connected to local area networks. The ETEs are advanced classrooms, equipped with computer-supported instructor and student workstations, Electronic Classroom Integration Software (ECIS), projection systems, "Smart" boards, and other advance audio and video systems. The systems are designed to be integrated with

advanced distributed learning applications, computer-assisted exercise training, English language training and other training devices.

EIPC was recently implemented in several countries: Poland, Nepal, Czech Republic, Hungary, and Ukraine. In the Ukraine, the goal was to enhance the training capabilities and conduct multinational staff training at the National Defense Academy. TSD integrated a local area network with computer-equipped classrooms, provided instructor preparation and course development centers, Learning resource centers, multipurpose electronic classroom, a conferencing facility, and connectivity to the PfP Information Management Systems (PIMS) network. Due to prior collaboration with other Enterprise Team members, the majority of the equipment installed under the EIPC program can be integrated with future information technology and modeling and simulation initiatives.

U.S. Army Simulation, Training, and Instrumentation Command (STRICOM)

STRICOM is based in Orlando, Florida. This command is responsible for the development and sustainment of training and test simulation, simulators, targets and instrumentation devices for the U. S. Army. STRICOM's mission includes the creation of a synthetic environment to evaluate and support requirements definition, materiel development, and test and evaluation; leveraging live, virtual and constructive to develop a system of systems that train the way we fight; and provide materiel life cycle support from concept development through disposal.

STRICOM manages the majority of the U.S. Army's fielded training aids, devices, simulators and simulations. They provide worldwide support for 394 different types of live, virtual and constructive training systems. Over 2100 people are committed in direct support.

STRICOM recognizes that its mission goes beyond the development of live, virtual and constructive simulation, and in a broader sense is to integrate these technologies both from a technical standpoint and an integrated training strategy aspect.. In fact the Command is primarily established along the three domains of simulation, live virtual and constructive. STRICOM attempts to export this same philosophy through its Security Assistance and International Cooperative programs. Many of their international partners are pursuing capabilities in all three domains, with a vision towards integrating these capabilities.

STRICOM's Command Analysis & Planning Office manages the Security Assistance Program and is the single interface with the U.S. Army Security Assistance Command. This includes establishing policy for the Commander, incorporating support to our allies into Command strategic planning, performing on-site surveys to define requirements, providing price and availability data for STRICOM products and services, transitioning acquisition programs throughout the command, and overseeing and closing Security Assistance Foreign Military Sales cases.

STRICOM is enhancing its support to Security Assistance by exporting the corporate vision it maintains for supporting the U.S. Soldier. They envision their organization as on point in the development of interoperable training, testing, instrumentation and simulation solutions for transformation. By relating this strategic vision to the Security Assistance mission they can assist international security partners in determining their needs in the areas of live, virtual and constructive simulation, effecting the transformation of foreign militaries as well.

STRICOM is currently supporting security assistance programs in 49 nations, supporting all five of the U.S. regional combatant commander missions. In carrying out these activities STRICOM has worked with 37 different defense contractors. This wide involvement in security assistance programs means that

STRICOM can use its broad expertise in providing solutions that will support national requirements. They are able to provide the right products and integrate other Enterprise Team member's expertise and products to ensure systems interoperate and provide the best value.

STRICOM provides a wide range of products and services through its security assistance program. Some examples of our live training products are aerial targets, MILES and Instrumentation System support. STRICOM's virtual training products represent the highest dollar value of business. These include gunnery and driver trainers and engagement skills trainers. The area of constructive training products has been the most dynamic in recent years. The number of nations that have obtained or expressed interest in computer-based simulations has increased more than threefold over the past 18-24 months. These products are important tools in transforming military forces to better employ information and other technologies.

U.S. Air Force Electronic Systems Center (ESC)

The Electronic Systems Center (ESC) delivers information dominance for aerospace operations. The ESC portfolio includes delivering capabilities for both combat support in areas such as medicine, logistics, and finance, as well as combat operations for effective command and control (C2) capabilities needed to defend national interests. And ESC is the focal point for the Air Force infrastructure investments to ensure the development and sustainment of interoperable systems that seamlessly work in Joint and international operations. The ESC organizations with the closest ties to the Enterprise Team are the International Operations Office and the Modeling and Simulation Division.

The International Operations Office (ESC/FA) provides a gateway for foreign military sales, armaments cooperation, and technical studies for our international partners, with the studies leading to the most Enterprise Team interaction. ESC has conducted the majority of the studies in Central and Eastern Europe with Partnership for Peace nations. The studies provide technical roadmaps for enhanced interoperability with the US and NATO and cover primarily three areas.

The first is the Regional Aerospace Initiative (RAI). RAI studies provide a blueprint for cooperation between civil and military airspace management not only within specific nations, but also throughout Central and Eastern Europe. One result of the RAI studies is the Air Sovereignty Operations Center (ASOC), which is the hardware suite that implements the RAI plan. Ten nations are currently using ASOCs in the region.

Navigational Aids (NAVAIDS) Studies provide a systematic, incremental set of agreed-upon modifications required by the countries to modernize their military navigational systems and landing aids. NAVAIDS studies evaluate interoperability in the following areas: en route navigation, precision approach, non-precision approach, air-ground communications, avionics, and approach lighting.

The Command and Control, Communications, and Computer (C4) Studies provide action plans for low cost modernizations of a nation's C4 functions. An outgrowth of the C4 Studies is the concept for National Military Command Center (NMCC). The NMCCs are planned as highly capable and affordable national command centers coordinating civilian and military resources for crisis management. The NMCC costs are based on participation by three nations. Currently two nations have committed, a third is in the process of signing the paperwork, and a fourth has voiced strong interest in joining in the system.

The Modeling and Simulation Division (ESC/CXC) is the focal point for ESC's modeling and simulation (M&S) capabilities.

First, ESC manages the development and support of modeling, simulation, and analysis tools. For example, the Air Force M&S Training Toolkit (AFMSTT) is a battlestaff training tool for Joint and combined operations, which provides air warfare simulations and a common operating picture for role-players and controllers. Another tool, the Joint Integrated Mission Model (JIMM), is a mission level analytical simulation used predominantly for the Joint Strike Fighter (JSF) program.

Second, ESC models command and control (C2) architectures and conducts analysis to provide an understanding of the relationships between multiple types and quantities of assets, how they are tasked, communicate, and can be better employed.

Third, CXC manages the C2 Enterprise Integration Facility (CEIF) to support the assessment of C2 systems using tactical systems and simulations as stimulators.

And finally, ESC/CXC is looking to the future with such projects as the creation of a Joint Synthetic Battlespace (JSB), a next generation framework to model consistent environments supporting projects from engineering studies to readiness operations. Successful completion of the JSB vision involves distributed facilities and cooperation spanning government, commercial, and research organizations.

The Electronic Systems Center combines technical and management expertise to provide information solutions for the US and our partners. ESC headquarters is located at Hanscom Air Force Base near Boston, Massachusetts and combines the strengths of its reporting units from across the US and the world.

U.S. Modeling and Simulation Information Analysis Center (MSIAC)

The MSIAC is one of thirteen government-owned, contractor operated information analysis centers under the guidance of the U.S. Defense Technical Information Center. It works closely with the U.S. Defense Modeling and Simulation Office (DMSO). Its mission is to be a center for excellence for modeling and simulation (M&S) knowledge and operational support and to provide M&S solutions and services to defense organizations and industry. The MSIAC staffs are experienced defense and M&S professionals who understand operational problems, training, education and resources. The IIT Research Institute, a not-for-profit organization, operates the MSIAC for the government. The MSIAC main office is located in Alexandria, Virginia.

The MSIAC's goal is to provide cost-effective M&S solutions in support of military operations, training, combat developments and peace support missions that are designed to optimize a nation's M&S investment. It can help organizations identify and articulate M&S requirements, assess and integrate current capabilities, providing recommendations, develop affordable executable M&S plans, facilitate personnel and education training, support systems acquisition, and assist in the defining long-term needs for M&S capabilities. As a member of the Enterprise Team the MSIAC is able to play the role of an honest broker, leveraging the entire spectrum of U.S. government M&S capabilities to find the most modern, cost effective, efficient, and integrated solutions to a nation's M&S requirements.

The MSIAC has extensive international M&S-related experience. The MSIAC, working with DMSO, played a leading role in writing and coordinating NATO's first M&S Master Plan and establishing the NATO Simulation Coordination Office. They maintain an on-site representative in Korea, assisted in the development of the PfP Simulation Network Five Year Plan, and provided M&S education for the NATO staff and in ten nations. They are currently working with Uzbek Armed Forces to develop a comprehensive M&S capability. Working collaboratively with Uzbek MOD and Armed Forces Academy staffs, USJFCOM and STRICOM,

they have completed a requirements analysis, concept document, and strategic plan. A comprehensive M&S master plan is currently being refined.

The MSIAC focuses on requirement determination, strategic planning and education programs. Working in conjunction with the nation and Enterprise Team members, MSIAC facilitates the strategic planning and system integration process. The key to success is working closely with national representatives to refine requirements, carefully consider resources, analyze options and then develop actionable plans.

Based on a nations needs, this planning process could typically include the following products:

- Needs Assessment: Determines requirements, assesses current capabilities, identifies resource constraints and determines prioritized needs.

- Concept Overview Development: Working closely with the customer, develops a strategy, clearly defining the purpose and intent of the M&S capability.

- M&S Master Planning: Develops a detailed time-phased M&S plan that considers resource constraints.

- M&S Education Planning: A coordinated M&S education and training strategy.

- Acquisition Strategy Development: A time-phased acquisition proposal for hardware, software, training and technical support needs. Assist in developing and processing letters of request (LOR).

- Implementation Support Planning: Coordinates in-country assistance to implement phased operational capabilities.

- M&S Enhanced (Future) Operational Planning: Identifies the support required to sustain and enhance current capabilities and meet future requirements.

WORKING AS A TEAM

The Enterprise Team has identified four key objectives to guide team members when executing individual programs in achieving interoperability, meeting a nation's needs and using resources efficiently. The degree at which a team member can support these objectives is dependant upon the specific project requirements, funding limitations, and program maturity. The objectives are:

1) Coordinate individually managed U.S. information technology programs.

2) Promote information technology interoperability through equipment standards and compatibility and advocating the PfP SIMNET as the modeling and simulation standard.

3) Provide advice to nations concerning modeling and simulation (M&S) trends.

4) Help nations meet training needs and achieve greatest return on investment (ROI).

As noted in the team member sections above, the Enterprise Team has collaborated on projects involving numerous nations. They have been successful in leveraging funding streams and coordinating multiple programs. The team has worked together effectively to help clients define and integrate requirements. They promoted interoperability and sharing of resources through the development of a common core equipment list. The team meets periodically to maintain channels of communication.

ACCESSING ENTERPRISE TEAM CAPABILITIES

The international M&S community, and in particular the NATO and PfP countries, can obtain professional, competent and experienced assistance in developing comprehensive and integrated M&S capabilities. Accessing Enterprise Team capabilities can be initiated through any of the team members. Following an initial consultation, additional Enterprise Team members can be added to work collaboratively with the requesting nations. The Enterprise Team can help the nation navigate through the US-provided Foreign Military Financing (FMF), Foreign Military Sales (FMS), EIPC, and International Military Education Training (IMET) programs, and assist in letter of requests (LOR) and letter of acceptance (LOA) processing. They can also assist in requirements definition, strategic planning, education, equipment fielding, training and the conduct of actual Computer Assisted Exercises (CAXs).

ABOUT THE AUTHORS

Mr. John Daniele, U.S. Army Simulation, Training and Instrumentation Command

Mr. Daniele is the Chief Security Assistance and International Programs, and has over 25 years experience in U.S. Army International Affairs having successfully delivered more than a billion dollars of military articles and services to critical allies worldwide. His efforts have played a key role in high priority military aid programs for the governments of El Salvador, Colombia, Haiti and others. Mr. Daniele was instrumental in the first Foreign Military Sale of the U.S. Army's Battery Computer System, exportable SINCGARS radio, Advanced Gunnery Training System and Corps Battle Simulation. Recent successes include a number of high visibility, training modernization efforts in support of NATO expansion, Partnership for Peace, and the Newly Independent States. Mr. Daniele is Chairmen of STRICOM's International Agreements Integrated Process Team which develops, negotiates and establishes cooperative research and development and foreign exchange agreements.

Mr. John Wrigley, U.S. Modeling and Simulation Information Analysis Center

Mr. Wrigley is a Modeling and Simulation Information Analysis Center (MSIAC) project manager for international M&S support. The MSIAC is managed for DoD by IIT Research Institute – he joined the IIT Research Institute, AB Tech Group in 1996 and has supported numerous projects aimed at enhancing the use of M&S in defense organizations. These projects included leading a Weapons of Mass Destruction (WMD) Civil Support Information System (CSIS) requirements analysis, conducting a DoD-wide Warfighter M&S Needs Assessment, coordinating simulation support for a DOT&E-sponsored Interoperability Test Bed initiative, revising the DoD M&S Master Plan, drafting NATO's first M&S Master Plan, and writing the JSIMS Functional Requirements Document. He holds a Modeling and Simulation Professional Certification.

Mr. Harry Thompson, U.S. Modeling and Simulation Information Analysis Center

Mr. Thompson is a Modeling and Simulation Information Analysis Center (MSIAC) project manager for international M&S support. The MSIAC is managed for DoD by IIT Research Institute – he joined the IIT Research Institute, AB Tech Group in 1999 and has supported numerous projects aimed at enhancing the use of M&S in defense organizations. These projects included authoring a DoD M&S Handbook, teaching M&S courses, developing several M&S education lessons and workshops, and assisting with the development of the PfP Simulation network plan. As a U.S Army officer assigned to the Defense Modeling and Simulation Office (DMSO), he led the project to draft the first NATO M&S Master Plan He holds a Modeling and Simulation Professional Certification.

Mr. Dan Collins, U.S. Joint Force Command

Mr. Collins is a Senior Systems Analyst for Joint Warfighting Center, U.S. Joint Forces Command (USJFCOM). He serves as the systems integrator for PfP programs and projects sponsored by Office of the Secretary of Defense (OSD) and USJFCOM. Notable projects include the 50th Anniversary of the NATO Summit, establishment of the Baltic Simulation Network, the Viking series of exercises, the Southeastern Europe Simulation Network (SEESIM) series of CAXs in Balkans. He also serves as the administrator for the Modeling and Simulation Working Group in the PfP Consortium of Defense Academies and Securities Institutes. Additionally, Mr. Collins co-authored the PfP Simulation Network Plan.

As a U.S Army officer he served in various training organizations including the Warrior Preparation Center in Einsiedlerhoff Germany, the Battle Command Training Program (BCTP), and the Center for Army Lessons Learned (CALL) at Ft Leavenworth, Kansas.

Mr. Nabil Morgan, U.S. Navair Orlando Training Systems Division

Mr. Morgan is a NAVAIR Orlando program manager responsible for executing more than 30 Foreign Military Sale cases, from requirement definition through planning, acquisition and delivery. Mr. Morgan holds a degree in Aerospace Engineering, and was a fellow member of the American Institute of Aeronautics and Astronautics (AIAA) from 1983 to 1994. He has also completed graduate studies in Program and Business Management. Mr. Morgan is certified Level III Acquisition Professional in two fields: Program Management; and Systems Planning, Research, Development, and Engineering. During his tenure career with NAVAIR Orlando (TSD), Mr. Morgan holds more than 14 years of U.S. Navy international programs experience that exposed him to the full spectrum of program management and systems acquisition. Mr. Morgan fielded numerous simulators and training systems to various FMS allies. He builds his success on the continuing dialogue with the customer throughout program execution.

Major Scott Lausman, U.S.A.F. Electronic Systems Center

Major Scott A. Lausman is Chief, Business Development Division, International Operations, Electronic Systems Center, Hanscom Air Force Base, Massachusetts. He is responsible for facilitating international activities for an organization of over 10,000 personnel with an annual budget of over $4 billion. Major Lausman received an Air Force Regular Commission in 1986 as a distinguished graduate of the University of Michigan Air Force Reserve Officer Training Corps. He has served as an aerospace engineer for an advanced design shop, an assistant professor at the University of Maryland, a combat simulation analyst of foreign aircraft, and the chief engineer of a satellite communications division. His staff assignments include twice serving as an executive officer and once as the speechwriter for a three-star commander. As the deputy chief, Security Assistance Division, he conducted international communications infrastructure studies and developed operational concepts for US allies. As a chief of support inspections and chief of commander programs, Major Lausman led teams conducting worldwide inspections of Department of Defense intelligence organizations.

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[1]   DEPSECDEF Memorandum, 4 August 2000.

[2]   Defense Planning Guidance 1904-1909, May 2002.

[3]   DeLeon Memo of 4 August 2000, Distributed Learning in Support of Enhanced Regional Security.

[4]   Http://www.nato.int/pfp/docu.

Program Executive Office
Simulation, Training and Instrumentation

Enterprise Team Summary

Leading 21st Century
Simulation Solutions

Presented by
Mr. John Wrigley
Modeling and Simulation
Imformation Analysis
Center

The Enterprise Team

USJFCOM / NAWCTSD / AF,ESC / MSIAC / PEO-STI

Collaborative Approach to:

- **Advanced Distributed Learning / Regional Engagement Network(s)**
- **Peace Support Operations Training**
- **National Military Crisis Management Centers**
- **Modeling and Simulation Education and Studies**
- **Acquisition / Delivery of Simulation and Training**

Who and Why Us ?

Common Goals, Core Technologies, Full Spectrum of Expertise!

United States Joint Forces Command / Joint Warfighting Center
4 Aug 00 Dep SecDef Memo "establishes the **Advanced Distributed Learning Regional Engagement Network**...as an Activity of the United States Joint Forces Command".

Naval Air Warfare Center Training Systems Division
SecDef Msg DTG 251301ZJun99 States "NAWCTSD will Receive all **Enhanced International Peacekeeping Capabilities (EIPC)** Letters of Request (LORs) Except those for Language Lab Acquisition and Installation..."

Air Force, Electronics Systems Command
Provide Emerging Democracies of Central / Eastern Europe with a Low Cost, Capable, **National Center for Crisis Management**.

Modeling and Simulation Information Analysis Center
Government Sponsored Agency to conduct **M&S Education, Planning, Employment and Assessments.**

Program Executive Office - Simulation, Training and Instrumentation
PEO-STI provides a Leave-Behind Constructive Simulation Capability for Local or Distributed Computer Assisted Exercises (CAX). Efforts Underway / Under Development in 37 Countries Around the World.

The Approach!

"The Enterprise Team Charter"

Members: USJFCOM, NAWCTSD, AF/ESC, MSIAC, PEO-STI

Goal: to optimize investments, reduce overlap and avoid redundancy to effectively execute assigned programs in support of US national security policies and objectives.

Strategies: Employ a collaborative method to:

- Leverage Funding Streams
- Leverage Multiple Programs
- Identify and Establish Common Equipment Specifications
- Define and Integrate Requirements
- Maintain Channels of Communication and Speak as One Voice while Addressing International Peacekeeping and Warfighting Training and Operational Requirements

Co-chairs:

USJFCOM	Mr. Greg Knapp
NAWCTSD	Mr. William C. Rees
PEO-STI	Mr. John F. Daniele
AF/ESC	LTC Stephen Cichoki
MSIAC	Mr. Harry Thompson

A Focal Point for M&S Information and Solutions

- Facilitates the Development of Integrated, State-of-the-Art M&S Capability
- Requirements Analysis and Generation
- Strategic Planning and Implementation Assistance
- Coordinates and Conducts M&S Education and Training
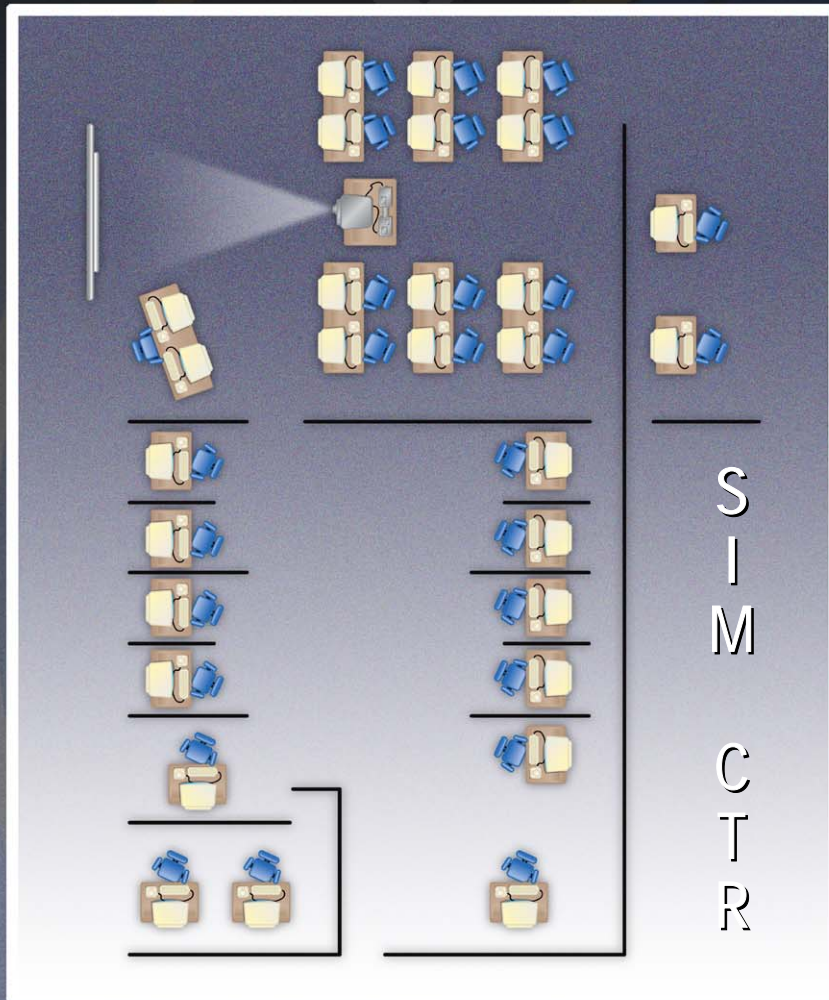- Provides Continuous Accessible M&S Information and Assistance

Enhanced International Peacekeeping Capabilities (EIPC)

Electronic Training Environment

- **Peace Support Operations Training Facility**

- **Core Common Equipment List**

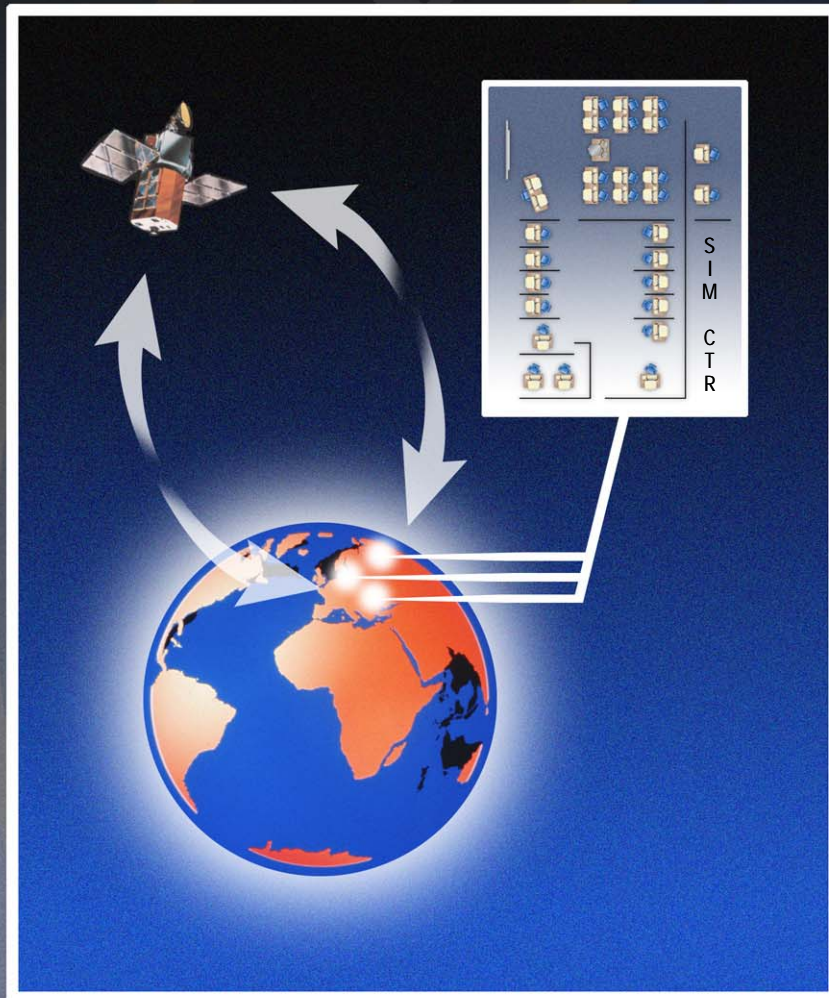- **Flexible and Expandable to Support Enterprise Team**

Constructive Simulation Centers

- **Simulation Center**

- **Computer Assisted Exercise**

- **Trains Warfighter and Peace Keeper**

- **Core Common Equipment List**

- **Supports Multiple Simulations**

- **Interoperable and Expandable to Support Enterprise Team**

S I M   C T R

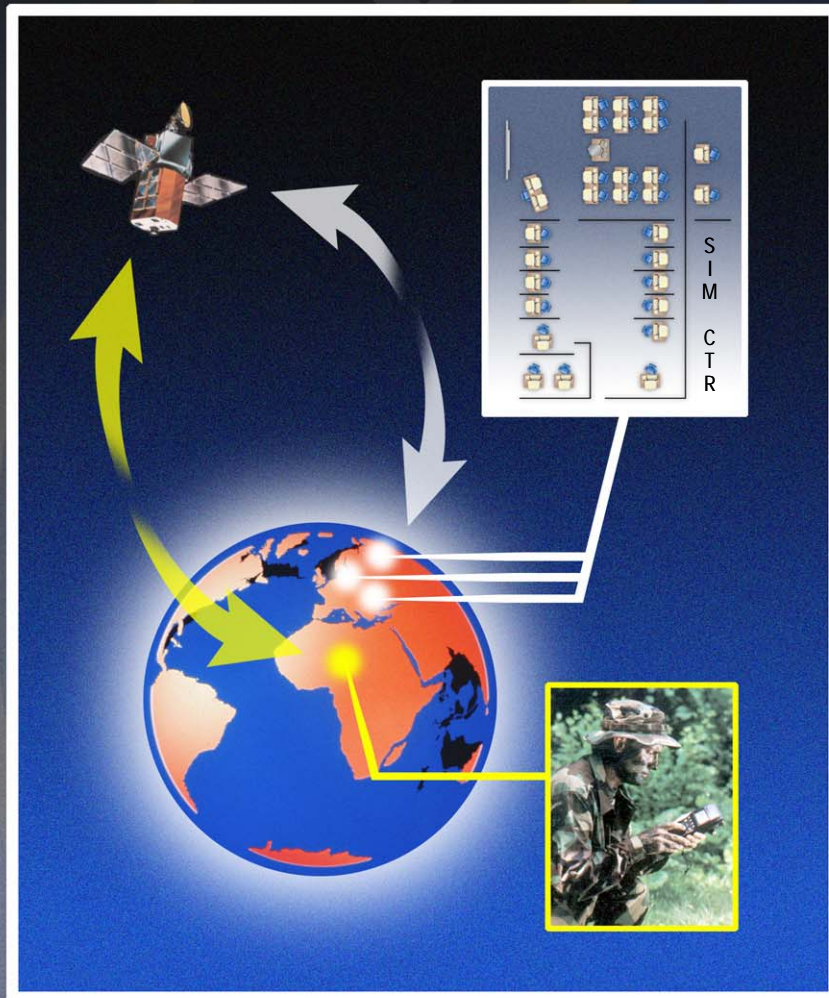# Regional Engagement Networks

Mix of:
- Staff Training Cells
- Stand Alone Sim Centers
- Distributed Sim Centers

- **Core Common Equipment List**

Supports:
- Advanced Distributed Learning
- Computer Assisted Exercises
- Can be Global in Nature

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National Military Command Center

- **Core Common Equipment List**

- **Regional Engagement Architecture**

- **Provides Real World Command and Control**

- **Can be used for Training, Mission Planning and Mission Rehearsal**

BOTTOM LINE

The Enterprise Team Approach Compels the US Agencies to:

- **Leverage Funding Streams**
- **Leverage Multiple Programs**
- **Identify and Establish Common Equipment Specifications**
- **Define and Integrate Requirements**
- **Maintain Channels of Communication and Speak as One Voice while Addressing International Peacekeeping and Warfighting Training and Operational Requirements**