



***Restoration of Operations ACTD
(RestOps)***

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12 July 2001

Report Documentation Page

Report Date 09Jul2001	Report Type N/A	Dates Covered (from... to) -
Title and Subtitle Restoration of Operations ACTD (RestOps)	Contract Number	
	Grant Number	
	Program Element Number	
Author(s) Harrison, David G.	Project Number	
	Task Number	
	Work Unit Number	
Performing Organization Name(s) and Address(es) WWCC, Ft. Leonard Wood, WWCC, Ft. Leonard Wood, MO	Performing Organization Report Number	
Sponsoring/Monitoring Agency Name(s) and Address(es) NDIA (National Defense Industrial Association) 211 Wilson Blvd, STE. 400 Arlington, VA 22201-3061	Sponsor/Monitor's Acronym(s)	
	Sponsor/Monitor's Report Number(s)	
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes Proceedings from Worldwide Chemical Conference, 9-13 July 2001 Sponsored by NDIA, The original document contains color images.		
Abstract		
Subject Terms		
Report Classification unclassified	Classification of this page unclassified	
Classification of Abstract unclassified	Limitation of Abstract UU	
Number of Pages 24		



Before/during/after attack actions necessary to *protect against* and *immediately react to* the consequences of a Chem or Bio attack at a fixed site

- Protect personnel and sensitive equipment prior to attack
- Detect, identify, and warn of CB attack
- Decontaminate personnel and personal equipment
- Determine extent of contamination
- Decontaminate critical equipment/facilities necessary to restore and sustain operations
- Determine impacts on Operating Tempo (OPTEMPO) (sortie generation/force and materiel flow/medical/logistics)



- Demonstrate tools and technologies to mitigate effects of CB attack on fixed site to support war plans
- Demonstrate Operational Concepts and Tactics/Techniques/Procedures (TTPs) for restoring ops at fixed sites
- Incorporate lessons learned into Joint and Service doctrine
- Identify potential improvements in U.S. policy for CONUS and OCONUS RestOps Contingencies

*Restore critical facility operations
to minimize impact on the warfight*

Key Participants & Roles



Osan Air Base, ROK
- *Demonstration Site* -



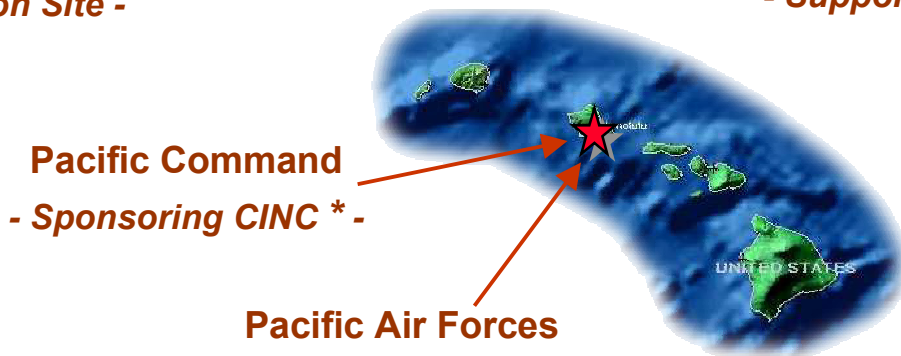
Dugway Proving Ground
- *Technical Testing* -

Air Force Operational Test & Eval Center
- *Military Utility Assessment* -

Central Command
- *Supporting CINC** -

Defense Threat Reduction Agency
* *Executive Agent* *
- *Technical Manager* -

US Air Force
- *Lead Service* -



Pacific Command
- *Sponsoring CINC** -

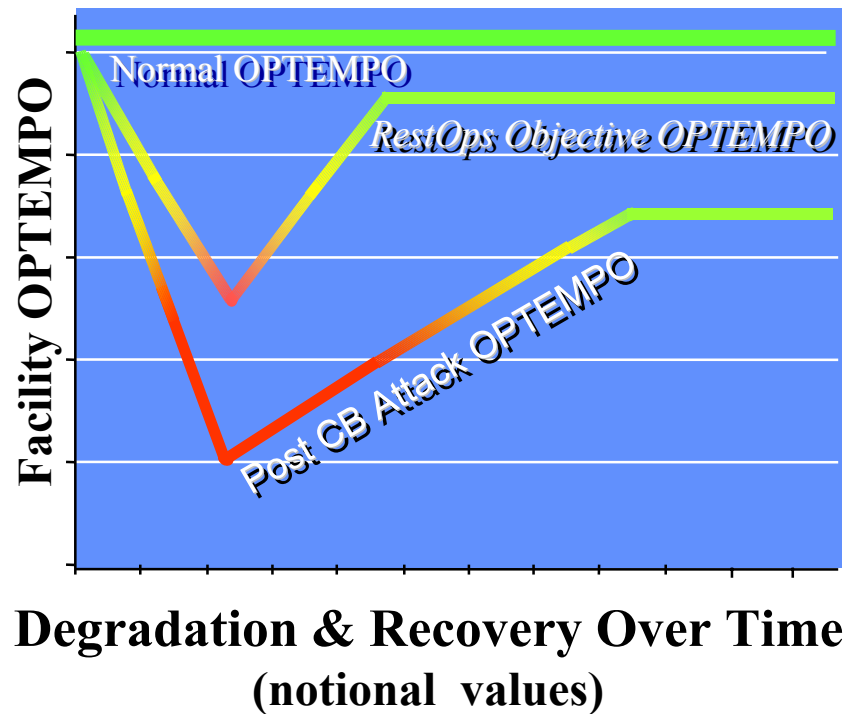
Pacific Air Forces
- *Operational Manager* -

13 Time Zones & Thousands of participants

* *Commander-in-Chief*

Potential Benefits

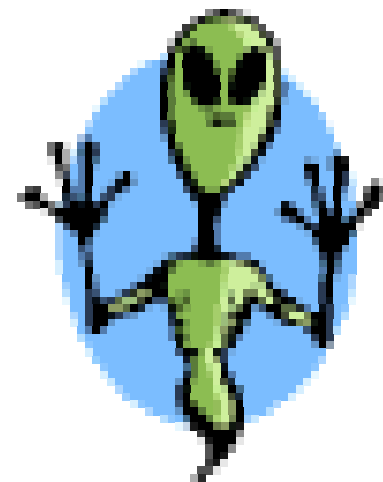
- Improved site response to CBW threat/attack
 - Integrated sensor/early warning network
 - Better decontamination capability
 - Improved medical response
 - Better understanding of operational impact of CB attack on warfighter and support operations
- Quicker recovery of site operating tempo
 - Sortie generation
 - Throughput of personnel/equipment



Decreased vulnerability of fixed sites to CBW attack

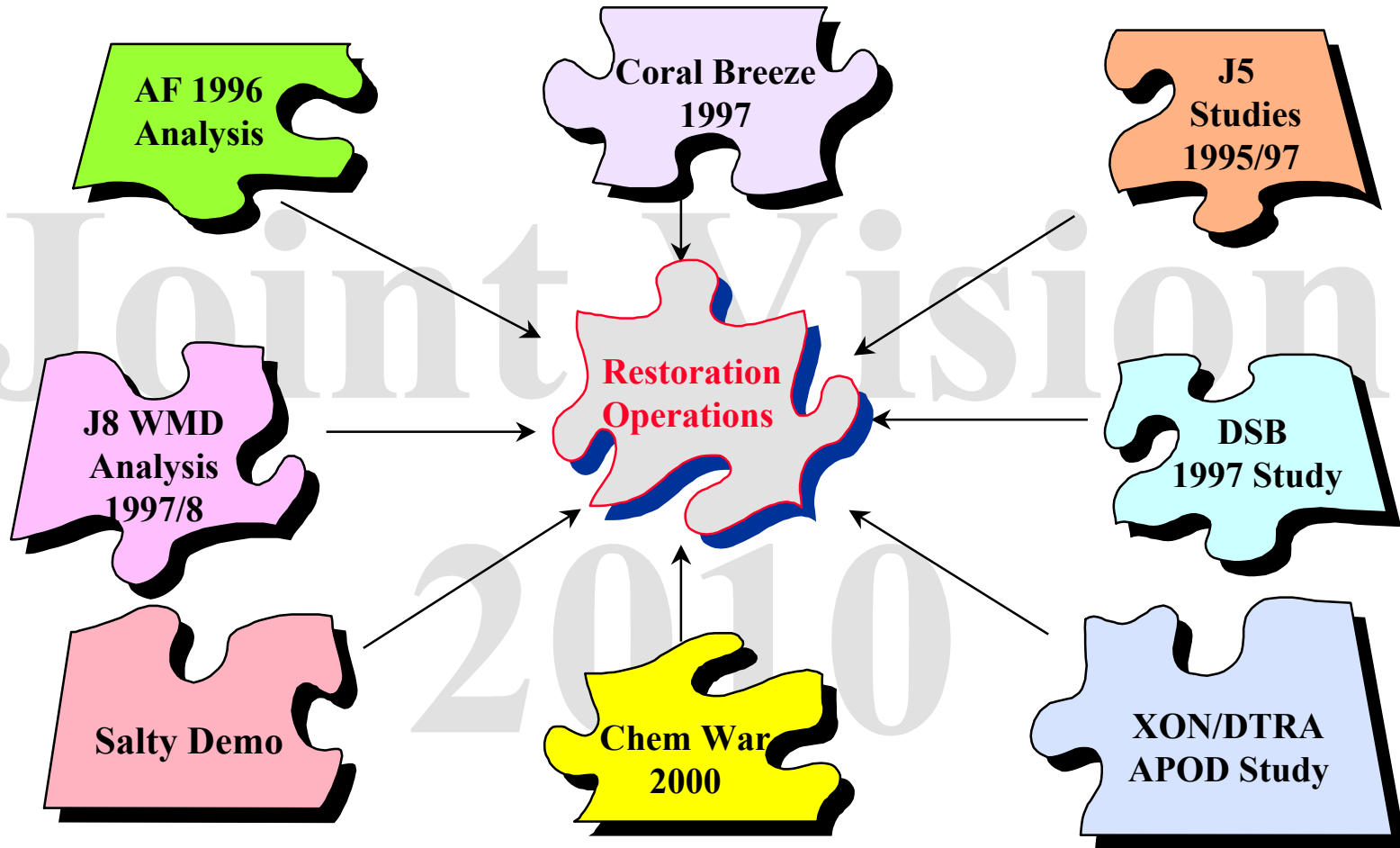
RestOps WILL NOT:

- Develop new equipment
- Perform Research & Development (R&D)
- Resolve all Seaport of Debarkation and Seaport of Embarkation (SPOD/E) issues
- Push Operating Procedures and equipment on services
- Determine the Origins of the Universe



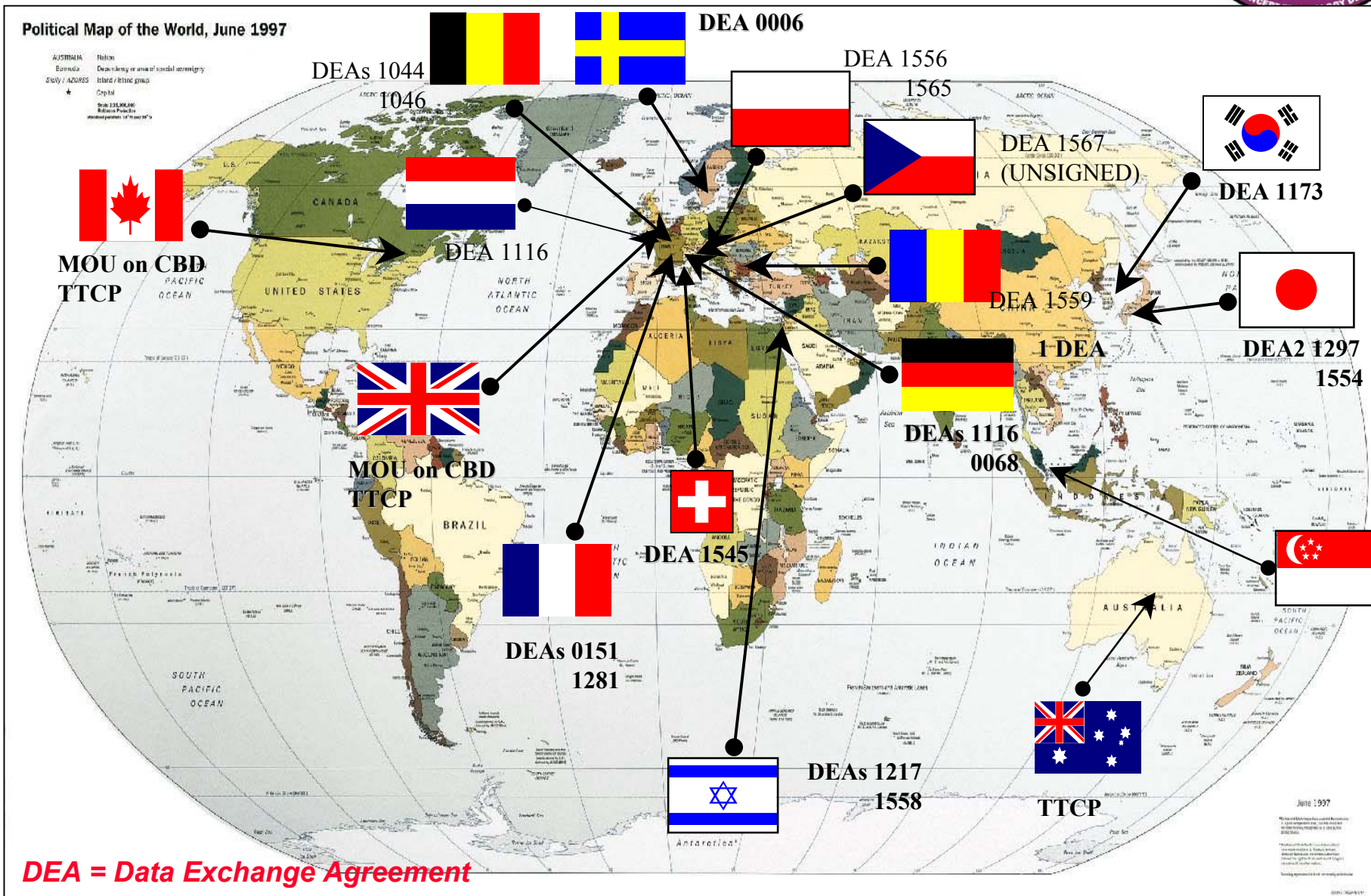


400 Reviewed; 138 Reviewed In Depth



It's time to stop admiring the problem...

RestOps International Invitations



DEA = Data Exchange Agreement

June 1997

Map of the World, June 1997. This map is based on the United States Geological Survey's World Atlas, 1997. It is not intended to be used for navigation. The map is a reproduction of the original map and is not a substitute for the original map. The map is a reproduction of the original map and is not a substitute for the original map. The map is a reproduction of the original map and is not a substitute for the original map.

Base Operations & Infrastructure



Housing

Noncombatant Evacuation
Operations (NEO)



Engineer Operations

Command Center



Command and Control



Maintenance
Operations

Strategic Lift & Time Phased Force Deployment Data (TPFDD) Flow
Inter-Theater Lift



Fueling
operations

Fighter Sortie Generation

Ammunition & Warehouse
Operations



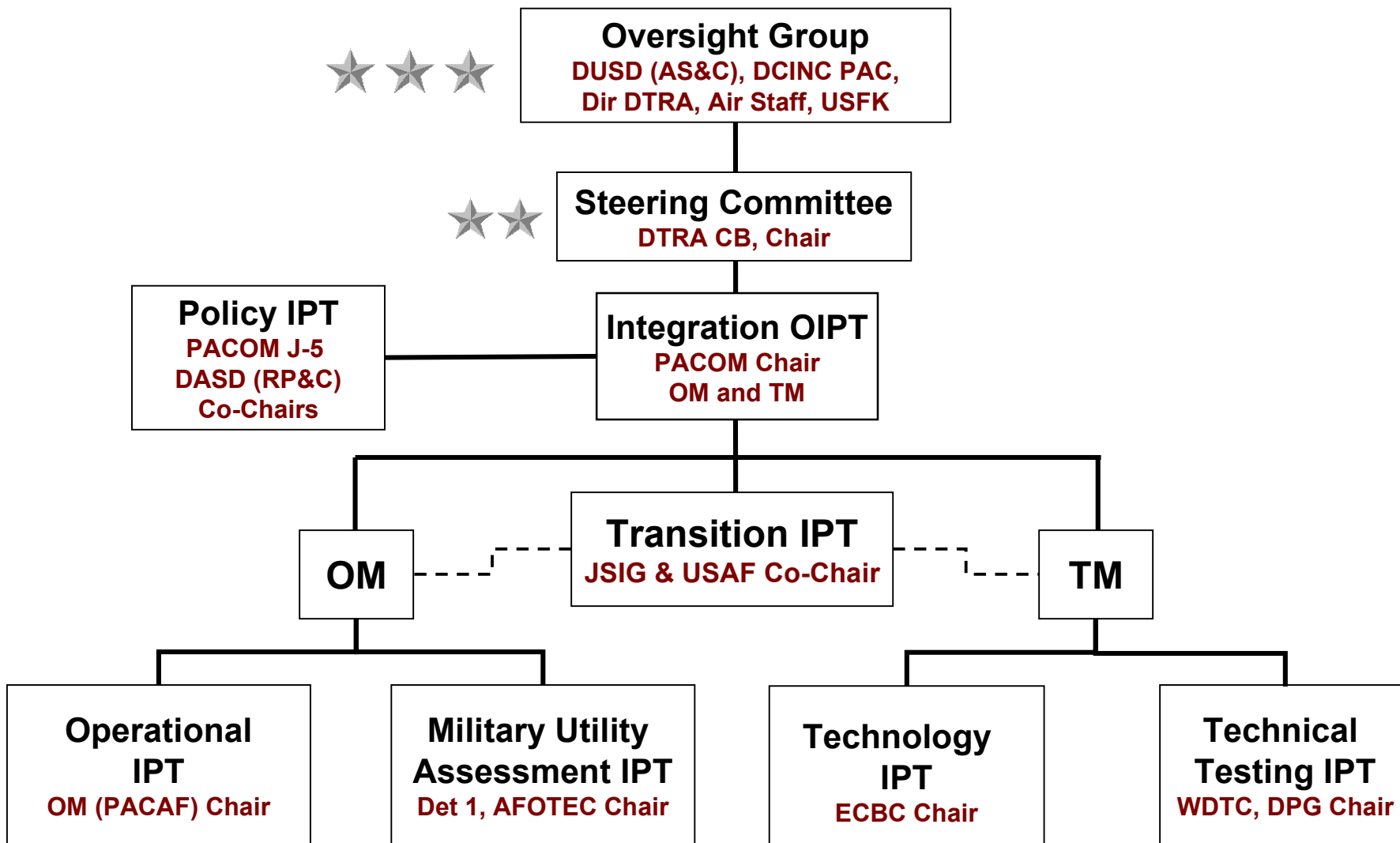
Hospital &
Medical Operations



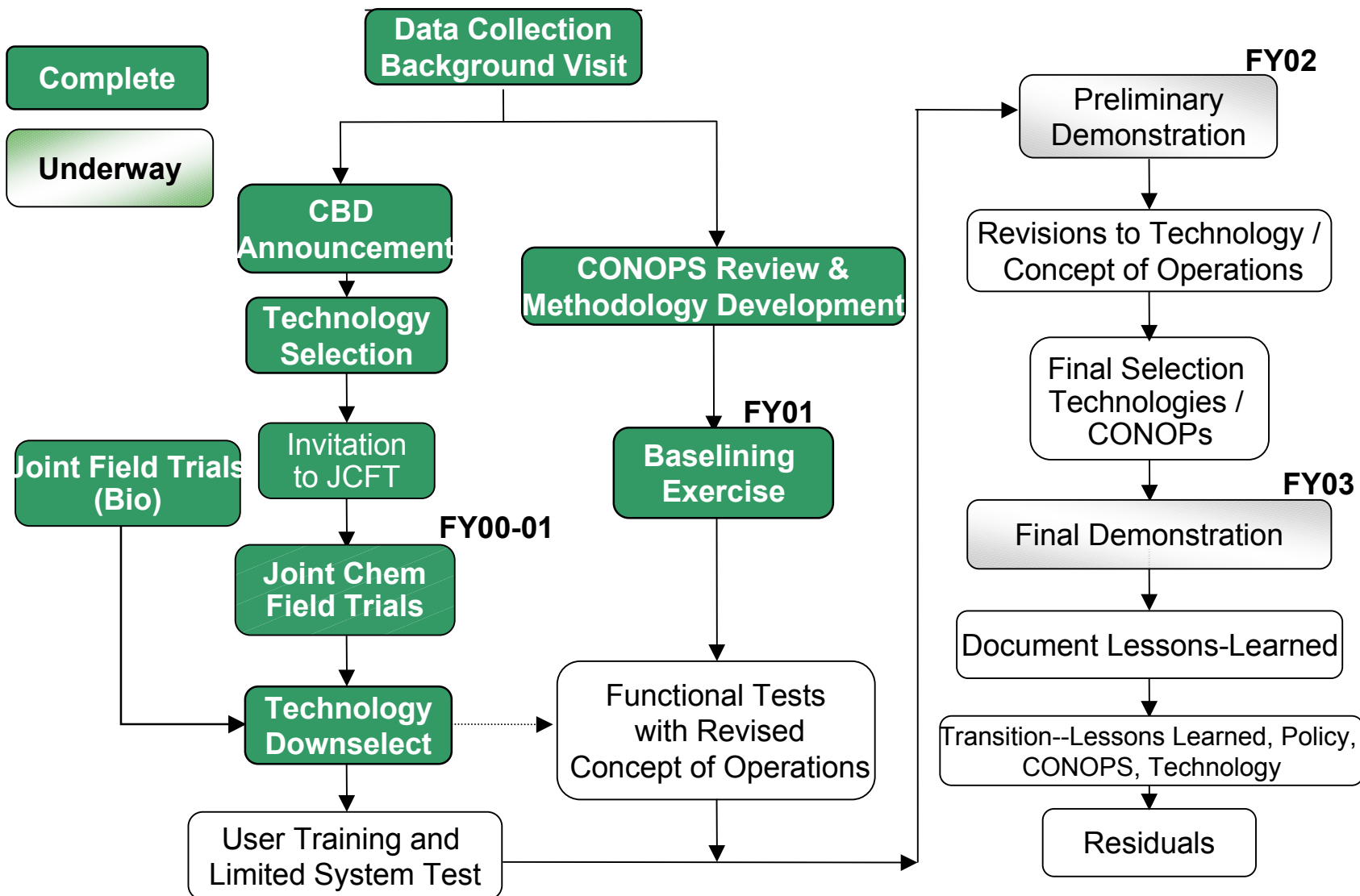
Air Defense Operations
& Patriot Batteries



Management Structure



RestOps Approach



Baseline Exercise Mission



Characterize Osan Air Base's capability to respond to CB attacks -- both to protect against and immediately react to the consequences of a CB attack -- in order to restore operating tempo (OPTEMPO) as quickly as possible.



Baseline Exercise Scope



- Conducted 10-16 Feb 01
- 450+ data collector/exercise control team looked at seven base mission areas:
 - Sortie generation
 - Defensive capability
 - C2/WOC
 - TPFDD flow
 - Base support operations
 - Other than US forces (HNS) support
 - Medical
- Mission areas further divided into 18 Functional Areas:
 - 43 data collection “nodes” within 18 areas
 - Areas chosen for CBD impact on mission, measurement
 - Nodes show data collector posts



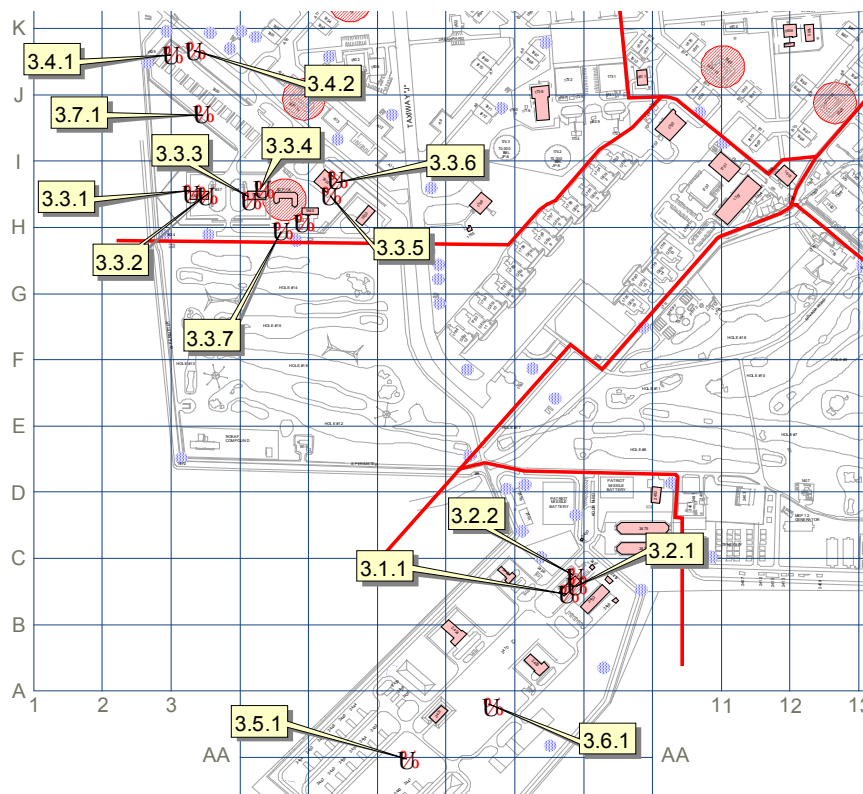
Measurement Areas

<i>Number</i>	<i>Name</i>
1	F-16 (36th FS)
2	A-10 (25th FS)
3	Munitions (storage, build, and pre-load)
4	Flight Line Maintenance (51st MXS)
5	Fuels (Supply)
6	Command and Control (C2)
7	Communications (51st CS)
8	CE Readiness (51st CEX)
9	Civil Engineering (51st CES)
10	Air Mobility (631st AMSS)
11	Security Forces (51st SFS)
12	Services (51st SVS)
13	Patriot (1-43rd ADA)
14	Firefighting (CE)
15	Transportation (51st TRNS)
16	Medical (51st MDG)
17	Logistics (51st LSS)
18	Supply (51st SUPS)

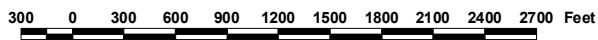
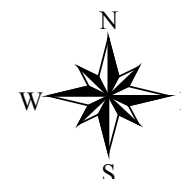
Data Collector Layout Sample



Functional Area 3: Munitions Data Collection



- Munitions Data Collection Sites
- NBC Zone Boundaries
- MXS Buildings
- Security Force Emplacements
- SCPS Locations



NOTE:
16 collector sites / 32 personnel

Next Steps

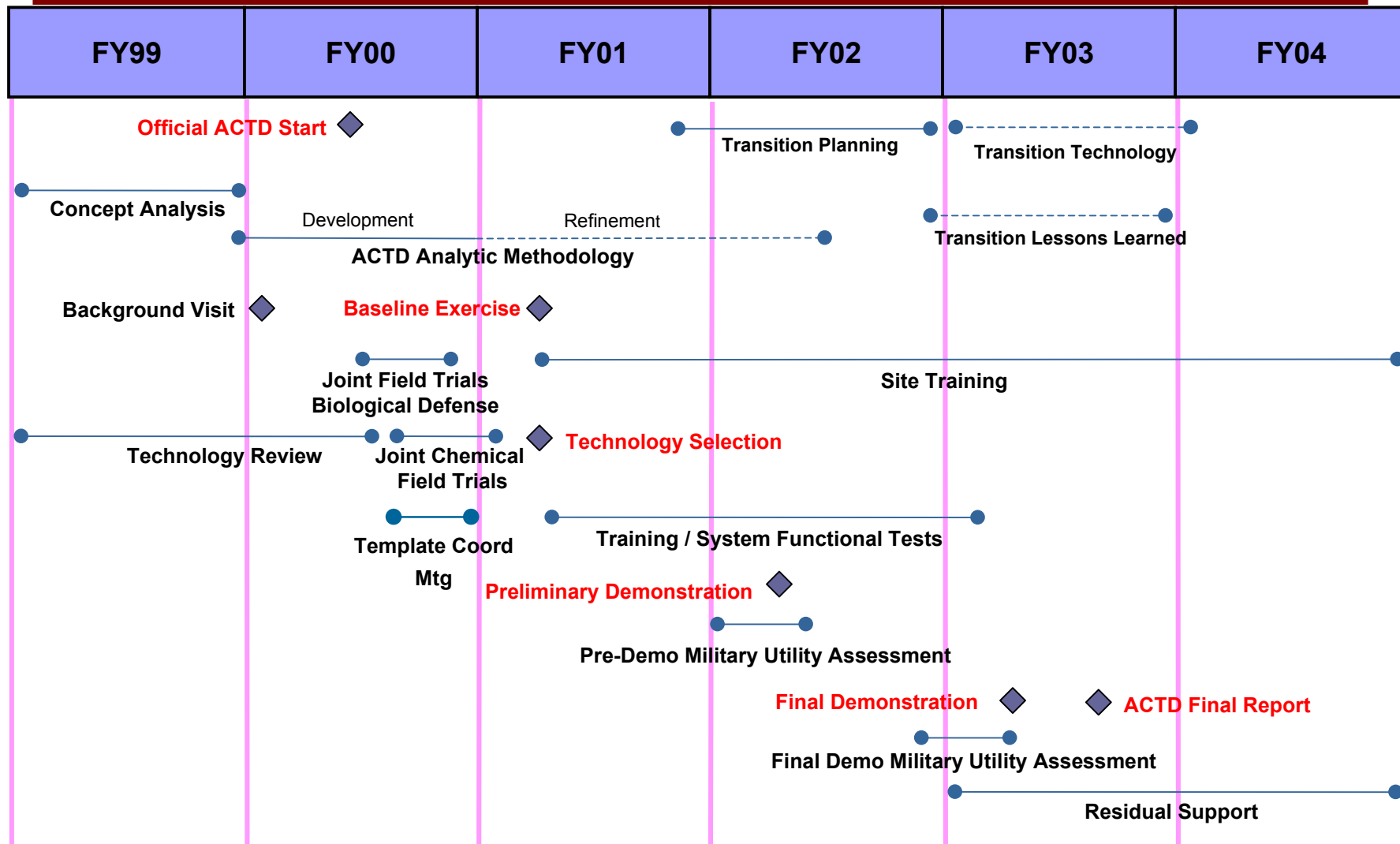
- **Conduct data analysis and prepare report**
 - **Exercise Report due out 25 July 01**
 - **Incorporate lessons learned into Feb 02 Preliminary Demo**
- **Brief ACTD senior management on baseline analysis**
- **Begin preparations for Preliminary Demonstration**





- Recommend Joint Doctrine changes (policy implications)
- Recommend operational doctrine changes to the Services
- Assist in developing training packages for the Services and Joint schools (equipment, base ops, C2)
- Assist in placing fixed site CB Defense CONOPS in service MOS producing and leadership schools (command, staff, and senior service schools)
- Assist services and CINC in placing fixed site CB Defense CONOPS into the major warfighting exercise process
- Residual equipment support (2 yrs) at Osan AB
- Assist accelerated acquisition of equipment selected
- Assist Services to POM for new equipment and sustainment support

RestOps Master Schedule





- **RestOps is fully funded to demonstrate Tactics, Techniques & Procedures (TTPs) and technology for CB defense at a fixed site**
- **ACTD will leverage:**
 - Recently completed, on-going & planned studies and live agent testing to refine understanding of post attack CBW contamination hazards
 - Non-DoD Research & Development programs to include Department of Energy and international community
- **CDR 7th Air Force is the customer and determines leave-behind capabilities**
- **Goal -- identify generic fixed site needs for restoration operations**
 - Osan Air Base demonstration applied to bigger picture for all fixed sites

Questions?

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Back Ups

Why RestOps?

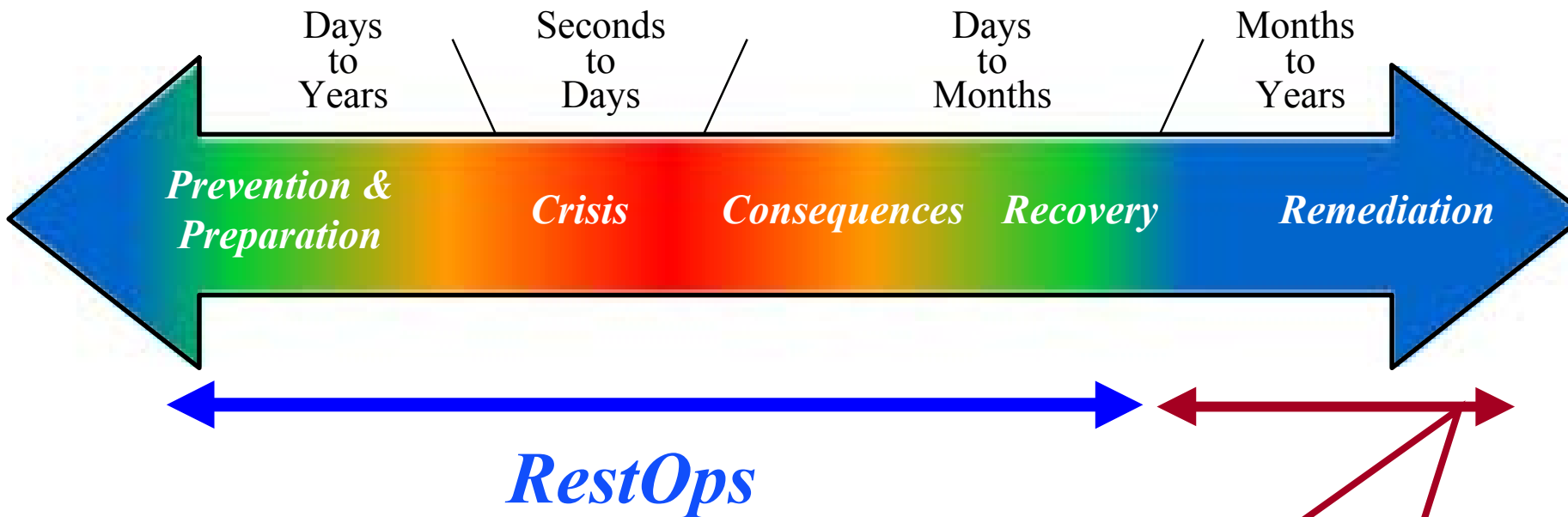
- **Warfighter Request:** Initiate an exercise (ACTD) to demonstrate processes, procedures and technology needed to quickly restore operations at a port or airfield following a CB attack.



- **Recent Studies Highlight Problem:** Establishing responsibility and providing the capability required to restore OPTEMPO at fixed sites (airports and seaports of embarkation / debarkation) after a CB attack critical to power projection strategy.



Spectrum of CB Defense



Outside of Scope :

- 100% decontamination of equipment or facilities
- 100% eradication of hazard
- 100% restoration of OPTEMPO

User Needs

- Better Operational Concepts/TTPs
 - Decontamination of Strategic Lift
 - Decontamination Waste Control
 - Contaminated Casualty Handling
- Improved Technologies
 - Mobile BW Detection
 - CB Contamination Marking
 - Aircraft & Equipment Decontamination
 - Patient Decontamination
 - CB Absorbent Barrier Materials
- Planning Tools
 - CBW sensor integration / placement
 - CBW sensor vulnerability assessment
- Science & technology to support resolution of Policy issues
 - Civil Reserve Air Fleet / Merchant Marine operations in CBW environment
 - Protection of critical Host Nation Support resources
 - Handling of contaminated remains