

JSIMS Enterprise



Joint Simulation System
JSIMS
New Tools to Train
Our Future Warfighters

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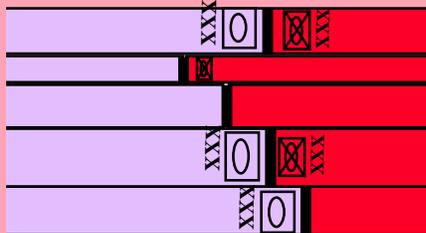
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Warfare is Evolving

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Attrition Warfare

40s - 70s



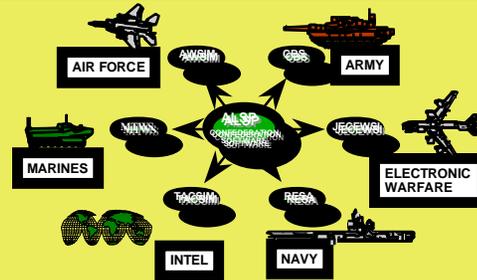
f (force)

- Cold War scenario
- Massive forces
- Nuclear weapons

Service
Attrition Based
Simulations

Maneuver Warfare

80s - 90s



f (force, space)

- Emphasize maneuver
- Joint operations
- Precision weapons

Joint
Interoperable
Simulations

Full Spectrum of Missions

21st Century



f (force, space, information)

- Non-linear warfare/OOTW
- Integrated Operations
- Timely application of assets

Joint
Composable
Simulations

Legacy Simulations

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Non-Interoperable Joint Systems

JTLS
Joint Theater
Level
Simulation

JCM
Joint
Conflict
Model

JTS
Joint
Tactical
Simulation

CBS (LAND)

RESA (SEA)

**MTWS
(AMPHIB)**

AWSIM (AIR)

*Limited Interoperable
Service Systems*

Today's Challenges

- interoperability
- high overhead
- scope
- maintainability
- C4I connectivity

JSIMS Warfighter Vision

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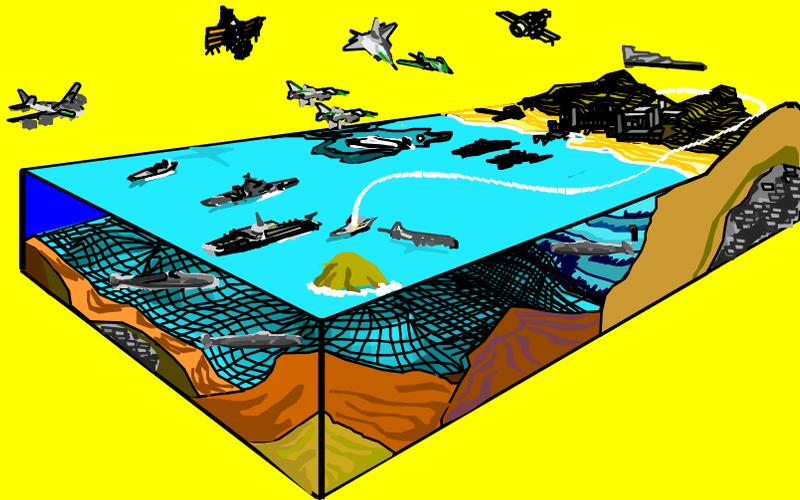
JSIMS is a simulation system that supports the twenty-first century warfighter's *preparation for real world contingencies*. The system provides *garrison and deployed* exercise capability to meet *current and emerging training and operational requirements in a timely and efficient* manner. By interfacing to the warfighter's real *go to war systems*, the view into the simulation world *mirrors* that of the real world.

Approved by the JROC, Spring 1996

The Next Generation Simulation

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**At IOC (Apr 01) --
JSIMS focus is to support
Joint and Service training at the
operational/theater level of warfare**



**At FOC (Dec 03)--
JSIMS focus is to support US Joint,
Service and Multinational Interoperability
training at all levels of warfare across
operational continuum**

JSIMS will:

- improve joint warfare functionality in training
- provide a distributed training environment
- interface with go-to-war C4I systems
 - reduce overhead to conduct computer-aided training events
 - offer rehearsal capability

***An Evolutionary Training Capability To Meet The Concepts Of JV 2010 --
“Move More Electrons and Fewer Troops”***

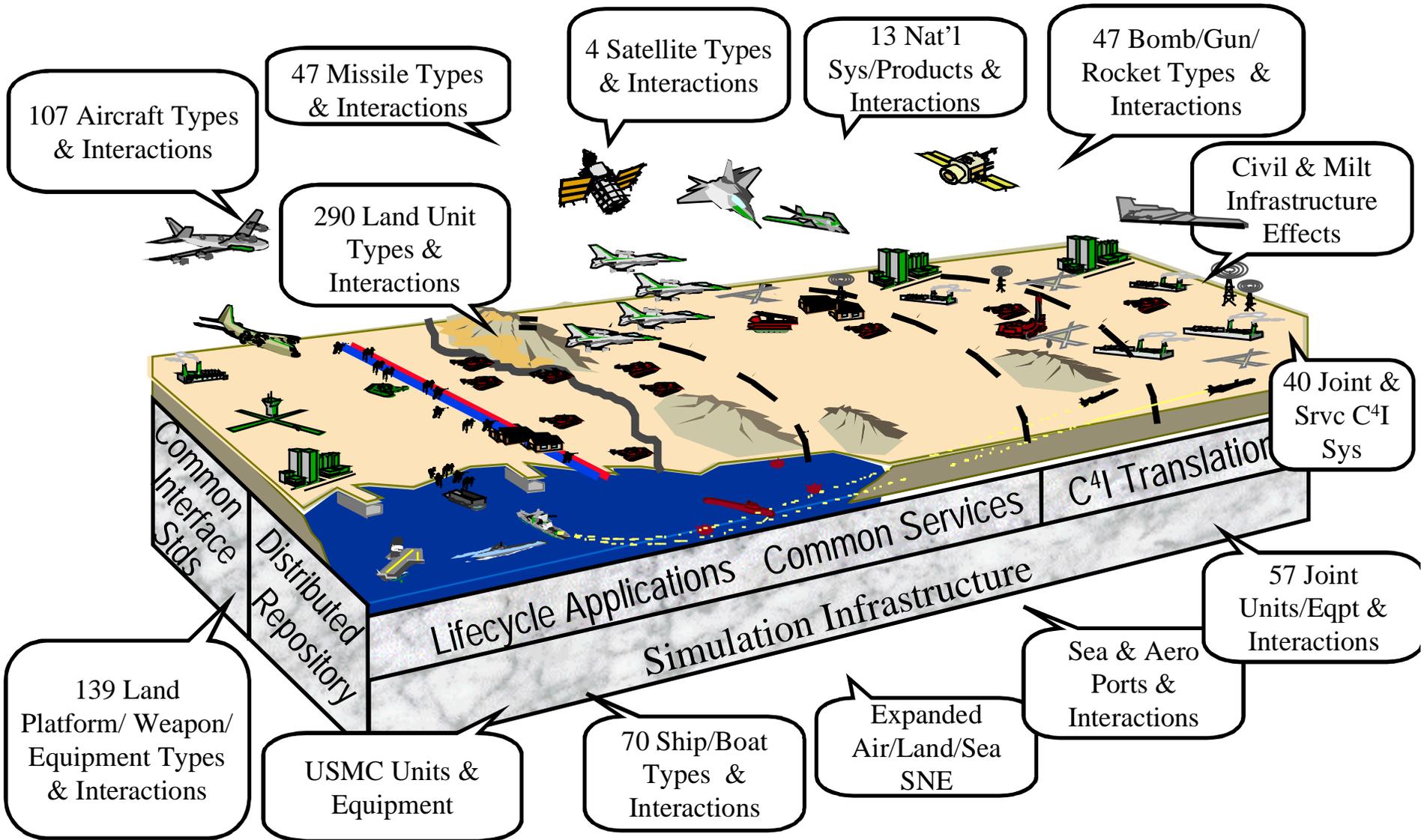
JSIMS Technical Vision

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JSIMS is a *single, distributed, seamlessly integrated simulation environment*. It includes a *core infrastructure* and *mission space objects*, both maintained in a *common repository*. These can be *composed* to create a simulation capability to support *Joint or Service* training, rehearsal, or education objectives.

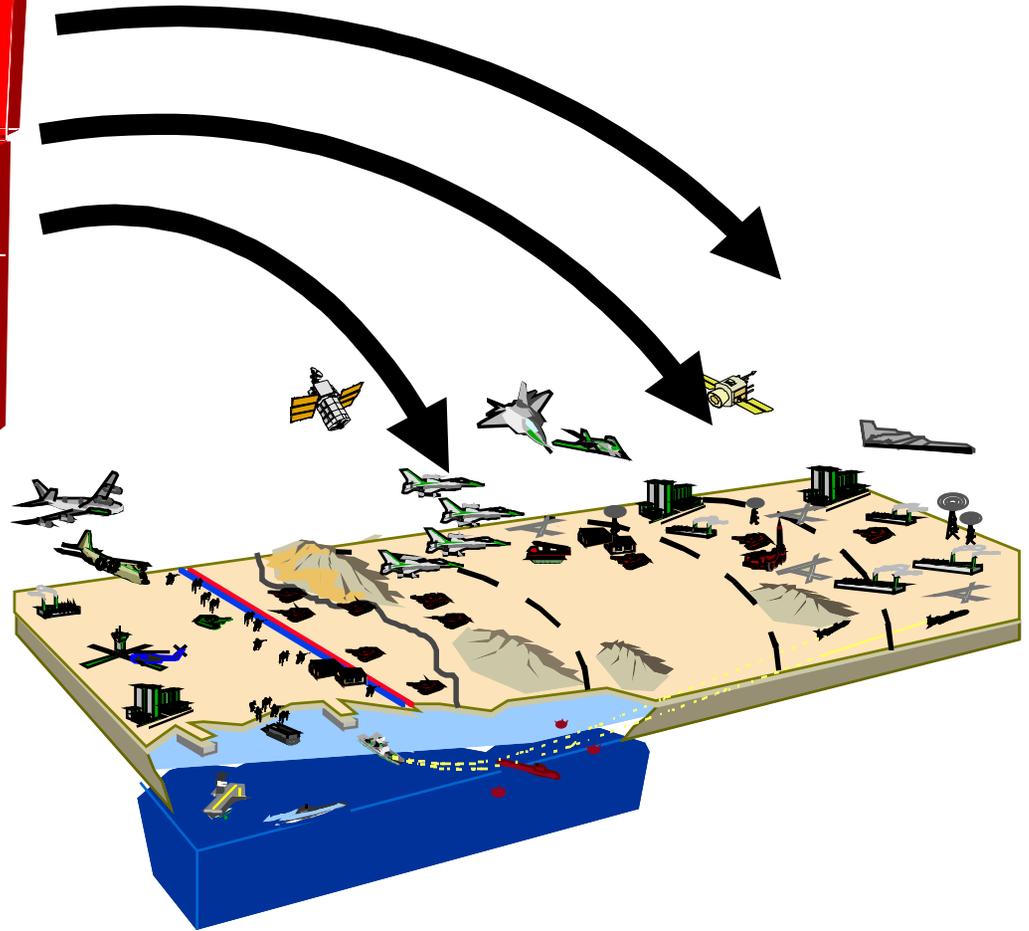
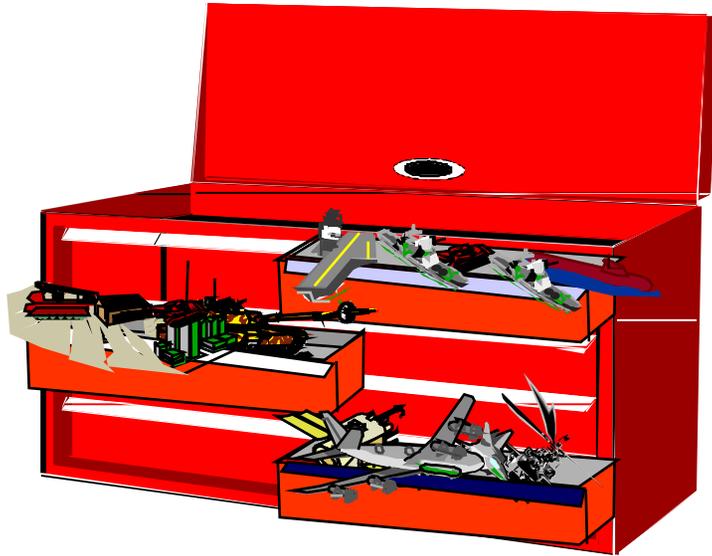
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JSIMS Must Provide a Balanced, Joint Synthetic Battlespace



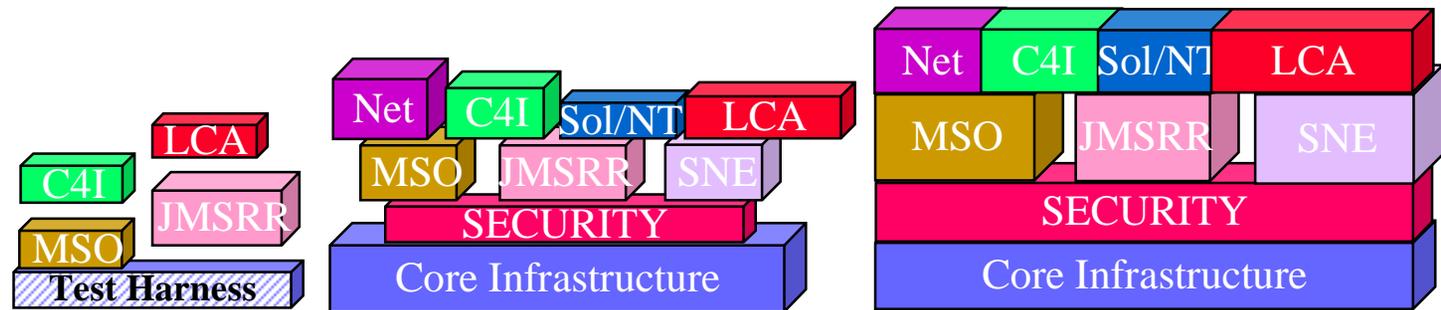
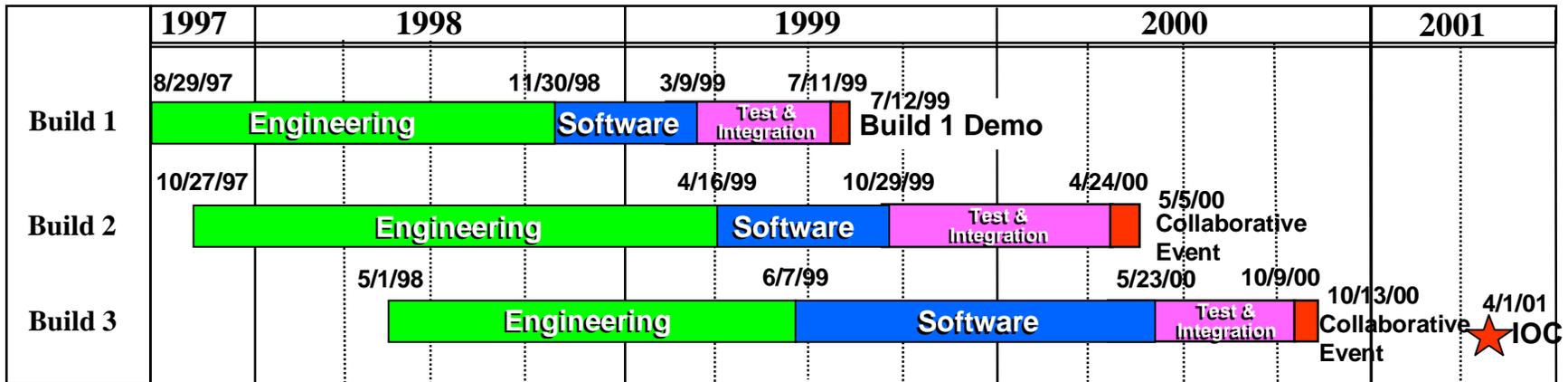
Exercise Composition

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**Pull From the JSIMS
Toolbox As Needed
To Compose the Exercise**

JSIMS Functionality by Build



DOMAIN	Build 1	Build 2	Build 3 / IOC
Joint/Core	<ul style="list-style-type: none"> JMSRR Role Player Functions GCCS 	<ul style="list-style-type: none"> Partial Exercise Generation Tools Partial Exercise Control Tools C4I Interface (USA, USN, USAF) 	<ul style="list-style-type: none"> Full Exercise Generation and Control Capability Exercise AAR Replaces JTC - Supports CINC/JTF Training
Army	<ul style="list-style-type: none"> Maneuver C2 Perceived Truth 	<ul style="list-style-type: none"> Artillery Aviation Terrain 	<ul style="list-style-type: none"> Logistics NBC Intelligence
Navy	<ul style="list-style-type: none"> Ship Platform Warship Motion & Sensors Underway Replenishment 	<ul style="list-style-type: none"> Weapons & Engagement Basic Ocean Flight Operations 	<ul style="list-style-type: none"> Naval Bases & Ports Ship/Ground Engagements Submarine/Air/Surface Warfare Operations
USAF	<ul style="list-style-type: none"> Fixed Wing Missions Civil Environment Airbases 	<ul style="list-style-type: none"> CAS CAP/C2/ABCCC Satellite Platforms 	<ul style="list-style-type: none"> Air Operations Center (AOC) Air Tasking Order Electronic Support Measures (ESM)
Agencies		<ul style="list-style-type: none"> Partial SIGINT Capability Partial IMINT Capability 	<ul style="list-style-type: none"> Full SIGINT Capability Full IMINT Capability Collection Management

JSIMS Development

Each Release Adds Significant Capabilities

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	Version 1.0 04 / 01	Version 1.1 11 / 01	Version 1.2 12 / 02	Version 2.0 12 / 03
Joint/Other	CINC/JTF Staff, CINC/JTF with Components, JFLCC, JFACC, JFMCC, JSOCC, <i>Multinational, Interagency</i>	Supporting CINC	Senior Off Education, JIC, JIC & JISE	<i>Planning & Analysis, Crew/Team Mission Rehearsal, Professional Officer Education, Doctrine Development, Multinational</i>
Army	Corps Cdr, Corps/Div Cdr, Div Cdr & Staff	Logistics Staff	<i>Intel Staff</i>	Bde/Bn Cdr & Staff, Intel Staff
Air Force	<i>JFACC</i>		AFFOR, JFACC	Wing Ops Center
Navy		Fleet Cdr, Carrier BG Cdr, Task Grp Cdr	Warfare Cdr	
Marine Corps	MEF, Amphib Ops		MARFOR, MEU(SOC)	
Special Ops	JSOTF, ARSOC	AFSOC, NAVSOC	MEU(SOC)	<i>Special Ops Team/Crew Mission Rehearsal</i>

Collaborative, Distributed Development

JSIMS Enterprise

- **JSIMS Joint Program Office (JPO) -- Orlando**
 - Joint Domain and Core Infrastructure, Enterprise Management
- **National Air and Space [Warfare] Model (NASM) -- Hanscom AFB, MA**
 - Air and Space Domain
- **JSIMS Maritime -- Norfolk, San Diego**
 - Maritime Domain, Maritime Environment
- **Warfighter's Simulation 2000 (WARSIM) -- Orlando**
 - Land Domain, Synthetic Natural Environment
 - **WARSIM Intelligence Module (WIM) -- Orlando**
 - Tactical Intelligence
- **National Simulation (NATSIM) -- Reston**
 - National Intelligence Systems
- **Joint Signal Simulation (J-SIGSIM) -- Ft. Meade**
 - Signal Intelligence
- **DOMINO -- DIA**
 - DIA National Intel Process Modeling

Many Significant Accomplishments to Date

JSIMS Enterprise

Acquisition

- **Integrated APB**
- **Schedule Synchronization**

Requirements

- **Requirements Harmonization**
- **JSIMS Requirements Control Board**

Development

- **Core Architecture**
- **Build 0**
- **High-Level Design**

Want More Information?

JSIMS Enterprise

The best source is the
JSIMS Enterprise Home Page

<http://www.jsims.mil>