

**BRAC 2005**  
**Technical Joint Cross-Service Group (TJCSG)**  
**Meeting Minutes of 18 November 2004**

Dr. Sega chaired the meeting. The agenda is enclosed in attachment 1. The list of attendees is enclosed in attachment 2. Read ahead materials for the meeting are enclosed in attachment 3. The primary objective for the meeting was to review the Weapons and Armaments (W&A) Subgroup's scenarios. The agenda topics are listed below in the order in which they were covered. The key points, decisions and action items from the meeting are as follows:

Scenario Overview – Ms. Felix

**Key Points:**

- The TJCSG has 42 registered scenarios. Some of these have been remanded to the services. Some are still in work.

**Decisions:**

- Ms. Felix will add an additional column on the Scenario List identifying those scenarios that are still in work.

Macro-Schedule – Mr. Shaffer

**Decisions:**

- Dr. Short will identify the number of outstanding critical questions remaining for each Service and the Services' assessment of how likely this data will be obtainable.
- The Analysis Team will begin posting the Scenario Data Call Worksheets on the portal for the TJCSG and CIT Principals to review and will notify them via e-mail when they are ready for review. Once reviewed by the TJCSG Principals the Data Call worksheets will be released to the Services.

Weapons and Armaments – Dr. Higgins

**Key Points:**

- Air Force In-Service Engineering resides at the Air Force Air Logistics Centers (ALC) and the Air Force desires to keep this located at the ALCs. The Air Force suggested capturing this idea in the BRAC report and work towards evolving Service-specific business models to be consistent in the future and that this be done outside of BRAC2005. Likewise, although Kirtland AFB is currently the center of gravity for Directed Energy Research, there is not a significant enough workload being done elsewhere to warrant BRAC2005 actions associated with establishing Kirtland as a Joint Center for Directed Energy Research. However, the Air Force recommended

the TJCSG also capture this idea in its BRAC report and again DoD pursue this outside of BRAC2005.

- The W/A Subgroup prioritized their scenarios based on
  1. Military value and Capacity Data
  2. How well the scenario met the subgroup's strategy.
  3. How well the scenario facilitated Jointness

**Decisions:**

- The TJCSG decided to remand TECH-0028, Underwater Weapons to Newport, to the Navy.
- The TJCSG approved all other scenarios. However, In Service Engineering versus Sustaining Engineering will be determined during the scenario data call to ensure all sustaining engineering associated with Legacy Systems remains in place without disrupting current Service business models. Mr. Goldstayn will work with the W&A Subgroup to develop the correct data call questions to segregate In-Service Engineering from Sustaining Engineering.
- CNR will not be included as a losing site based on the Navy's input that they are not involved in this workload.

The TJCSG will meet again on Monday, 22 November 2004 and Tuesday, 23 November 2004. Both meetings will take place in Crystal City, PT-1, Rm 9200 from 0900-1100 hrs EST.

**Action Items:**

1. Ms. Marie Felix will add an additional column on the Scenario List identifying those scenarios that are still in work. TO be completed by COB Friday, 19 November 2004.
2. Dr. Short will identify the number of outstanding critical questions remaining for each Service and the Services' assessment of how likely this data will be obtainable. This will be completed by COB today in preparation for tomorrow's ISG Meeting.
4. The Analysis Team will begin posting the Scenario Data Call Worksheets on the portal for the TJCSG and CIT Principals to review and will notify them via e-mail when they are ready for review. Once reviewed by the TJCSG Principals the Data Call worksheets will be released to the Services.
5. Mr. Goldstayn will work with the W&A Subgroup to develop the correct data call questions to segregate In-Service Engineering from Sustaining Engineering. To be completed by COB Friday, 19 November 2004.

November 18, 2004

BRAC FOUO

Approved: \_\_\_\_\_

  
Mr. Al Shaffer  
Chairman, Capabilities Integration Team

Attachments:

1. Outline -Agenda
2. List of Attendees
3. Read Ahead Materials

# **TJCSG Meeting Agenda**

**18 Nov 04, 1030-1200 hrs EDT**  
**Crystal City, PT-1, Rm 9200**

- **Data Status Update– COL DeSalva**
- **Capacity and Military Value Report Updates – Dr. Short**
- **Issue Papers – Mr. Shaffer**
  - **Platform Integration – Dr. Higgins**
  - **Military Judgment – Mr. DeYoung**
- **Overall TJCSG Scenario Status/Prioritization**
- **Weapons & Armaments Scenario Review**

**Attachment 2**  
**Technical JCSG Meeting**  
**November 18, 2004**  
**Attendees**

**Members:**

Dr. Ron Sega, TJCSG Chairman  
Dr. Dan Stewart, Air Force Alternate for Mr. Blaise Durante, Air Force  
Dr. John Foulkes, Army  
RADM Jay Cohen, Navy  
Dr. Barry Dillon, Marines  
Mr. Jay Erb, JCS

**Other:**

Dr. Bob Rohde, Army CIT Rep  
COL Walt Hamm, Marines CIT Rep  
Mr. Al Goldstayn, Air Force CIT Rep  
Mr. George Ryan, Navy CIT Rep  
Mr. Al Shaffer, CIT Chairman  
Mr. Andy Porth, OSD BRAC  
Mr. Gary Strack, OSD  
Ms. Marie Felix, OSD  
COL Pete DeSalva, Marines  
Dr. Karen Higgins, Weapons & Armaments Subgroup Lead  
Dr. Jim Short, OSD  
COL Steve Evans, Marines  
BG Fred Castle, OSD  
COL Bob Buckstad, OSD  
Mr. Don DeYoung, Navy  
Mr. Steve Kratzmeier, Army  
Dr. Larry Schuette, Innovative Systems Subgroup Lead  
Ms. Eileen Shibley, Navy  
Dr. Robin Buckelew, Army  
Mr. Jerry LaCamera, Navy  
Mr. Jerry Schieffer, OSD  
Mr. Marc Magdinec, Navy  
Mr. Pete O'Neill, Army  
Mr. Neil Baron, Navy

JCSG	Capacity Analysis Complete <i>(Date)</i>	Material Capacity Data Issues <i>(# ques-sites)</i>	Mil Value Analysis Complete <i>(Date)</i>	Material Mil Value Data Issues <i>(# ques-sites)</i>	Scenario Development Complete <i>(Date)</i>	Criteria 5-8 Analysis Complete <i>(Date)</i>
E&T						
H&SA						
Indus						
Intel						
Med						
S&S						
Tech	11/24/04 (1)	93 Questions (2) 26 Locations	12/10/04 (1)	248 Questions (2) 31 Locations	11/30/04 (3)	1/21/05 (4)

**NOTES**

- (1) Assumes database lock down COB 11/19
- (2) Data current as of noon 11/16
- (3) All scenario packages for which data is needed to support draft recommendations need to be disseminated.
- (4) Assumes all Scenario COBRA Data Call input will be received by 1/14/05
- (5) No data from the Corps of Engineers or SOCOM has been found in existing database

# Remaining Data Issues

	Capacity Questions	Military Value Questions
Army *	64 Questions 13 Locations	234 Questions 21 Locations
Navy *	24 Questions 11 Locations	12 Questions 8 Locations
Air Force *	5 Questions 2 Locations	2 Questions 2 Locations

\* Most if not all data issues are suppose to be corrected in next version of database.



ACQUISITION,  
TECHNOLOGY  
AND LOGISTICS

## THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3010

NOV 16 2004

### MEMORANDUM FOR CHAIRMEN, JOINT CROSS-SERVICE GROUPS

SUBJECT: BRAC 2005 Scenario Analysis Status

As discussed at the November 5, 2004, ISG meeting, and as requested in my September 23, 2004 memorandum, please provide the status of your ongoing analyses in the appropriate columns of the attached slide by November 17, 2004. The information described below will assist you in this effort:

- Capacity Analysis Complete (Date) and Mil Value Analysis Complete (Date): the projected or actual date by which you will complete "progressive closure" of your capacity and military value analysis reports.
- Material Capacity Data Issues (# ques-sites) and Material Mil Value Data Issues (# ques-sites): the total number of unresolved data points and affected sites that materially prohibit you from completing your capacity and military value analyses (e.g., 10 questions/24 sites).
- Scenario Development Complete (Date): the projected or actual date by which you will have registered in the tracking tool all the scenarios you intend to analyze.
- Criteria 5-8 Analysis Complete (Date): the projected date by which you will complete the criteria five through eight analyses for all your scenarios.

For the data issue columns, I would also like you to separately complete, by November 24, 2004, the attached Outstanding Data Issues Status Report detailing the specific questions and locations that support your answers in the table. This information will enable the OSD BRAC Office to work with you and the Military Departments to obtain the data needed to complete your analysis.

Finally, if you have concerns that may jeopardize your ability to provide candidate recommendations to the ISG by December 20, 2004, please identify those concerns to me by memorandum. If you have any questions, please contact Peter Potochney, Director, BRAC, at 703-614-5356.

Michael W. Wynne  
(Acting USD Acquisition, Technology & Logistics)  
Chairman, Infrastructure Steering Group

Attachments: As stated



JCSG	Capacity Analysis Complete (Date)	Material Capacity Data Issues (# ques-sites)	Mil Value Analysis Complete (Date)	Material Mil Value Data Issues (# ques-sites)	Scenario Development Complete (Date)	Criteria 5-8 Analysis Complete (Date)
E&T						
H&SA						
Indus						
Intel						
Med						
S&S						
Tech						

\_\_\_\_\_ JCSG  
Outstanding Data Issues Status Report

**Capacity Status**

*Material Capacity Data Issues*

Site Name	Number Unresolved Questions
Swampy	6
Ocean Side	5
Base Y	4
Base Z	5

Total: 4 sites with 20 outstanding questions.

**Military Value Status**

*Material Military Value Data Issues*

Site Name	Number Unresolved Questions
Swampy	10
Ocean Side	15
Base X	8
Base Y	8
Base Z	9

Total: 5 sites with 50 outstanding questions.

Technical JCSG  
Outstanding Data Issues Status Report

**Capacity Status**

*Material Capacity Data Issues*

Site Name	Number Unresolved Questions
ABERDEEN PROVING GROUND (Army)	22
FORT BELVOIR (Army)	13
RDECOM-ORLANDO (Army)	12
COMOPTEVFOR NORFOLK VA (Navy)	6
SURFCOMBATSYSCEN_WALLOPS_ISLAND_VA (Navy)	4
COMNAVAIRSYSCOM_PATUXENT_RIVER_MD (Navy)	3
Los Angeles AFB (Air Force)	3
FORT HUACHUCA (Army)	3
YUMA PROVING GROUND (Army)	3
Kirtland AFB (Air Force)	2
COMNAVAIRWARCENACDIV_PATUXENT_RIVER_MD (Navy)	2
COMNAVSEASYSYSCOM_WNY_DC (Navy)	2
CNR_ARLINGTON_VA (Navy)	2
FORT RUCKER (Army)	2
FORT HOOD (Army)	2
REDSTONE ARSENAL (Army)	2
DUGWAY PROVING GROUND (Army)	1
AIRTEVRON NINE CHINA LAKE CA (Navy)	1
NAVSURFWARCENDIV_PORT_HUENEME_CA (Navy)	1
DETROIT ARSENAL (Army)	1
JITC Fort Huachuca (Army)	1
CG MCCDC QUANTICO VA (USMC)	1
ROCK ISLAND ARSENAL (Army)	1
NAVPGSCOL MONTEREY CA (Navy)	1
NAVSURFWARCENDIV_CRANE_IN (Navy)	1
WHITE SANDS MISSILE RANGE (Army)	1

Total: 26 sites with 93 outstanding questions.

## Military Value Status

### Material Military Value Data Issues

Site Name	Number Unresolved Questions
ABERDEEN PROVING GROUND (Army)	96
FORT BELVOIR (Army)	28
RDECOM-ORLANDO (Army)	27
WHITE SANDS MISSILE RANGE (Army)	23
YUMA PROVING GROUND (Army)	10
REDSTONE ARSENAL (Army)	7
ADELPHI LABORATORY CENTER (Army)	7
DETROIT ARSENAL (Army)	6
FORT RUCKER (Army)	5
FORT HOOD (Army)	5
PEO STRICOM (Army)	4
FORT MONMOUTH (Army)	3
FORT HUACHUCA (Army)	3
COMOPTEVFOR NORFOLK VA (Navy)	3
COMNAVSEASYSYSCOM_WNY_DC (Navy)	3
FORT SAM HOUSTON (Army)	2
DUGWAY PROVING GROUND (Army)	2
Wright-Patterson AFB (Air Force)	1
TRIPLER ARMY MEDICAL CENTER (Army)	1
SURFCOMBATSYSCEN_WALLOPS_ISLAND_VA (Navy)	1
SOLDIER SYSTEMS CENTER (Army)	1
ROCK ISLAND ARSENAL (Army)	1
NAVPGSCOL_MONTEREY_CA (Navy)	1
NAVEODTECHDIV_INDIAN_HEAD_MD (Navy)	1
Kirtland AFB (Air Force)	1
FORT SILL (Army)	1
FORT LEAVENWORTH (Army)	1
FORT KNOX (Army)	1
COMNAVAIRSYSCOM_PATUXENT_RIVER_MD (Navy)	1
CNR_ARLINGTON_VA (Navy)	1
AIRTEVRON_NINE_CHINA_LAKE_CA (Navy)	1

Total: 31 sites with 248 outstanding questions.

Supplemental Capacity Questions (DoD#4277-4286)						
Status	1	2	3	4	5	Total by Sub Group
<b>Sub-Groups</b>						
Enabling	1	25	28	5	68	127
ALSS	5	11	36	25	40	117
Weapons	0	16	20	23	114	173
C4ISR	0	1	5	5	29	40
Analytic Team	0	1	5	0	0	6
<b>Totals</b>	<b>6</b>	<b>54</b>	<b>94</b>	<b>58</b>	<b>251</b>	<b>463</b>
	1%	12%	20%	13%	54%	

Military Value Questions (DoD# 3000-3027)						
Status	1	2	3	4	5	Total by Sub Group
<b>Sub-Groups</b>						
Enabling	13	58	188	4	145	408
ALSS	46	5	532	66	56	705
Weapons	0	23	56	50	104	233
C4ISR	0	0	1	7	9	17
Analytic Team	0	0	13	2	8	23
<b>Totals</b>	<b>59</b>	<b>86</b>	<b>790</b>	<b>129</b>	<b>322</b>	<b>1386</b>
	4%	6%	57%	9%	23%	

Key to Status Code

- 1 - Confirmed at the Mil Deps/Awaiting Further Status
- 2 - Out to the field units
- 3 - Problems with questions including duplication
- 4 - No Change to response
- 5 - Data Changed

All Questions By Service						
Status	1	2	3	4	5	Total by Service
<b>Sub-Groups</b>						
Army	65	96	339	39	257	796
Navy	0	33	327	68	78	506
Air Force	0	11	210	69	207	497
MDA	0	0	1	10	21	32
DTRA	0	0	2	1	9	12
DARPA	0	0	4	0	1	5
DISA	0	0	1	0	0	1
<b>Totals</b>	<b>65</b>	<b>140</b>	<b>884</b>	<b>187</b>	<b>573</b>	<b>1849</b>
	4%	8%	48%	10%	31%	

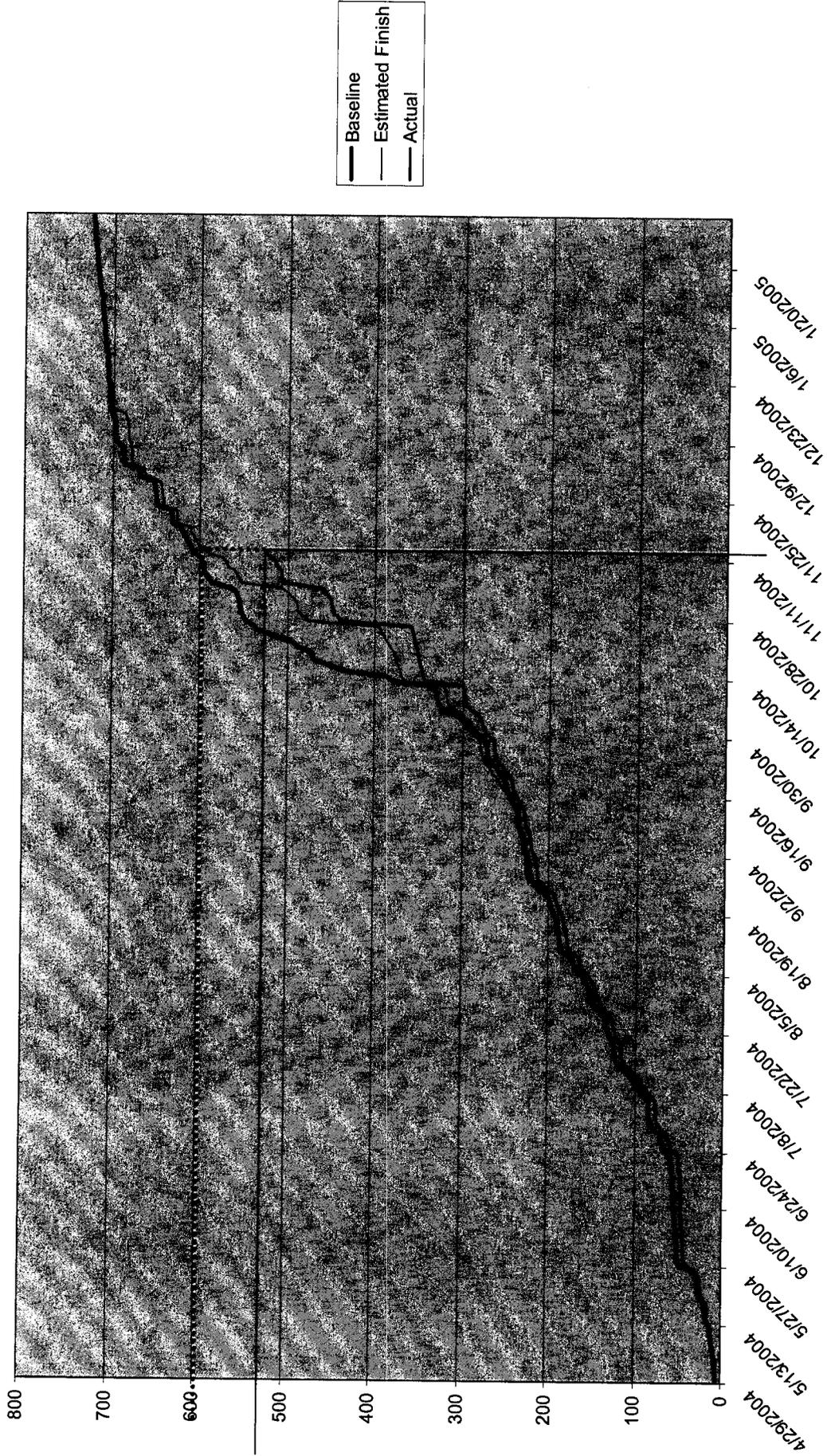
All Questions						
Status	1	2	3	4	5	Total by Sub Group
<b>Sub-Groups</b>						
Enabling	14	83	216	9	213	535
ALSS	51	16	568	91	96	822
Weapons	0	39	76	73	218	406
C4ISR	0	1	6	12	38	57
Analytic Team	0	1	18	2	8	29
<b>Totals</b>	<b>65</b>	<b>140</b>	<b>884</b>	<b>187</b>	<b>573</b>	<b>1849</b>
	4%	8%	48%	10%	31%	

**Sup Cap By Service**

<b>Status</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total by Service</b>
<b>Sub-Groups</b>						
Army	6	32	60	16	113	227
Navy	0	15	25	24	26	90
Air Force	0	7	9	15	101	132
IMDA	0	0	0	2	8	10
DTRA	0	0	0	1	2	3
DARPA	0	0	0	0	1	1
DISA	0	0	0	0	0	0
<b>Totals</b>	<b>6</b>	<b>54</b>	<b>94</b>	<b>58</b>	<b>251</b>	<b>463</b>

1%    12%    20%    13%    54%

# TJCSG Actions Completed as of 12 Nov 04



# Summary

- Subgroup Data Validation Actions closed out as of 5 Nov.
- RFC Reporting and Validation Actions left open with estimated finish to coincide with 15 November data download.
- Completed actions for development of Roll-up methods (Single Technical facility in a location)
- Completed Actions for implementing Subgroup guidance on Data inconsistencies
- Added 68 tasks for transmitting Scenario Data Calls to Mildeps, Mildeps answering them, and populating COBRA
- Required actions at Level 4 and below for Subgroup evaluation of Criteria 5,6,7,8 are not defined and therefore not fully reported.

# Status of Orgcodes as of 12 Nov

Source	Apparent		Error		Total	% Good
	Good	OrgCode	Det RU	% Good		
DARPA	1	1	0	2	50%	
DISA	3	3	0	6	50%	
DTRA	3	0	0	3	100%	
MDA	10	2	0	12	83%	
USA	239	30	15	284	89%	
USAF	363	24	1	388	94%	
USN	320	0	20	340	100%	
Grand	939	60	36	1035	94%	

# Status of Zip Codes in Question 3000

as of 12 Nov

Source	Zip				Foreign Locations	Total	% Good
	Apparent Good	Missing Zip	Zip Code error	N/A Zip			
DARPA	2	1	0	0	0	3	67%
DISA	0	6	0	0	0	6	0%
DTRA	3	0	0	0	0	3	100%
MDA	4	8	0	0	0	12	33%
USA	165	101	17	0	1	284	58%
USAF	325	18	14	12	19	388	88%
USN	313	27	0	0	0	340	92%
Grand	812	161	31	12	20	1036	80%

# Defense Agency Detail

Source	OrgName	Apparent Good	Error OrgCode	Det RU	Missing Zip	Apparent Good	Zip Code error	N/A Zip	Foreign Locations
DARPA	Defense Advanced Research Projects Agency Total	1	1	0	1	1	0	0	0
DARPA	Defense Contract Audit Agency Total	0	0	0	0	1	0	0	0
<b>DARPA Total</b>		<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
DISA	JITC Fort Huachuca Total	2	3	0	5	0	0	0	0
DISA	JITC Indianhead Total	1	0	0	1	0	0	0	0
<b>DISA Total</b>		<b>3</b>	<b>3</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DTRA	Defense Threat Reduction Agency Total	1	0	0	0	1	0	0	0
DTRA	Defense Threat Reduction Agency, Albuquerque Total	1	0	0	0	1	0	0	0
DTRA	DTRA Nevada Total	1	0	0	0	1	0	0	0
<b>DTRA Total</b>		<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>
MDA	MDA - Alabama Total	4	0	0	4	0	0	0	0
MDA	MDA - Alaska Total	1	0	0	0	1	0	0	0
MDA	MDA - California Total	1	0	0	0	1	0	0	0
MDA	MDA - Colorado Total	2	2	0	4	0	0	0	0
MDA	MDA - NCR Total	1	0	0	0	1	0	0	0
MDA	MDA - New Mexico Total	1	0	0	0	1	0	0	0
<b>MDA Total</b>		<b>10</b>	<b>2</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>

# USA Detail

Source	OrgName	Apparent Good	Error OrgCode	Det RU	Missing Zip	Apparent Good	Zip Code error	N/A Zip	Foreign Locations
USA	ABERDEEN PROVING GROUND Total	16	0	0	10	6	0	0	0
USA	ADELPHI LABORATORY CENTER Total	44	0	1	1	36	8	0	0
USA	DETROIT ARSENAL Total	6	0	0	1	0	5	0	0
USA	DUGWAY PROVING GROUND Total	5	2	0	4	3	0	0	0
USA	FORT BELVOIR Total	19	9	0	6	21	1	0	0
USA	FORT BENNING Total	1	0	0	1	0	0	0	0
USA	FORT BRAGG Total	1	0	0	0	1	0	0	0
USA	FORT DETRICK Total	13	0	0	2	11	0	0	0
USA	FORT EUSTIS Total	2	0	0	0	2	0	0	0
USA	FORT HOOD Total	2	0	0	0	2	0	0	0
USA	FORT HUACHUCA Total	5	0	0	3	2	0	0	0
USA	FORT KNOX Total	2	0	0	1	1	0	0	0
USA	FORT LEAVENWORTH Total	1	0	0	0	1	0	0	0
USA	FORT MONMOUTH Total	33	13	6	20	30	2	0	0
USA	FORT MONROE Total	1	0	0	1	0	0	0	0
USA	FORT RUCKER Total	6	0	0	2	4	0	0	0
USA	FORT SAM HOUSTON Total	2	0	0	0	2	0	0	0
USA	FORT SILL Total	1	0	0	0	1	0	0	0
USA	PEO STRICOM Total	2	0	0	2	0	0	0	0
USA	PICATINNY ARSENAL Total	19	1	2	10	12	0	0	0
USA	REDSTONE ARSENAL Total	30	2	6	19	19	0	0	0
USA	ROCK ISLAND ARSENAL Total	4	0	0	2	2	0	0	0
USA	SOLDIER SYSTEMS CENTER Total	6	0	0	5	0	1	0	0
USA	TRIPLER ARMY MEDICAL CENTER Total	0	3	0	0	2	0	0	1
USA	US ARMY GARRISON SELFRIDGE Total	1	0	0	1	0	0	0	0
USA	WALTER REED ARMY MEDICAL CENTER Total	3	0	0	1	2	0	0	0
USA	WATERVLIET ARSENAL Total	2	0	0	2	0	0	0	0
USA	WHITE SANDS MISSILE RANGE Total	8	0	0	6	2	0	0	0
USA	YUMA PROVING GROUND Total	4	0	0	1	3	0	0	0
<b>USA Total</b>		<b>239</b>	<b>30</b>	<b>15</b>	<b>101</b>	<b>165</b>	<b>17</b>	<b>0</b>	<b>1</b>

# USAF Detail

Source	OrgName	Apparent Good	Error OrgCode	Det RU	Missing Zip	Apparent Good	Zip Code error	N/A Zip	Foreign Locations
USAF	Arnold AFS Total	3	0	0	0	3	0	0	0
USAF	Barksdale AFB Total	2	0	0	0	2	0	0	0
USAF	Beale AFB Total	1	0	0	1	0	0	0	0
USAF	Brooks City-Base Total	13	0	0	2	10	0	0	1
USAF	Edwards AFB Total	26	0	0	0	26	0	0	0
USAF	Eglin AFB Total	55	0	0	2	52	1	0	0
USAF	Hanscom AFB Total	42	0	0	3	26	10	0	3
USAF	Hill AFB Total	38	0	0	1	37	0	0	0
USAF	Holloman AFB Total	2	0	0	0	2	0	0	0
USAF	Hurlburt Field Total	4	0	0	0	4	0	0	0
USAF	Keesler AFB Total	3	0	0	3	0	0	0	0
USAF	Kirtland AFB Total	39	0	0	1	38	0	0	0
USAF	Lackland AFB Total	3	0	0	0	3	0	0	0
USAF	Langley AFB Total	4	0	0	1	3	0	0	0
USAF	Los Angeles AFB Total	23	0	0	0	22	0	1	0
USAF	McGuire AFB Total	6	0	0	0	6	0	0	0
USAF	Nellis AFB Total	11	0	0	0	11	0	0	0
USAF	Onizuka AFS Total	1	0	0	0	1	0	0	0
USAF	Patrick AFB Total	12	0	0	0	12	0	0	0
USAF	Randolph AFB Total	2	0	0	0	2	0	0	0
USAF	Robins AFB Total	20	22	0	0	31	3	0	8
USAF	Rome Laboratory Total	1	0	0	0	1	0	0	0
USAF	Tinker AFB Total	12	2	1	0	11	0	0	4
USAF	Tucson IAP AGS Total	3	0	0	0	3	0	0	0
USAF	Tyndall AFB Total	1	0	0	0	1	0	0	0
USAF	Wright-Patterson AFB Total	36	0	0	4	18	0	11	3
	<b>USAF Total</b>	<b>363</b>	<b>24</b>	<b>1</b>	<b>18</b>	<b>325</b>	<b>14</b>	<b>12</b>	<b>19</b>

# USN Detail 1 of 2

Source	OrgName	Apparent Good	Error OrgCode	Det RU	Missing Zip	Apparent Good	Zip Code error	N/A Zip	Foreign Locations
USN	AEGIS_TECHREP_MOORESTOWN_NJ Total	2	0	0	0	2	0	0	0
USN	AIRTEVRON_NINE_CHINA_LAKE_CA Total	4	0	0	0	4	0	0	0
USN	AIRTEVRON_ONE Total	1	0	0	0	1	0	0	0
USN	CBTDIRSYSACT_DAM_NECK_VA Total	1	0	0	0	1	0	0	0
USN	CG_MCB_CAMPEN Total	1	0	0	0	1	0	0	0
USN	CG_MCB_QUANTICO_VA Total	2	0	0	0	2	0	0	0
USN	CG_MCCDC_QUANTICO_VA Total	1	0	0	0	1	0	0	0
USN	CNR_ARLINGTON_VA Total	7	0	1	1	7	0	0	0
USN	COMNAVAIRSYSCOM_PATUXENT_RIVER_MD Total	12	0	1	3	10	0	0	0
USN	COMNAVAIRWARCENACDIV_PATUXENT_RIVER_MC	4	0	2	3	3	0	0	0
USN	COMNAVAIRWARCENWPNDIV_CHINA_LAKE_CA Tot	1	0	0	0	1	0	0	0
USN	COMNAVSEASYSYSCOM_WNY_DC Total	3	0	0	0	3	0	0	0
USN	COMNAVSRFWARCEN_WASHINGTON_DC Total	1	0	0	0	1	0	0	0
USN	COMNAVUNSEAWARCEN_NEWPORT_RI Total	1	0	0	0	1	0	0	0
USN	COMOPTEVFOR_NORFOLK_VA Total	7	0	0	0	7	0	0	0
USN	DIRSSP_WASHINGTON_DC Total	1	0	0	0	1	0	0	0
USN	DRPM_AAA_WASHINGTON_DC Total	2	0	0	0	2	0	0	0
USN	NATEC_SAN_DIEGO_CA Total	32	0	1	1	32	0	0	0
USN	NAVAIWARCENACDIV_LAKEHURST_NJ Total	36	0	1	2	35	0	0	0
USN	NAVAIWARCENTRASYSYSDIV_ORLANDO_FL Total	58	0	1	1	58	0	0	0
USN	NAVAIWARCENWPNDIV_PT_MUGU_CA Total	1	0	0	0	1	0	0	0
USN	NAVCLOTEXTRSFAC_NATICK_MA Total	1	0	1	0	2	0	0	0
USN	NAVEODTECHDIV_INDIAN_HEAD_MD Total	1	0	0	0	1	0	0	0
USN	NAVHLTHRSCHCEN_SAN_DIEGO_CA Total	3	0	1	1	3	0	0	0
USN	NAVMEDRSCHCEN_SILVER_SPRING_MD Total	2	0	0	0	2	0	0	0
USN	NAVOBSY_WASHINGTON_DC Total	2	0	1	1	2	0	0	0
USN	NAVORDSAFSECACT_INDIAN_HEAD_MD Total	3	0	1	1	3	0	0	0
USN	NAVORDTESTU_CAPE_CANAVERAL_FL Total	1	0	0	0	1	0	0	0
USN	NAVPGSCOL_MONTEREY_CA Total	1	0	0	0	1	0	0	0
USN	NAVPMOSSP_DET_MAGNA_UT Total	1	0	0	0	1	0	0	0

# USN Detail 2 of 2

Source	OrgName	Apparent Good	Error OrgCode	Det RU	Missing Zip	Apparent Good	Zip Code error	N/A Zip	Foreign Locations
USN	NAVPMOSSP_PITTSFIELD_MA Total	4	0	0	0	4	0	0	0
USN	NAVPMOSSP_SUNNYVALE_CA Total	1	0	0	0	1	0	0	0
USN	NAVSURFWARCN_CARDEROCKDIV_BETHESDA_MD T	6	0	0	0	6	0	0	0
USN	NAVSURFWARCN_COASTSYSSTA_PANAMA_CITY_FL	2	0	0	1	1	0	0	0
USN	NAVSURFWARCN_DIV_CORONA_CA Total	1	0	0	0	1	0	0	0
USN	NAVSURFWARCN_DIV_CRANE_IN Total	2	0	0	0	2	0	0	0
USN	NAVSURFWARCN_DIV_DAHLGREN_VA Total	1	0	0	0	1	0	0	0
USN	NAVSURFWARCN_DIV_INDIAN_HEAD_MD Total	5	0	1	1	5	0	0	0
USN	NAVSURFWARCN_DIV_PORT_HUENEME_CA Total	5	0	0	0	5	0	0	0
USN	NAVSURFWARCN_SHIPSYSENGSTA_PHILADELPHIA_P/	1	0	0	0	1	0	0	0
USN	NAVUNSEAWARCN_DIV_KEYPORT_WA Total	4	0	0	1	3	0	0	0
USN	NAVUNSEAWARCN_DIV_NEWPORT_RI Total	6	0	1	1	6	0	0	0
USN	NAVXDIVINGU_PANAMA_CITY_FL Total	1	0	0	0	1	0	0	0
USN	NCTSI_SAN_DIEGO_CA Total	5	0	1	1	5	0	0	0
USN	NFESC_PORT_HUENEME_CA Total	4	0	0	0	4	0	0	0
USN	NRL_WASHINGTON_DC Total	7	0	1	1	7	0	0	0
USN	PACMISRANFAC_HAWAREA_BARKING_SANDS_HI Total	1	0	0	0	1	0	0	0
USN	SEASPARROWPROJSUPPO_WASHINGTON_DC Total	2	0	0	2	0	0	0	0
USN	SPAWARINFOTEHCEN_NEW_ORLEANS_LA Total	5	0	1	1	5	0	0	0
USN	SPAWARSYSNEN_CHARLESTON_SC Total	42	0	3	3	42	0	0	0
USN	SPAWARSYSNEN_NORFOLK_VA Total	2	0	0	0	2	0	0	0
USN	SPAWARSYSNEN_SAN_DIEGO_CA Total	3	0	0	0	3	0	0	0
USN	SPAWARSYSNEN_SAN_DIEGO_CA Total	11	0	1	1	11	0	0	0
USN	SSFA_CHANTILLY_VA Total	5	0	0	0	5	0	0	0
USN	SURFCOMBATSYSNEN_WALLOPS_ISLAND_VA Total	1	0	0	0	1	0	0	0
<b>USN Total</b>		<b>320</b>	<b>0</b>	<b>20</b>	<b>27</b>	<b>313</b>	<b>0</b>	<b>0</b>	<b>0</b>

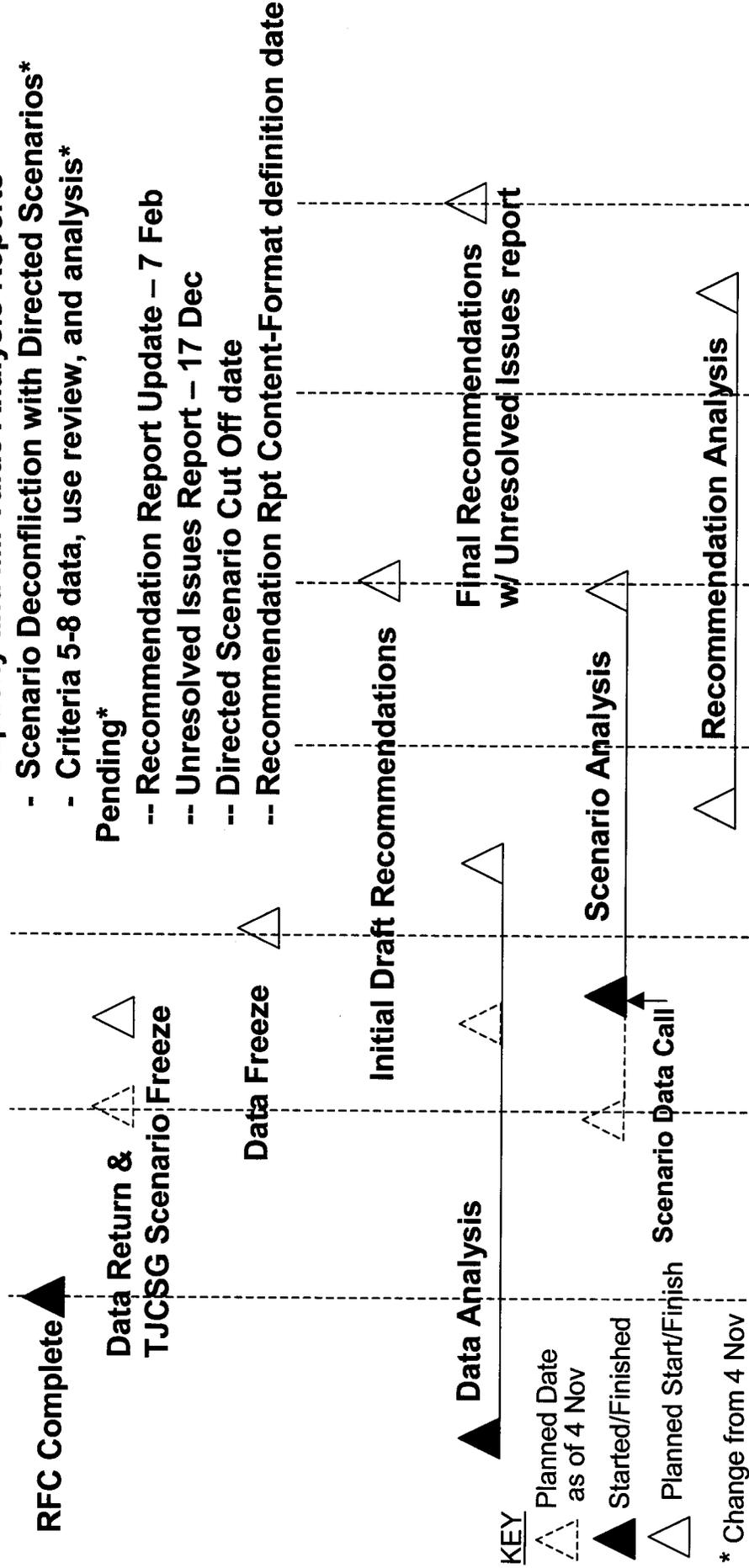
# TJCSG MACRO SCHEDULE (as of 17 Nov)

## Other Major Activity:

- LOM Runs (as Needed) & COBRA Call and Runs
- Supplemental "Epiphany" Runs
- Capacity and Mil Value Analysis Reports
- Scenario Deconfliction with Directed Scenarios\*
- Criteria 5-8 data, use review, and analysis\*

## Pending\*

- Recommendation Report Update -- 7 Feb
- Unresolved Issues Report -- 17 Dec
- Directed Scenario Cut Off date
- Recommendation Rpt Content-Format definition date



5 Nov 12 Nov 19 Nov 26 Nov 3 Dec 10 Dec 17 Dec



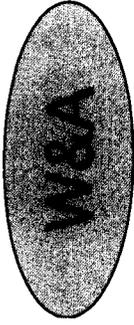
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# W&A

# Revised Scenarios and Recommendations

Rev 2

18 Nov 2004



# Considerations for Change

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- New information
  - Capacity and MV
  - Type of work
  - Synergy considerations for platform integration and ISE
- Deconfliction
  - ALSS
  - E&T JCSG [OAR]
  - Services
- Delete donors < 30 FTEs



## Revised Overarching Strategy

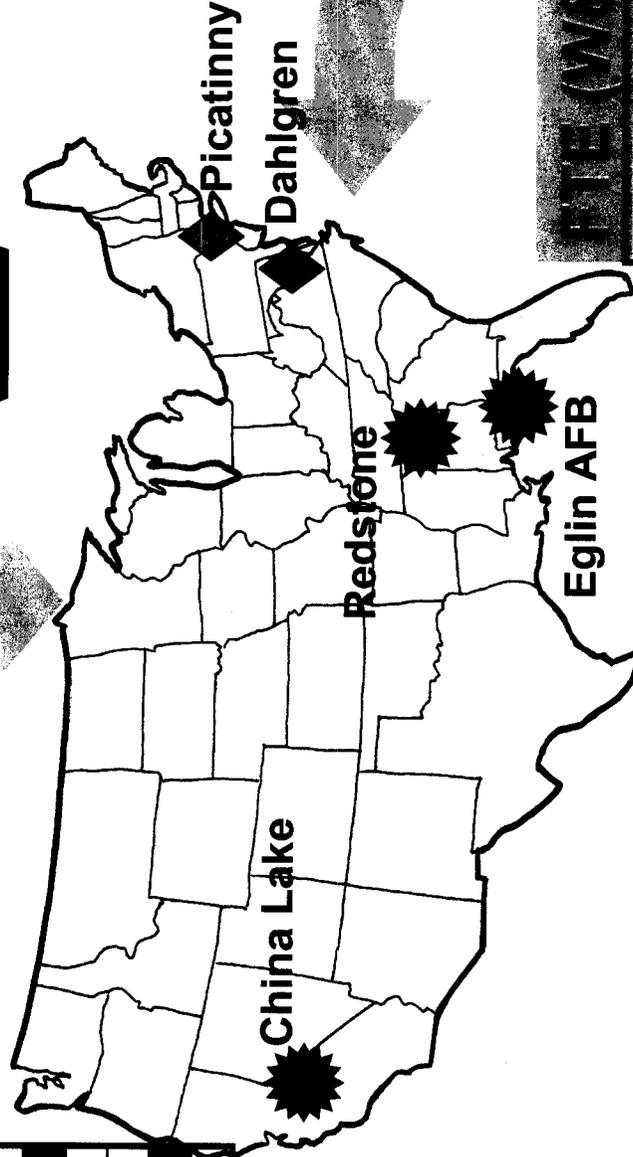
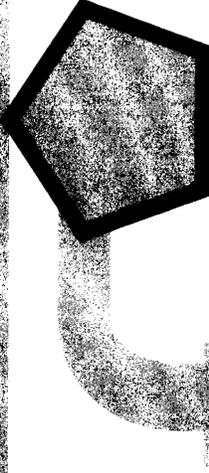
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- Integrate and consolidate W&A system and subsystem life cycle capabilities [RDAT&E and ISE] at major complexes; retain unique critical specialty capability sites
  - Synergy:
    - Full Spectrum Cradle to Grave
    - Options for Energetics Materials Capability intellectual capital
  - Efficiency and Critical Mass:
    - Eliminate smaller, single or dual function facilities
    - Options for Underwater consolidations
  - Jointness:
    - Robust full spectrum capabilities preserves options for future jointness
    - Joint site for guns and ammo

# MIL Val (W&A)

D&A	Research	T&E
Dahlgren		
China Lake	Kirtland	WSMR
	China Lake	China Lake
		Pl. Mugu
	Aberdeen	Keyport
PHD	IH	
Newport	Panama City	PAX
IH	Dahlgren	Crane
PAX	Newport	Dahlgren
		Aberdeen

# Export Military Judgment



Primary



Specialty

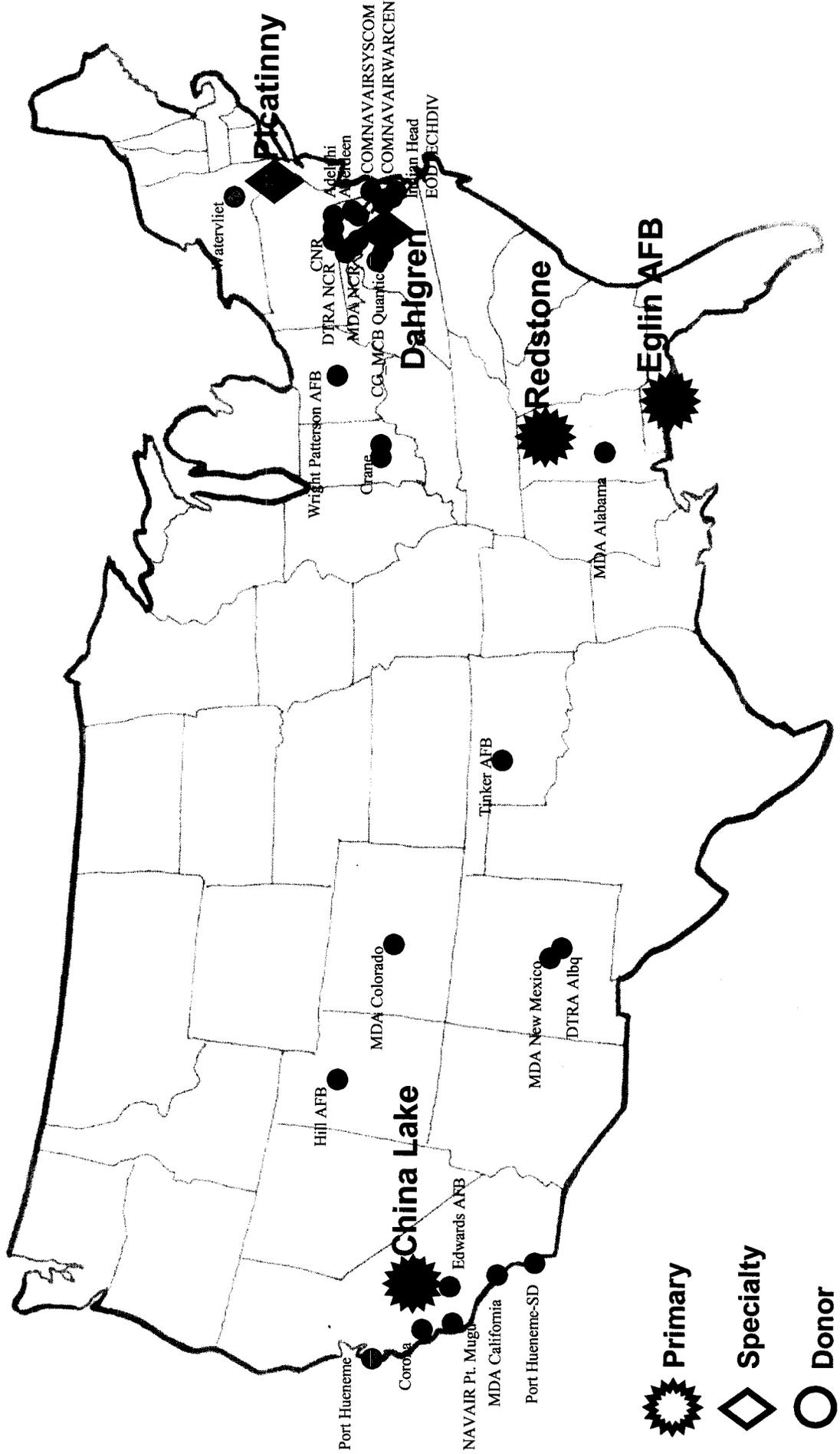
# FTE (W&A)

D&A	Research	T&E
	to be updated	

**Relocate for:**  
**Synergy**  
**Efficiency**  
**Critical Mass**  
**Jointness**



# TECH 0002 – 3 Primary, 2 Specialty Sites



- Primary
- Specialty
- Donor

New scenario; deleted scenario; change to scenario  
 Draft Deliberative Document - For Discussion Purposes Only - Do Not Release Under FOIA  
 12/14/2004 18 Nov 04



# Impacts

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- Agencies
  - Relocates all W&A work
  - Donor sites affected: *MDA* [all]; *DTRA* [NCR and Albuquerque]
  
- Air Force
  - Core Complex at *Eglin*
  - Relocates all W&A RDAT&E/ISE [except platform integ] to core/specialty
  - Combines *Indian Head* EOD Tech Div w/ joint EOD School [option]
  - USAF donor sites affected: *Edwards, Hill, Wright Patterson, Tinker*
  
- Army
  - Core Complex at *Redstone*
  - Specialty site: Joint guns/ ammo work to *Picatinny* with *Dahlgren* and potentially *Aberdeen* options
  - Facilitates closures: Relocate all W&A work from *Watervliet*
  - Other Army donor sites affected: *Adelphi, Aberdeen*

# Impacts

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- Marines
  - Relocates all non-platform work to core/ specialty
  - Donor site affected: *Quantico, Crane [MC Prog Div]*
  
- Navy
  - Core Complex at *China Lake*
  - Specialty site: Ship systems integration at *Dahlgren*
  - Relocates W&A RDAT&E/ISE [except underwater] to core/specialty
    - Partial moves [except platform integ] from *Port Hueneme, PAX River, CNR, Dahlgren, Indian Head* [option]
    - Complete moves to facilitate closures [includes platform integration] from *Corona, Crane, Point Mugu, Indian Head* [basic scenario]
  - Underwater Weapons options: *Panama City or Newport*
  - Coastal Presence:
    - *Dam Neck [East]; Keyport & Port Hueneme [West]*
  - Joint guns/ammo work option: consolidate at *Dahlgren*
  - Surface weapons PEO/PMs remain at *WNY*





# Revised Scenarios

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**Scenario 1:** Relocate RDATA&E of W&A [except guns/ammo, ship systems integration and underwater weapons] at 3 core complexes [Redstone, Eglin, China Lake],

- with 2 specialty sites for:
  - Guns/ Ammo to Picatinny
  - Ship systems/ combat systems integration at Dahlgren
- retain East/ West Coast Navy connectivity to Fleet
- with all PAX River and Point Mugu W&A to China Lake

**Scenario 2:** Relocate RDATA&E of W&A [except guns/ammo, ship systems integration and underwater weapons] at 3 core complexes [Redstone, Eglin, China Lake]

- with 2 specialty sites for:
  - Guns/ Ammo to Picatinny
  - Ship systems/ combat systems integration at Dahlgren
- retain East/ West Coast Navy connectivity to Fleet
- with PAX River non-PEOs / PMS and air-launched W&A from Point Mugu to Eglin

**Scenario 3:** Scenario 1 plus surface ship integration to Dahlgren  
**DELETE AND INCORPORATE DAHLGREN AS SPECIALTY IN BASELINE SCENARIOS 1, 2 and 4**



## Revised Scenarios [cont]

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**Scenario 4:** Scenario 1 with Energetics Materials capability [only] at Indian Head; all other energetics material to China Lake, and relocate EM capability from Crane, Aberdeen [R only] & Yorktown to IH

**Scenario 5a:** Relocate DoD guns and ammunition RD&A to Picatinny Arsenal

**Scenario 5b:** Relocate DoD guns and ammunition RD&A to Aberdeen [NEW]

**Scenario 5c:** Relocate DoD guns and ammunition RD&A to Dahlgren [NEW]

**Scenario 6a:** Relocate Underwater Weapons RDT&E to Newport to Panama City

**Scenario 6b:** Relocate Underwater Weapons from Panama City to Newport [NEW]

**Scenario 7:** Relocate Navy combat control systems [weapons integration for ship systems/ weapons integration to one location [Dahlgren] DELETE / INCORPORATE DAHLGREN AS SPECIALTY IN SCENARIOS 1, 2 and 4

**Scenario 8:** Relocate DoD Directed Energy Research to one Kirtland DELETE

**Scenario 9:** Relocate DoD Directed Energy T&E and selected weapon T&E to one location [White Sands Missile Range] DELETE



## Revised Scenarios [cont]

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**Scenario 10a:** Relocate RD&A Energetic Materials Capability [only] from Crane, Aberdeen [R only], and Yorktown to Indian Head.

**Scenario 10b:** Relocate RD&A Energetic Materials Capability [only] from Indian Head, Crane, Aberdeen [R only], and Yorktown to Dahlgren [NEW]

### **Remanded to Army**

**Scenario 11:** Relocate W&A RDA from Rock Island to Picatinny Arsenal [NOTE: No longer covered in scenarios 1,2,3,4,5 since <30FTEs]

**Scenario 12:** Relocate W&A RDA from Watervliet Arsenal (Benet Lab) to Picatinny Arsenal [NOTE: Covered in scenarios 1,2,3,4,5 above]



# Prioritized Scenarios

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## HIGH PRIORITY

**Scenario 1:** 3 core complexes/ 2 specialty sites w/ PAX River & Point Mugu to CL  
**Scenario 4:** Scenario 1 with Energetics Materials [only] at Indian Head from Crane, Aberdeen & Yorktown, all other to China Lake

## MEDIUM PRIORITY

**Scenario 5a:** DoD guns and ammunition RD&A to Picatinny Arsenal  
**Scenario 10a:** Energetic Mat'l [only] from Crane, Aberdeen & Yorktown to IH

## LOW PRIORITY

**Scenario 5c:** DoD guns and ammunition RD&A to Dahlgren [NEW]  
**Scenario 6a:** Underwater Weapons from Panama City to Newport  
**Scenario 6b:** Underwater Weapons RDA&E from Newport to Panama City [NEW]  
**Scenario 10b:** Energetic Mat'l [only] from Crane, Aberdeen & Yorktown, IH to Dahlgren [NEW]

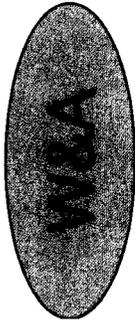
**Scenario 5b:** DoD guns and ammunition RD&A to Aberdeen [NEW]  
**Scenario 2:** 3 core complexes / 2 specialty sites w/ PAX River non-PEOs / PMS and Point Mugu air-launched work to Eglin



# Summary of Major Issues/Changes

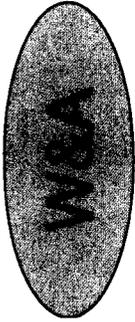
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- Platform Integration with guns and weapons
  - Retain where it currently resides except where closure may be desired
- Guns and Ammo Receiver Options: Picatinny, Dahlgren, Aberdeen
- DEW: Delete specialty sites [Kirtland and WSMR]
- Navy Surface East / West Coast Fleet Connectivity
  - East Coast: Retain Dam Neck [East]; Port Hueneme/Keyport [West]
- ISE: Move toward Integrated Life Cycle Management
- Ship System Integration Strategy: Dahlgren as specialty site
- Energetics “Materials” Strategy including Underwater: 3 Options
  - All Indian Head to China Lake
  - Energetics Materials to IH or to Dahlgren; rest to CL
- Underwater Weapons Strategy: 2 Options
  - Panama City to Newport or Newport to Panama City
  - Keyport not be a donor or receiver



# Recommendations

Primary Scenario # (priority)	Primary Scenario Description	Alternate Scenario #	Alternate Scenario Description
TECH 0002 (high) (W&A #1)	3 core sites w/ 2 speciality sites -- Picatinny (gun/ammo) & Dahlgren (combat/ship system integration)		Alternates addressed in separate scenarios/excursions
TECH 0018 (high) (W&A #4)	3 core sites w/ 2 speciality sites -- Picatinny (gun/ammo) & Dahlgren (combat/ship system integration) -- w/ energetic materials [only] to Indian Head		Alternates addressed in separate scenarios/excursions
TECH 0019 (medium) (W&A #10a)	Energetic materials [only] to Indian Head	TBD (low) (W&A #10b)	Energetic materials [only] to Dahlgren
TECH 0017 (medium) (W&A #5a)	Guns & ammo to Picatinny	TBD (low) (W&A #5c)	Guns & ammo to Dahlgren
TECH 0028 (low) (W&A #6a)	Underwater weapons to Newport	TBD (low) (W&A #6b)	Underwater weapons to Panama City



# BACKUP

## [details for documentation]



# Original Strategy Guidelines

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- Reduce Infrastructure via boldest realignment with joint considerations
- Gain synergy and efficiency through integrated lifecycle R/D&A/T&E
- Select “core complexes” independent of Service whose W&A FTEs are in the top 80% of total W&A work in all three functions [R/DAT&E]
- Identify “Specialty Sites” with unique attributes or critical mass in special areas
- Examine excursions where loss of critical mass or intellectual capital could “break” the capability
- All W&A specific work to move from donor sites that are not core or specialty
  - Ignore known organizations whose W&A does not fit intent or is <10 FTEs; All others with presence in W&A become donors
  - Weapons or guns/ platform integration & ISE already at core/ specialty sites remain
  - Critical functional areas/intellectual capital that is synergistic with core/specialty sites remain intact at those core/specialty sites
  - Platform integration remains at donor sites unless intent is to facilitate closure
  - Legacy weapon ISE has life cycle synergy to be explored by relocating at core sites
  - Explore synergy by collocating W&A work regardless of platform or mission [e.g. surface and air launched or air-to-air and air-to-ground]. Donors go to core or specialty sites that already have work in similar areas.
- Use military judgment in absence of accurate Mil Values.
- No integration/ deconfiction with other TJCSG subgroups/ JCSGs or Services



# Original Strategy Scenarios

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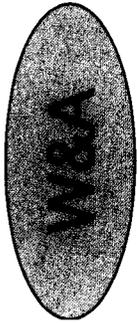
- Ten Scenarios plus 2 Army desired requests
- RDAT&E Integration at 3 core complexes [Redstone, Eglin, China Lake] with PAX River and Point Mugu relocating to China Lake or Eglin
- 4 Specialty Sites
  - Guns/ Ammo to Picatinny
  - Underwater weapons to Newport
  - DEW RD&A to Kirtland
  - DEW T&E and other selected T&E to WSMR
- Excursions to retain intellectual capital
  - Ship systems/ combat systems integration stays at Dahlgren; integration from non-core complexes move to Dahlgren
  - Energetics materials capability [only] stays at Indian Head; energetics materials capability from non-core complexes moves to IH; non-energetics materials capability only to China Lake
- To contribute to closures, one or more scenarios would consider removal of all W&A reported work from:
  - MDA [all], DTRA [all], Quantico, Corona, Crane, Dahlgren, Indian Head, Keyport, Panama City, PAX River, Point Mugu, Port Hueneme, Edwards, Hill, Wright Patterson, Tinker, Aberdeen, Adelphi, Dugway, Ft Hood, Rock Island, Watervliet



# Revised Strategy

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- Revisions proposed based on
  - New information [FTEs/ MV/ type of work reported/ other synergy considerations for platform integration and In Service Engineering]
  - Ongoing deconfliction / integration with ALSS/ E&TJCSG/Services
  - Eliminating donors whose W&A/non-platform integration/ DEW/ guns& ammo work <30 FTEs [per TJCSG]
- Remove from consideration [OAR deconfliction, <30 FTEs or not synergistic]:
  - Dugway, Ft Hood, Aberdeen to WSMR
  - Rock Island, Adelphi [except Picatinny detachment], Aberdeen (AMSAA and ATC/DTC), DTRA Nevada, Quantico MCCDC, NRL



# Summary of Major Issues/Changes

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- Platform Integration
  - Retain guns/ platform and weapons/ platform integration where it currently resides except where closure may be desired
  
- Guns and Ammo Receiving Sites
  - Picatinny remains as primary receiver option
  - Add alternative scenario with Dahlgren as receiver
  - Add option with Aberdeen as receiver [low priority]
  
- DEW
  - Delete DEW RDA to Kirtland as specialty site [not donor or receiver]
  - Delete DEW T&E and other T&E to WSMR as specialty site [not donor or receiver]
  
- Navy Surface East / West Coast Fleet Connectivity
  - East Coast: Retain Dam Neck
  - West Coast: System integration remains at Port Hueneme; Corona system integration to Port Hueneme, combat systems integration San Diego [Port Hueneme] to Dahlgren, all other work to China Lake.



# Summary of Major Issues/Changes [cont]

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- ISE
  - Move toward Integrated Life Cycle Management; consolidate non-platform integration ISE with R, D&A, T&E
  
- Strategy for Ship/ Combat System Integration
  - Dahlgren becomes specialty site in basic scenario for systems/ combat systems; Delete other scenarios
  
- Strategy for Energetics Materials [RD&A]
  - Basic scenario relocates all Indian Head W&A to China Lake.
  - Option retains Energetics Materials Capability at IH [including underwater], moves EM from non-core donors to IH; all other Energetics to China Lake
  - Add alternative to move Energetics Materials Capability [including Indian Head] to Dahlgren vs to Indian Head
  
- Underwater Weapons
  - Underwater weapons removed from basic scenarios
  - Modify scenario for Newport: Panama City is only donor
  - Add alternative scenario with Panama City as receiver/ Newport as donor
  - Keyport will not be a donor or receiver



# Revised Strategy [cont]

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- Original strategy guidelines apply except that
  - <30 FTEs vs <10 FTEs will be excluded
  - Defined strategy for ISE will be applied
  
- Relocate RDATA&E of W&A [except guns/ammo, ship systems integration and underwater weapons] at 3 core complexes [Redstone, Eglin, China Lake],
  - with 2 specialty sites for:
    - Guns/ Ammo to Picatinny
    - Ship systems/ combat systems integration at Dahlgren
  - retain East/ West Coast Navy connectivity to Fleet
  - with all PAX River and Point Mugu W&A to China Lake or PAX River non-PEOs / PMs and Point Mugu W&A to Eglin
  
- 4 New Options
  - Guns/ Ammo to Aberdeen [#5b] and Guns/ Ammo to Dahlgren [#5c]
  - Underwater Weapons to Panama City [#6b] and to Newport
  - Energetic Materials Capability [only] to Indian Head or to Dahlgren [#10b] [rest of IH moves]



# Revised Strategy [cont]

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- 4 Deleted Scenarios
  - Dahlgren as excursion [delete baseline [#3] and stand alone [#7]]
  - Becomes specialty site for ship platform integration
  - Kirtland in baseline [W&A #1,2,4] and as stand alone excursion [#8]
  - WSMR in baseline [W&A #1,2,4] and as stand alone excursion [#9]
    - Deconflict with E&T TJCSCG [OAR] or <30 FTE or non-synergistic
    - WSMR will not be a donor or receiver
  
- Other Deletions from Scenarios
  - Newport as specialty site for underwater weapons
    - Delete from W&A #1,2,4
    - Becomes optional scenario with Panama City as alternate
  - Keyport from all scenarios
    - Delete from W&A #1,2,4; Delete from option W&A #6
    - Keyport will not be a donor or receiver
  
- 2 Remanded to Army
  - Rock Island to Picatinny [#11]
  - Watervliet to Picatinny [#12]



# Strategy Revision Details

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- Remove DEW RDA Scenario
  - Only small technology presence in proposed donor organizations [per expert military judgment donors reporting in W&A < 30 FTEs]; personnel are often part time
  - DoD needs joint center for DEW Research
    - Kirtland has preponderance of efforts
    - Joint technology office already in place at Albuquerque [near Kirtland]
  - Recommend using “Policy” to create joint center vs BRAC
  
- Clarify W&A ISE strategy
  - Integrated Life Cycle Mgmt is desired more efficient model for W&A in the future, i.e. R, D&A, T&E and ISE
  - Legacy systems in some reporting orgs do not fit this model; Donors potentially affected: Port Hueneme, Corona, Hill AFB, Edwards AFB
  - Synergy for future may outweigh current business models; reduction in workforce desired; timing to implement BRAC enough time to reconstitute expertise.
  - W&A Approach:
    - In baseline scenario, relocate all W&A from donor sites, regardless of funding or life cycle phase with anticipated reduction in FTEs
    - Retain platform integration [weapons/ guns] at donor sites



# Strategy Revision Details [cont]

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- Retain Navy Surface East / West Coast Fleet Connectivity
  - West: Port Hueneme remains; Corona relocates to Port Hueneme Non-platform integration work and ISE, in both cases moves to China Lake; Combat systems integration work from San Diego detachment of Port Hueneme relocates to Dahlgren
  - East: Dam Neck remains
  
- Revise Strategy for Ship/ Combat System Integration
  - Put Dahlgren in baseline as specialty site for systems/ combat systems; integration work from other donors moves to Dahlgren
  
- Revise Energetics Materials [RD&A] Strategy
  - Retain baseline scenario to relocate all Indian Head W&A to China Lake.
  - Retain scenario excursion to retain Energetics Materials [only] at IH [non-energetics material capability to China Lake], and move EM from other non-core donors to IH [R only from Aberdeen]
    - Joint Energetics Leadership Board [strategy/ coordination/ policy/expertise]
  - Consider Underwater EM as part of this core capability vs part of underwater work [i.e. would not relocate to underwater sites]
  - Add option to Retain Intellectual Capital in Energetics Materials [only] by relocating from Indian Head to Dahlgren



# Strategy Revision Details [cont]

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- Add scenario alternatives
  - Increase options for Guns/ Ammo Receiving Site:
    - Picatinny [executive agent for 3 services-ammo]
    - Dahlgren [next largest presence in guns after Picatinny]
    - Aberdeen [W&A data shows small presence-facilities and people]
  - Increase options for energetic materials
    - Move Crane, Aberdeen (R only) and Yorktown to Indian Head
    - Move Indian Head] [energetics materials only], Crane, Aberdeen (R only) and Yorktown to Dahlgren
      - Concerns with lack of facilities/ environmental [permits]
  
- Delete Underwater Weapons from baseline
  - Retain Keyport as is for Navy Underwater West Coast Connectivity to the Fleet; Keyport will not be a donor or receiver
  - Increase options for underwater weapons
    - Panama City to Newport
    - Newport to Panama City

# Technical Scenarios as of 11/16/04

	Status	Rank
0001 Establish Joint Centers for Air Platforms Centers (ALSS) POC: Thom Mathes	rework	
0002 Relocate W&A RDAT&E to 3 core & 4 specialty w/ weapons from PAX River & Ft. Mugu to China Lake (W&A) POC: Karen Higgins	rework	
0003 Relocate DoD DEW Research to 1 location (W&A) POC: Karen Higgins	OK	
0004 Relocate DoD DEW & selected weapon T&E to 1(W&A) POC: Dr. Higgins	Deleted	
0005 Establish Joint Centers for Rotary Wing Air Platform RDAT&E (ALSS) POC: Mr. Mathes	2 additional	
0006 Establish Joint Centers for Fixed Wing Platform RDAT&E (ALSS) POC: Thom Mathes	OK	
0007 Relocate Ground Vehicle RDAT&E @ Detroit Arsenal to Selfridge ANG Base (ALSS) (ALSS) POC: Thom Mathes	Army	
0008 C4ISR Cross DTAP & Function (C4ISR) POC: Matt Mleziva	OK	
0009 Defense Research Service Led Laboratories (IS) POC: Larry Schuette	now 2 scenarios	
0010 Consolidate Extramural research Program Managers @ site 1 (IS) POC: Schuette	OK	

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# Technical Scenarios as of 11/16/04

		Status	Rank
0011	Joint Training, Modeling and Simulation Center (JTMSC) (ET) POC: Dr. Berry	deleted	
0012	Relocate W&A RDAT&E to 3 core & 4 specialty w/ air (W&A) POC: Karen Higgins launched weapons from PAX & Pt Mugu to Eglin	rework	
0013	Establish Joint Centers for Ground Platform RDAT&E (ALSS) POC: Thom Mathes	Army	
0014	Establish Joint Centers for Space Platform RDAT&E (ALSS) POC: Thom Mathes	OK	
0015	Establish a Joint Center for Space R into 1 core site. (ALSS) POC: Thom Mathes	deleted	
0016	Establish a Joint Centers for Space D&A into 1 core site (ALSS) POC: Thom Mathes	deleted	
0017	Relocate DoD Guns & Ammunition RD&A at 1 location (W&A) POC: Dr. Higgins	rework	
0018	Relocate W&A RDAT&E to 3 Primary & 4 specialty; retain/relocate energetics @ Indian Head (W&A) POC: Karen Higgins	rework	
0019	Relocate RD&A energetic capability from Crane, APG, & Yorktown to Indian Head (W&A) POC: Karen Higgins	rework	
0020	Joint Battlespace Environments Center (ET) POC: Dr. Berry	rework	

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# Technical Scenarios as of 11/16/04

	Status, Rank
0021	Joint Chemical-Biological Defense RD&A Center (ET) deleted
0022	Establish Joint Medical Biological Defense RD&A Center (ET) deleted
0023	Establish Joint Chemical-Biological Defense T&E Center (ET) deleted
0024	Joint Biomedical Development & Acquisition Center (JBDAC) deleted
0025	Biomedical Research Co-Location (ET) deleted
0026	Omitted Omitted
0027	Relocate W&A RDAT&E to 3 core & 4 speciality; retain/relocate surface ship integration at Dahlgren (W&A) rework
0028	Relocate Underwater Weapons RDAT&E to 1 location. (W&A) rework
0029	Relocate Navy Weapons integration for Ship Systems/weapons to 1 location (Dahlgren) (W&A) rework
0030	C4ISR Joint NCOE Integration Center Establishment rework
0031	Optimize Sea Vehicle – (ALSS) Navy

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# Technical Scenarios as of 11/16/04

	Status	Rank
0032	Replace 0021/0022	
0033	deleted	
0034	new	
0035	new	
0036	new	
0037	new	
0038	Refer to 0010	
0039	Refer to 0010	
0040	Refer to 0010	
0041	Refer to 0010	

0032 Joint Chemical-Biological Defense RD&A Center (ET)

0033 Part of Tech 0009 instead of Adelphi its APG

0034 Part of Tech 0009 - alternate sites

0035 Joint Land Network Warfare LCM & TC

0036 Establish Joint Center for Rotary wing Air Platform RDAT&E @ Redstone

0037 Establish Joint Center for Rotary wing Air Platform RDAT&E @ PAX

0038 Consolidate Extramural research Program Managers @ site 2

0039 Consolidate Extramural research Program Managers @ site 3

0040 Consolidate Extramural research Program Managers @ site 4

0041 Consolidate Extramural research Program Managers @ site 5

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# Critical Unresolved Issues (As of 17 Nov 04)

Reference Number	Issue	Issue Paper Author/Date of Submittal to CIT	Required TJCSG Executive Action/Date of Next TJCSG Mtg	CIT Recommendations
11-09-04-01	Platform Integration	Dr. Higgins	Needs CIT Recommendation	Army – Concur with comments AF – Navy – Marines –
11-15-04-01	Military Judgement	Mr. DeYoung	Needs CIT Recommendation	Army – Non-Concur with a), b), and c) AF – Non-Concur with a), b), and c) Navy – Marines – Non-Concur with a) Concur with b) and c)

**MILITARY JUDGMENT: NECESSARY — BUT NOT SUFFICIENT**  
Issue # 11-15-04-01

**Issue:** The Technical Joint Cross Service Group (TJCSG) has registered 29 closure / realignment scenarios on the Department's Scenario Tracking Tool.<sup>1</sup> But 20 months after the TJCSG's first deliberations in March 2003, and with the Cost of Base Closure and Realignment (COBRA) data calls set to launch in a matter of days — not one scenario is the output of the Linear Optimization Model (LOM), not one is driven by data on excess capacity, and not one reflects data-derived military value. *In short, not one scenario is the result of quantitative analysis.* All are instead the product of "military judgment."

Military judgment is a critical part of our process, but it is subjective by nature and strongly dependent on the mix of individuals within the TJCSG. The process was designed to be *data-driven* for those very reasons, but it has drifted into one that will be, at best, *data-validated*, and at worst, *data-rationalized*. Without proactive measures, the scenarios will be difficult to defend before the BRAC Commission.

**Point of Contact:** Don DeYoung, Capabilities Integration Team (Alternate), U.S. Navy

**Issue Summary**

1. *Background*

Military judgment is a filter through which all closure / realignment proposals must pass in order to gauge their practicality and prudence. An extreme hypothetical example would be a scenario that would close Pearl Harbor. Military judgment would doubtless reject it on the grounds of strategic and tactical interests. Strictly speaking, however, *military* judgment is not the province of the TJCSG, whose considerations are different from those that focus on force structure and basing requirements. The TJCSG's area of competence is, instead, *technical* judgment. For simplicity, the phrase "expert judgment" will be used hereafter.

2. *Drifting Away From a Data-Driven Process*

After 20 months, we have not accomplished two critical requirements: (a) confirming the assertion that there is excess capacity within the DoD's in-house system (and if so, where and to what extent), and (b) determining a score for each sites' military value. Both sets of data are needed for the LOM.

As described in the issue paper, "Decision Criteria for Scenario Proposals," (dated 8 September), the LOM has two advantages. The first is as a decision-aid that limits the number of options produced from a very large universe of potential options. For example, given any 10 sites, there are 175 possible alternatives that close 1, 2, or 3 of them.<sup>2</sup> The second advantage is that *the LOM provides an objective means by which to defend our chosen few scenarios when so many other possibilities existed but were never considered.*

The drift away from a data-driven process began on 23 July with the request for notional scenarios by the Infrastructure Steering Group (ISG). The issue paper, "Notional Scenarios," (dated 28 July) argued that the ISG's request would risk fueling perceptions that the Department created the answers before the data was in. In fact, at that time, the field sites were still in the process of responding to the

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<sup>1</sup> The Infrastructure Steering Group set 1 November as the deadline for the "vast majority of scenarios declared by JCSGs and MilDeps" (ref: USD(AT&L) memo, subj: "BRAC 2005 Scenario Data Calls and Revised BRAC Timeline", 23 September 2004).

<sup>2</sup> DON IAT Briefing, "Proposed Optimization Methodology: Generating Alternatives."

military value and capacity data calls. In our 30 July TJCSG meeting, the OSD BRAC Office gave clarifying guidance that these scenarios were to be notional, but nevertheless “useful,” a somewhat mixed message. OSD also asserted that scenario development is “the front-end of the analytical process,”<sup>3</sup> which was a departure from its guidance, issued a year ago, that called it “the final step.”<sup>4</sup>

One month after the ISG’s request, the JCSGs began providing scenarios that identified “gainers” and “losers.”<sup>5</sup> The TJCSG initially kept its scenarios at a general level, specifying only the impacted sites,<sup>6</sup> but soon followed suit when the ISG: (a) required that all JCSGs begin registering scenario proposals into the Scenario Tracking Tool by 20 September<sup>7</sup> and, (b) scheduled the TJCSG to brief its scenarios (with “gainers” and “losers”) to the ISG on 1 October.<sup>8</sup>

The moment we produced our first scenarios without the benefit of capacity and military value data, we lost the right to call the TJCSG process data-driven. It instead became *judgment-driven*.

### 3. *Not Mission Impossible*

It is difficult to measure capacity and assign military values, and do it in time to run the LOM — but not impossible, especially in 20 months time. In fact, during BRAC-95, the Navy derived the necessary data and used the LOM to generate scenarios in 10 months’ time,<sup>9</sup> in a process that was data-driven from start to finish. As a member of the Navy’s BRAC-95 Base Structure Analysis Team, I can attest to that fact. The following items give more evidence of the sound, analytical nature of that process:

- During BRAC-95, the General Accounting Office (GAO) examined the closure process and decisions of each Service, including their capacity and military value analyses, and found that the Navy’s data-driven process and recommendations were sound.<sup>10</sup>
- The DoD honored C. P. Nemfakos, the architect of the Navy process, as a “Defense Career Civilian of Distinction.” His plaque, featured in the Pentagon’s A-Ring exhibit, “Career Civil Servants in the Nation’s Defense,” states that he “oversaw the department’s base closure process so effectively that his methodologies were adopted<sup>11</sup> by the GAO and the Base Realignment and Closure Commission.”

Even BRAC-95’s much criticized Laboratory and T&E cross-service studies took only 9 months to produce capacity data and military value rankings (though the military value scoring was flawed by some bizarre results in the T&E arena). The two studies even ran the LOM.

To be fair, ten years later, some profoundly different circumstances have had a significant effect on our current process. First and foremost, the Pentagon is fighting a war. There are three other causes for progress’ glacial pace, of even greater effect than the first, but they lie outside the scope of this paper.

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<sup>3</sup> TJCSG Meeting Minutes of 30 July 2004

<sup>4</sup> USD(AT&L) memo, subj: “BRAC 2005 Guidance for the Technical Joint Cross-Service Group”, 16 July 2003.

<sup>5</sup> Briefing to the Infrastructure Steering Group, 27 August 2004

<sup>6</sup> DDR&E memo, subj: “Technical Joint Cross Service Group (TJCSG) Notional Training Scenarios”, 4 August 2004.

<sup>7</sup> USD(AT&L) memo, subj: “BRAC 2005 Scenario Data Calls and Revised BRAC Timeline”, 23 September 2004.

<sup>8</sup> USD(AT&L) memo, subj: “Template and Briefing Schedule for BRAC 2005 Scenarios”, 17 September 2004.

<sup>9</sup> BSAT memo RP-0445-F8, subj: “Report of BSEC Deliberations on 16 November 1994,” 16 November 1994.

<sup>10</sup> GAO, “Military Bases: Analysis of DoD’s 1995 Process and Recommendations for Closure and Realignment”, p.87.

<sup>11</sup> Use of the word “adopted” is probably inaccurate, since neither the GAO of the Commission would have the occasion to employ these closure methodologies. Perhaps the word meant here was “endorsed.”

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#### 4. *The Problem — Defensibility of Our Recommendations*

Lately, our process has been described as “strategy-driven,”<sup>12</sup> because the scenarios generated by that process conform to the TJCSG’s overarching strategy. That strategy is to:

“Reduce excess capacity and reduce the number of technical sites through combined Research, Development & Acquisition, Test & Evaluation Centers aligned for functional and technical efficiency and synergy.”<sup>13</sup>

The epithet, “strategy-driven,” while technically correct at a superficial level, is hard to support. For one, we have not proven there is any excess capacity to reduce, which is one objective of the strategy. The other is to reduce the number of sites in a way that aligns them for efficiency and synergy, but how does one align them successfully without objective data on their military value?

A strategy-driven process would be if we were reducing proven excess capacity while enhancing vertically integrated platform work, or co-locating a broad range of multidisciplinary sciences, at sites *shown by data to possess the best people, state-of-the-art facilities, and an established record of success in making scientific advances and creating new warfighting capabilities*. By contrast, realigning work to sites that merely have the most people working in what are large, wide-ranging technology areas (e.g., Sensors) is not strategy. It is expedience, at best.

Defensibility problems will almost certainly result from the belated use of data because our judgment-driven scenarios now have two sub-optimal futures. The best-case has them *data-validated*; and in the worst-case, *data-rationalized*. In either case, without corrective action, notions that we marshaled data to support preexisting judgments, or preferred outcomes, will be difficult to dispel.

#### 5. *A Remedial Plan of Action*

##### (a) Consult Other DoD Studies

The TJCSG does not have a monopoly on expert judgment, so it will be difficult to explain why we did not calibrate with the findings of high-level expert panels — *especially those that, unlike our study, actually examined projects at the sites*. Fortunately, there is still time to use the expert judgment of other DoD panels as a solution to our problem.

The issue paper, “Decision Criteria for Scenario Proposals,” proposed that we, where possible, assess each scenario for whether it conforms or conflicts with any judgment(s) of a DoD study, like those of the Service Science Boards, Tri-Service RDT&E Panels, or any other DoD/Federal board of scientific and engineering experts. Conformance to other panel findings would enhance the credibility of our judgment-driven scenarios. Conflicts with other findings, while not a show-stopper, should be cause for re-examination.

Some may claim this approach compromises objectivity because such studies can be biased (a legitimate concern), or that such information is not certifiable because it draws from sources outside the closure process. These arguments are not convincing for the following reasons:

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<sup>12</sup> TJCSG Meeting Minutes of 25 October 2004.

<sup>13</sup> DDR&E Briefing to the Infrastructure Steering Group, “Technical Joint Cross Service Group (TJCSG): Strategy / Initial Scenarios,” 1 October 2004.

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- Other studies are unlikely to be any more subjective than our judgment-driven process. *The more objective studies will be those that examined the R&D work itself, which we have not done.*
- These would be official reports, authorized and approved by the DoD / Services. *If this information cannot be considered authoritative and certifiable, then why does the DoD continue to charter such studies — at considerable public expense — and provide them to Congress?*
- BRAC-05 will use — for the first time in five rounds — closure ideas proposed by private groups outside the Government, such as the Business Executives for National Security. *Surely, if private sector opinions can be used for generating scenarios, then the official findings of DoD chartered and approved studies, must be acceptable and certifiable.*
- The DoD IG determined, after our 2 December 2003 off-site, when we first began our work on military value, that the use of DoD studies would be auditable, and therefore defensible.

If we can show that other DoD studies made similar judgments to our own, then the credibility, and defensibility, of our proposals are improved. One study of potential use is the Tri-Service “Fixed-Wing Aircraft T&E Reliance Study.” Another is the study by the National Defense University (NDU) on S&T in the areas of sensors, IT, and weapons (three areas we are examining). The NDU team included experts with impressive credentials: former Service Vice Chiefs (one was later appointed Chair of the Columbia Accident Investigation Board), former Commanders-in-Chiefs (one was later appointed as the President’s Special Envoy to the Middle East), a former DDR&E and Secretary of the Air Force, experts from academia, former lab directors, and a former National Security Council Special Assistant to the President.

*In short, what rationale could be offered for why OSD entertained ideas from the private sector, even as the TJCSG ignored expert judgments made in DoD’s own studies — many of which have been provided to Congress and the Secretary of Defense?*

(b) Derive Valid Military Value Scores — ASAP

Even if we decide to consult other DoD studies, the fact remains that judgment alone cannot substitute for the objective data necessary for deriving military value. In fact, OSD policy, established by the Deputy Secretary of Defense (DEPSECDEF), directs us to:

*“...determine military value through the exercise of military judgment built upon a quantitative analytical foundation (emphasis added).”<sup>14</sup>*

Deriving scenarios, without the foundation of quantitative analysis, causes problems. First, *it ignores the DEPSECDEF’s policy and risks compromising the integrity of the BRAC process.* It was for this reason, at the 3 November CIT meeting that I abstained from ranking the 31 proposed scenarios by their order of importance.<sup>15</sup> How can one make such determinations, in an objective way, without the analytical foundation provided by military value (MV) scores or capacity data?

The second problem is that *accurate MV scores are essential if we are to avoid closing, or realigning work from, sites that have greater value than ones we have selected to be the gainers.* Again, this situation was caused by developing scenarios before the MV scores were available to inform our selection of gainers and losers. The key task after deriving the scores will be to modify any defective scenarios as quickly as possible.

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<sup>14</sup> DEPSECDEF memo, subj: “BRAC 2005 Military Value Principles”, 3 September 2004.

<sup>15</sup> D. DeYoung, Memo to DoD IG, subj: “Decision to Abstain from Scenario Prioritization”, 4 November 2004.

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Complicating matters is the fact that the COBRA calls will be launched soon, well before the MV scores are finalized. This is likely to waste dollars, time, and effort. Each defective COBRA squanders resources in the following ways.

- COBRA calls are expensive. Based on the cost of an actual BRAC-95 COBRA call, my estimated cost of a BRAC-05 TJCSG COBRA call, affecting 7 sites, might be roughly \$495,000.<sup>16</sup> Assuming 20-30 COBRA calls, the total price tag could range between 10 and 15 million dollars.
- COBRA calls are labor intensive. Based on an actual BRAC-95 COBRA call, a BRAC-05 TJCSG COBRA call, affecting 7 sites, may generate 375 pages of data.<sup>17</sup> Assuming 20-30 COBRA calls, the sub-groups may be swamped with between 7,500 and 12,000 pages of data. Analyzing this data and resolving the likely conflicts between “gainers” and “losers”, especially the inter-service conflicts, will take time that is in short supply. *Of all phases in our process, this is the most likely to be a “showstopper”* (see issue paper, “Scenario Conflict Adjudication,” dated 13 September).
- COBRA calls disrupt important work. Labs and centers perform critical missions, many in direct support of our armed forces in Iraq and Afghanistan, as well as the global war on terrorism. COBRA calls are major distractions and divert resources away from mission needs. *The fact that we are risking the launch of unnecessary and/or defective COBRA calls, due to a lack of objective data, after 20 months of work, is more than unfortunate. It is inexcusable.*

One last issue regarding military value is the question of, “what gets assigned a score?” — i.e., will it be a bin, a group of bins, or an organization? Confining the scores to individual bins makes the least sense because it does not conform to the synergistic nature of how good R&D is conducted. Moreover, our 39 bins do not have clean, mutually exclusive borders — both people and facilities are shared across multiple bins. A bin-to-bin analysis will lead to realignments of workload packets, which will *sever the connectivity of critical multidisciplinary projects and vertically integrated programs*. The way out of this box is to assign MV to groups of bins, or to more meaningful organizational units, such as an activity (e.g., laboratory or center).

(c) Simplify the Capacity Analysis

Every dollar spent on excess infrastructure robs our treasury and burdens our armed forces. Our first task was to determine whether that excess exists, and if it does, where it is and how much there is of it. As with military value, this task must be accomplished *objectively and accurately*, and should have been completed *prior* to the generation of any closure scenarios.

*Reliable capacity data is still needed to confirm assertions made about the existence of excess capacity.* After all, this was the primary reason given to justify another round of closures. Conventional wisdom after the 1995 closures held that substantial excess capacity remained. However the circumstances supporting that contention were profoundly altered by a foreign

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<sup>16</sup> The BRAC-95 COBRA call expended 1-2 WYs of effort in 48 hours (plus a weekend) at the “losing” site. Assume the level to be 1.5 WYs, at a fully-burdened compensation rate of a GS-13, and then the “losing” site spent approximately \$225K to respond. Then assume the “gaining” site expended 1/5 the effort, which is probably conservative, and the cost for that site was roughly \$45 K, *making the total for the COBRA call approximately \$270 K.* But, that was a scenario that involved only 2 sites. Our three “notional” scenarios would have affected 7, 9, and 9 sites respectively. Let us assume that our COBRA calls affect an average of 7 sites, with a conservative ratio of 1 “loser” and 6 “gainers” for each. By applying the response costs of \$225 K for the “loser” and \$45 K for each “gainer”, *the estimated cost for each scenario might be \$495 K.*

<sup>17</sup> The BRAC-95 COBRA call generated 165 pages of data from the “losing” site. Again, assuming the “gaining” site expended 1/5 of the effort, about 35 pages may have been produced for a total data call response of 200 pages. Again, assuming the TJCSG data calls affect an average of 7 sites, with a ratio of 1 “loser” to 6 “gainers”, and the total amount of information might be roughly 375 pages.

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attack on our homeland. As a result, (a) the nation's defense budget has risen (with an accompanying increase in DoD lab/center workload),<sup>18</sup> (b) serious Congressional consideration is being given to increasing the size of the force structure, and (c) there are urgent wartime challenges that require extensive levels of RDT&E, such as finding reliable ways to detect, from a distance, everything from conventional explosives, to bio-agents, to nuclear material.

*The TJCSG's approach to determining capacity is overly complicated.* It uses too many metrics of dubious value. One is square footage, which has problems best addressed in the issue paper, "Notional Scenarios." A second, Force Structure Adjustment (FSA), is especially relevant here because of its total reliance on judgment. As explained in the issue paper, "Proposed Contingency Plan" (dated 4 August 2004), the FSA is intended to account for any current capacity that may not be necessary in 2025. Our individual judgments were merged into a collective judgment by means of a Delphi session, but it is unclear how to defend pure speculation about the world 20 years from now. Needless to say, the FSA is not certified data.

To be blunt, the third metric — extramural funding — is absurd. First, dollars given to external organizations is not a measure of on-site capacity. If it were, DARPA, with nearly \$2.7 billion in FY03, should have a sprawling infrastructure, but it occupies an office building.<sup>19</sup> Second, it injects private sector infrastructure into an analysis of the public sector's capacity. Funding that goes outside of an installation's fence-line is immaterial to BRAC. Third, the issue paper, "Proposed Contingency Plan," predicted that we would risk multiple counts of the same dollar as it is passed around different organizations at the same location. The prediction was right. At the 1 November CIT meeting, the Analytic Team reported that a roll-up of capacity measures was necessary in order to compare apples-to-apples, but that this will also ensure double-counting (or worse). The Team's proposal to use only intramural funding, which would eliminate both the multiple-counting and private sector issues, was not adopted.

A fourth metric, ACATs (both count and funding), is analytically unsound. ACAT programs exhibit large variances in cost and complexity. This leads to big differences in personnel, funding, and infrastructure requirements between programs — even at the same ACAT level. ACATs are much too imprecise as a means for measuring capacity. As a diagnostic tool, it is not unlike using an oven thermometer to decide whether your child has a fever.

We need to simplify our analysis. Work-years and test hours were sufficient in BRAC-95's Lab and T&E cross-service analyses. And, work-years alone got the job done in the Navy's BRAC-95 process; a process that the GAO endorsed. The solution is clear. Instead, we are proceeding with COBRA calls — *even though no excess capacity has been proven to exist*. We owe it to the field sites and to our nation's security to determine whether there is in fact any excess capacity, and if so, where and by how much. If we fail to meet that obligation, then we owe it to ourselves to start working on some plausible explanations for the Commission.

## **Conclusion**

There is an enormous difference between a closure process that is *data-driven & validated by judgment* and one that is *judgment-driven & rationalized by data*. The first approach, after proving excess capacity does indeed exist, can yield fair outcomes that reduces infrastructure and preserves an in-house system that meets long-term national interests. The second approach can heighten the risk to America's security.

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<sup>18</sup> Navy Laboratory Community Coordinating Group data show a 10% increase in the one year from FY01 to FY02 in reimbursable funding, and direct cites (including non-Navy funding sources).

<sup>19</sup> <http://www.darpa.mil/body/pdf/FY03BudEst.pdf>

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While we no longer have a data-driven approach, we may be able to avoid the pitfalls of the latter one. To do this we must first calibrate our judgment-derived scenarios against the findings of other defense studies. This will minimize the risk of errors in judgment and give our proposals more credibility. Then we need to validate those scenarios in two steps: use valid capacity data, derived through a simplified and more analytically sound process, to verify that there is excess capacity within the Department's system of labs and centers, and if such excess is proven, then use accurate MV scores, at a meaningful level of aggregation (e.g., organizations vice the artificial 39 bins) to make the best choices regarding "gainers" and "losers." Accomplishing less than those three steps will create unacceptable risks.

Much has been said about this BRAC being about transforming the Department for future threats. Much less is said about the fact that the very mission of the Department's laboratories and centers is one of constant transformation — both incremental and radical. Whatever we do in this BRAC, *their ability to make technical contributions to national security must be preserved*. One example is the contribution made by world-class chemists with the Navy's laboratory at Indian Head, Maryland, who developed and fielded the thermobaric weapon in only 67 days for use against al Qaeda and Taliban forces holed up in Afghanistan's mountain caves and tunnels. Another is that made by engineers with the Army's laboratory and test center at Aberdeen, Maryland and its Tank Automotive R&D center in Warren, Michigan, who developed and fielded, within two months, the Armor Survivability Kits that are now being rushed into Iraq to better protect U.S. ground forces.<sup>20</sup>

Another in-house ability that must be preserved is its role as a *yardstick*,<sup>21</sup> a term referring to the standard that it sets by providing authoritative, objective advice to governmental decisionmakers. This is critical to good government. The Federal Government must be able to choose among competing options offered by industrial producers. The need for profit makes each company an advocate of its own product, so, given those natural tendencies, the Government "requires internal technical capability of sufficient breadth, depth, and continuity to assure that the public interest is served."<sup>22</sup>

A lot rides on our actions, much more so than ten years ago. America is engaged in a prolonged struggle with an opportunistic, fanatical enemy who has unlimited apocalyptic goals and is not deterred by traditional means. We need to identify and collect any potential BRAC savings — and our country needs all of the technological options it can get.

**Recommendations:** The TJCSG should require that the sub-groups: (a) calibrate the proposed scenarios against the findings of other DoD studies; (b) use capacity data, derived through a simplified and more analytically sound process, to verify that there is excess capacity within the DoD in-house system, and if so, then (c) use MV scores, at a meaningful level of aggregation, to *validate* the scenarios and make the best choices regarding "gainers" and "losers."

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<sup>20</sup> RDECOM Magazine, "Vehicles in Iraq Go From Workhorse to Warrior with New Kits," February 2004.

<sup>21</sup> H. L. Nieburg, *In the Name of Science* (Chicago: Quadrangle Books, 1966).

<sup>22</sup> William J. Perry, *Required In-House Capabilities for Department of Defense Research, Development, Test and Evaluation* (Washington, DC: Department of Defense, 1980).

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**Army Position: Non-Concur**

**AF Position:**

- a) **Non-Concur** Calibrating against findings of other DoD Studies not required by the BRAC Law nor appropriate based on context and circumstances operative when those studies were conducted.
- b) **Non-Concur** Use the existing capacity methodology approved by the ISG
- c) **Non-Concur** Used Military Value to analyze TJCSG recommendations consistent with Mr. Wynne's guidance as opposed to using Military Value to validate TJCSG scenarios.

**Issue Paper #07-28-04-01 Notional Scenarios - AF Non-Concurs as this has been overcome by events.**

**Issue Paper #08-06-04-02 Proposed Contingency Plan - AF Non-Concurs as this has been overcome by events.**

**Issue Paper #07-30-04-05 Decision Criteria for Scenario Proposals AF Non-Concurs Use TJCSG Decision Factors instead of Decision Criteria proposed in the issue paper.**

**Issue Paper #07-16-04-05 Scenario Conflict Adjudication AF Non-Concurs The TJCSG Chairman should adjudicate TJCSG scenario conflicts not the Service Vice Chiefs.**

**Navy Position:** \_\_\_\_\_  
**Marine Corps Position:** \_\_\_\_\_  
**JCS Position:** \_\_\_\_\_

Final Resolution:

POC Signature: \_\_\_\_\_ Date: \_\_\_\_\_

CIT Chair: \_\_\_\_\_ Date: \_\_\_\_\_

**MILITARY JUDGMENT: NECESSARY — BUT NOT SUFFICIENT**  
Issue # 11-15-04-01

**Issue:** The Technical Joint Cross Service Group (TJCSG) has registered 29 closure / realignment scenarios on the Department's Scenario Tracking Tool.<sup>1</sup> But 20 months after the TJCSG's first deliberations in March 2003, and with the Cost of Base Closure and Realignment (COBRA) data calls set to launch in a matter of days — not one scenario is the output of the Linear Optimization Model (LOM), not one is driven by data on excess capacity, and not one reflects data-derived military value. *In short, not one scenario is the result of quantitative analysis.* All are instead the product of "military judgment."

Military judgment is a critical part of our process, but it is subjective by nature and strongly dependent on the mix of individuals within the TJCSG. The process was designed to be *data-driven* for those very reasons, but it has drifted into one that will be, at best, *data-validated*, and at worst, *data-rationalized*. Without proactive measures, the scenarios will be difficult to defend before the BRAC Commission.

**Point of Contact:** Don DeYoung, Capabilities Integration Team (Alternate), U.S. Navy

**Issue Summary**

1. *Background*

Military judgment is a filter through which all closure / realignment proposals must pass in order to gauge their practicality and prudence. An extreme hypothetical example would be a scenario that would close Pearl Harbor. Military judgment would doubtless reject it on the grounds of strategic and tactical interests. Strictly speaking, however, *military* judgment is not the province of the TJCSG, whose considerations are different from those that focus on force structure and basing requirements. The TJCSG's area of competence is, instead, *technical* judgment. For simplicity, the phrase "expert judgment" will be used hereafter.

2. *Drifting Away From a Data-Driven Process*

After 20 months, we have not accomplished two critical requirements: (a) confirming the assertion that there is excess capacity within the DoD's in-house system (and if so, where and to what extent), and (b) determining a score for each sites' military value. Both sets of data are needed for the LOM.

As described in the issue paper, "Decision Criteria for Scenario Proposals," (dated 8 September), the LOM has two advantages. The first is as a decision-aid that limits the number of options produced from a very large universe of potential options. For example, given any 10 sites, there are 175 possible alternatives that close 1, 2, or 3 of them.<sup>2</sup> The second advantage is that *the LOM provides an objective means by which to defend our chosen few scenarios when so many other possibilities existed but were never considered.*

The drift away from a data-driven process began on 23 July with the request for notional scenarios by the Infrastructure Steering Group (ISG). The issue paper, "Notional Scenarios," (dated 28 July) argued that the ISG's request would risk fueling perceptions that the Department created the answers before the data was in. In fact, at that time, the field sites were still in the process of responding to the

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military value and capacity data calls. In our 30 July TJCSG meeting, the OSD BRAC Office gave clarifying guidance that these scenarios were to be notional, but nevertheless “useful,” a somewhat mixed message. OSD also asserted that scenario development is “the front-end of the analytical process,”<sup>3</sup> which was a departure from its guidance, issued a year ago, that called it “the final step.”<sup>4</sup>

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The moment we produced our first scenarios without the benefit of capacity and military value data, we lost the right to call the TJCSG process data-driven. It instead became *judgment-driven*.

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It is difficult to measure capacity and assign military values, and do it in time to run the LOM — but not impossible, especially in 20 months time. In fact, during BRAC-95, the Navy derived the necessary data and used the LOM to generate scenarios in 10 months’ time,<sup>9</sup> in a process that was data-driven from start to finish. As a member of the Navy’s BRAC-95 Base Structure Analysis Team, I can attest to that fact. The following items give more evidence of the sound, analytical nature of that process:

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<sup>9</sup> BSAT memo RP-0445-F8, subj: “Report of BSEC Deliberations on 16 November 1994,” 16 November 1994.

<sup>10</sup> GAO, “Military Bases: Analysis of DoD’s 1995 Process and Recommendations for Closure and Realignment”, p.87.

<sup>11</sup> Use of the word “adopted” is probably inaccurate, since neither the GAO of the Commission would have the occasion to employ these closure methodologies. Perhaps the word meant here was “endorsed.”

#### 4. *The Problem — Defensibility of Our Recommendations*

Lately, our process has been described as “strategy-driven,”<sup>12</sup> because the scenarios generated by that process conform to the TJCSG’s overarching strategy. That strategy is to:

“Reduce excess capacity and reduce the number of technical sites through combined Research, Development & Acquisition, Test & Evaluation Centers aligned for functional and technical efficiency and synergy.”<sup>13</sup>

The epithet, “strategy-driven,” while technically correct at a superficial level, is hard to support. For one, we have not proven there is any excess capacity to reduce, which is one objective of the strategy. The other is to reduce the number of sites in a way that aligns them for efficiency and synergy, but how does one align them successfully without objective data on their military value?

A strategy-driven process would be if we were reducing proven excess capacity while enhancing vertically integrated platform work, or co-locating a broad range of multidisciplinary sciences, at sites *shown by data to possess the best people, state-of-the-art facilities, and an established record of success in making scientific advances and creating new warfighting capabilities*. By contrast, realigning work to sites that merely have the most people working in what are large, wide-ranging technology areas (e.g., Sensors) is not strategy. It is expedience, at best.

Defensibility problems will almost certainly result from the belated use of data because our judgment-driven scenarios now have two sub-optimal futures. The best-case has them *data-validated*; and in the worst-case, *data-rationalized*. In either case, without corrective action, notions that we marshaled data to support preexisting judgments, or preferred outcomes, will be difficult to dispel.

#### 5. *A Remedial Plan of Action*

##### (a) Consult Other DoD Studies

The TJCSG does not have a monopoly on expert judgment, so it will be difficult to explain why we did not calibrate with the findings of high-level expert panels — *especially those that, unlike our study, actually examined projects at the sites*. Fortunately, there is still time to use the expert judgment of other DoD panels as a solution to our problem.

The issue paper, “Decision Criteria for Scenario Proposals,” proposed that we, where possible, assess each scenario for whether it conforms or conflicts with any judgment(s) of a DoD study, like those of the Service Science Boards, Tri-Service RDT&E Panels, or any other DoD/Federal board of scientific and engineering experts. Conformance to other panel findings would enhance the credibility of our judgment-driven scenarios. Conflicts with other findings, while not a show-stopper, should be cause for re-examination.

Some may claim this approach compromises objectivity because such studies can be biased (a legitimate concern), or that such information is not certifiable because it draws from sources outside the closure process. These arguments are not convincing for the following reasons:

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<sup>12</sup> TJCSG Meeting Minutes of 25 October 2004.

<sup>13</sup> DDR&E Briefing to the Infrastructure Steering Group, “Technical Joint Cross Service Group (TJCSG): Strategy / Initial Scenarios,” 1 October 2004.

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- Other studies are unlikely to be any more subjective than our judgment-driven process. *The more objective studies will be those that examined the R&D work itself, which we have not done.*
- These would be official reports, authorized and approved by the DoD / Services. *If this information cannot be considered authoritative and certifiable, then why does the DoD continue to charter such studies — at considerable public expense — and provide them to Congress?*
- BRAC-05 will use — for the first time in five rounds — closure ideas proposed by private groups outside the Government, such as the Business Executives for National Security. *Surely, if private sector opinions can be used for generating scenarios, then the official findings of DoD chartered and approved studies, must be acceptable and certifiable.*
- The DoD IG determined, after our 2 December 2003 off-site, when we first began our work on military value, that the use of DoD studies would be auditable, and therefore defensible.

If we can show that other DoD studies made similar judgments to our own, then the credibility, and defensibility, of our proposals are improved. One study of potential use is the Tri-Service “Fixed-Wing Aircraft T&E Reliance Study.” Another is the study by the National Defense University (NDU) on S&T in the areas of sensors, IT, and weapons (three areas we are examining). The NDU team included experts with impressive credentials: former Service Vice Chiefs (one was later appointed Chair of the Columbia Accident Investigation Board), former Commanders-in-Chiefs (one was later appointed as the President’s Special Envoy to the Middle East), a former DDR&E and Secretary of the Air Force, experts from academia, former lab directors, and a former National Security Council Special Assistant to the President.

*In short, what rationale could be offered for why OSD entertained ideas from the private sector, even as the TJCSG ignored expert judgments made in DoD’s own studies — many of which have been provided to Congress and the Secretary of Defense?*

(b) Derive Valid Military Value Scores — ASAP

Even if we decide to consult other DoD studies, the fact remains that judgment alone cannot substitute for the objective data necessary for deriving military value. In fact, OSD policy, established by the Deputy Secretary of Defense (DEPSECDEF), directs us to:

*“...determine military value through the exercise of military judgment built upon a quantitative analytical foundation (emphasis added).”<sup>14</sup>*

Deriving scenarios, without the foundation of quantitative analysis, causes problems. First, *it ignores the DEPSECDEF’s policy and risks compromising the integrity of the BRAC process.* It was for this reason, at the 3 November CIT meeting that I abstained from ranking the 31 proposed scenarios by their order of importance.<sup>15</sup> How can one make such determinations, in an objective way, without the analytical foundation provided by military value (MV) scores or capacity data?

The second problem is that *accurate MV scores are essential if we are to avoid closing, or realigning work from, sites that have greater value than ones we have selected to be the gainers.* Again, this situation was caused by developing scenarios before the MV scores were available to inform our selection of gainers and losers. The key task after deriving the scores will be to modify any defective scenarios as quickly as possible.

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<sup>14</sup> DEPSECDEF memo, subj: “BRAC 2005 Military Value Principles”, 3 September 2004.

<sup>15</sup> D. DeYoung, Memo to DoD IG, subj: “Decision to Abstain from Scenario Prioritization”, 4 November 2004.

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Complicating matters is the fact that the COBRA calls will be launched soon, well before the MV scores are finalized. This is likely to waste dollars, time, and effort. Each defective COBRA squanders resources in the following ways.

- COBRA calls are expensive. Based on the cost of an actual BRAC-95 COBRA call, my estimated cost of a BRAC-05 TJCSG COBRA call, affecting 7 sites, might be roughly \$495,000.<sup>16</sup> Assuming 20-30 COBRA calls, the total price tag could range between 10 and 15 million dollars.
- COBRA calls are labor intensive. Based on an actual BRAC-95 COBRA call, a BRAC-05 TJCSG COBRA call, affecting 7 sites, may generate 375 pages of data.<sup>17</sup> Assuming 20-30 COBRA calls, the sub-groups may be swamped with between 7,500 and 12,000 pages of data. Analyzing this data and resolving the likely conflicts between “gainers” and “losers”, especially the inter-service conflicts, will take time that is in short supply. *Of all phases in our process, this is the most likely to be a “showstopper”* (see issue paper, “Scenario Conflict Adjudication,” dated 13 September).
- COBRA calls disrupt important work. Labs and centers perform critical missions, many in direct support of our armed forces in Iraq and Afghanistan, as well as the global war on terrorism. COBRA calls are major distractions and divert resources away from mission needs. *The fact that we are risking the launch of unnecessary and/or defective COBRA calls, due to a lack of objective data, after 20 months of work, is more than unfortunate. It is inexcusable.*

One last issue regarding military value is the question of, “what gets assigned a score?” — i.e., will it be a bin, a group of bins, or an organization? Confining the scores to individual bins makes the least sense because it does not conform to the synergistic nature of how good R&D is conducted. Moreover, our 39 bins do not have clean, mutually exclusive borders — both people and facilities are shared across multiple bins. A bin-to-bin analysis will lead to realignments of workload packets, which will *sever the connectivity of critical multidisciplinary projects and vertically integrated programs*. The way out of this box is to assign MV to groups of bins, or to more meaningful organizational units, such as an activity (e.g., laboratory or center).

(c) Simplify the Capacity Analysis

Every dollar spent on excess infrastructure robs our treasury and burdens our armed forces. Our first task was to determine whether that excess exists, and if it does, where it is and how much there is of it. As with military value, this task must be accomplished *objectively and accurately*, and should have been completed *prior* to the generation of any closure scenarios.

*Reliable capacity data is still needed to confirm assertions made about the existence of excess capacity.* After all, this was the primary reason given to justify another round of closures. Conventional wisdom after the 1995 closures held that substantial excess capacity remained. However the circumstances supporting that contention were profoundly altered by a foreign

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<sup>16</sup> The BRAC-95 COBRA call expended 1-2 WYs of effort in 48 hours (plus a weekend) at the “losing” site. Assume the level to be 1.5 WYs, at a fully-burdened compensation rate of a GS-13, and then the “losing” site spent approximately \$225K to respond. Then assume the “gaining” site expended 1/5 the effort, which is probably conservative, and the cost for that site was roughly \$45 K, *making the total for the COBRA call approximately \$270 K.* But, that was a scenario that involved only 2 sites. Our three “notional” scenarios would have affected 7, 9, and 9 sites respectively. Let us assume that our COBRA calls affect an average of 7 sites, with a conservative ratio of 1 “loser” and 6 “gainers” for each. By applying the response costs of \$225 K for the “loser” and \$45 K for each “gainer”, *the estimated cost for each scenario might be \$495 K.*

<sup>17</sup> The BRAC-95 COBRA call generated 165 pages of data from the “losing” site. Again, assuming the “gaining” site expended 1/5 of the effort, about 35 pages may have been produced for a total data call response of 200 pages. Again, assuming the TJCSG data calls affect an average of 7 sites, with a ratio of 1 “loser” to 6 “gainers”, and the total amount of information might be roughly 375 pages.

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attack on our homeland. As a result, (a) the nation's defense budget has risen (with an accompanying increase in DoD lab/center workload),<sup>18</sup> (b) serious Congressional consideration is being given to increasing the size of the force structure, and (c) there are urgent wartime challenges that require extensive levels of RDT&E, such as finding reliable ways to detect, from a distance, everything from conventional explosives, to bio-agents, to nuclear material.

*The TJCSG's approach to determining capacity is overly complicated.* It uses too many metrics of dubious value. One is square footage, which has problems best addressed in the issue paper, "Notional Scenarios." A second, Force Structure Adjustment (FSA), is especially relevant here because of its total reliance on judgment. As explained in the issue paper, "Proposed Contingency Plan" (dated 4 August 2004), the FSA is intended to account for any current capacity that may not be necessary in 2025. Our individual judgments were merged into a collective judgment by means of a Delphi session, but it is unclear how to defend pure speculation about the world 20 years from now. Needless to say, the FSA is not certified data.

To be blunt, the third metric — extramural funding — is absurd. First, dollars given to external organizations is not a measure of on-site capacity. If it were, DARPA, with nearly \$2.7 billion in FY03, should have a sprawling infrastructure, but it occupies an office building.<sup>19</sup> Second, it injects private sector infrastructure into an analysis of the public sector's capacity. Funding that goes outside of an installation's fence-line is immaterial to BRAC. Third, the issue paper, "Proposed Contingency Plan," predicted that we would risk multiple counts of the same dollar as it is passed around different organizations at the same location. The prediction was right. At the 1 November CIT meeting, the Analytic Team reported that a roll-up of capacity measures was necessary in order to compare apples-to-apples, but that this will also ensure double-counting (or worse). The Team's proposal to use only intramural funding, which would eliminate both the multiple-counting and private sector issues, was not adopted.

A fourth metric, ACATs (both count and funding), is analytically unsound. ACAT programs exhibit large variances in cost and complexity. This leads to big differences in personnel, funding, and infrastructure requirements between programs — even at the same ACAT level. ACATs are much too imprecise as a means for measuring capacity. As a diagnostic tool, it is not unlike using an oven thermometer to decide whether your child has a fever.

We need to simplify our analysis. Work-years and test hours were sufficient in BRAC-95's Lab and T&E cross-service analyses. And, work-years alone got the job done in the Navy's BRAC-95 process; a process that the GAO endorsed. The solution is clear. Instead, we are proceeding with COBRA calls — *even though no excess capacity has been proven to exist*. We owe it to the field sites and to our nation's security to determine whether there is in fact any excess capacity, and if so, where and by how much. If we fail to meet that obligation, then we owe it to ourselves to start working on some plausible explanations for the Commission.

## **Conclusion**

There is an enormous difference between a closure process that is *data-driven & validated by judgment* and one that is *judgment-driven & rationalized by data*. The first approach, after proving excess capacity does indeed exist, can yield fair outcomes that reduces infrastructure and preserves an in-house system that meets long-term national interests. The second approach can heighten the risk to America's security.

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<sup>18</sup> Navy Laboratory Community Coordinating Group data show a 10% increase in the one year from FY01 to FY02 in reimbursable funding, and direct cites (including non-Navy funding sources).

<sup>19</sup> <http://www.darpa.mil/body/pdf/FY03BudEst.pdf>

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While we no longer have a data-driven approach, we may be able to avoid the pitfalls of the latter one. To do this we must first calibrate our judgment-derived scenarios against the findings of other defense studies. This will minimize the risk of errors in judgment and give our proposals more credibility. Then we need to validate those scenarios in two steps: use valid capacity data, derived through a simplified and more analytically sound process, to verify that there is excess capacity within the Department’s system of labs and centers, and if such excess is proven, then use accurate MV scores, at a meaningful level of aggregation (e.g., organizations vice the artificial 39 bins) to make the best choices regarding “gainers” and “losers.” Accomplishing less than those three steps will create unacceptable risks.

Much has been said about this BRAC being about transforming the Department for future threats. Much less is said about the fact that the very mission of the Department’s laboratories and centers is one of constant transformation — both incremental and radical. Whatever we do in this BRAC, *their ability to make technical contributions to national security must be preserved*. One example is the contribution made by world-class chemists with the Navy’s laboratory at Indian Head, Maryland, who developed and fielded the thermobaric weapon in only 67 days for use against al Qaeda and Taliban forces holed up in Afghanistan’s mountain caves and tunnels. Another is that made by engineers with the Army’s laboratory and test center at Aberdeen, Maryland and its Tank Automotive R&D center in Warren, Michigan, who developed and fielded, within two months, the Armor Survivability Kits that are now being rushed into Iraq to better protect U.S. ground forces.<sup>20</sup>

Another in-house ability that must be preserved is its role as a *yardstick*,<sup>21</sup> a term referring to the standard that it sets by providing authoritative, objective advice to governmental decisionmakers. This is critical to good government. The Federal Government must be able to choose among competing options offered by industrial producers. The need for profit makes each company an advocate of its own product, so, given those natural tendencies, the Government “requires internal technical capability of sufficient breadth, depth, and continuity to assure that the public interest is served.”<sup>22</sup>

A lot rides on our actions, much more so than ten years ago. America is engaged in a prolonged struggle with an opportunistic, fanatical enemy who has unlimited apocalyptic goals and is not deterred by traditional means. We need to identify and collect any potential BRAC savings — and our country needs all of the technological options it can get.

**Recommendations:** The TJCSG should require that the sub-groups: (a) calibrate the proposed scenarios against the findings of other DoD studies; (b) use capacity data, derived through a simplified and more analytically sound process, to verify that there is excess capacity within the DoD in-house system, and if so, then (c) use MV scores, at a meaningful level of aggregation, to *validate* the scenarios and make the best choices regarding “gainers” and “losers.”

**Army Position:** NC  
**AF Position:** \_\_\_\_\_  
**Navy Position:** \_\_\_\_\_  
**Marine Corps Position:** \_\_\_\_\_  
**JCS Position:** \_\_\_\_\_

Final Resolution:	
POC Signature: _____	Date: _____
CIT Chair: _____	Date: _____

<sup>20</sup> RDECOM Magazine, “Vehicles in Iraq Go From Workhorse to Warrior with New Kits,” February 2004.

<sup>21</sup> H. L. Nieburg, *In the Name of Science* (Chicago: Quadrangle Books, 1966).

<sup>22</sup> William J. Perry, *Required In-House Capabilities for Department of Defense Research, Development, Test and Evaluation* (Washington, DC: Department of Defense, 1980).

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<sup>8</sup> USD(AT&L) memo, subj: “Template and Briefing Schedule for BRAC 2005 Scenarios”, 17 September 2004.

<sup>9</sup> BSAT memo RP-0445-F8, subj: “Report of BSEC Deliberations on 16 November 1994,” 16 November 1994.

<sup>10</sup> GAO, “Military Bases: Analysis of DoD’s 1995 Process and Recommendations for Closure and Realignment”, p.87.

<sup>11</sup> Use of the word “adopted” is probably inaccurate, since neither the GAO of the Commission would have the occasion to employ these closure methodologies. Perhaps the word meant here was “endorsed.”

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#### 4. *The Problem — Defensibility of Our Recommendations*

Lately, our process has been described as “strategy-driven,”<sup>12</sup> because the scenarios generated by that process conform to the TJCSG’s overarching strategy. That strategy is to:

“Reduce excess capacity and reduce the number of technical sites through combined Research, Development & Acquisition, Test & Evaluation Centers aligned for functional and technical efficiency and synergy.”<sup>13</sup>

The epithet, “strategy-driven,” while technically correct at a superficial level, is hard to support. For one, we have not proven there is any excess capacity to reduce, which is one objective of the strategy. The other is to reduce the number of sites in a way that aligns them for efficiency and synergy, but how does one align them successfully without objective data on their military value?

A strategy-driven process would be if we were reducing proven excess capacity while enhancing vertically integrated platform work, or co-locating a broad range of multidisciplinary sciences, at sites *shown by data to possess the best people, state-of-the-art facilities, and an established record of success in making scientific advances and creating new warfighting capabilities*. By contrast, realigning work to sites that merely have the most people working in what are large, wide-ranging technology areas (e.g., Sensors) is not strategy. It is expedience, at best.

Defensibility problems will almost certainly result from the belated use of data because our judgment-driven scenarios now have two sub-optimal futures. The best-case has them *data-validated*; and in the worst-case, *data-rationalized*. In either case, without corrective action, notions that we marshaled data to support preexisting judgments, or preferred outcomes, will be difficult to dispel.

#### 5. *A Remedial Plan of Action*

##### (a) Consult Other DoD Studies

The TJCSG does not have a monopoly on expert judgment, so it will be difficult to explain why we did not calibrate with the findings of high-level expert panels — *especially those that, unlike our study, actually examined projects at the sites*. Fortunately, there is still time to use the expert judgment of other DoD panels as a solution to our problem.

The issue paper, “Decision Criteria for Scenario Proposals,” proposed that we, where possible, assess each scenario for whether it conforms or conflicts with any judgment(s) of a DoD study, like those of the Service Science Boards, Tri-Service RDT&E Panels, or any other DoD/Federal board of scientific and engineering experts. Conformance to other panel findings would enhance the credibility of our judgment-driven scenarios. Conflicts with other findings, while not a show-stopper, should be cause for re-examination.

Some may claim this approach compromises objectivity because such studies can be biased (a legitimate concern), or that such information is not certifiable because it draws from sources outside the closure process. These arguments are not convincing for the following reasons:

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<sup>12</sup> TJCSG Meeting Minutes of 25 October 2004.

<sup>13</sup> DDR&E Briefing to the Infrastructure Steering Group, “Technical Joint Cross Service Group (TJCSG): Strategy / Initial Scenarios,” 1 October 2004.

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- Other studies are unlikely to be any more subjective than our judgment-driven process. *The more objective studies will be those that examined the R&D work itself, which we have not done.*
- These would be official reports, authorized and approved by the DoD / Services. *If this information cannot be considered authoritative and certifiable, then why does the DoD continue to charter such studies — at considerable public expense — and provide them to Congress?*
- BRAC-05 will use — for the first time in five rounds — closure ideas proposed by private groups outside the Government, such as the Business Executives for National Security. *Surely, if private sector opinions can be used for generating scenarios, then the official findings of DoD chartered and approved studies, must be acceptable and certifiable.*
- The DoD IG determined, after our 2 December 2003 off-site, when we first began our work on military value, that the use of DoD studies would be auditable, and therefore defensible.

If we can show that other DoD studies made similar judgments to our own, then the credibility, and defensibility, of our proposals are improved. One study of potential use is the Tri-Service “Fixed-Wing Aircraft T&E Reliance Study.” Another is the study by the National Defense University (NDU) on S&T in the areas of sensors, IT, and weapons (three areas we are examining). The NDU team included experts with impressive credentials: former Service Vice Chiefs (one was later appointed Chair of the Columbia Accident Investigation Board), former Commanders-in-Chiefs (one was later appointed as the President’s Special Envoy to the Middle East), a former DDR&E and Secretary of the Air Force, experts from academia, former lab directors, and a former National Security Council Special Assistant to the President.

*In short, what rationale could be offered for why OSD entertained ideas from the private sector, even as the TJCSG ignored expert judgments made in DoD’s own studies — many of which have been provided to Congress and the Secretary of Defense?*

(b) Derive Valid Military Value Scores — ASAP

Even if we decide to consult other DoD studies, the fact remains that judgment alone cannot substitute for the objective data necessary for deriving military value. In fact, OSD policy, established by the Deputy Secretary of Defense (DEPSECDEF), directs us to:

*“...determine military value through the exercise of military judgment built upon a quantitative analytical foundation (emphasis added).”<sup>14</sup>*

Deriving scenarios, without the foundation of quantitative analysis, causes problems. First, *it ignores the DEPSECDEF’s policy and risks compromising the integrity of the BRAC process.* It was for this reason, at the 3 November CIT meeting that I abstained from ranking the 31 proposed scenarios by their order of importance.<sup>15</sup> How can one make such determinations, in an objective way, without the analytical foundation provided by military value (MV) scores or capacity data?

The second problem is that *accurate MV scores are essential if we are to avoid closing, or realigning work from, sites that have greater value than ones we have selected to be the gainers.* Again, this situation was caused by developing scenarios before the MV scores were available to inform our selection of gainers and losers. The key task after deriving the scores will be to modify any defective scenarios as quickly as possible.

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<sup>14</sup> DEPSECDEF memo, subj: “BRAC 2005 Military Value Principles”, 3 September 2004.

<sup>15</sup> D. DeYoung, Memo to DoD IG, subj: “Decision to Abstain from Scenario Prioritization”, 4 November 2004.

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Complicating matters is the fact that the COBRA calls will be launched soon, well before the MV scores are finalized. This is likely to waste dollars, time, and effort. Each defective COBRA squanders resources in the following ways.

- COBRA calls are expensive. Based on the cost of an actual BRAC-95 COBRA call, my estimated cost of a BRAC-05 TJCSG COBRA call, affecting 7 sites, might be roughly \$495,000.<sup>16</sup> Assuming 20-30 COBRA calls, the total price tag could range between 10 and 15 million dollars.
- COBRA calls are labor intensive. Based on an actual BRAC-95 COBRA call, a BRAC-05 TJCSG COBRA call, affecting 7 sites, may generate 375 pages of data.<sup>17</sup> Assuming 20-30 COBRA calls, the sub-groups may be swamped with between 7,500 and 12,000 pages of data. Analyzing this data and resolving the likely conflicts between “gainers” and “losers”, especially the inter-service conflicts, will take time that is in short supply. *Of all phases in our process, this is the most likely to be a “showstopper”* (see issue paper, “Scenario Conflict Adjudication,” dated 13 September).
- COBRA calls disrupt important work. Labs and centers perform critical missions, many in direct support of our armed forces in Iraq and Afghanistan, as well as the global war on terrorism. COBRA calls are major distractions and divert resources away from mission needs. *The fact that we are risking the launch of unnecessary and/or defective COBRA calls, due to a lack of objective data, after 20 months of work, is more than unfortunate. It is inexcusable.*

One last issue regarding military value is the question of, “what gets assigned a score?” — i.e., will it be a bin, a group of bins, or an organization? Confining the scores to individual bins makes the least sense because it does not conform to the synergistic nature of how good R&D is conducted. Moreover, our 39 bins do not have clean, mutually exclusive borders — both people and facilities are shared across multiple bins. A bin-to-bin analysis will lead to realignments of workload packets, which will *sever the connectivity of critical multidisciplinary projects and vertically integrated programs*. The way out of this box is to assign MV to groups of bins, or to more meaningful organizational units, such as an activity (e.g., laboratory or center).

(c) Simplify the Capacity Analysis

Every dollar spent on excess infrastructure robs our treasury and burdens our armed forces. Our first task was to determine whether that excess exists, and if it does, where it is and how much there is of it. As with military value, this task must be accomplished *objectively and accurately*, and should have been completed *prior* to the generation of any closure scenarios.

*Reliable capacity data is still needed to confirm assertions made about the existence of excess capacity.* After all, this was the primary reason given to justify another round of closures. Conventional wisdom after the 1995 closures held that substantial excess capacity remained. However the circumstances supporting that contention were profoundly altered by a foreign

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<sup>16</sup> The BRAC-95 COBRA call expended 1-2 WYs of effort in 48 hours (plus a weekend) at the “losing” site. Assume the level to be 1.5 WYs, at a fully-burdened compensation rate of a GS-13, and then the “losing” site spent approximately \$225K to respond. Then assume the “gaining” site expended 1/5 the effort, which is probably conservative, and the cost for that site was roughly \$45 K, *making the total for the COBRA call approximately \$270 K*. But, that was a scenario that involved only 2 sites. Our three “notional” scenarios would have affected 7, 9, and 9 sites respectively. Let us assume that our COBRA calls affect an average of 7 sites, with a conservative ratio of 1 “loser” and 6 “gainers” for each. By applying the response costs of \$225 K for the “loser” and \$45 K for each “gainer”, *the estimated cost for each scenario might be \$495 K*.

<sup>17</sup> The BRAC-95 COBRA call generated 165 pages of data from the “losing” site. Again, assuming the “gaining” site expended 1/5 of the effort, about 35 pages may have been produced for a total data call response of 200 pages. Again, assuming the TJCSG data calls affect an average of 7 sites, with a ratio of 1 “loser” to 6 “gainers”, and the total amount of information might be roughly 375 pages.

attack on our homeland. As a result, (a) the nation's defense budget has risen (with an accompanying increase in DoD lab/center workload),<sup>18</sup> (b) serious Congressional consideration is being given to increasing the size of the force structure, and (c) there are urgent wartime challenges that require extensive levels of RDT&E, such as finding reliable ways to detect, from a distance, everything from conventional explosives, to bio-agents, to nuclear material.

*The TJCSG's approach to determining capacity is overly complicated.* It uses too many metrics of dubious value. One is square footage, which has problems best addressed in the issue paper, "Notional Scenarios." A second, Force Structure Adjustment (FSA), is especially relevant here because of its total reliance on judgment. As explained in the issue paper, "Proposed Contingency Plan" (dated 4 August 2004), the FSA is intended to account for any current capacity that may not be necessary in 2025. Our individual judgments were merged into a collective judgment by means of a Delphi session, but it is unclear how to defend pure speculation about the world 20 years from now. Needless to say, the FSA is not certified data.

To be blunt, the third metric — extramural funding — is absurd. First, dollars given to external organizations is not a measure of on-site capacity. If it were, DARPA, with nearly \$2.7 billion in FY03, should have a sprawling infrastructure, but it occupies an office building.<sup>19</sup> Second, it injects private sector infrastructure into an analysis of the public sector's capacity. Funding that goes outside of an installation's fence-line is immaterial to BRAC. Third, the issue paper, "Proposed Contingency Plan," predicted that we would risk multiple counts of the same dollar as it is passed around different organizations at the same location. The prediction was right. At the 1 November CIT meeting, the Analytic Team reported that a roll-up of capacity measures was necessary in order to compare apples-to-apples, but that this will also ensure double-counting (or worse). The Team's proposal to use only intramural funding, which would eliminate both the multiple-counting and private sector issues, was not adopted.

A fourth metric, ACATs (both count and funding), is analytically unsound. ACAT programs exhibit large variances in cost and complexity. This leads to big differences in personnel, funding, and infrastructure requirements between programs — even at the same ACAT level. ACATs are much too imprecise as a means for measuring capacity. As a diagnostic tool, it is not unlike using an oven thermometer to decide whether your child has a fever.

We need to simplify our analysis. Work-years and test hours were sufficient in BRAC-95's Lab and T&E cross-service analyses. And, work-years alone got the job done in the Navy's BRAC-95 process; a process that the GAO endorsed. The solution is clear. Instead, we are proceeding with COBRA calls — *even though no excess capacity has been proven to exist*. We owe it to the field sites and to our nation's security to determine whether there is in fact any excess capacity, and if so, where and by how much. If we fail to meet that obligation, then we owe it to ourselves to start working on some plausible explanations for the Commission.

## **Conclusion**

There is an enormous difference between a closure process that is *data-driven & validated by judgment* and one that is *judgment-driven & rationalized by data*. The first approach, after proving excess capacity does indeed exist, can yield fair outcomes that reduces infrastructure and preserves an in-house system that meets long-term national interests. The second approach can heighten the risk to America's security.

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<sup>18</sup> Navy Laboratory Community Coordinating Group data show a 10% increase in the one year from FY01 to FY02 in reimbursable funding, and direct cites (including non-Navy funding sources).

<sup>19</sup> <http://www.darpa.mil/body/pdf/FY03BudEst.pdf>

While we no longer have a data-driven approach, we may be able to avoid the pitfalls of the latter one. To do this we must first calibrate our judgment-derived scenarios against the findings of other defense studies. This will minimize the risk of errors in judgment and give our proposals more credibility. Then we need to validate those scenarios in two steps: use valid capacity data, derived through a simplified and more analytically sound process, to verify that there is excess capacity within the Department's system of labs and centers, and if such excess is proven, then use accurate MV scores, at a meaningful level of aggregation (e.g., organizations vice the artificial 39 bins) to make the best choices regarding "gainers" and "losers." Accomplishing less than those three steps will create unacceptable risks.

Much has been said about this BRAC being about transforming the Department for future threats. Much less is said about the fact that the very mission of the Department's laboratories and centers is one of constant transformation — both incremental and radical. Whatever we do in this BRAC, *their ability to make technical contributions to national security must be preserved.* One example is the contribution made by world-class chemists with the Navy's laboratory at Indian Head, Maryland, who developed and fielded the thermobaric weapon in only 67 days for use against al Qaeda and Taliban forces holed up in Afghanistan's mountain caves and tunnels. Another is that made by engineers with the Army's laboratory and test center at Aberdeen, Maryland and its Tank Automotive R&D center in Warren, Michigan, who developed and fielded, within two months, the Armor Survivability Kits that are now being rushed into Iraq to better protect U.S. ground forces.<sup>20</sup>

Another in-house ability that must be preserved is its role as a *yardstick*,<sup>21</sup> a term referring to the standard that it sets by providing authoritative, objective advice to governmental decisionmakers. This is critical to good government. The Federal Government must be able to choose among competing options offered by industrial producers. The need for profit makes each company an advocate of its own product, so, given those natural tendencies, the Government "requires internal technical capability of sufficient breadth, depth, and continuity to assure that the public interest is served."<sup>22</sup>

A lot rides on our actions, much more so than ten years ago. America is engaged in a prolonged struggle with an opportunistic, fanatical enemy who has unlimited apocalyptic goals and is not deterred by traditional means. We need to identify and collect any potential BRAC savings — and our country needs all of the technological options it can get.

**Recommendations:** The TJCSG should require that the sub-groups: (a) calibrate the proposed scenarios against the findings of other DoD studies; (b) use capacity data, derived through a simplified and more analytically sound process, to verify that there is excess capacity within the DoD in-house system, and if so, then (c) use MV scores, at a meaningful level of aggregation, to *validate* the scenarios and make the best choices regarding "gainers" and "losers."

**Army Position:** \_\_\_\_\_  
**AF Position:** \_\_\_\_\_  
**Navy Position:** \_\_\_\_\_  
**Marine Corps Position:** \_\_\_\_\_  
**JCS Position:** \_\_\_\_\_

Final Resolution:	
POC Signature: _____	Date: _____
CIT Chair: _____	Date: _____

<sup>20</sup> RDECOM Magazine, "Vehicles in Iraq Go From Workhorse to Warrior with New Kits," February 2004.

<sup>21</sup> H. L. Nieburg, *In the Name of Science* (Chicago: Quadrangle Books, 1966).

<sup>22</sup> William J. Perry, *Required In-House Capabilities for Department of Defense Research, Development, Test and Evaluation* (Washington, DC: Department of Defense, 1980).

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Revision 1 8 November 2004**

ISSUE: Resolution of proposal by W&A for a "platform integration" scenario

POINT OF CONTACT: Karen Higgins

DISCUSSION:

Goals of original proposal:

- 1) Achieve potential efficiencies through a joint and common approach to platform integration and
- 2) Ensure current synergies achieved by current ways of doing business are not unintentionally lost
- 3) Create Transformational path for integration in the Network Centric Warfare future

Background:

Point 1: In addition to desire for greater efficiencies and synergies, part of the impetus was that "integration" has been binned in one of two ways by various organizations. Some put this work in ALSS [as requested by data call] and some put it in W&A. This difference in binning caused a confusion factor that may not be noted in some of the scenarios, resulting in unintended consequences, i.e. undesired breaking of synergies without commensurate benefits. For example, Redstone and Eglin binned weapons integration work for air platforms with W&A, while China Lake binned it with ALSS. In addition, underwater weapons [Newport/ Keyport] and ship surfaced launched weapons [Dahlgren] were binned in W&A--also causing a confusion factor with some scenarios that propose to handle weapons integration separate from some W&A work.

Point 2: The issue has currently taken on an emotional wrap that needs to be removed, so issues [and non-issues] can be clearly seen.

Point 3: Discussion among W&A and ALSS subgroups notes the following:

a) There are many similarities among services in how weapons system integration occurs on platforms.

1) Funding and direction comes from platform program offices.

2) Both contractors and in-house government folks [e.g. Army Weapons Center/ Navy Warfare Centers/ Air Force ALCs] are engaged in all Services.

b) Major differences in how weapons system occurs include: the degree to which prime contractors are involved during the life cycle [more for the USAF in all phases]; and, the location at which integration occurs especially after IOC [Army-Weapons Centers; Navy-Warfare Centers; USAF--Prime Contractor sites, platform sites and ALCs].

c) After discussion and analysis among membership from ALSS and W&A subgroups, consensus was

1) A common process approach could be implemented [NOT part of BRAC] in a joint service environment so that software integration processes could become more efficient.

2) A single organizational solution [i.e. move all integration to either platform or weapons sites] could break more synergies than it could gain efficiencies or other benefits. Scenario proposals need to ensure changes to current integration approach for all services do not have unintentional consequences.

**RECOMMENDATION(s):**

1) W&A remove the encompassing integration scenario from consideration Comments: Concur.

2) ALSS proceed with considering ALCs in their scenarios that consolidate R, D&A, & T&E Mgmt at a few select sites across the services Comments: Concur: Army does not own Air Logistic Centers. However, Army develops missiles at Redstone, and integration on Air platforms occurs there as well. Army ground platform and gun integration is the subject of the Land Warfare scenario. Guns or missiles that cross these platforms are integrated at the platform development site.

3) ALSS ensure movement of platform work does not encompass moving weapons integration. Concur with comment. Unless both move together to the same installation, which is being entertained in the Army LW scenario.

4) W&A proceed with excursions that address ship platform/combat systems integration and underwater weapons system integration. Concur with comment. Do not support excursion for energetics. It appears to be a presolution without at least the 15 Decision Factor analysis, when other scenarios are possible.

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DATE: 17 November 2004, Revision 3

ISSUE: Resolution of proposal by W&A for a "platform integration" scenario

POINT OF CONTACT: Karen Higgins

DISCUSSION:

Goals of original proposal:

- 1) Achieve potential efficiencies through a joint and common approach to Weapons and Platform integration
- 2) Ensure current synergies achieved by current ways of doing business are not unintentionally lost
- 3) Create Transformational path for integration in the Network Centric Warfare future

Background:

Point 1: Inconsistent Binning

In addition to desire for greater efficiencies and synergies, part of the impetus for this issue paper is that "integration" has been binned in one of several ways by various organizations. Some put this work in ALSS [as requested by data call] while some put it in W&A. In addition, others have chosen to place weapon related combat systems work in W&A and higher level platform combat systems and/or Integrated Warfare Systems under Information Systems and thus are part of C4I subgroup scenarios. Given the DTAP structure and the widely varying approach each of the services used in allocating their FTE/workload, this difference in binning has caused a significant confusion factor that for most scenarios, will result in unintended consequences, i.e. undesired breaking of mission critical synergies without commensurate benefits. For example, Redstone and Eglin binned weapons integration work for air platforms with W&A, while China Lake binned it with ALSS. In addition, submarine and underwater weapons, sensors, combat systems and C4I systems [Newport/ Keyport] and ship surfaced launched weapons, sensors, combat systems, C4I and force systems [Dahlgren] were binned in W&A, and C4I

.Point 2: Discussion among W&A and ALSS subgroups notes the following:

a) There are similarities and differences among the services in how weapons system integration occurs on platforms. Some of the similarities include:

1) While often funding and direction comes from platform program offices, this is not always true. Funding and direction for new/upgraded weapon system, combat systems, C4I systems and other related missions systems can come from the weapon or equipment sponsors directly, especially for standardized, cross platform, cross service programs and requires close coordination with platform sponsors.

2) Contractors, University Labs, other FFRDC's, and traditional in-house government R/D&A/T&E personnel [e.g. Army Weapons Center/ Navy Warfare Centers/ Air Force ALCs] are essential elements in this process and are often involved in supporting weapon and platform integration for other Services as well.

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b) Some of the major differences in how weapons and platform development and system integration occurs include:

1) The degree to which prime contractors are involved during the life cycle [more for the USAF in all phases]; and, the location at which integration occurs especially after IOC [Army-Weapons Centers; Navy-Warfare Centers; USAF--Prime Contractor sites, platform sites and ALCs].

2) While there may be similarities for Air platforms (USAF and Navy Air, Navy and USA Helo) and Ground platforms (USA and USMC), Surface Ship and Submarine Weapons and Platform integration is more unique to the Navy and Maritime applications.

3) The hierarchy of systems engineering (element, subsystem, system, system-of-systems, force systems, and joint capability) must be supported by a professional development base of knowledge. To succeed at platform, force and joint levels, extensive professional development and experience must be supported within resident knowledge base extant in both government and industry. Varying models for how this is accomplished exist across the services c) After discussion and analysis among membership from ALSS and W&A subgroups, consensus was

1) A common process approach could be implemented [NOT part of BRAC] in a joint service environment so that software integration processes could become more efficient.

2) A single organizational solution [i.e. move all integration to either platform or weapons sites] could break more synergies than it could gain efficiencies or other benefits. Scenario proposals need to ensure changes to current integration approach for all services do not have unintentional consequences.

RECOMMENDATION(s):

1) W&A remove the encompassing integration scenario from consideration

2) ALSS proceed with considering ALCs in their scenarios that consolidate R, D&A, & T&E Mgmt at a few select sites across the services

3) For Air-launched weapons, W&A recommends that other subgroups ensure that weapons/platform integration is not inadvertently relocated, thus breaking synergies referred to above.

4) For surface ship/ underwater platform integration, as part of its primary strategy, W&A has developed options to retain surface ship platform/ combat/weapons systems integration intact. W&A has also developed options to address submarine/underwater platform/combat/weapons systems integration, which may be remanded to the Navy. Gun integration with Navy surface ship platforms will be retained at existing sites.