DCN:11611

**Hood, Wesley, CIV, WSO-BRAC**

**From:** DelMonico, Tim [Tim.DelMonico@mail.house.gov]
**Sent:** Saturday, August 13, 2005 2:48 PM
**To:** 'Hood, Wesley, CIV, WSO-BRAC'
**Subject:** RE: FYI - NJ Response MD Arguments

Rep. Frank Pallone
Staff: Tim Del Monico

Rep. Rush Holt
Staff: Steven Hildner

Rep. Chris Smith
Staff: Tim Lynagh

Staffer for Senator Jon Corzine: Ellen Stein

Representetive of The Rhodes Agency: Barry Rhodes

Hope this is helpful.

Tim

~~~~~~~~~~~~~~~~~~~~~~~~
Tim Del Monico
Legislative Assistant
Rep. Frank Pallone's Office (D-NJ)
420 Cannon House Office Building
Washington, DC 20515
P - 202-225-4671
F - 202-225-9665

-----Original Message-----
**From:** Hood, Wesley, CIV, WSO-BRAC [mailto:Wesley.Hood@wso.whs.mil]
**Sent:** Saturday, August 13, 2005 11:40 AM
**To:** DelMonico, Tim
**Subject:** RE: FYI - NJ Response MD Arguments

Tim - could you please provide me the names of everyone who attended this meeting with you? I came in late and did not get all of the names for our meeting report. Any help you could give me will be appreciated.

Thanks. Wes

**Wes Hood**

**Senior Army Analyst**

**BRAC Commission**
~~~~~~~~~~~~~~~~~~~~~~~~

DCN:11611

# LOSS OF INTELLECTUAL CAPITAL
# A CRITICAL PROBLEM
# Discussion Items

## New Items Included:

- National Defense University Ltr. 29 June 2005—Requested By Admiral Gehman
- Workforce Survey Results
- Amplification of Workforce Capability & Experience In C4ISR---Linked To NDU Concerns

# NDU Letter Extracts—Request From Admiral Gehman

- Efficiencies In Consolidation Are Overshadowed By Loss Of Key Personnel And By A Loss Of Innovation.
- The DoD S&T Workforce Has Become Somewhat Fragile Due To Previous BRAC Closures And the Outsourcing Of the Expertise.
- Data From The Last BRAC Indicate That On Average Only About 25-30% Of S&Es Relocate ----Many Of Those Who Do Relocate Subsequently Leave The Government
- Closure Of Fort Monmouth & Relocation Of The Communications And Electronics Research, Development And Engineering Center (CERDEC) & The Relocation Of The CERDEC Night Vision And Electronics Sensors Directorate To Aberdeen Are Troubling.
- Because Of The Need To Construct New Facilities At Aberdeen (No Core C4ISR Expertise Or Culture) The Consolidation Would Take Several Years
- A Serious Slump In Productivity In An Area Where Maintaining A Vigorous S&T Program Is Of National Importance

DCN:11611

# Ft. Monmouth/Belvoir R&D—Technology/Demonstrators

| Technical Discipline | # People | Degrees BA/BA, M, PhD | Clearances Conf.—TS/SCI |
|---|---|---|---|
| Command & Control | 355 | 289 (81%) | 340 (96%) |
| Intelligence & Info Warfare | 372 | 311 (84%) | 372 (100%) |
| Software | 244 | 243 (100%) | 230 (94%) |
| Communication | 461 | 394 (84%) | 400 (87%) |
| Night Vision & Sensors | 517 | 378 (73%) | 500 (96%) |
| Headquarters | 106 | 73 (69%) | 100 (94%) |
| Totals | 2055 | 1688 (82%) | 1942 (95%) |

- Highly Technical ---- 67% Engineers; 12% Scientists; 3% Business
- Highly Educated----82% Degreed; 39% Masters Or Above

DCN:11611

# Ft. Monmouth/Belvoir D& A—PEO/PM , Production & Logistics

| AREA | # People | Degrees BA/BA, M, PhD | Clearances Conf.—TS/SCI |
|---|---|---|---|
| Cmd. Control, Communication | 275 | 176 (64%) | 275 (100%) |
| Intell. EW & Sensors | 106 | 67 (63%) | 106 (100%) |
| Software Engineering | 156 | 101 (65%) | 156 (100%) |
| Logistics & Headquarters | 1943 | 1071 (55%) | 1943 (100%) |
| Totals | 2480 | 1415 (57%) | 2480 (100%) |

- Large Acquisition Trained Work Force
- Many Years Of Critical C4ISR Experience in Development & Acquisition

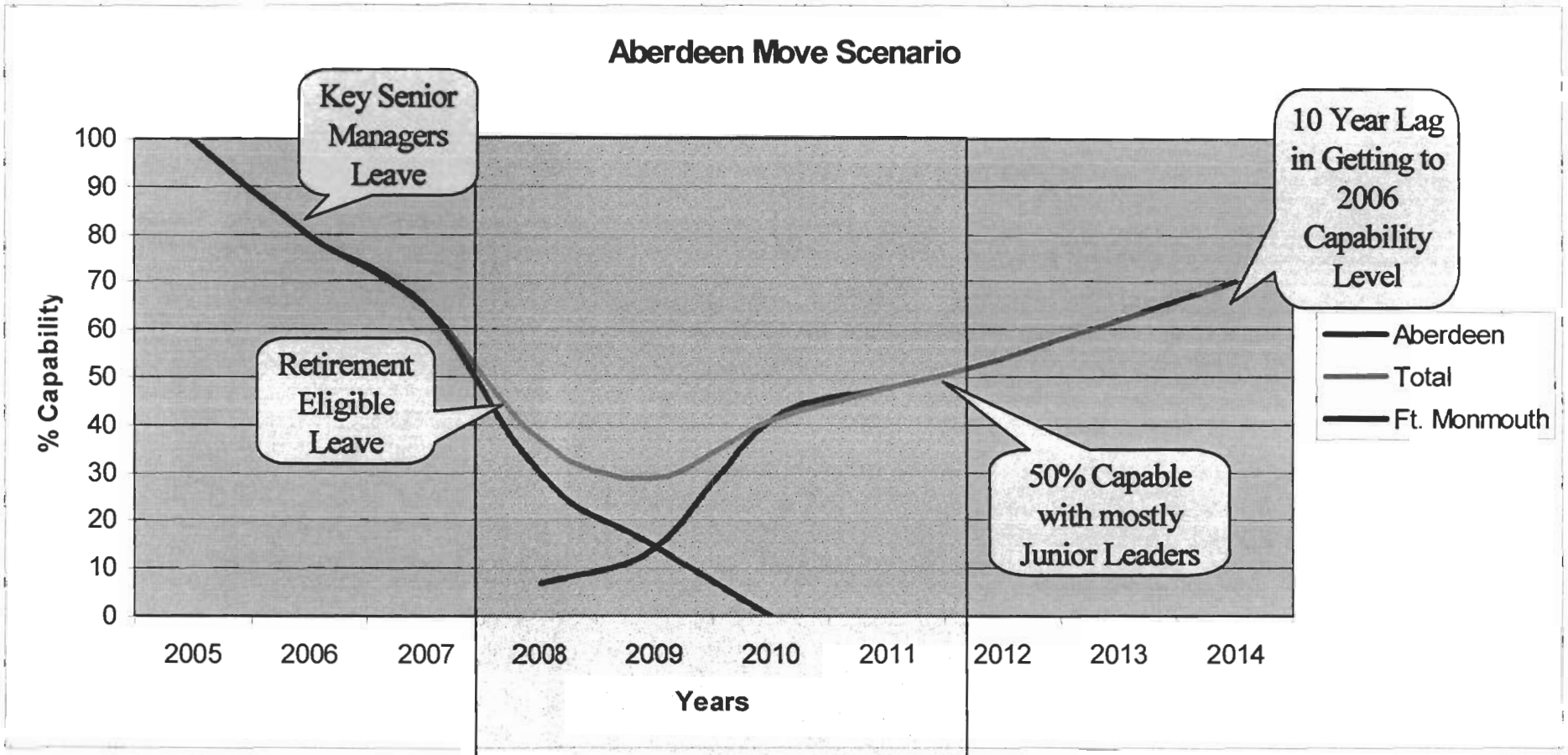
DCN:11611

# Direct Support Contractors

| Company | # People Direct Support | Degrees BA/BA, M, PhD | Clearances Conf.—TS/SCI |
|---|---|---|---|
| A | 304 | 204 (67%) | 303 (100%) |
| B | 149 | 132 (89%) | 122 (82%) |
| C | 171 | 103 (60%) | 146 (85%) |
| D | 116 | 70 (60%) | 89 (77%) |
| E | 182 | 135 (76%) | 152 (84%) |
| F | 119 | 60 (50%) | 100 (84%) |
| G | 180 | 180 (100%) | 180 (100%) |
| Totals | 1221 | 804 (72%) | 1139 (93%) |

**Over 1000 Surveyed From Direct Support Contactor Workforce Of 4000**

# Reduced Capability In The BRAC Window




A Huge Loss of Capability with Significant Program Disruption occurs in this Window

DCN:11611

# CONCLUSIONS

- BRAC Analysis Has Not Given Sufficient Weight To The C4ISR Intellectual Capital.
  - The Combined Workforce For Government and Industry In Direct Support Will Result In A Loss Of Skilled Personnel
  - With The Shortage Of DoD S&E Recruitments & The Excessive Delays In Obtaining High Level Security Clearances (12- 18 Months) A Critical Personnel Vacuum Will Be Created
  - The Existing Skills At Aberdeen Do Not Match The Needed C4ISR Skills And Cannot Fill These Jobs
  - The Length Of Time To Recruit, Hire, & Train This NEW Workforce Has Not Been Considered & The Impact On The Warfighter Never Considered

DCN:11611

DCN:11611

# PROGRAM DISRUPTION DISCUSSION ITEMS

## New Items Included

- Breadth & Depth Of Fort Monmouth Mission
- Amplification Of Disruption Linked To Loss Of Productivity
- Impact On Wartime Efforts

DCN:11611

# The ISR Products—*Many Joint*

**Airborne**

GR/CS

ARL

TUAV Payloads

ACS

MARS

TESAR

TSP

**Ground-Based**

Prophet

CGS

LRAS3

2nd Gen FLIR f/ Bradley

DCGS-A

PLGR

DVE

**Targeting**

**Sensor-to-Shooter**

TUAV Payloads

Profiler

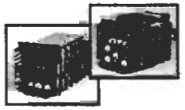
GR/CS

CGS

Firefinder

DCGS-A

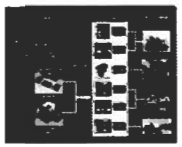
LLDR



2nd Gen FLIR f/ Abrams

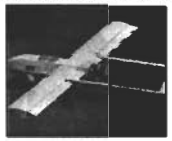
**Full Dimension Protection**

ASE


2nd Gen FLIR

LVRS

LRAS3


TUAV Payloads

ACS

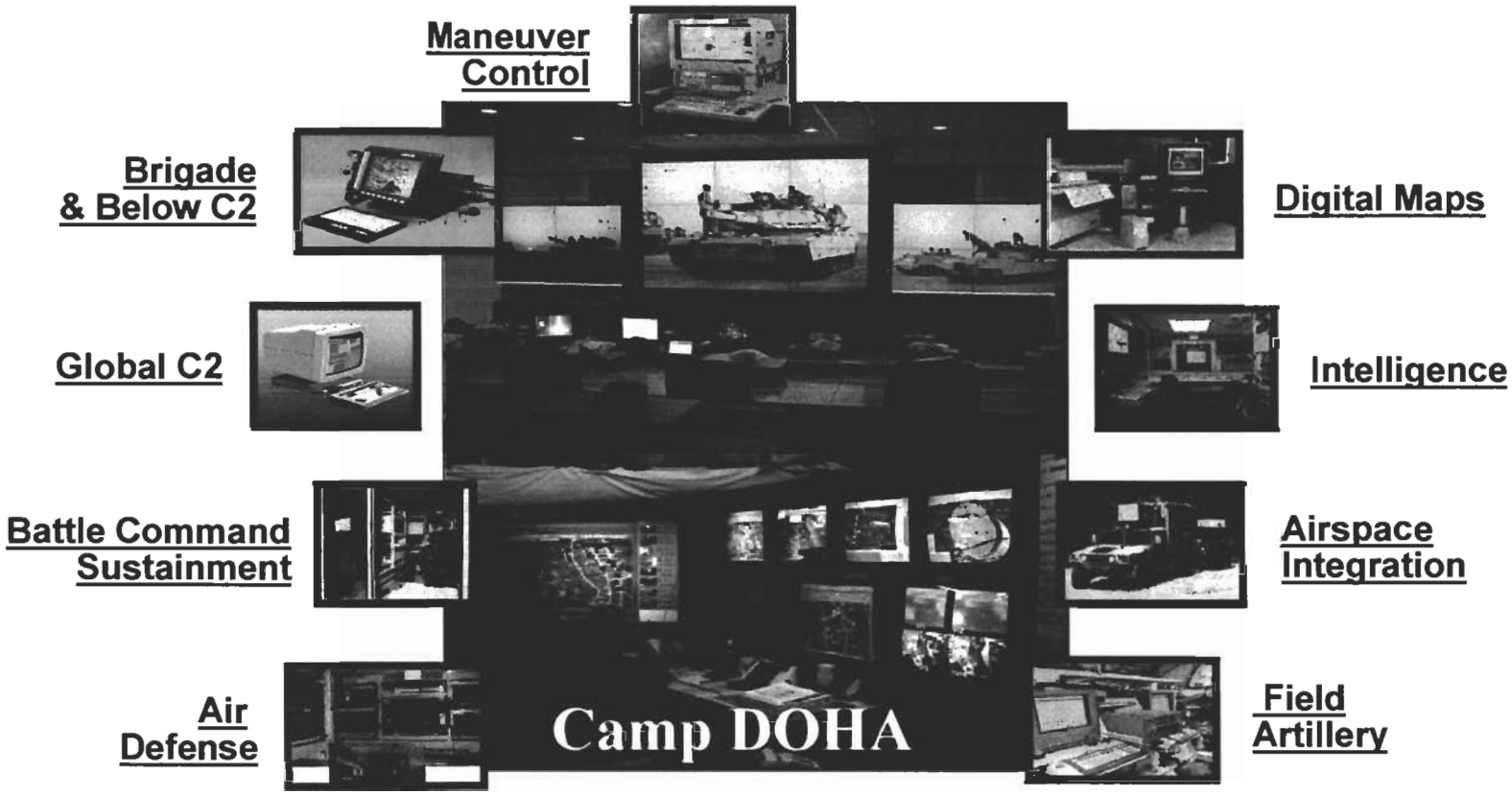
CHIMS

REMBASS

- **Linking The Sources Of Information With The Subscribers Is Key To Network Centric Warfare-----*Enables Rapid Decision Process***
- **Linking & Rapidly Integrating Multi Spectral Information Is Key To Timely & Efficient Kill Mechanisms ----*Enables The Missiles & Weapons***

DCN:11611

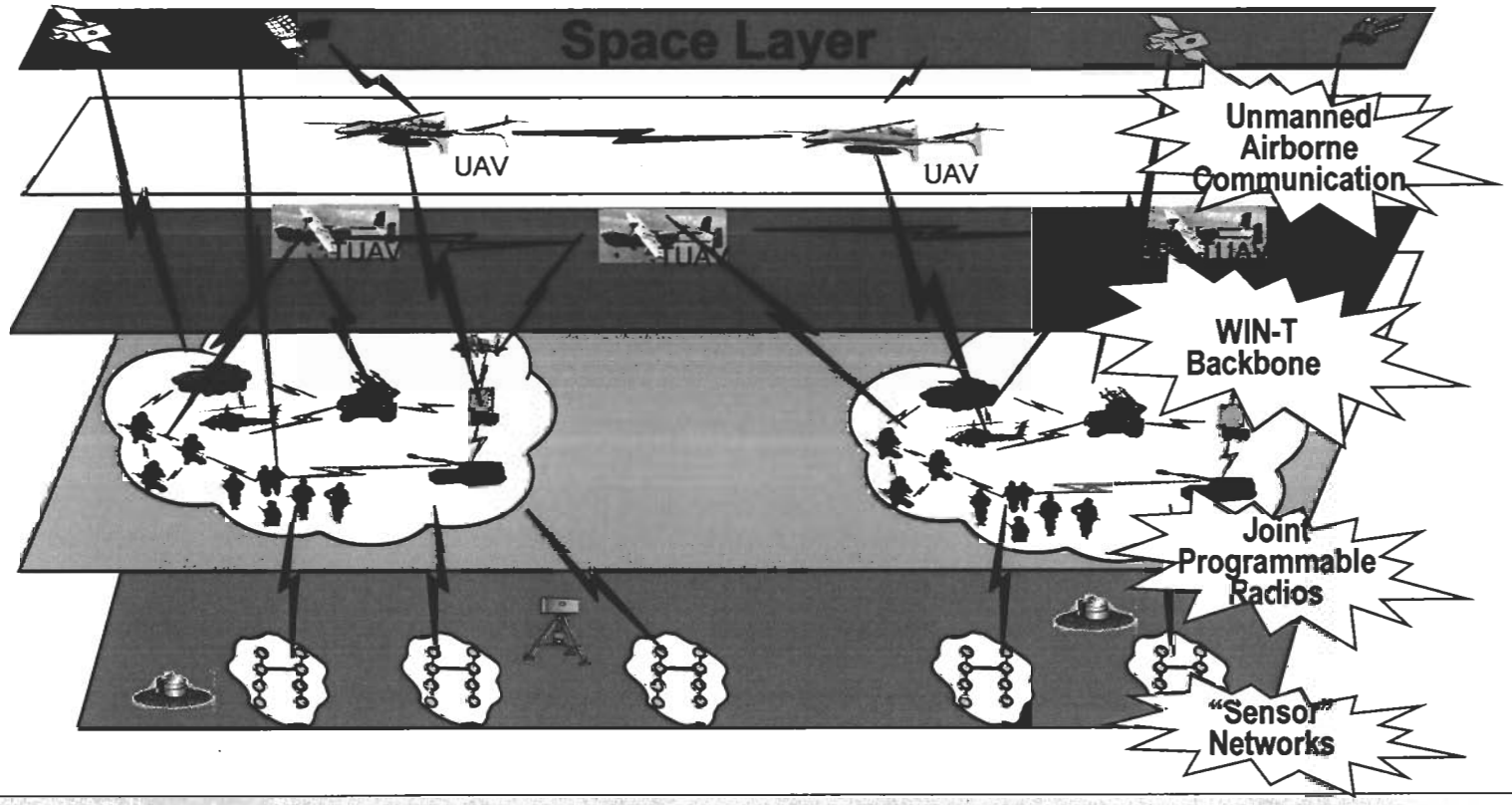
# The Command & Control Products




- **Battle Command Enabled By The Ability To Retrieve, Interpret, & Understand Information—*Commander Tailored Visualization***
- **Integrated C4ISR Allows Intelligent Flow Of Information Based On Commander Priorities----*Smart Networks Engineered For Efficiency***

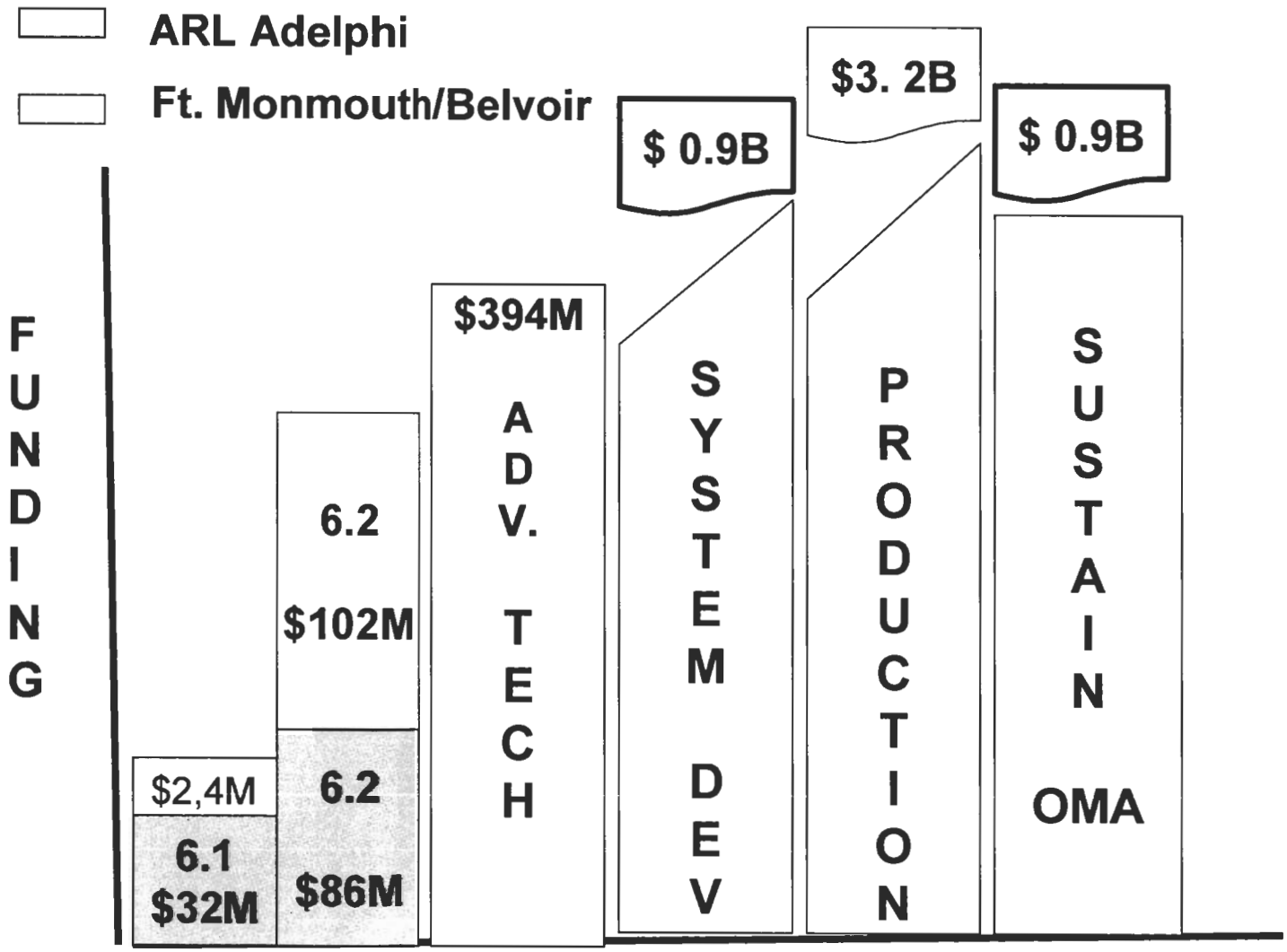
DCN:11611

# Communications Products — Enable Net Centric Operations




- Over 300,000 SINCGARS Fielded To Joint Force At Low Echelons
- EPLRS The Only Current Networked Radio In Use Today
- Lead In JTRS Cluster 1 and Cluster 5; Bold Concept For WIN-T
- Lead In The Wideband Networking Waveform & Soldier Radio Waveform
- Providing Critical Satellite On-The-Move Technology

# C4ISR Funding FY 06




DCN:11611

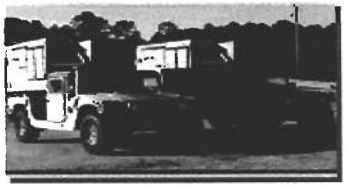
DCN:11611

# *Disruption—War Time Responsiveness*

## *Providing Quick Reaction Solutions To Warfighter Needs*

### *Joint Network Nodes*

*-- Connects Joint Warfighter To Global Grid*

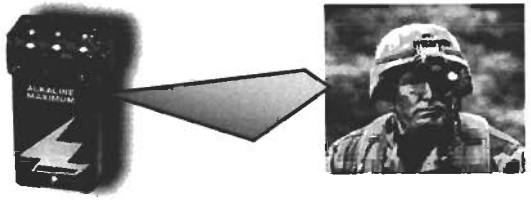


### *Blue Force Tracking/FBCB2*

*-- Joint Coalition Answer To "Where Am I? Where Are My Buddies?*

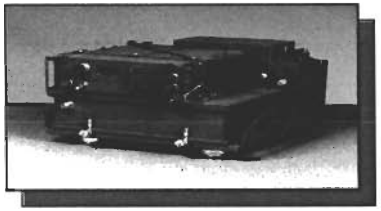
### *Joint Combat Friendly Identification*

*-- 384,000 Devices Provided In 90 Days*



### *Improvised Explosive Device Jammers*

*-- Protection For Platforms & Personnel*



### *Support Critical Systems In A War Zone*

*-- Improved Performance & 100% Operational Readiness*

DCN:11611

# *Disruption War Time Responsiveness*

## *Providing Quick Reaction Solutions To Warfighter Needs*

### *Coalition Military Network*

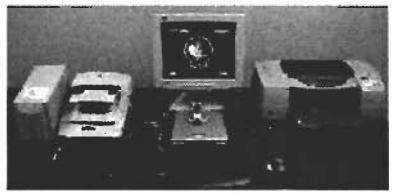
*-- Building The Global Grid In A War Zone*

### *Persistent Surveillance & Dissemination*

*-- Rapid Dissemination Of Actionable Intelligence*

### *Hand Held Standoff Mine Detection*

*-- New System With Low False Alarms*



### *Changing Intelligence Paradigms*

*-- Focus On Individuals Not Units*

### *Long Range Advanced Scout Surveillance*

*-- Extend The Eyes Of The Scout*

# *Disruption War Time Responsiveness*

## *Providing Quick Reaction Solutions To Warfighter Needs*

### *Battle Command On The Move*

*-- Untether The Commander From The CP*

### *Enabling Decisive Decisions*

*-- Collaborative Decision Aids*

### *Prophet Cobra/Hammer*

*-- Mobile SIGINT For Latest Signals*

### *Synthetic Aperture Radar*

*-- All Weather Detection Of Terrain Changes In Critical Areas*

### *Multi Band/Multi Mode Tactical Satellite Comms*

*-- Extends The Range Of The Tactical Internet*

DCN:11611

# *Disruption War Time Responsiveness*

## *Providing Quick Reaction Solutions To Warfighter Needs*

### *Sensors To Protect Critical Areas*

*-- See Intrusions & Respond Rapidly*

Imaging Sensor Unit

### *Man Portable Battlefield Surveillance*

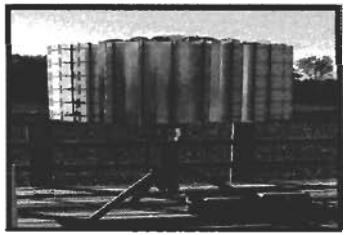
*-- See The Enemy Through Sand & Dust*

### *Guardian Eagle*

*-- Adding New Signal Detection Capability*

### *Light Weight Counter Mortar Radar*

*-- Protect Troops From Mortar Fire*



### *Kuwait Iraq C4 Commercialization*

*-- Enable Tactical Signal Units To Redeploy*

DCN:11611

# DISRUPTION---Four Major Programs Examined

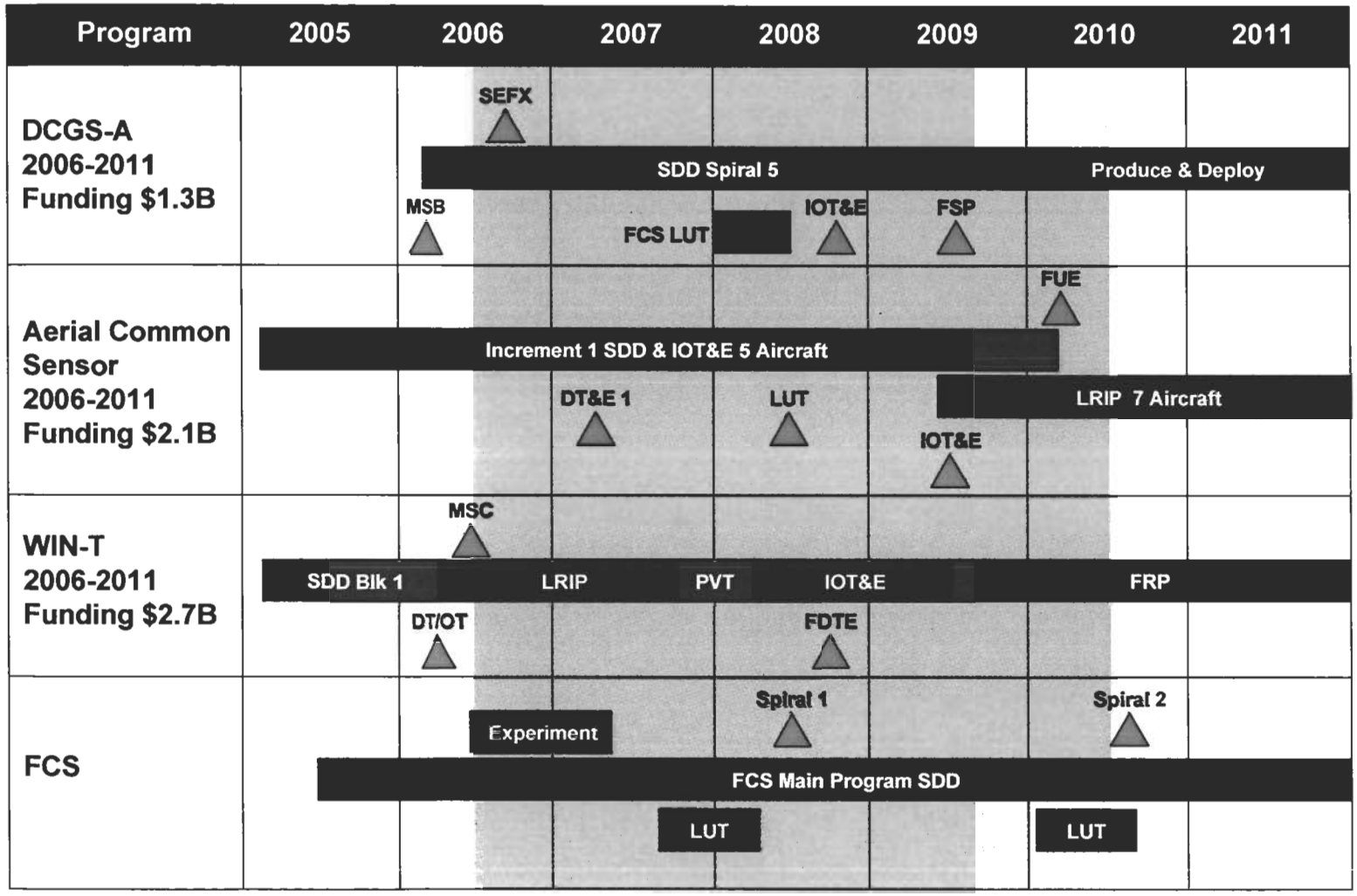
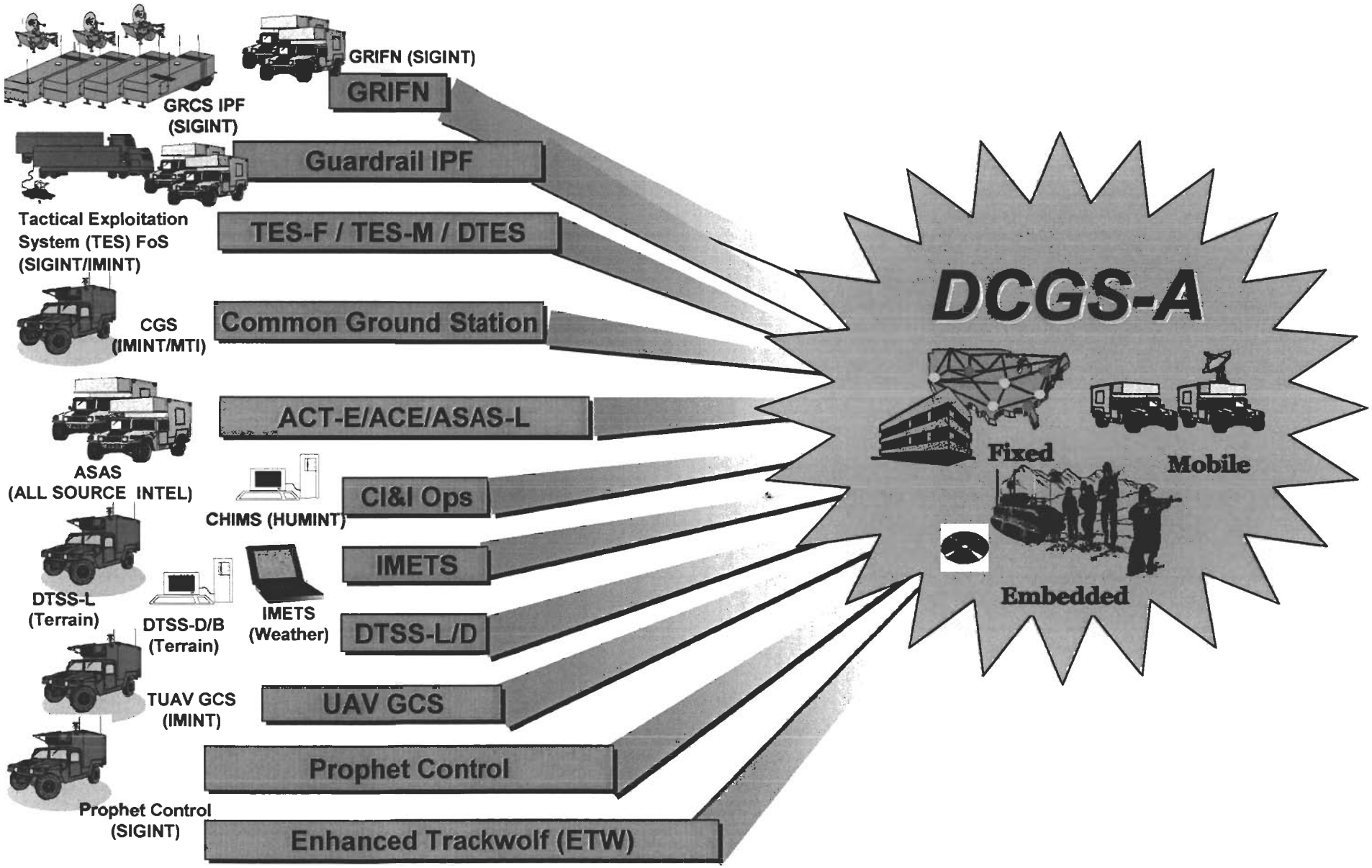



Figure 12: BRAC Impact on Major Programs

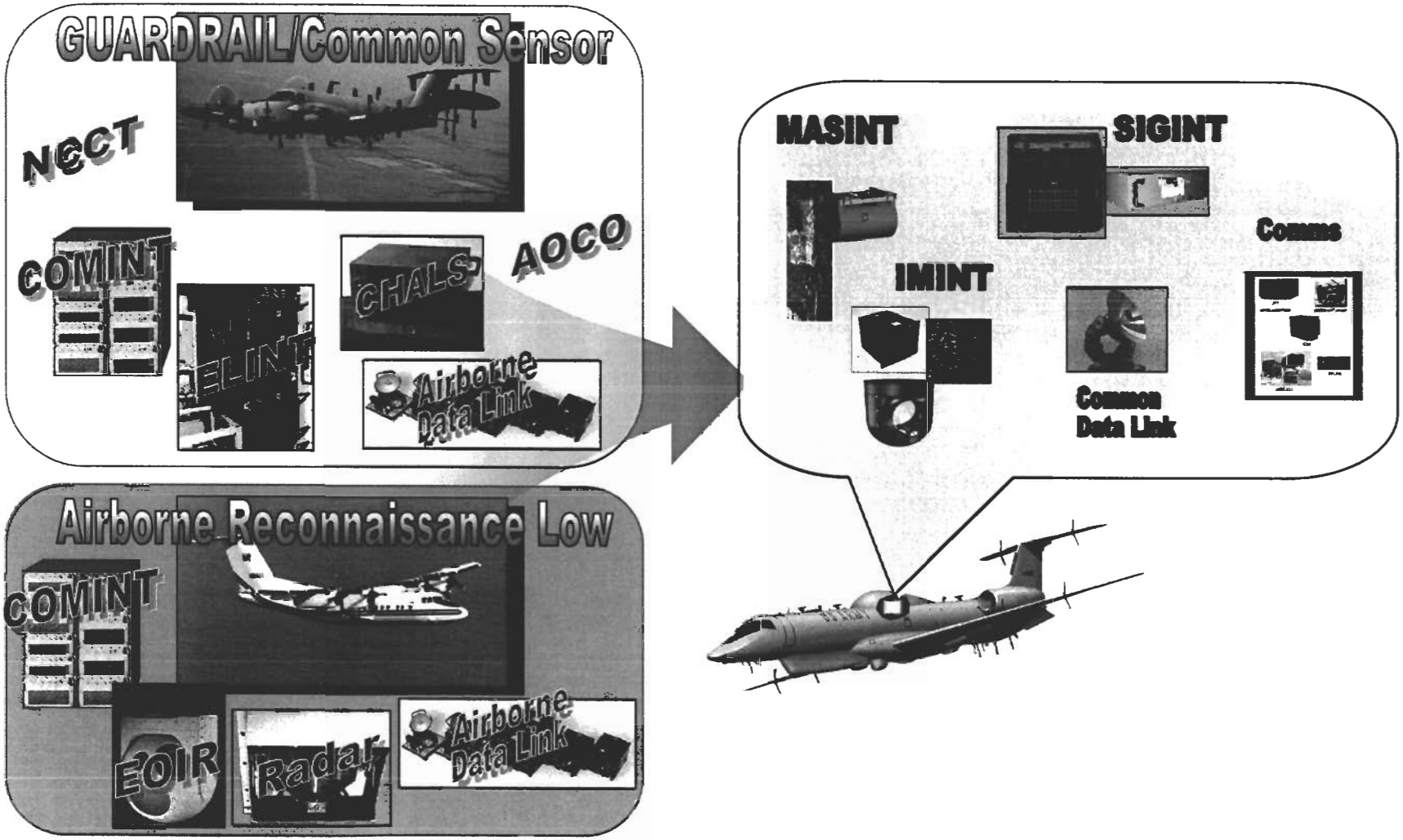
DCN:11611

DCN:11611

# DCGS-A Future Force Intelligence Processing



# ACS—The Future Force ISR System



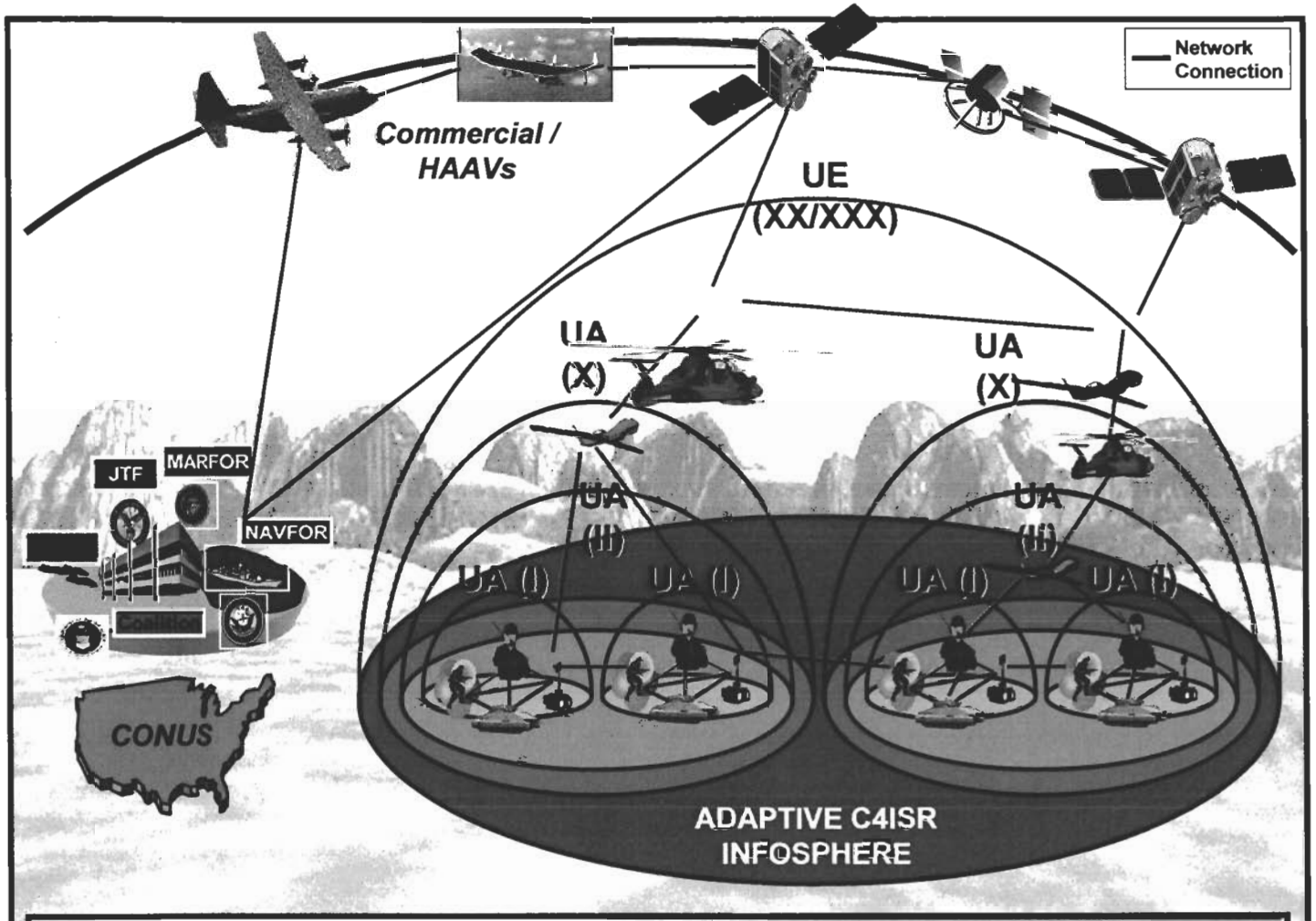

DCN:11611

DCN:11611

# WIN-T Future Force Communications

**WIN-T is:**

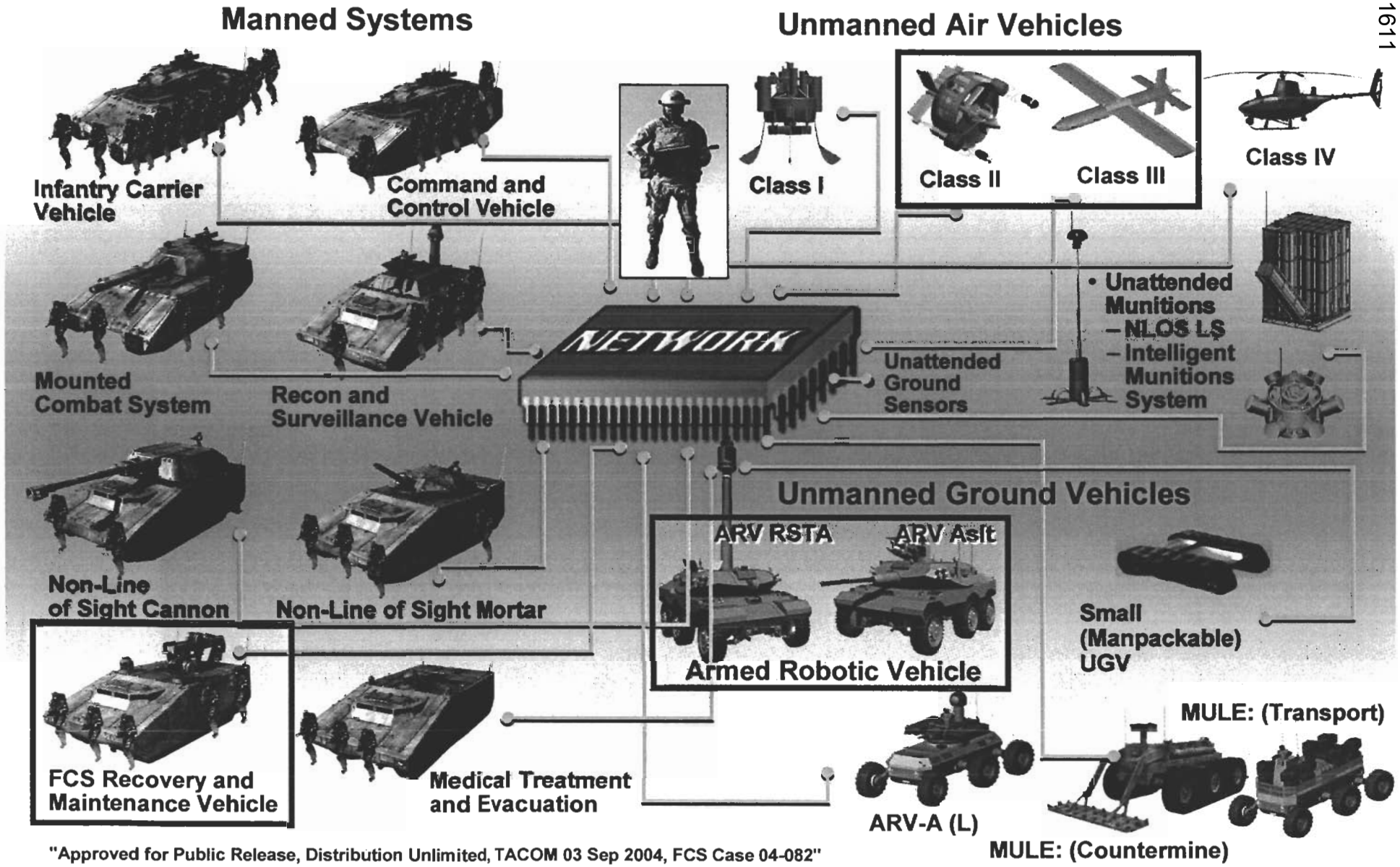
- A single integrating Future Force communications network
- Increased network capacity, speed and quality of service, reliable and secure
- Mobile Throughput for Reach over increased distances
- Scalable, tailorable, and dynamically adaptive to mission, task, purpose
- Seamless Interoperability to Joint, Coalition and Global Commercial




**A Fully Integrated C4ISR Systems-Information Superiority Enabling the Warfighter to:**

***See First, Understand First, Act First*, and *Finish Decisively***

# Future Combat System---FCS




"Approved for Public Release, Distribution Unlimited, TACOM 03 Sep 2004, FCS Case 04-082"

DCN:11611

DCN:11611

# Significant Program Disruption Likely

- Disruption to Both Current & Future Programs Will Occur
- Disruption Never Considered In Military Value Analysis
- Cost Implications Are In The Billions
- Schedule Implications Directly Impact Warfighter

DCN:11611

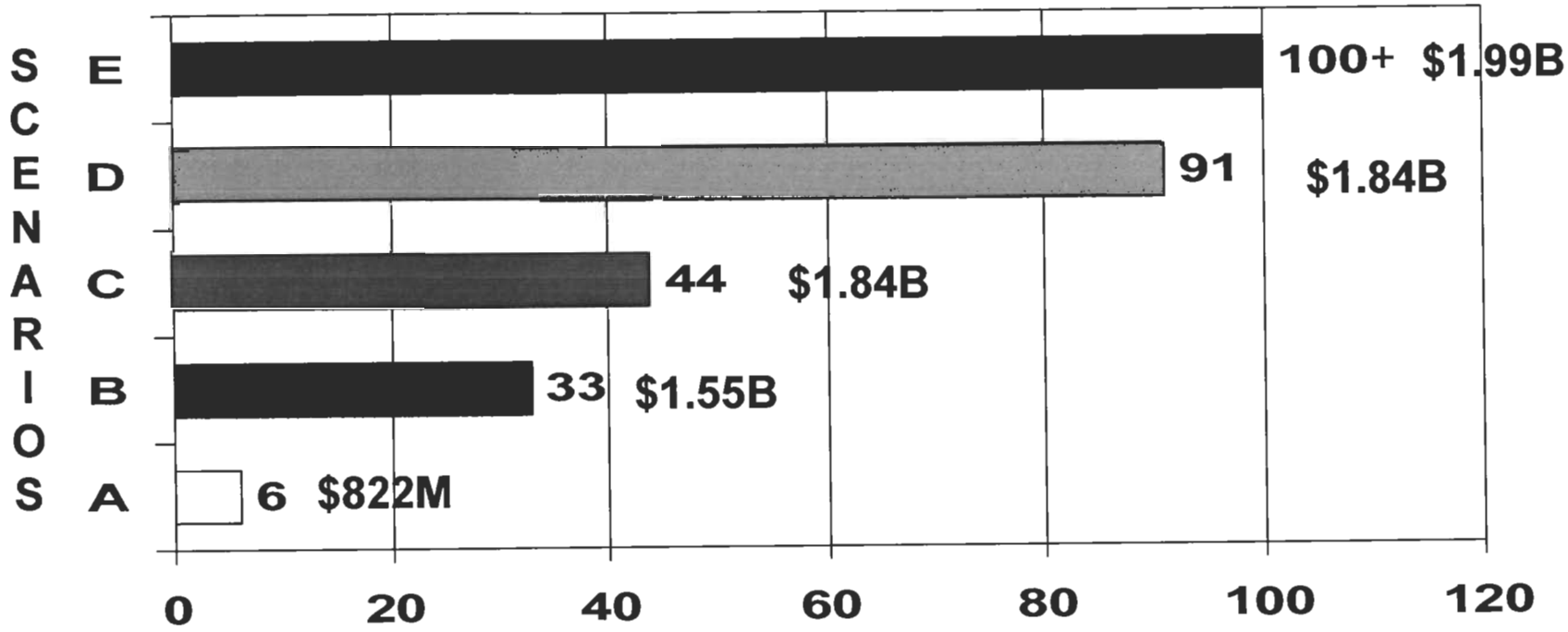
# COST ANALYSIS DISCUSSION CHARTS

## New Items Included:

- Net Present Value Included In Pay Back—Extends Payback
- COBRA Runs Showing Impact Of Military Salaries
- Sensitivity Analysis Around COBRA Corrected Data
- Simplified Explanation Of Parameters Used In Analysis
- COBRA Data Showing Impact Of New Contractor Workforce

# Total Cost And Payback Years

## Pay Back Years & Associated 1-Time Costs

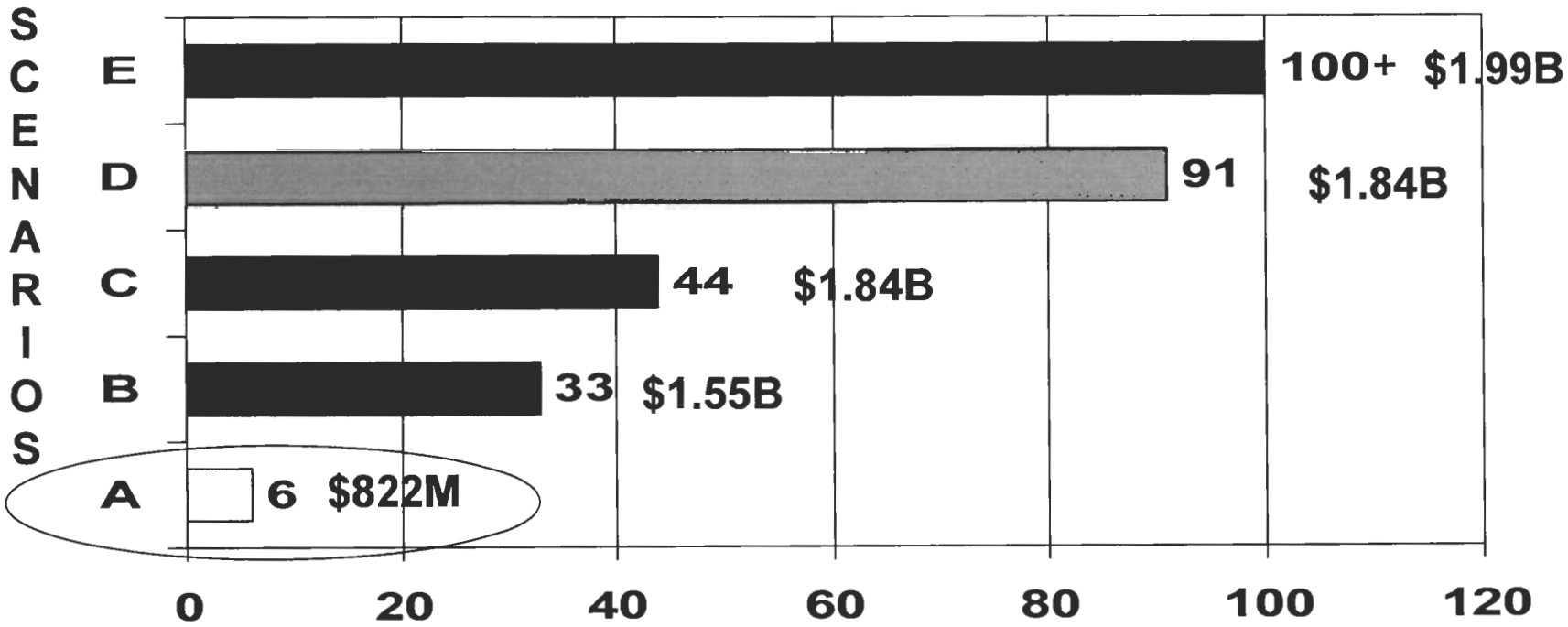



- A------- Army Base Case
- B------- Corrected Base Case
- C------- B Plus Recruit, Hire, and Train New Work Force
- D------- C Plus No Military Eliminated (No Savings)
- E------- D Plus Cost Of Reconstituting Contractor Work Force

DCN:11611

# Army Base Case --- Scenario A

## Pay Back Years & Associated 1-Time Costs




Errors In Army Base Case

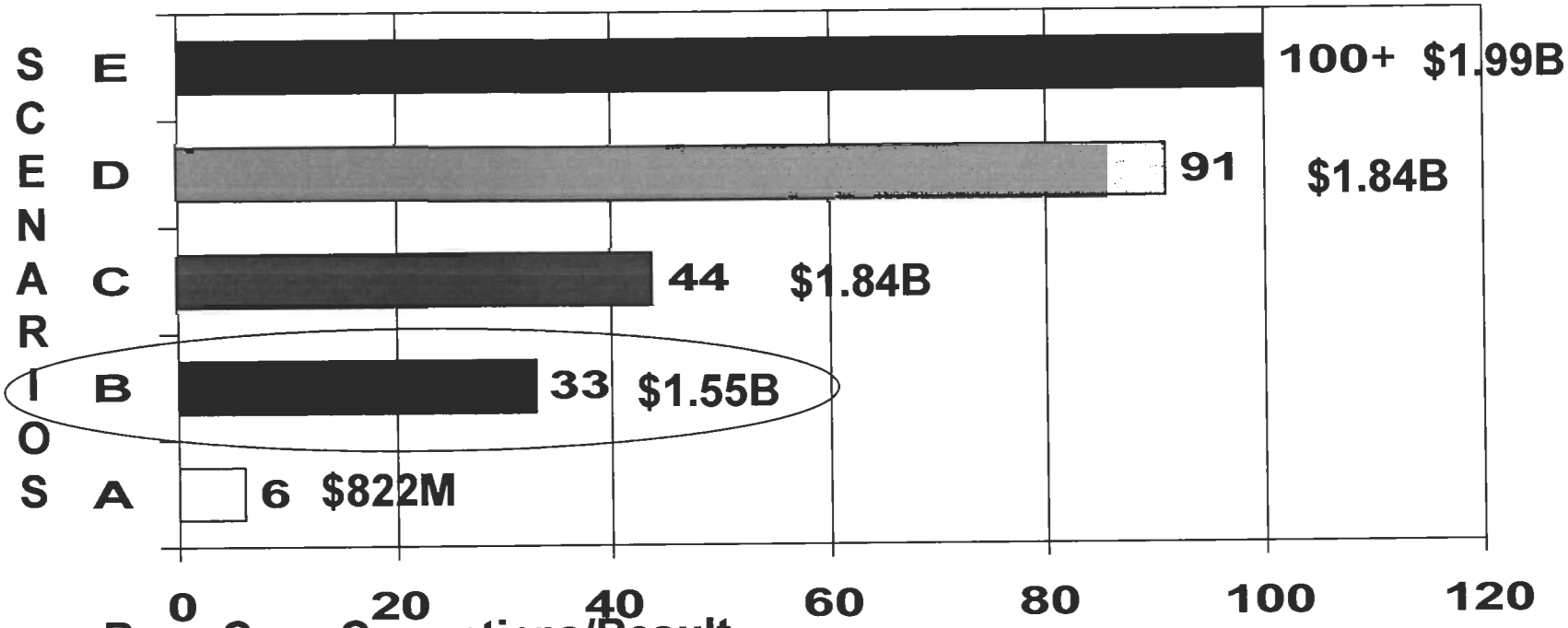
- **MILCON -**
  - ✓ Monmouth/Belvoir - Insufficient Lab and Admin Space
  - ✓ USMAPS - Omitted & Underestimated Facilities
  - ✓ Aviation Facilities - Underestimated Space and Omitted Facilities
- **Other $$$ -** Omitted Replication of Special Facilities
- **Other Cobra Costs/Savings**
  - ✓ Unrealistic assumption of employees willing to transfer
  - ✓ Omitted Overhires
  - ✓ Errors in Monmouth BOS Input Data (overstated)
  - ✓ Omitted Reimbursable BOS Costs at APG
  - ✓ Improperly Applied "Back-Office" Collocation Efficiency Savings

DCN:11611

DCN:11611

# Corrected Base Case --- Scenario B

## Pay Back Years & Associated 1-Time Costs




## Base Case Corrections/Result

| | DoD | Chg | Result |
|---|---|---|---|
| • **MILCON -** | | | |
| ✓ Lab & Admin (1-Time Cost) | $368M | $279M | $647M |
| ✓ USMAPS (1-Time Cost) | $24M | $195M | $219M |
| ✓ Aviation Facilities (1-Time Cost) | $56M | $60M | $116M |
| • **Other $$$ -** Special Facilities (1-Time Cost) | $0M | $253M | $253M |
| • **Other COBRA Costs/Savings** | | | |
| ✓ Employee Transfer & Overhires (Recurring Cost) | $218M | -$74M | $144M |
| ✓ BOS Input (Recurring Save) | $93M | -$44M | $49M |
| ✓ Reimbursables (Recurring Cost) | $0M | $13M | $13M |
| ✓ Back-Office Efficiencies (Recurring Save) | $4M | -$4M | $0M |

DCN:11611

# MILCON – RDTE & Admin Space

## Increase of $ 474M

- DoD Basis of Estimate
  - ✓ Approximate 1.3M* RDE & Admin Sq Ft - Unclear at Best
  - ✓ Army Data Call not Well Understood, Resulting in Underestimates
- Monmouth Belvoir - Bottoms-Up Recalculation of Existing Occupied Lab (RDE) & Admin Space
  - ✓ Data Drawn from IMA Std Facilities Reports (R-Plans)
  - ✓ Cross Checked with Installation/Command staffs
- West Point - FE Estimate (DD1391 documents $219M in Cost); USMAPS Rpt
- Corrected Monmouth Belvoir Input* -

| Location | Admin (Sq Ft) | RDE (Sq Ft) | Total (Sq Ft) |
|---|---|---|---|
| Mon | 1,112,323 | 776,285 | |
| Belvoir | 175,423 | 385,527 | |
| Total | 1,287,746 | 1,161,812 | 2,449,558 |
| FAC | 6100 @ $150 | 3151 @ $320 | |

- Shortfall - Approximately One Million Square Feet

* Note. Does not include an 176,000 Sq Ft RDE SCIF; separately priced by DoD.

DCN:11611

# MILCON - Aviation Facilities

## Increase $60M

- DoD Basis of Estimate
  - ✓ Not Readily Traceable to Specific Facilities
  - ✓ Data Call not Clear nor Precise; Reply Omitted Significant Items
- Replication of Existing Aviation Facilities
  - ✓ Lakehurst NAS
    - ➢ Underestimated Hanger Space – Fixed & Rotary Wing
    - ➢ Omitted Hanger and Docking Pad - Lighter than Air (LTA), Aerostat
  - ✓ Davidson AAF – Omitted Hanger Space – Fixed, Rotary & UAV

| Location | DoD Estimate | Hanger (Sq Ft) | Pad (Sq Yd) |
|---|---|---|---|
| Lakehurst NAS | 210,000 | + 99,000 | |
| Lakehurst LTA | 000 | +125,000 | +53,000 |
| Davidson AAF | 000 | + 33,000 | |
| Total | 210,000 | +257,000 | +53,000 |
| FAC | | 2111 @ $211 | *1163 @ $101 |

*Note. 1163 is Aircraft Washing Pad and was chosen as a reasonably close match for the exact FAC.

# MILCON - Special Facilities

## Increase $253M

- Special Facilities & Labs –
  - ✓ " Space Park" Major Item With 24x7 Unique Mission
  - ✓ Evolve - Become "built-ins" (Equipment in Place)
  - ✓ Utilize "Legacy" & "One of a Kind" Equipment
  - ✓ Reply To Data Call Inadequate At Fort Monmouth
- DoD Basis of Estimate –
  - ✓ Unknown From Data Available
  - ✓ Limited Costs may Appear in 1-Time Moving Cost
- Community Basis of Estimate -
  - ✓ Surveyed 92 Labs/Facilities, at Least 14 have "built-ins" Requiring Replication, vice Tear-down/Transport/Re-assemble/Calibrate
  - ✓ Estimates for Facility Reconstruction, ($0.5M - $25M)
  - ✓ Detailed Description/Rationale for Facilities in Cost Annex
  - ✓ Estimate For Space Park Range From $102M--$343M (Replicate)
- Conservative Cost to Reconstruct - $253M

DCN:11611

# Other COBRA Costs/Savings

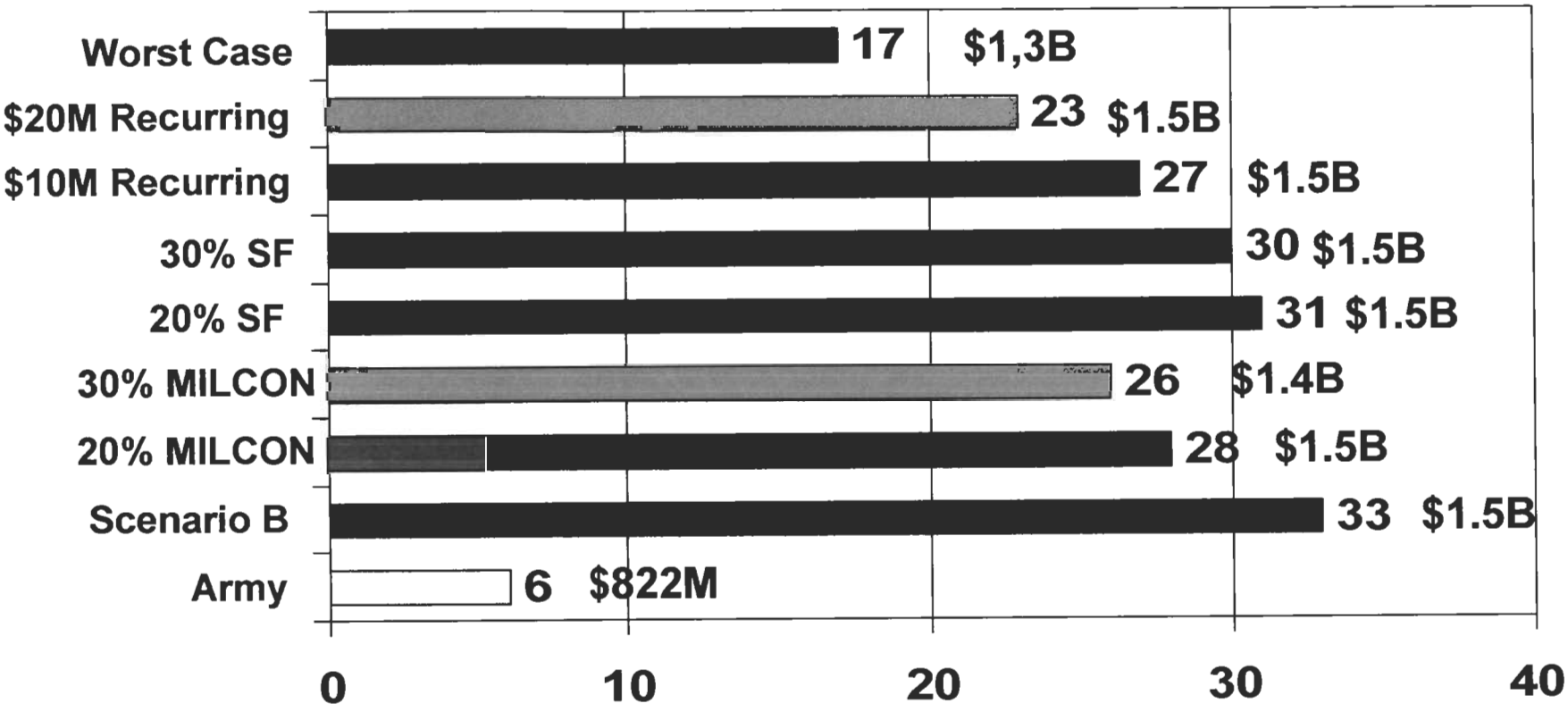
- 75% Transfer Reduced to 20% Transfer - Lessons Learned = Reduced 1-Time Move Costs (-$74M)
- Overhires Added to Civilians Moving - Overlooked = Increased 1-Time Move Costs
- Reduced Monmouth BOS - Error in Installation IMA Input Data = Reduced Recurring Savings at Monmouth (-$44M)
- Increased BOS at APG - Omission Monmouth Reimbursable Costs at APG = Increased Recurring Costs at APG (+$13M)
- Credit for Civilian Position Eliminations at Belvoir - No Rationale/Justification = Reduced Recurring Savings (-$4M)

# Excursions Around Scenario B

- Tested The Sensitivity Around Scenario B Using The Following:
  - MILCON
    - Reduced By 20% and 30%
  - Special Facilities
    - Reduced By 20% and 30%
  - Recurring Cost/Savings
    - Decreased By $10M & $20M
- Examined A Worst Case Scenario That Combined The Above: 30% MILCOM; 30% Special Facilities; $20M Recurring Cost

DCN:11611

# Excursions Around Scenario B—Community Base Case

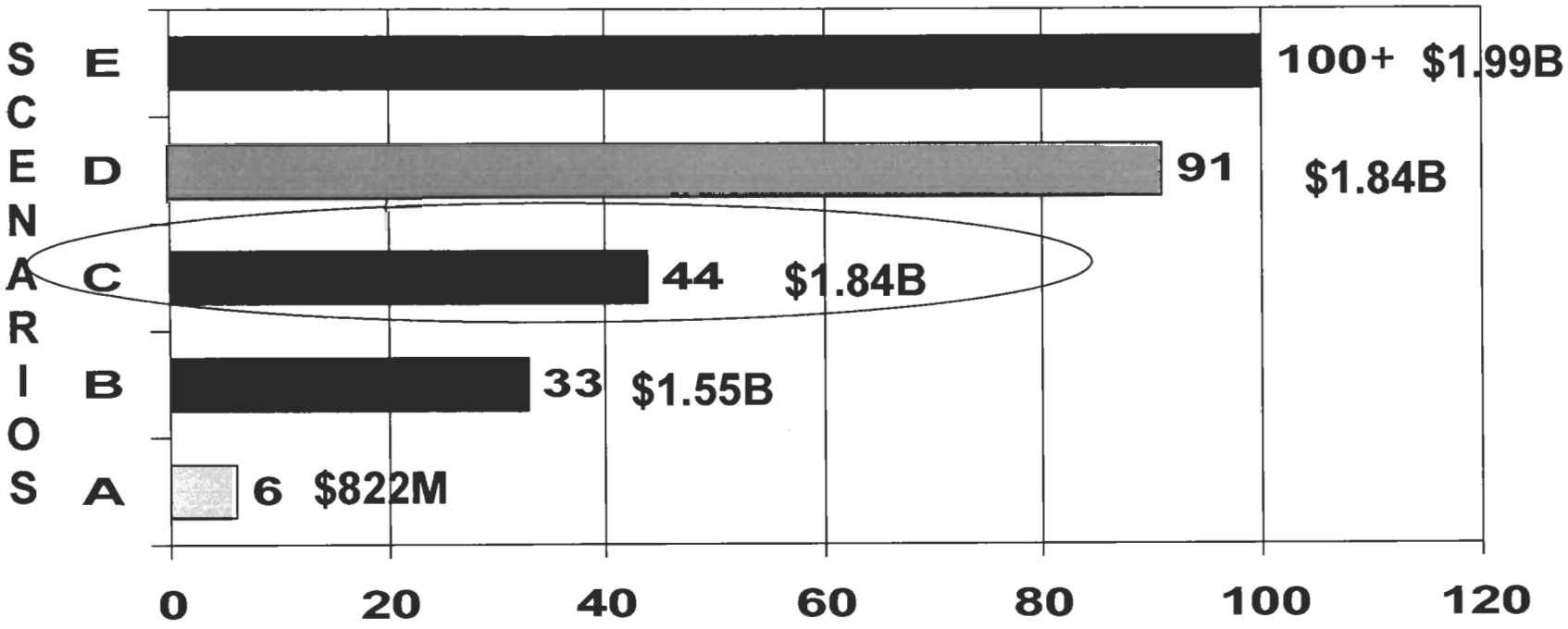



- Excursions Do Not Impact Basic Conclusions---Army Estimates Are Severely Understated
- Worst Case Is Highly Unlikely-----Yet Cost And Pay Back Are Still Significant
- Recurring & One Time Costs Dominate The Analysis

DCN:11611

# Recruit, Hire, & Train Corrections ---- Scenario C

Pay Back Years & Associated 1-Time Costs




- **DoD did not discuss, consider or calculate the loss of the technical workforce – feeds disruption to current and future mission**
  - ✓ COBRA uses a standard 75% will move
  - ✓ History shows ~20% move
  - ✓ Harris Poll = 18 % move
- **Extraordinary Impact in Time of War**
- **Costs to Reconstitute = $300M**

# Reconstitute Workforce

- Used Established Models To Estimate Costs To Recruit/Train---- Conservative Estimates Below Those Used In The Referenced Studies

- Variables:
  - E&S Senior Grades & E&S Lower Grades—Used % Of Salary
  - Acquisition Certified Senior Grades & Lower Grades—Used % of Salary
  - Training Durations Over A Number Of Years Based On Functional Expertise; Job Requirements; Formal Education Requirements; and Certification Requirements

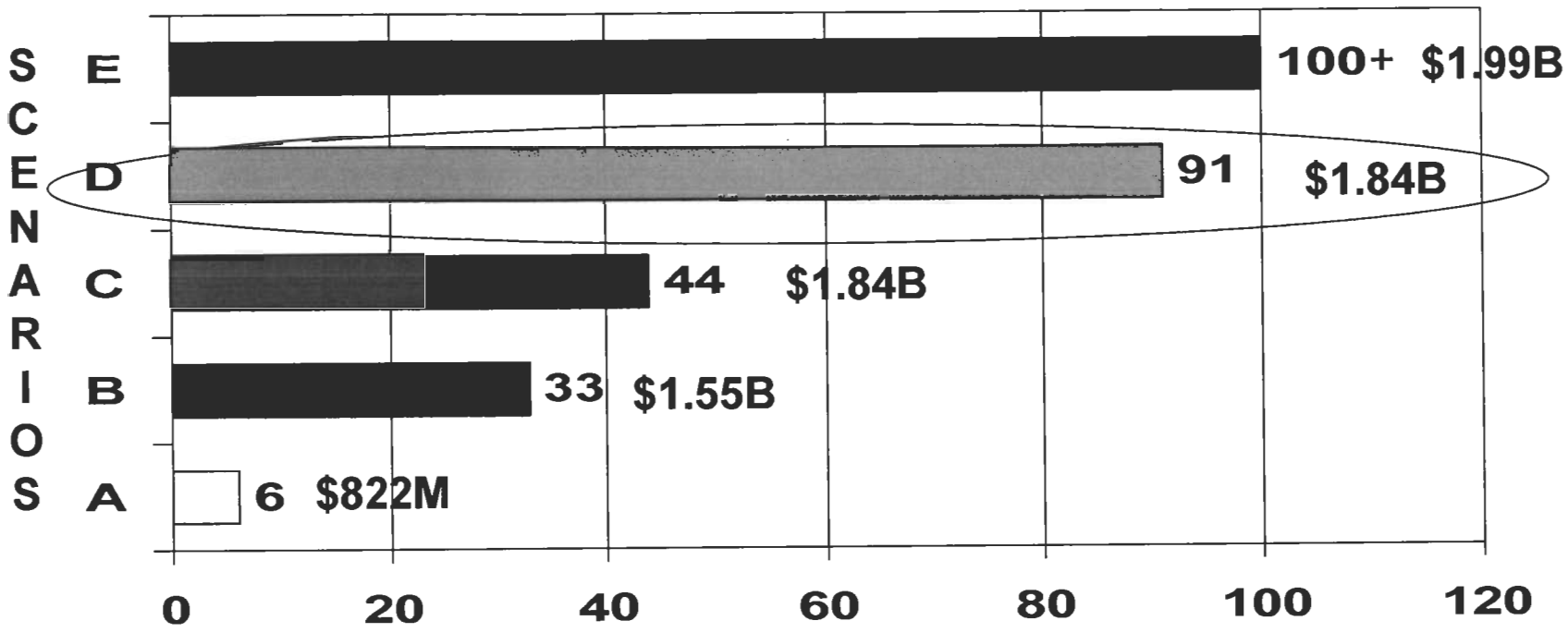
- Total number of vacancies used = ~3000

**Result: $300M cost to reconstitute the workforce**
**Range: ~ $200M - $400M**

Sources: Bliss & Assoc; N Sorenson; B. Ettore; J. Fitz-enz; W Cascio; Marshall et al. and conferred w/ other R&D center on model constants

# Military Pay Corrections --- Scenario D

## Pay Back Years & Associated 1-Time Costs



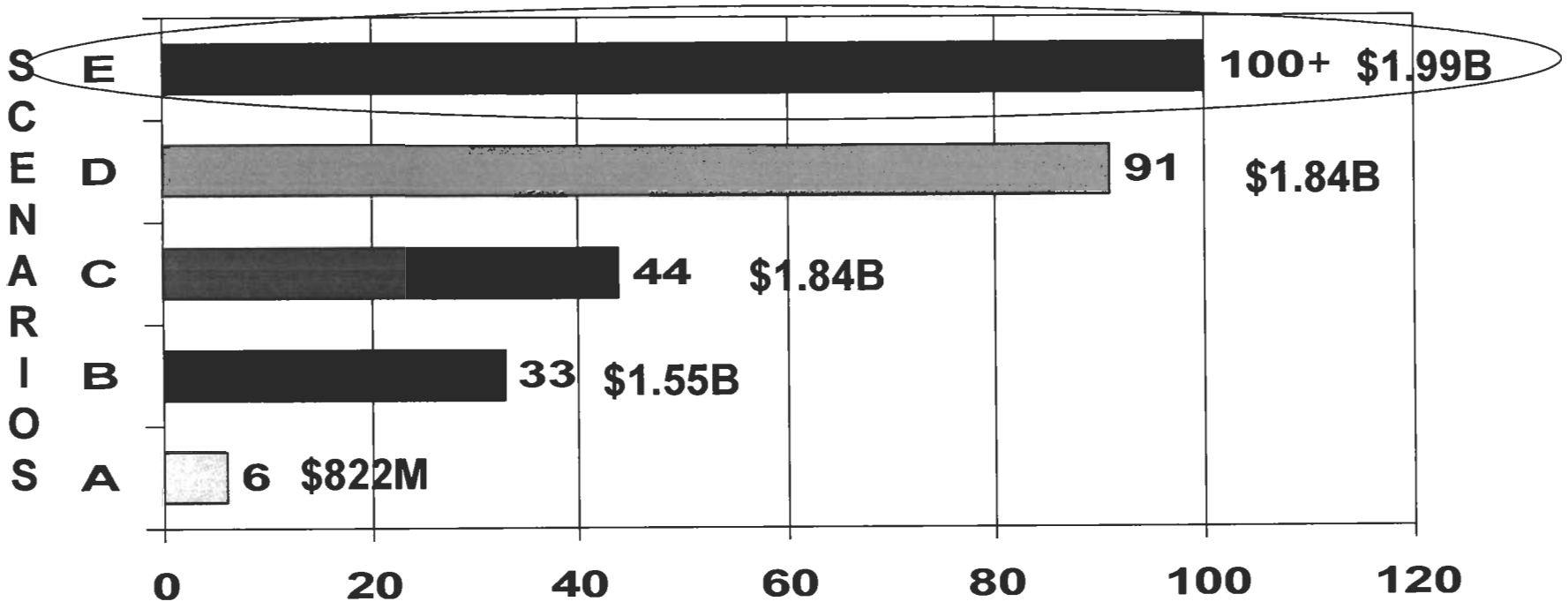

### Military Pay Savings Corrections

- GAO Observation - Savings taken; Positions Applied Elsewhere
- Base Case Reflects $22M in Military Salary & Housing Allowance as Recurring Savings
- Eliminate Military Salary Savings

DCN:11611

# Contractor Workforce Corrections --- Scenario E

## Pay Back Years & Associated 1-Time Costs




Contractor Workforce Corrections

- DOD analysis does not consider impact of Contractor workforce
- Survey indicates less than 15% Contractors will relocate
- Revised analysis conservatively estimates costs by using Government PCS rate

DCN:11611

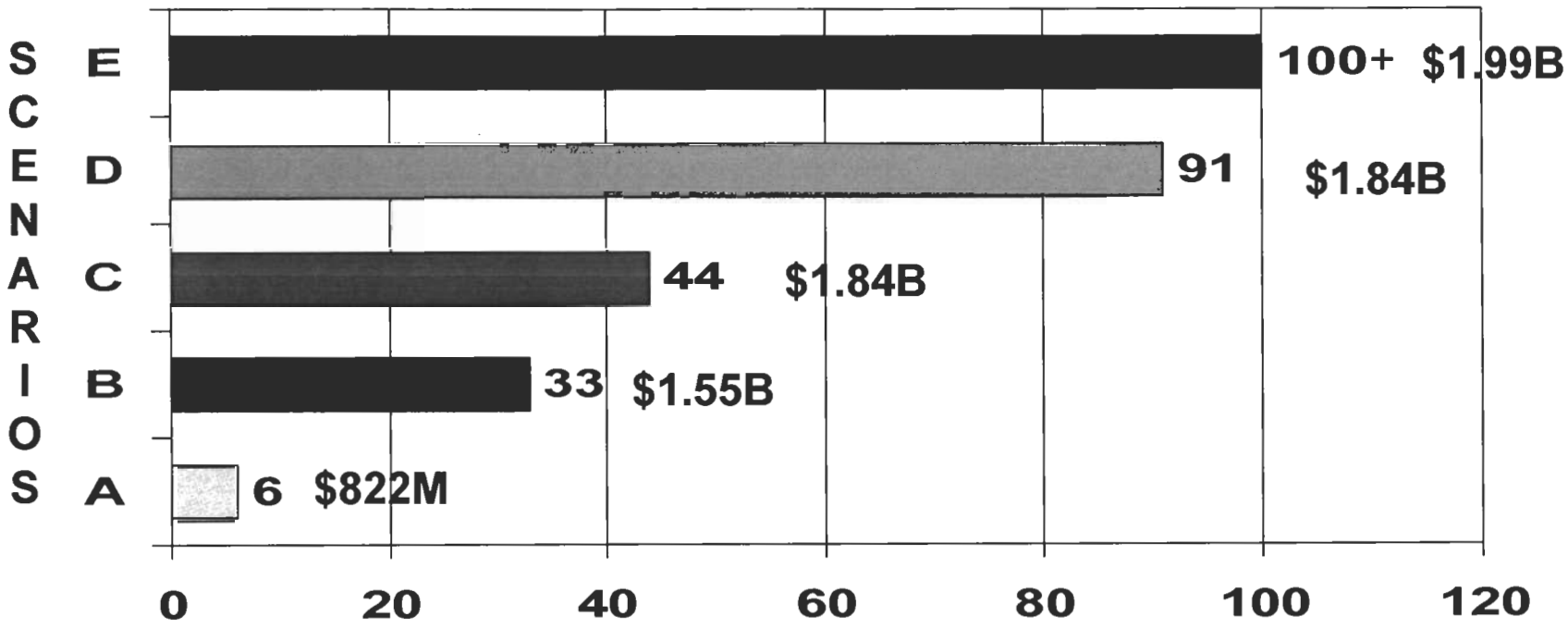
# Contractor Workforce

- For Fort Monmouth, COBRA Projects -
  - ✓ 4212 Civilians Transferring
  - ✓ Cost to Move = $160.1M
- Community Estimate -
  - ✓ 4000 Supporting Contactors
  - ✓ Assume Cost @ 95% of Civilian Cost to Move
  - ✓ Total Contractor Move Cost = $152.1M
- Contractor Cost To Recruit, Hire, Train Their New Workforce Are Costs That Will Pass Largely To the Government

DCN:11611

# CONCLUSIONS

## Pay Back Years & Associated 1-Time Costs




- DoD Estimate Fails to Include many Costs & Overstates Savings
- Corrected Estimate (Scenario B) Demonstrates Reality is a 33 yr Payback
- Additional Non-COBRA Costs Significantly Extend Payback Years
- With Regard to Cost - Recommendation FAILS to Pass Muster

DCN:11611

DCN:11611

# Military Value & The Opportunity For Joint Experimentation Discussion Items

## New Items Included:

- MV Rankings Of Dix & Fort Monmouth
- Description & Value Of Recent Joint Experiment
- Infrastructure In Place & Role Experiments Are Playing In Defining Future Army C4ISR Needs

# Mission Military Value

- Relates to **Criteria 1-4**
- Military Value for technical mission
  - Monmouth scores ~2X the rest; Aberdeen last
- Source: DOD BRAC Army Recommendation Supporting Information 09 May 05, Tab 1

| | R Info Systems | R Sensors EW | D&A Info Systems | D&A Sensors EW |
|---|---|---|---|---|
| Monmouth | 0.46 1st | 0.34 3rd | 0.48 1st | 0.43 1st |
| Belvoir | 0.07 5th | 0.39 2nd | 0.23 5th | 0.25 3rd |
| Adelphi | 0.25 3rd | 0.50 1st | --- | --- |
| Redstone | 0.24 4th | 0.23 4th | 0.23 4th | 0.34 2 nd |
| Aberdeen | 0.28 2nd | 0.17 5th | --- | 0.22 4th |

DCN:11611

DCN:11611

# Application of Installation Military Value ?

## Landlord or Mission priority?

- Direct Fire
- MOUT
- Heavy Maneuver
- Indirect Fire
- Airspace
- Gen. Instruction
- Applied Inst.
- Air Quality
- Noise
- Soil
- Mob History
- Force Deploy
- Mat'l Deploy
- Operations
- Accessibility
- Connectivity
- **RDT&E Mission Diversity**
- **Test Ranges**
- Munitions
- Workload
- Maintenance
- Supply Storage
- Ammo Storage
- Crime
- Medical Availability
- Housing
- In State Tuition
- Employment
- Workforce Availability
- Area Cost
- Joint Facilities
- C2 Target Facilities
- Installation unit cost
- Buildable acres
- Brigade capacity
- Environment
- Urban Sprawl
- Infrastructure Proximity
- Water

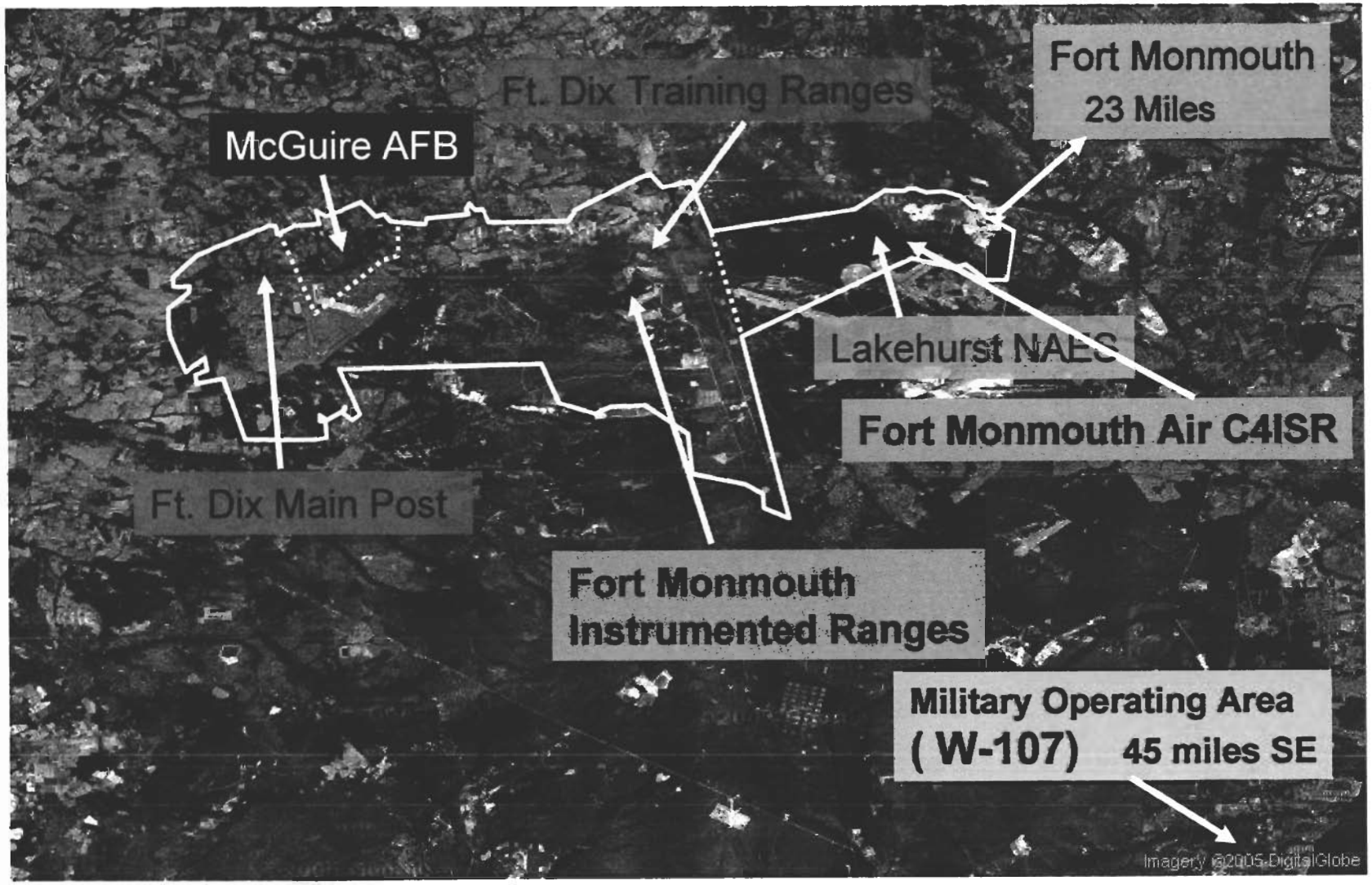
**Only two attributes are R&D or C4ISR relevant**

DCN:11611

## Military Value Comparison

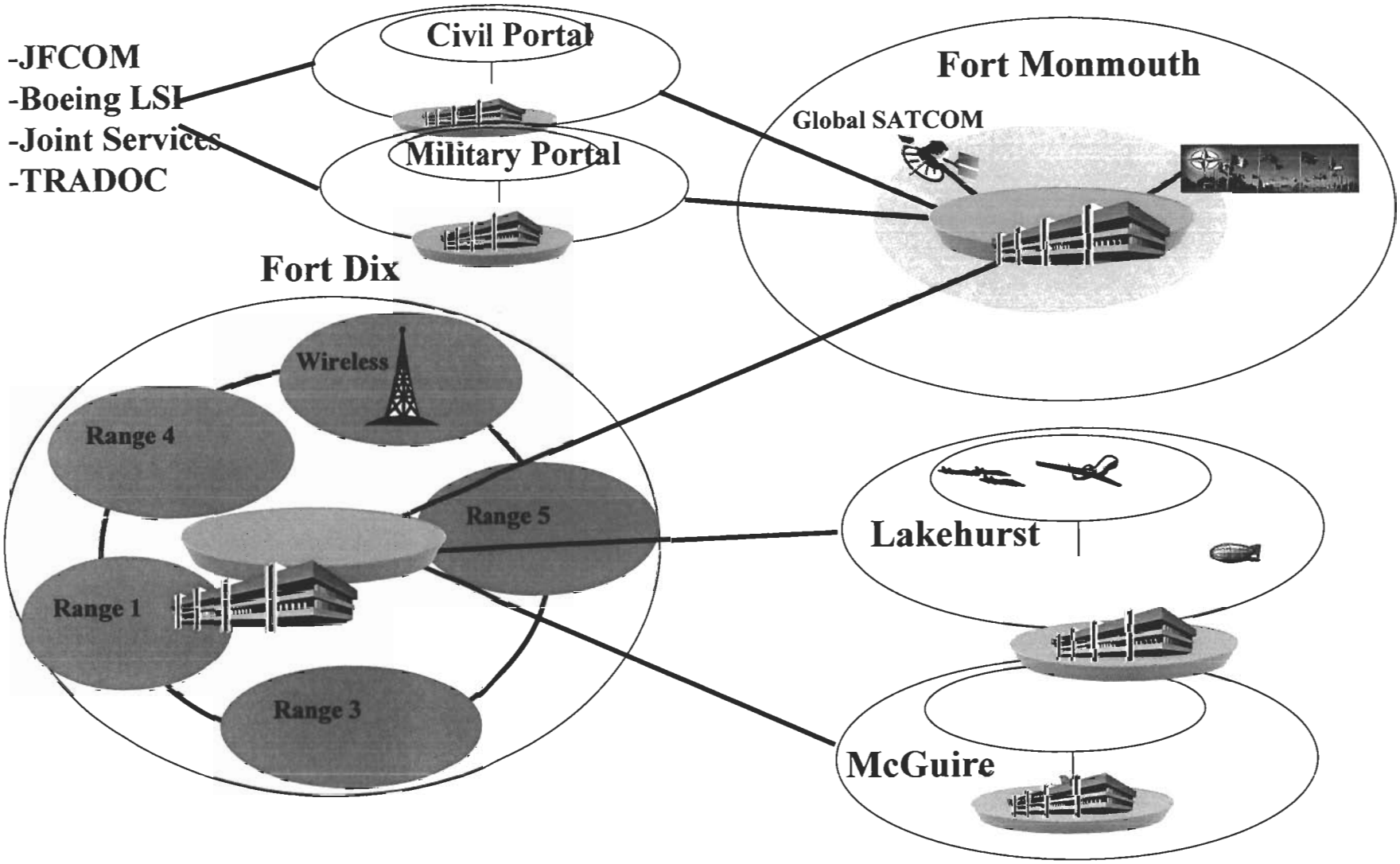
| | | APG | FT Dix | Ft M | Consol Dix+M | | Weight | Score |
|---|---|---|---|---|---|---|---|---|
| Overall MVI | | 4.18 | 3.47 | 2.25 | 4.13 | | | 4.1265 |
| Overall Ranking (of 97 in Army) | | 18 | 23 | 50 | 19 | | | |
| A1 | Direct Fire Capability | 0.00 | 3.30 | 0.00 | 3.30 | | 5.45% | 0.17985 |
| A2 | Indirect Fire Capability | 1.70 | 1.00 | 0.00 | 1.00 | | 4.90% | 0.049 |
| A3 | MOUT Capabilities | 5.80 | 0.95 | 0.00 | 0.95 | | 0.54% | 0.00513 |
| A4 | Heavy Maneuver Area | 0.00 | 0.08 | 0.00 | 0.08 | | 5.45% | 0.00436 |
| A5 | Light Maneuver Area | 0.20 | 0.85 | 0.00 | 0.85 | | 4.90% | 0.04165 |
| A6 | Airspace | 10.00 | 2.63 | 0.00 | 2.63 | | 4.90% | 0.12887 |
| A7 | General Instructional Facilities | 4.43 | 4.53 | 0.21 | 4.53 | | 0.27% | 0.012231 |
| A8 | Applied Instructional Facilities | 7.51 | 0.98 | 0.11 | 0.98 | | 0.27% | 0.002646 |
| A9 | Air Quality | 10.00 | 6.67 | 10.00 | 10.00 | | 0.54% | 0.054 |
| A10 | Noise Contours | 0.00 | 1.50 | 10.00 | 10.00 | | 0.54% | 0.054 |
| A11 | Soil Resiliency | 8.48 | 6.56 | 0.00 | 6.56 | | 2.72% | 0.178432 |
| A12 | Water Quantity | 5.11 | 3.66 | 0.00 | 3.66 | | 1.09% | 0.039894 |
| A13 | Mobilization | 0.80 | 10.00 | 0.08 | 10.00 | | 4.09% | 0.409 |
| A14 | Force Deployment | 3.61 | 4.56 | 2.32 | 4.56 | | 4.90% | 0.22344 |
| A15 | Materiel Deployment | 6.85 | 1.64 | 4.07 | 4.07 | | 4.90% | 0.19943 |
| A16 | Operations/Administrative Facilities | 6.75 | 1.18 | 3.55 | 3.55 | | 0.54% | 0.01917 |
| A17 | Accessibility | 10.00 | 10.00 | 10.00 | 10.00 | | 2.72% | 0.[illegible] |
| A18 | Connectivity | 9.00 | 6.30 | 10.00 | 10.00 | | 1.09% | 0.109 |
| A19 | RDT&E Mission Diversity | 10.00 | 0.00 | 5.44 | 5.44 | | 1.09% | 0.059296 |
| A20 | Test Range Capability | 4.36 | 0.54 | 0.54 | 0.54 | | 4.09% | 0.022086 |
| A21 | Munitions Production Capability | 0.00 | 0.00 | 0.00 | 0.00 | | 2.72% | 0 |
| A22 | Ammunition Storage Capacity | 0.00 | 0.00 | 0.00 | 0.00 | | 0.54% | 0 |
| A23 | Inetrservice/Partnering Workload Flexibility | 0.00 | 0.00 | 0.00 | 0.00 | | 4.09% | 0 |
| A24 | Maintenance/Manufacturing Capability | 0.00 | 0.02 | 0.00 | 0.02 | | 2.72% | 0.000544 |
| A25 | Supply and Storage Capacity | 2.55 | 0.51 | 0.35 | 0.51 | | 0.54% | 0.002754 |
| A26 | Crime Index | 2.86 | 5.98 | 5.98 | 5.98 | | 2.72% | 0.162656 |
| A27 | Employment Opportunity | 2.22 | 5.81 | 5.81 | 5.81 | | 1.09% | 0.063329 |
| A28 | Housing Availability | 7.66 | 4.72 | 1.07 | 4.72 | | 2.72% | 0.128384 |
| A29 | Medical Care Availability | 5.15 | 10.00 | 6.34 | 10.00 | | 0.54% | 0.054 |
| A30 | IN-State College Tuition Policies | 4.33 | 10.00 | 0.00 | 10.00 | Sa | 0.54% | 0.054 |
| A31 | Workforce Availability | 10.00 | 10.00 | 10.00 | 10.00 | | 1.09% | 0.109 |
| A32 | Joint Facilities Cost Sharing | 5.42 | 3.65 | 5.42 | 5.42 | | 2.72% | 0.147424 |
| A33 | Area Cost Factor | 8.92 | 6.85 | 6.77 | 6.85 | | 4.09% | 0.280165 |
| A34 | C2 Target Focus Facilities | 0.95 | 0.07 | 2.84 | 2.84 | | 0.27% | 0.007668 |
| A35 | Installation Unit Cost Factor | 0.00 | 0.00 | 0.00 | 0.00 | | 1.09% | 0 |
| A36 | Buildable Acres | 8.96 | 8.75 | 8.81 | 8.81 | | 4.09% | 0.360329 |
| A37 | Brigade Capacity | 6.37 | 2.93 | 0.54 | 2.93 | | 5.45% | 0.159685 |
| A38 | Environmental Elasticity | 3.63 | 0.35 | 0.35 | 0.35 | | 1.09% | 0.003815 |
| A39 | Urban Sprawl | 5.42 | 5.73 | 0.34 | 5.73 | | 2.72% | 0.155856 |
| A40 | Critical Infrastructure | 10.00 | 9.13 | 9.13 | 9.13 | | 4.09% | 0.373417 |
| | | | | | | | 99.91% | |

# Dix, Lakehurst, McGuire Joint Base
# " **DLM Joint Base**"




DCN:11611

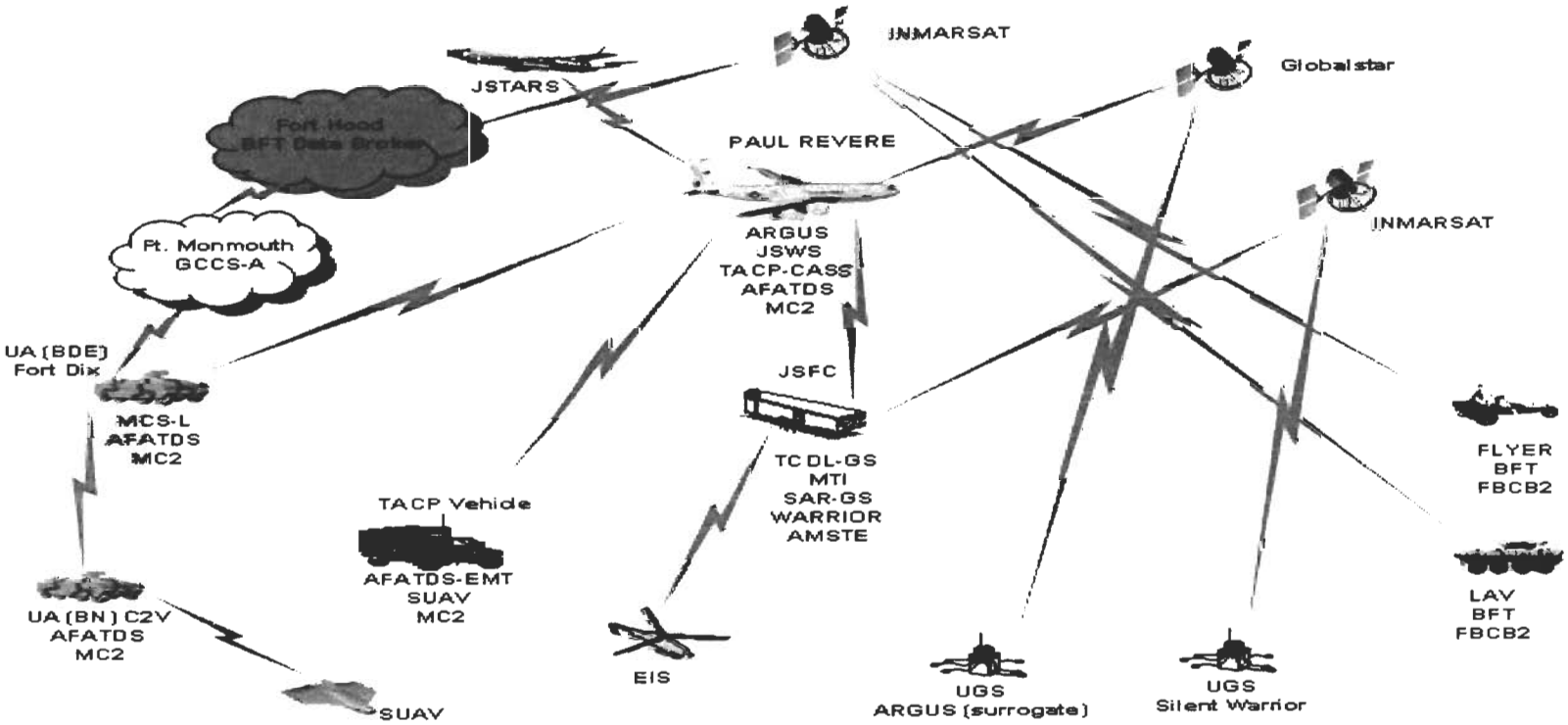
# New Jersey Joint Base Infrastructure




DCN:11611

DCN:11611

# Joint Interoperability Exercise Systems Architecture




- JINEX Provided Army An Initial Look At FCS Concepts & Surrogate Hardware Operating as a System of Systems In A Network Centric Architecture
- Joint Experiment Composed Of Systems & Technologies From The Army RDT&E; Army PEO & PMs; Air Force Technology & Acquisition Community; & Industry.
- Vignettes Designed To Address Joint Integration Areas On Current Operational Constructs. Exercise Based On Future Combat Systems (FCS) Requirement & Army-Air Force Joint Operations.
- Involved TRACOC, PM-FCS; Boeing FCS/LSI; Army Test Command; Air Force Hanscom AFB; & Army Reserve Units

# MV & Joint Experimentation Conclusions

- Can Take Advantage Of A Premier Installation & A Premier C4ISR Organization Without Any Disruption Caused By BRAC
- Joint Experiments Are Being Conducted Frequently And Are Sanctioned By Senior Army Leadership
  - Provide Insights Into Future Directions
  - Identify Technology Needs To Focus Programs
  - Integrates C4ISR With Weapons and Platforms To Determine System of System Implications
  - Utilize Army Test Community So They Learn How To Instrument and Test Future Systems
  - Involves Industry To Obtain Insights Into Their Technology
- Recognizing The Joint Potential Will Further Expand The Opportunities & Provide A Significant Step Forward In Integrating Joint Capabilities

DCN:11611

# Benefits Of Recommendation To Make Fort Monmouth An Enclave Of The Joint Base

- Allows Army To Eliminate An Installation While Preserving The Capability Of The Experienced C4ISR Workforce.
- Enhances Opportunity For Joint Experimentation And Takes Advantage Of An Instrumented Capability In Place At The Joint Base
- Review The Fort Monmouth "Footprint" ---Potential To Shed Acreage By 40%
- Eliminates The Need For Expenditure Of Considerable Funds With A Resultant Extended Payback Period ( unattainable and unrealistic in POM plus Extended Planning Annex period)
- No Disruption To Critical C4ISR Programs And Enables Continuity Of Current Force and Future Force C4ISR Modernization
- Takes Advantage Of Military Value Of Premier Joint Installations Coupled With The Highest C4ISR RDT&E Military Value Ranking
- Eliminates Any Impact On Supporting War Time Forces
- Recognizes An Existing Land Warfare C4ISR Center Of Excellence And Eliminates The Need To Begin A 10 Year "Rebuilding" Effort

DCN:11611