

National Missile Defense Program



NMD Joint Program Office

BG Willie B. Nance, Jr., USA
Program Manager



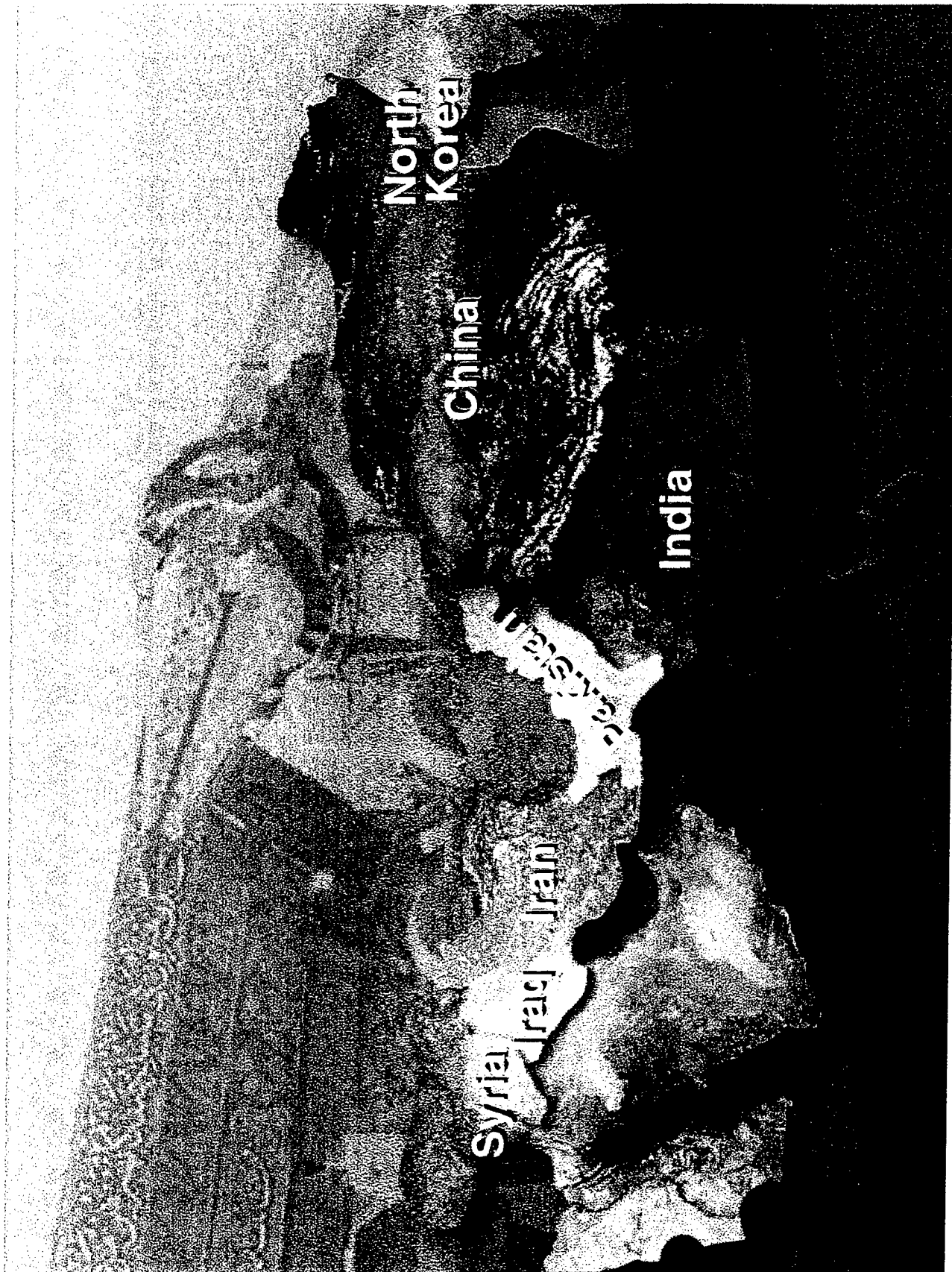
**“The Ballistic Missile Threat Is Broader,
More Mature, And Evolving More Rapidly
Than Has Been Reported By The
U.S. Intelligence Community.”**

***-The Rumsfeld Commission
August 4, 1998***



“ ...Provide For The Common Defense...”

*-Preamble, Constitution Of
The United States*



THE PENTAGON

“National Missile Defense Development Has Been A Priority For The Joint Chiefs And The Unified Commanders.”

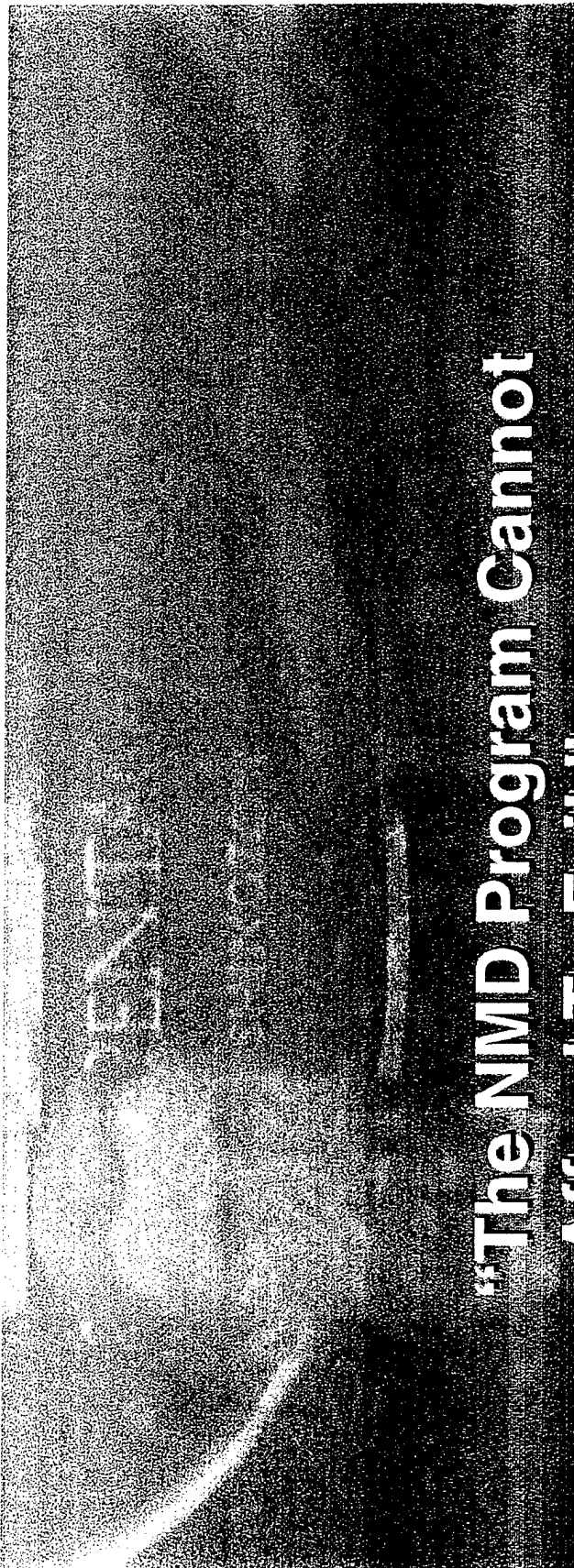
*General Henry H. Shelton
Chairman Joint Chiefs of Staff
January 20, 1999*

**“It Is The Policy Of The United States
To Deploy As Soon As Is Technologically
Possible An Effective National Missile
Defense System Capable Of Defending
The Territory Of The United States
Against Limited Ballistic Missile
Attack...”**

*The National Missile Defense Act Of 1999
Section 2: National Missile Defense Policy
Awaiting Presidential Signature*

**“We Are Committed To The
Development Of A Limited
National Missile Defense
System...”**

Samuel R. Berger
*Assistant to the President
for National Security Affairs*
January 12, 1999



"The NMD Program Cannot Afford To Fail."

William S. Cohen
Secretary of Defense
January 20, 1999

Jaques Gansler
Under Secretary of Defense
(Acquisition & Technology)
February 2, 1999



MISSION

**Develop, Demonstrate, And Deploy (When Directed)
A System To Defend U.S. Against A Limited Strategic
Ballistic Missile Threat By A Rogue Nation...**

- By 2000, Be In A Position To Make A Deployment Decision Based On An Assessment Of:
 - System Technology & Operational Effectiveness
 - Status Of Threat
 - System Cost
 - Arms Control Objectives
- Develop System Consistent With ABM Treaty
- Deployment May Require ABM Treaty Modification
- Phase Program Key Decisions To Reduce Risk



NMD KEY REQUIREMENTS



1. US Defense

- No Leakers With A Very High Degree Of Confidence

2. Human-In-Control

- Assured Human Control

3. Highly Automated BM/C³

- Near-Continuous Operation

Protect All 50 States Against A Limited Attack



JOINT PROGRAM TEAM



**BMDO
Director**

**NMD
Program Manager**

**Deputy For
System Integration**

**Prg Mgmt. &
Control Office**

**Deputy For
System Development**

JPO Elements

**Ground-Based
Elements
Intercepter//Radar**

**Early/
Warning
Radar**

**Command,
Control &
Communication**

**Space
Based
Sensors**

PEO-AMD

**Electronic
Systems
Center**

JPO

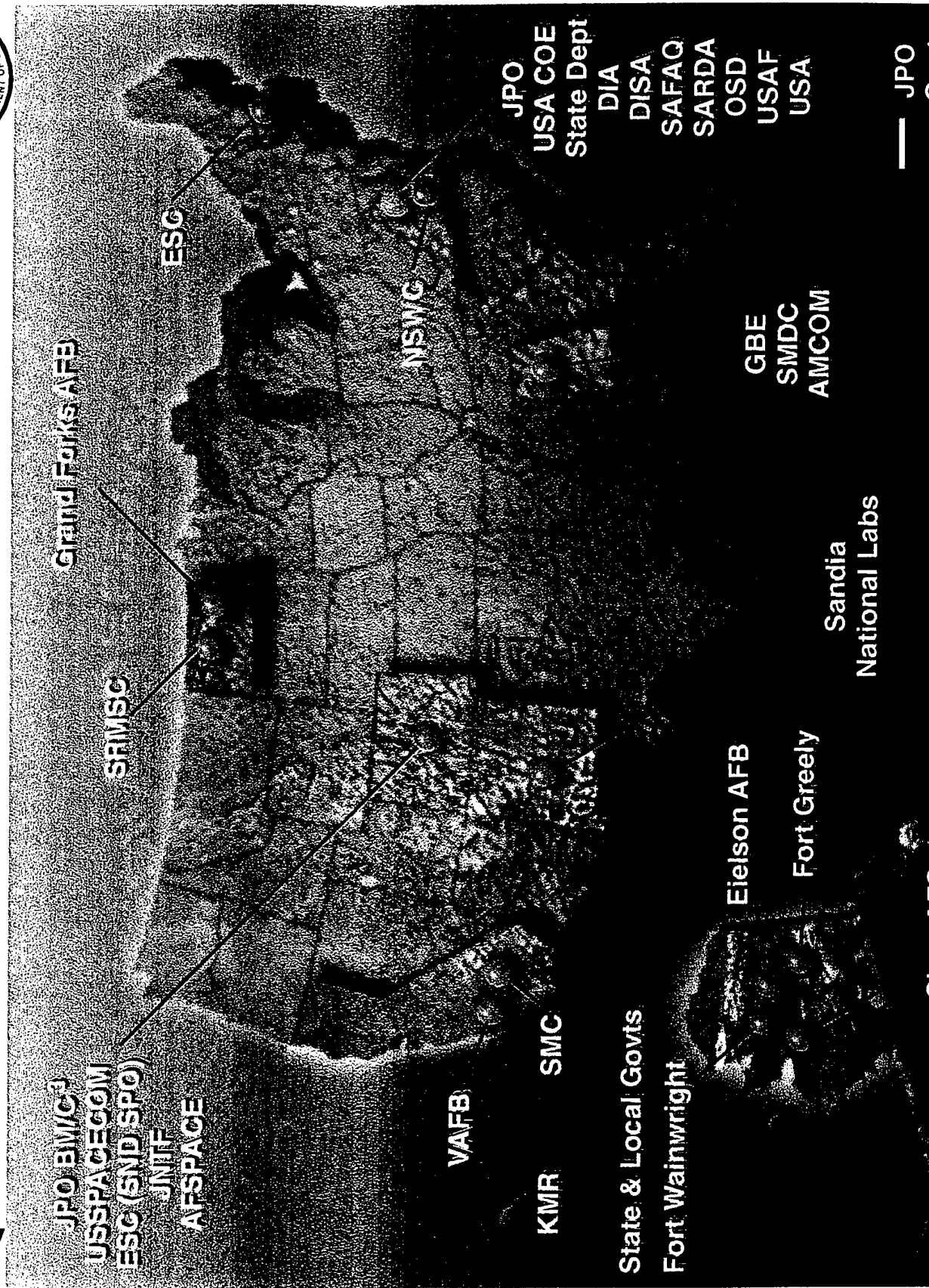
**Space &
Missile
Systems
Command**

Support Agencies

- OSD (P)
- State Department
- USSPACECOM
- Defense Information Support Agency
- Defense Intelligence Agency
- Space & Missile Defense Command
- AFSPACE
- Alaska Command
- Corps Of Engineers
- Strategic Nuclear Deterrent SPO
- Vandenberg Air Force Base
- Naval Surface Warfare Center
- Aviation & Missile Command
- Joint National Test Facility
- Kwajalein Missile Test Range
- Sandia National Labs
- Host Installations

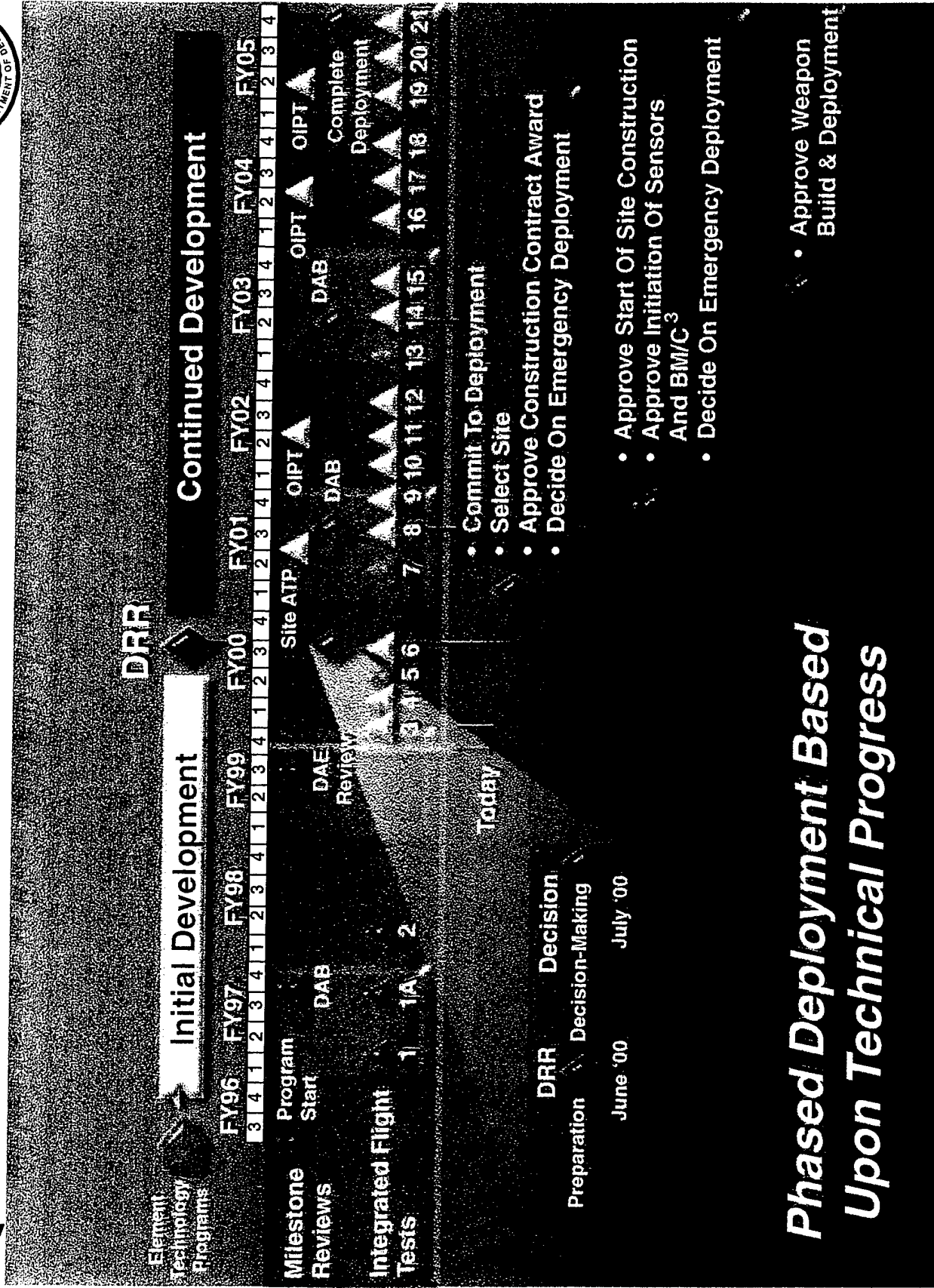


NATIONAL MISSILE DEFENSE - JPO GOVERNMENT -



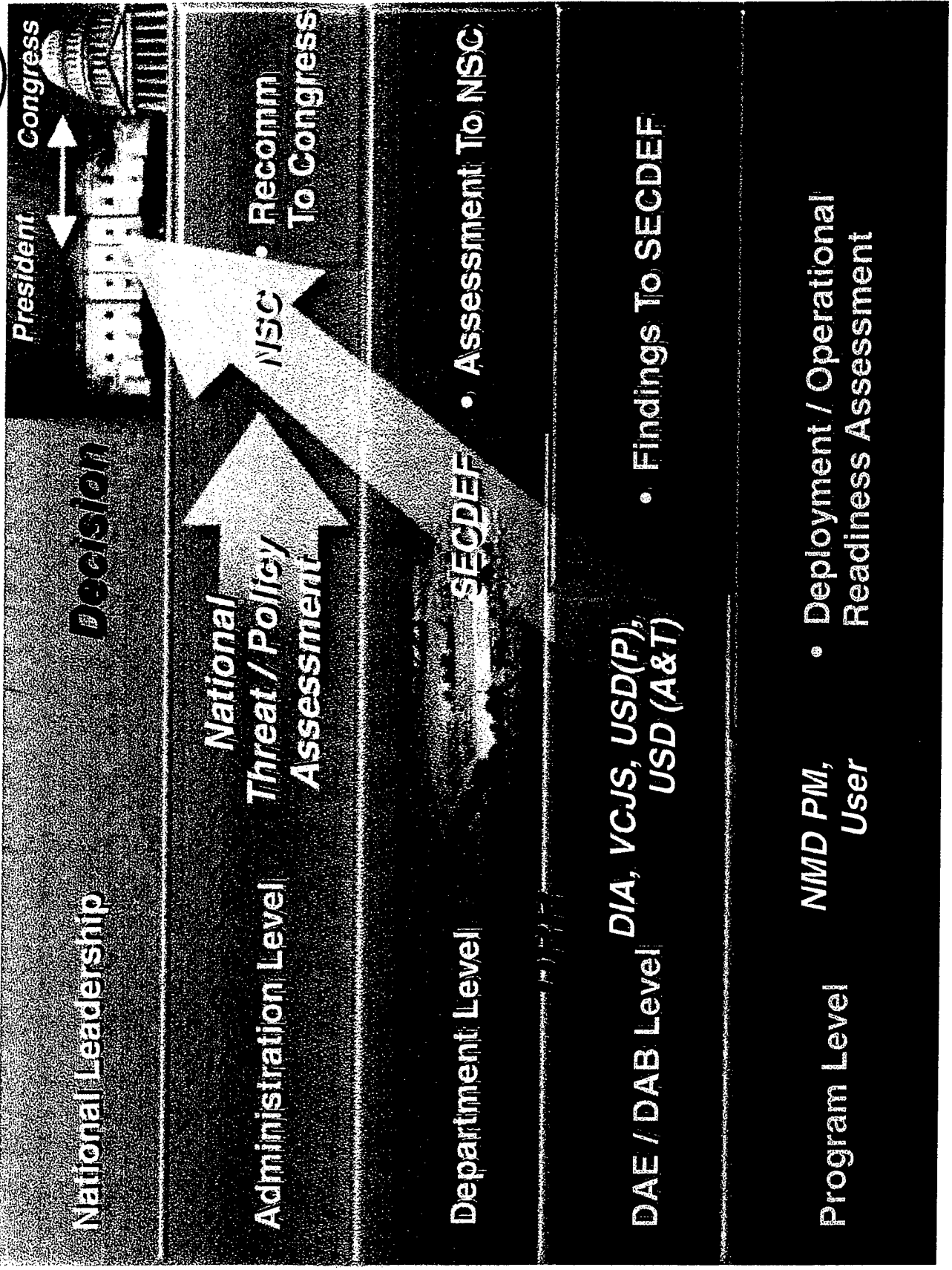


KEY DECISIONS





NMD DEPLOYMENT DECISION





SYSTEM ELEMENTS

KV



Kill Vehicle

SBIRS LOW



Space Based Infrared
System / Low Component

DSP / SBIRS

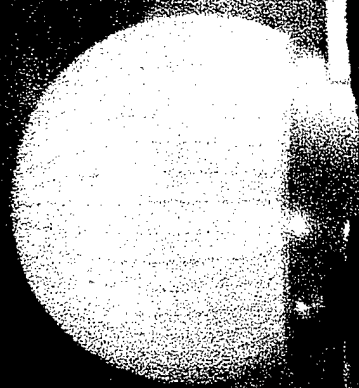
High



Defense Support Program/
Space Based Infrared System
High Component

BM/C³

XBR



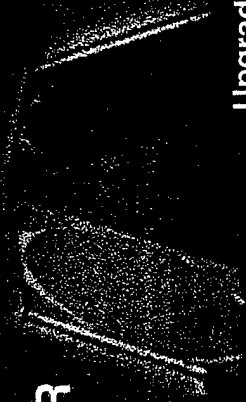
X Band Radar

Weapon



Battle Management / Command,
Control & Communications

UEWR



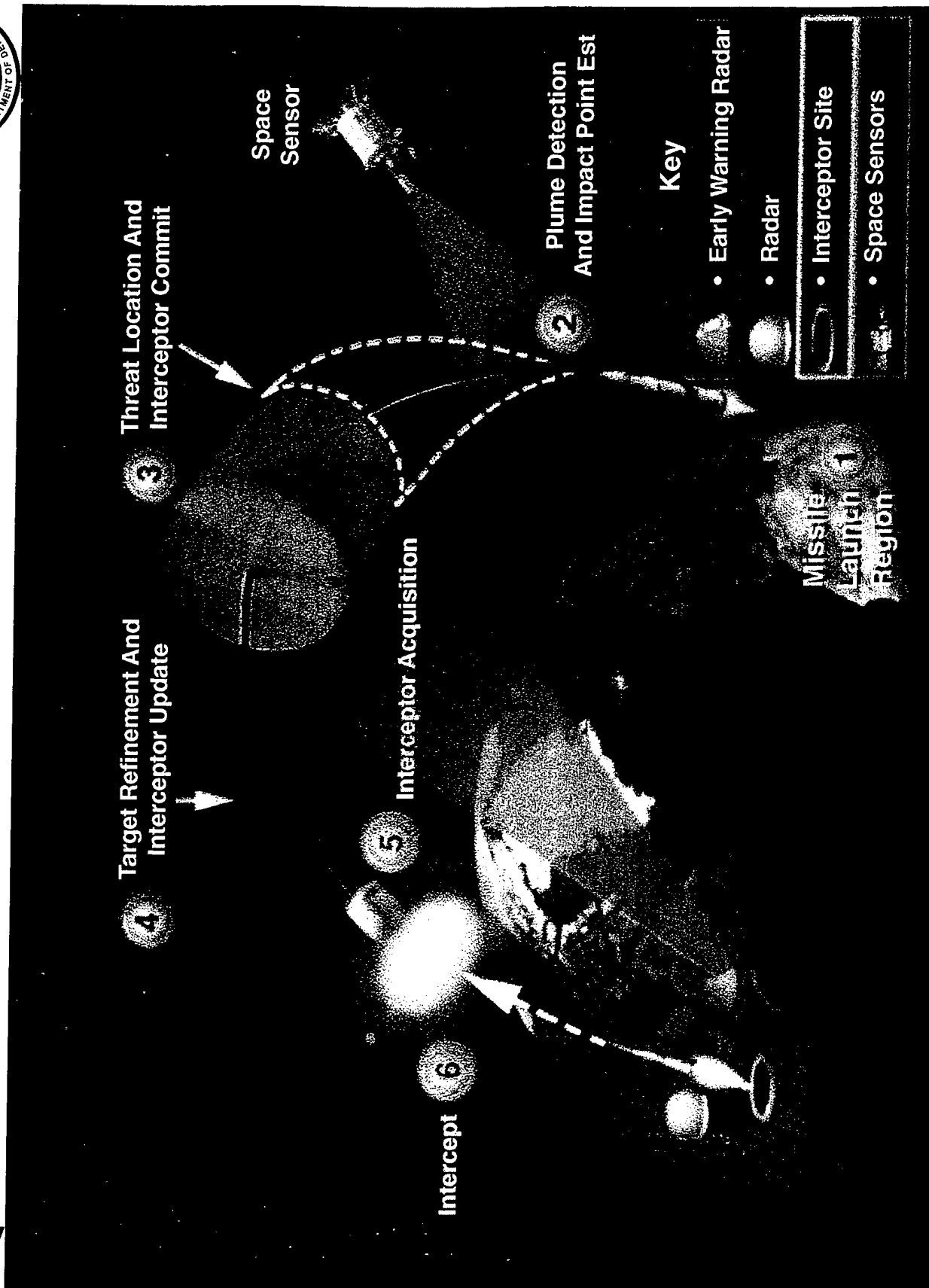
Upgraded Early Warning
Radar

Weapon System





NMD ENGAGEMENT CONOPS





NMD ELEMENT STATUS - DSP / SBIRS

DSP / SBIRS
High

- DSP Operational

- NMD Working Group Established With Air Force In FY97

- SBIRS High
 - IOC - FY06

- SBIRS Low
 - FOC - FY10

SBIRS
Low

Air Force Managed Programs



NMD UEWR STATUS



- Successfully Demonstrated Initial Integration With BM/C3 During Integrated Ground Testing (IGT-3) - FEB 99
- Successfully Tracked Risk Reduction Flight 4
- Ready For Risk Reduction Flight 6 And Integrated Flight Test 3

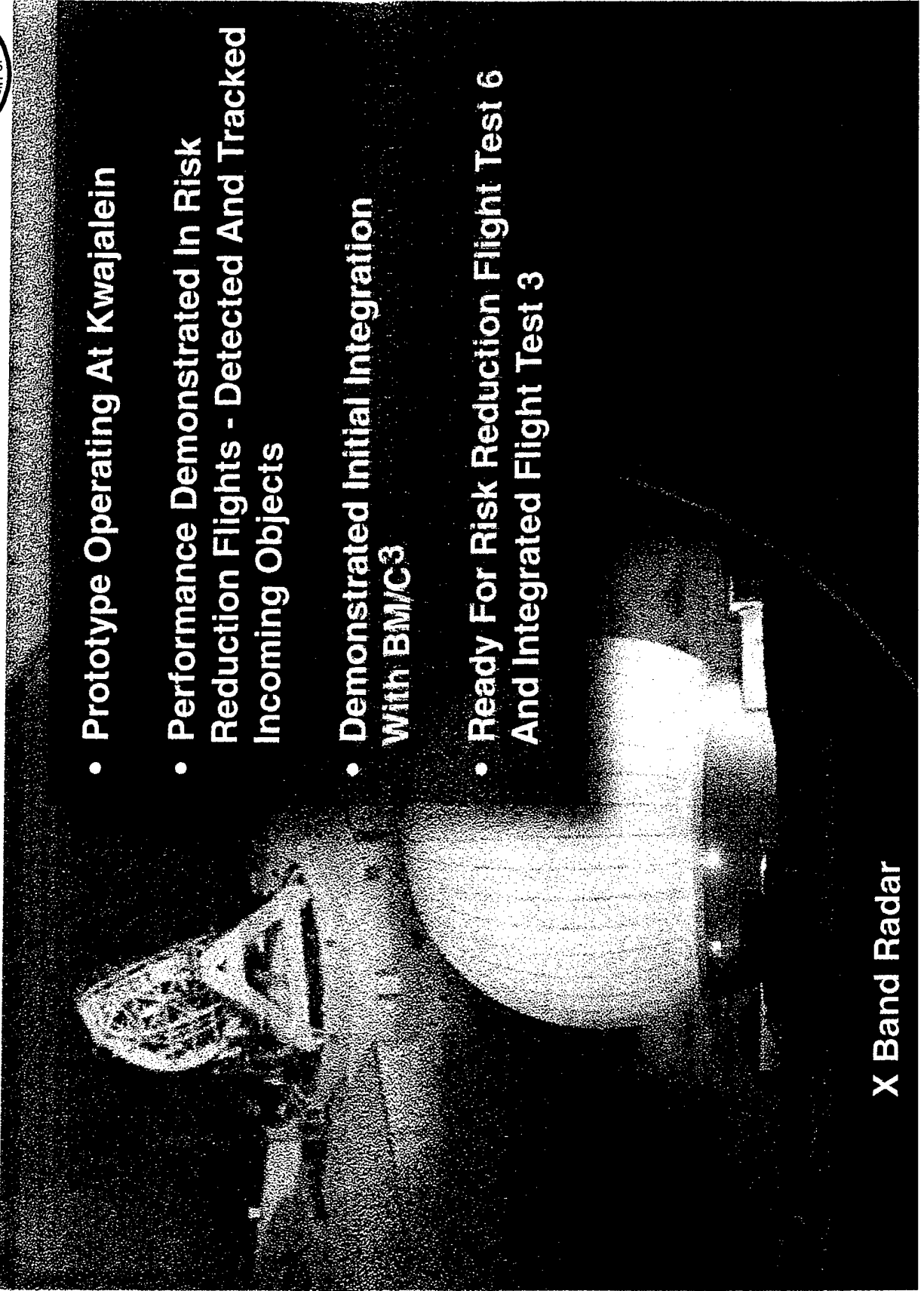
*Upgraded Early
Warning Radar*



X BAND RADAR



- Prototype Operating At Kwajalein
- Performance Demonstrated In Risk Reduction Flights - Detected And Tracked Incoming Objects
- Demonstrated Initial Integration With BM/C3
- Ready For Risk Reduction Flight Test 6 And Integrated Flight Test 3



X Band Radar



NMD WEAPON STATUS



- Successful Sensor Flight - JAN 98
- Successful Hover Test - NOV 98
- IFT-3 Unit In Ground Test



Operational Booster

- GEM Motor Ready For Integration
 - OCT 99 (Over 520 Flown)
- Orbus Motor (25 Produced, 7 Flown No Failures)
 - Successful Burn Test - JUN 99
- First Verification Test Scheduled
 - FEB 00



NMD BM/C³ / IFICS STATUS



**Battle Management, Command
Control & Communications**

- BM/C³ Demonstrated In Major Command And Control Exercise - DEC 98
- Demonstrated Initial Integration With Upgraded Early Warning Radar And X-Band Radar - FEB 99
- Ready For Risk Reduction Flight Test 6



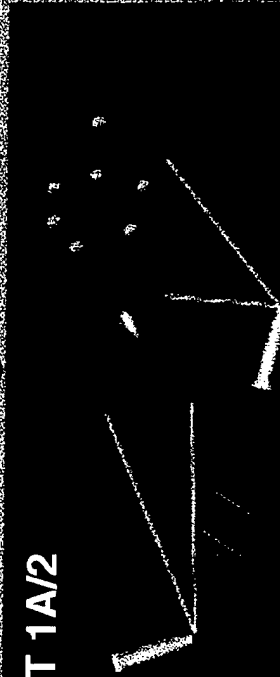
**In-Flight Interceptor
Communications System
(IFICS)**



INTEGRATED FLIGHT TEST PROGRAM

Flights

IFT 1A/2



Sensor Fly-By

IFT 3



Intercept

IFT 4, 5 & 6



Integrated Flight Test / Intercept

Program Objectives And Goals

- Risk Reduction For Kill Vehicle Tests
 - Demonstrate Kill Vehicle Sensor Performance
 - Collect Target Signatures To Validate Discrimination Algorithms
- Activate Test Infrastructure
- Demo Target Complex Acquisition
- Demo Onboard Discrimination And Target Selection
- Demo Endgame Performance
- Demo Interoperability Of Elements

IQ00

- Demo End-to-End Integrated System Performance

FY00

IFT-3 OBJECTIVES

Primary Objective

- Demonstrate EKV Flight Test Performance
 - EKV Deployment And Orientation
 - Target Complex Acquisition
 - Track Management
 - Real-Time Onboard Discrimination
 - End Game Performance
 - Divert And Homing
 - Intercept

Key Dates

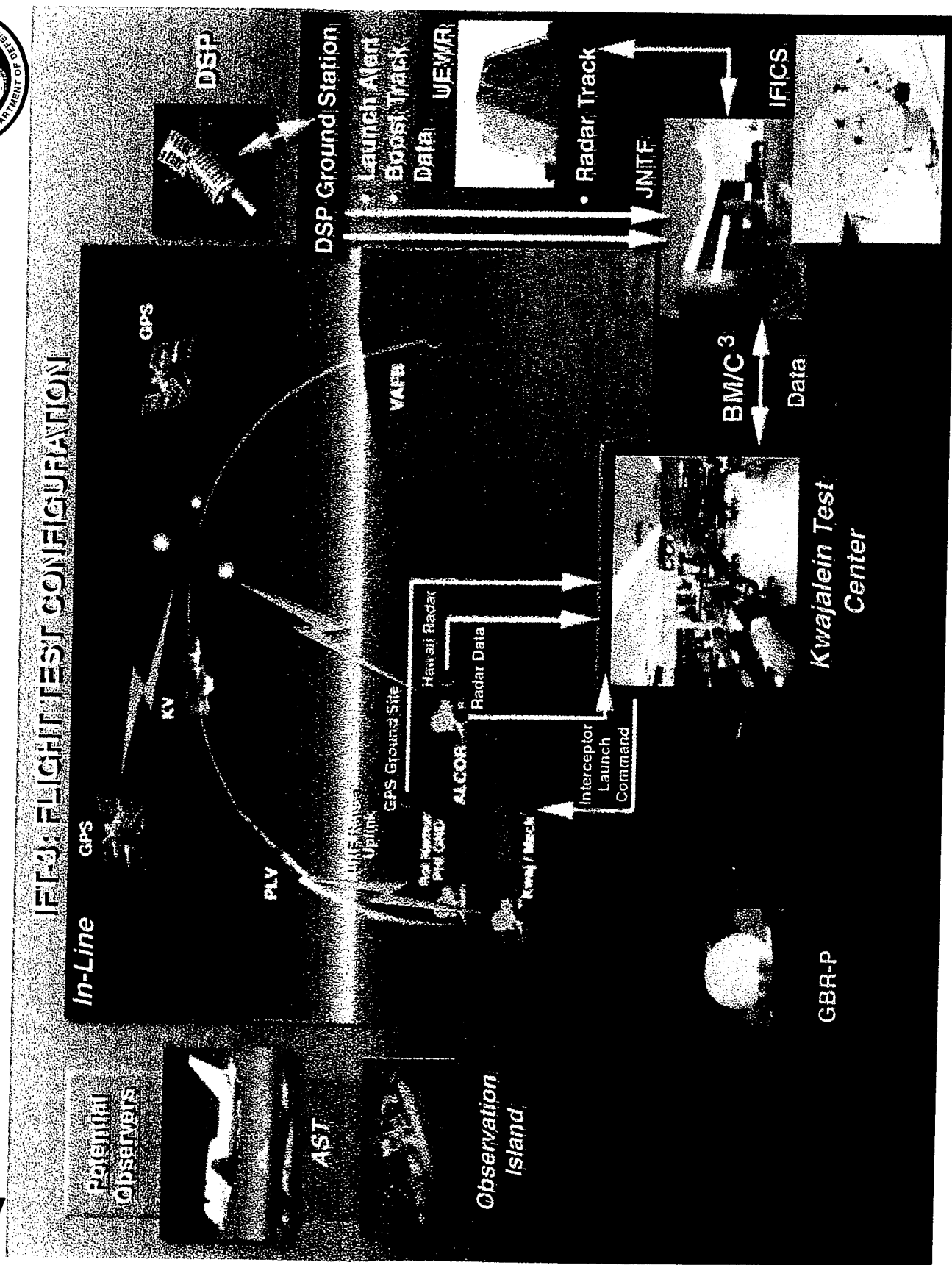
- April - KV Blowdown Test
- 24 July - Ship Flight Payload EKV System Test Area (ESTA)
- August - Ship Flight Test H/W To KMR
- 1000 - Scheduled Test

Secondary Objective

- Sensor And BM/C³ Test
 - Detection And Acquisition
 - System Track Performance
 - Integration Of System Elements
- Data Collection
 - V&V Of Models And Simulations
 - Element And System Performance Analyses
 - Impact And Lethality Analyses
 - Reliability, Availability, Maintainability Analyses
 - Assessment Of Test Infrastructure



IFT-3: FLIGHT TEST CONFIGURATION





IFT-3 BOTTOM LINE



- IFT-3 Is A Complex Undertaking
- Primary Objective Is To Demonstrate EKV Flight Test Performance
- IFT-3 Will Provide Critical Data For Further Development



DEPLOYMENT STATUS



Grand Forks, ND

- Fact Finding Visits And Siting Studies Conducted For ND And AK
- Notice Of Intent (NOI) - NOV 98
- Prototype Site Designs Initiated
- Public Scoping Meeting Held In AK, ND And VA - DEC 98

- Draft Environmental Impact Statement (EIS) - 4Q99

- Public Hearings On Draft EIS Scheduled

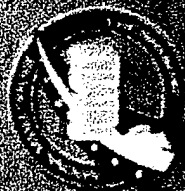
- Industry Briefings For Construction Contracts - 1Q00

- 100% Site Designs Complete - JAN 00

Fort Greely, AK



ACCOMPLISHMENTS



National Missile Defense
Joint Program Office

Program Restructured To
"Phased Deployment"



Lead System Integrator
Contract Awarded



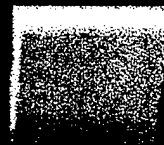
Battle Management
Cmd, Ctrl, & Comm
Capability Increment 3

Risk Reduction Flights 1-5
Integrated Ground Test 1A-3
Integrated Flight Tests 1A & 2

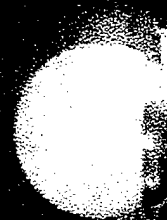
Grand
Forks

Fort Greely, AK

Scoping Visits Conducted
EIS Underway
For ND & AK



System
Requirements
Documents



Construction At
Kwajalein