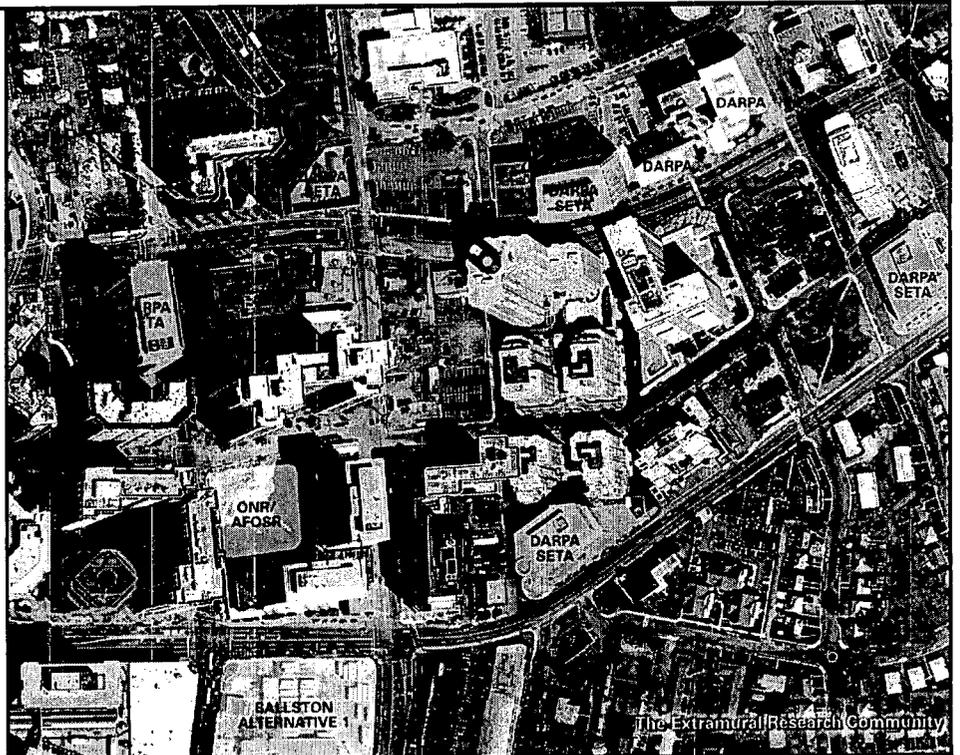




# Arlington County Proposal to the Base Realignment and Closure Commission

July 7, 2005





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## Executive Summary

The 2005 Base Realignment and Closure (BRAC) recommendations on *leased* space so substantially deviate from the criteria established by Congress that the BRAC Commission should completely remove leased space from consideration. Such an action would retain the authority and ability of the Department of Defense (DOD) to address issues of co-location, consolidation, and anti-terrorism involving leased space.

Working with the Commonwealth of Virginia and the private sector, we are able to develop solutions that did not emerge within the strictures of the BRAC process. Our alternatives demonstrate conclusively that leased space can fully comply with anti-terrorism/force protection (AT/FP) standards and do so at a significantly lower cost than recommendations presented by the Department of Defense.

Most importantly, the alternatives uphold high military value as the key criterion, in contrast to the assessment by DOD's Technical Joint-Cross Service Group that concluded:

***"Military Value analysis is irrelevant as this scenario strives to get out of leased space."  
(DOD TJCSG)<sup>1</sup>***

***Background.*** On May 13<sup>th</sup>, DOD announced its 2005 BRAC recommendations, which include the proposal to transfer over 26,000 personnel nationwide from twelve million square feet of existing leased commercial space onto DOD military installations. With over 23,000 personnel located in Northern Virginia, it is one of the most severely impacted communities of this BRAC round.

By statute, DOD's BRAC recommendations were to be based on eight Selection Criteria. This structure provides for a process by which military value is analyzed by data collected for the past several years, and from which realignment and closure "scenarios," are developed, costed, and selected.

Regarding leased space, the process collapsed in the following ways:

- The scenarios were drafted before data existed, prejudicing all subsequent thinking;
- The Office of the Secretary of Defense (OSD) established three imperatives above and beyond the statutory selection criteria, one of which called for the elimination of all leased space;

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<sup>1</sup> TJCSG Meeting Minutes 19 January 2005.

- Data was displaced by arbitrary assumptions on leasing and force protection that were, regardless of the facts, heavily biased and often times based on flawed information.

The breakdown in the process is amply demonstrated in the records DOD released and is documented explicitly and extensively in the minutes of the two Joint-Cross Service Groups, Headquarters and Support Activities and Technical Joint-Cross Service Group (HSA JCSG/TJCSG). DOD material makes it clear that evaluating leased space had not been done in previous BRAC rounds, that there was no existing methodology, and that the rules evolved throughout the process. Detailed documentation reveals that the process was simply manipulated to achieve pre-determined outcomes.

Among the examples of misapplication of the process is the automatic down-scoring of leased space on factors where leased space is equal to or clearly superior to space on military bases:

- Availability of communications and IT infrastructure
- Percent of the area population with a bachelor's degree or higher
- Access to civilian airports
- Condition and quality of space
- Survivability from a terrorist attack

In each instance above, leased space was arbitrarily given values lower than the worst space on military installations, even in instances where the leased space was clearly superior by any objective measure. By default, leased space in the immediate proximity of a military base was literally given different scores for factors that are identical, such as the education of the population in the community.

These failures indicate a significant and fatal deviation from the BRAC Selection Criteria.

## **Extramural Research Activities and Arlington Alternatives**

Representative of the fatally flawed analysis are the recommendations for the extramural research functions of the Department of Defense:

- Defense Advanced Research Projects Agency (DARPA),
- Office of Naval Research (ONR),
- Air Force Office of Scientific Research (AFOSR), and
- Army Research Office (ARO).

The current DOD BRAC recommendations will have unintended consequences of mission disruption and degradation on these agencies by breaking their synergy with other research organizations, such as the National Science Foundation (NSF). By DOD's own analysis, moving these agencies would harm mission effectiveness. At this critical time, when the nation is at war, the risk is simply too great to accept.

We propose alternatives that demonstrate conclusively there are options with greater military value at significantly less cost consistent with the BRAC criteria.

The only real reasons given by DOD for proposing changes to the extramural research functions are to (1) get out of leased space and (2) achieve greater anti-terrorism/force protection. The former is not a BRAC criterion, but rather a justification; the latter is fully achieved in the Arlington alternatives without the disruption or degradation of military value:

- The Ballston Site – a new state-of-the-art facility in an urban area that achieves the quality of life essential to the scientific community; and
- The Arlington Hall Site – a new state-of-the-art facility on a federally secured campus that is literally down the street from the current location.

Our alternatives preserve the scientific and research synergy of the current locations, achieve much greater military value, fulfill force protection objectives, and do all of this at a substantially lower cost than the DOD recommendation:

- \$122 million additional savings to U.S. taxpayers in immediate costs;
- \$58 million to \$52 million additional savings over the BRAC implementation period;
- \$25 million to \$4 million additional NPV savings over a 20-year period.

These savings are achieved even though the cost data used for the DOD recommendations are incorrect:

- DOD underestimates one-time costs by \$16.3 million;
- DOD overestimates lease savings by over \$30 million a year;
- DOD underestimates sustainment costs by approximately 48%.

### **Actions Requested of the Commission**

The attached analysis and alternatives demonstrate how DOD substantially deviated from the BRAC criteria in making its recommendations, and how its inaccurate and inconsistent approach risks a significant adverse impact on vital DOD missions—calling into question the assessment of military value and cost savings. We recommend that the Commission take one of the following actions:

- **Option 1.** Set aside all leased space recommendations in the BRAC report. This option preserves the extensive discretion that DOD currently has to reduce, expand, or reallocate leased space as it deems appropriate. DOD is in no way dependent upon the BRAC process to make such decisions. In cases where DOD determines that activities in leased space should be re-located to military installations, there are opportunities to do so as part of the annual authorization and appropriations processes. More importantly, this option would provide the Secretary of Defense a means to address concerns regarding assets and capabilities that only state and local governments can offer in partnership with the private sector to achieve the best possible DOD outcomes.
- **Option 2.** If the Commission determines that leased space should remain part of the BRAC process, the recommendations should be modified to permit the exploration of better alternatives. The appropriate alternative language already exists in DOD's BRAC report under "Relocate Miscellaneous Department of Navy Leased Locations Recommendation."<sup>2</sup> In addition to identifying the "most likely relocation sites" on military installations, the text states:

*However, the recommendation is written broadly enough to relocate Navy organizations currently in leased space **to any other DOD leased space in the NCR.** (Emphasis added.)*

Similar language applied to other leased space recommendations would permit DOD the ability to explore alternatives with greater military value and reduced costs, such as the ones we offer.

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<sup>2</sup> Final BRAC Report, Volume VII, HSA JCSG, p. 70.

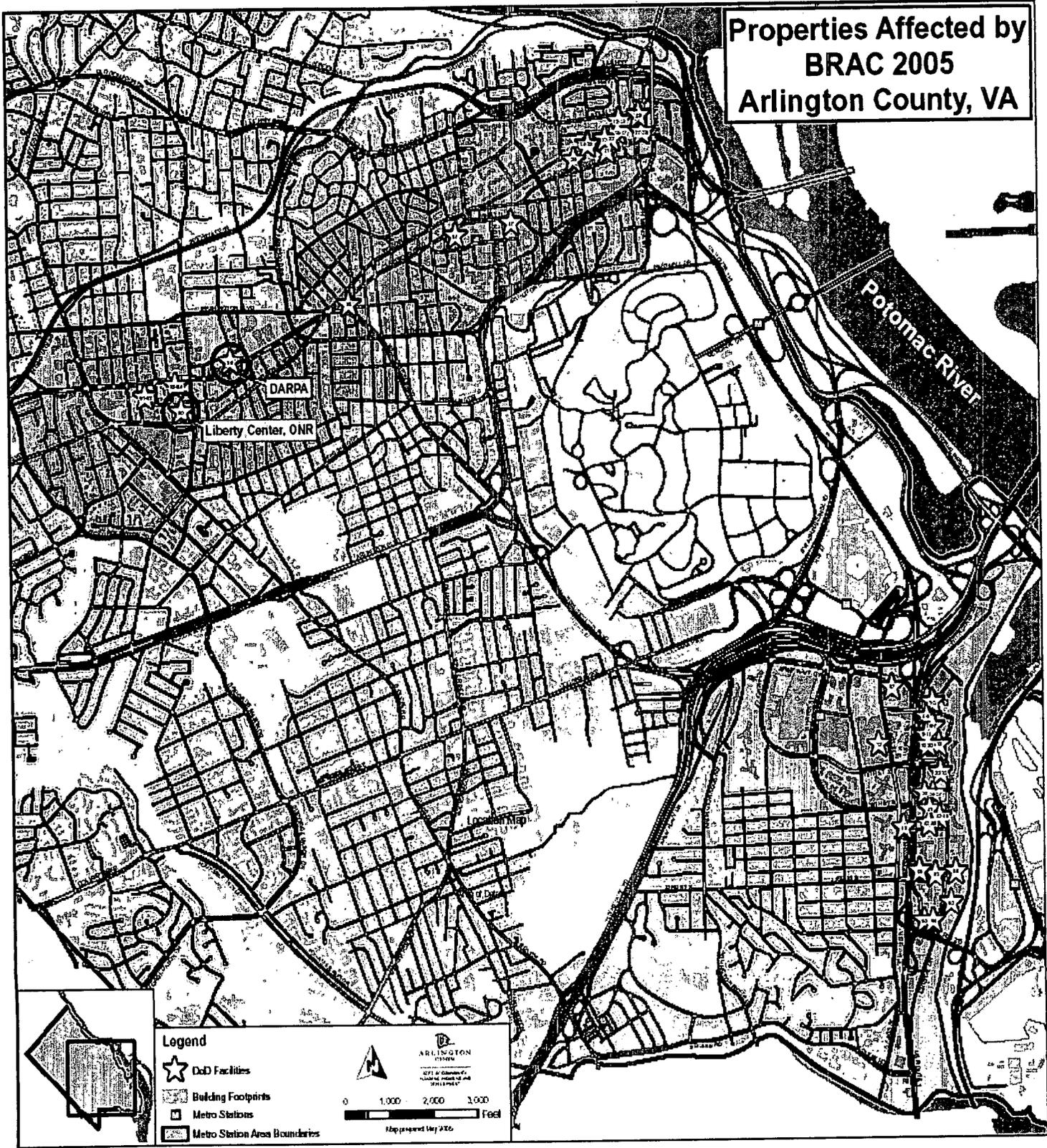
- **Option 3.** Modify the language specifically regarding extramural research managers to permit exploration of the Arlington Alternatives. This narrowly focused option enables DOD to at least consider the compelling case that has been presented to achieve greater military value at substantial cost savings for the science and technology functions.

### **Conclusion**

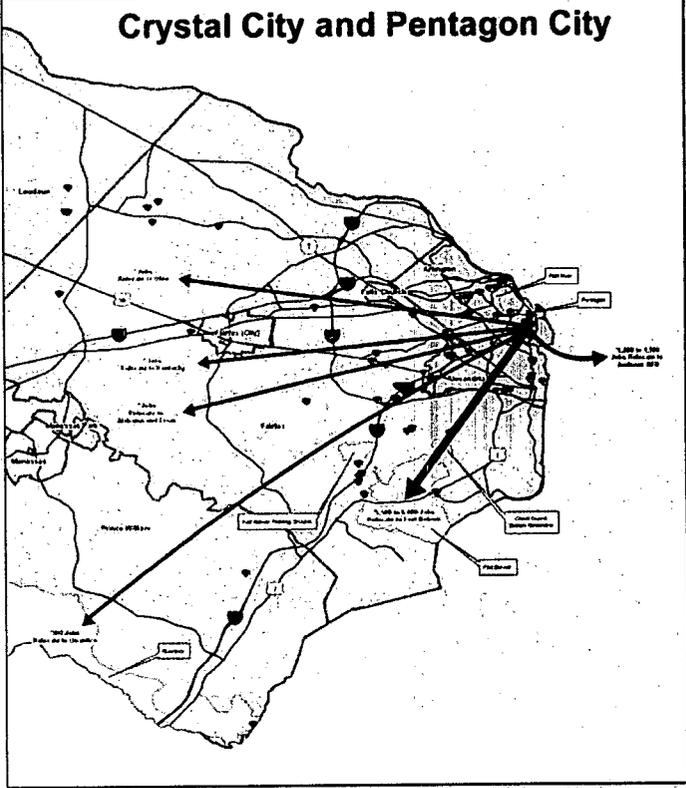
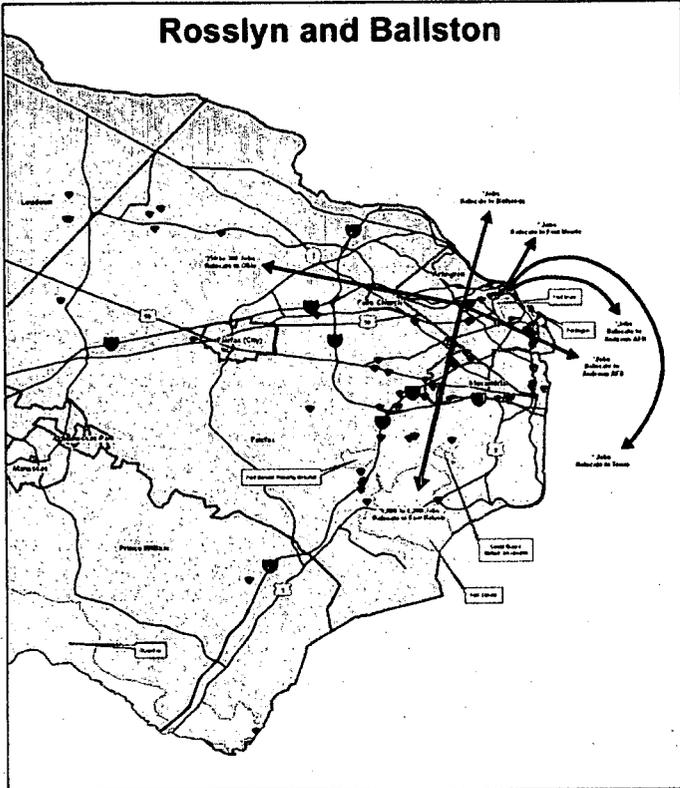
We urge the Commission to provide sufficient flexibility in formulating its recommendations to ensure that whatever actions it takes affecting installations in leased space, are solutions that are in the best interest of national security and accurately and objectively assess military value. They must also be in full compliance with the BRAC criteria. The BRAC process is intended as an objective, data-driven way to achieve the greatest military value for the nation at the lowest cost. We are confident that if this process is used, as intended by Congress, that superior solutions, such those we have offered, can achieve DOD's goals and enhance the nation's military value.

The White House, Pentagon and Congress are all centered in a metropolitan area. Their locations fully demonstrate that the military should not, and does not, need to abandon America's urban areas to safely and effectively achieve its mission. By using urban leased space options for headquarters, administrative, and technical activities, the Department of Defense preserves its military installation assets to truly meet the military objectives for which they are designed.

**Properties Affected by  
BRAC 2005  
Arlington County, VA**

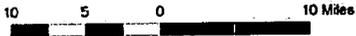
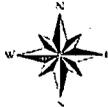


# Northern Virginia Region BRAC Job Movements

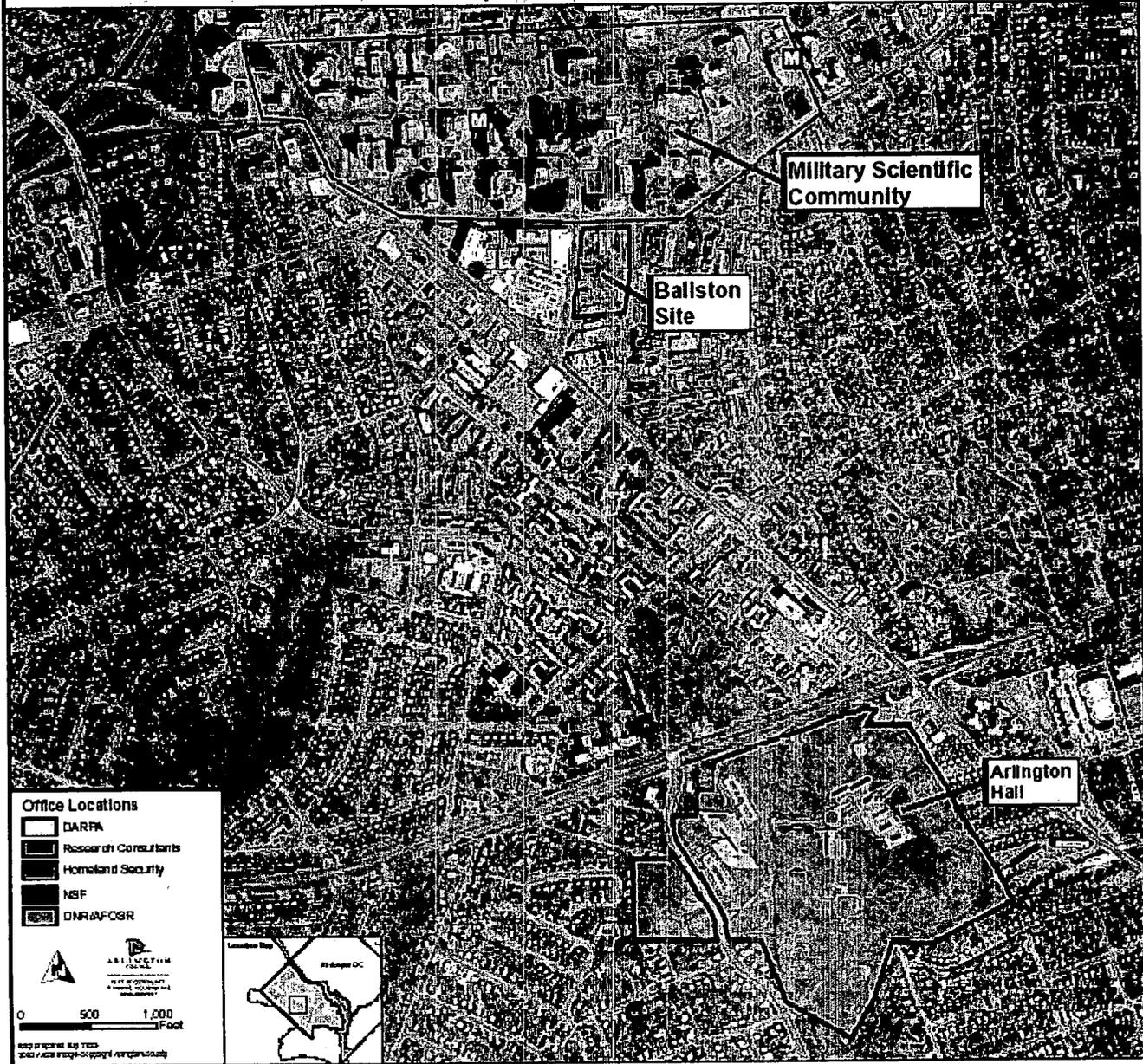


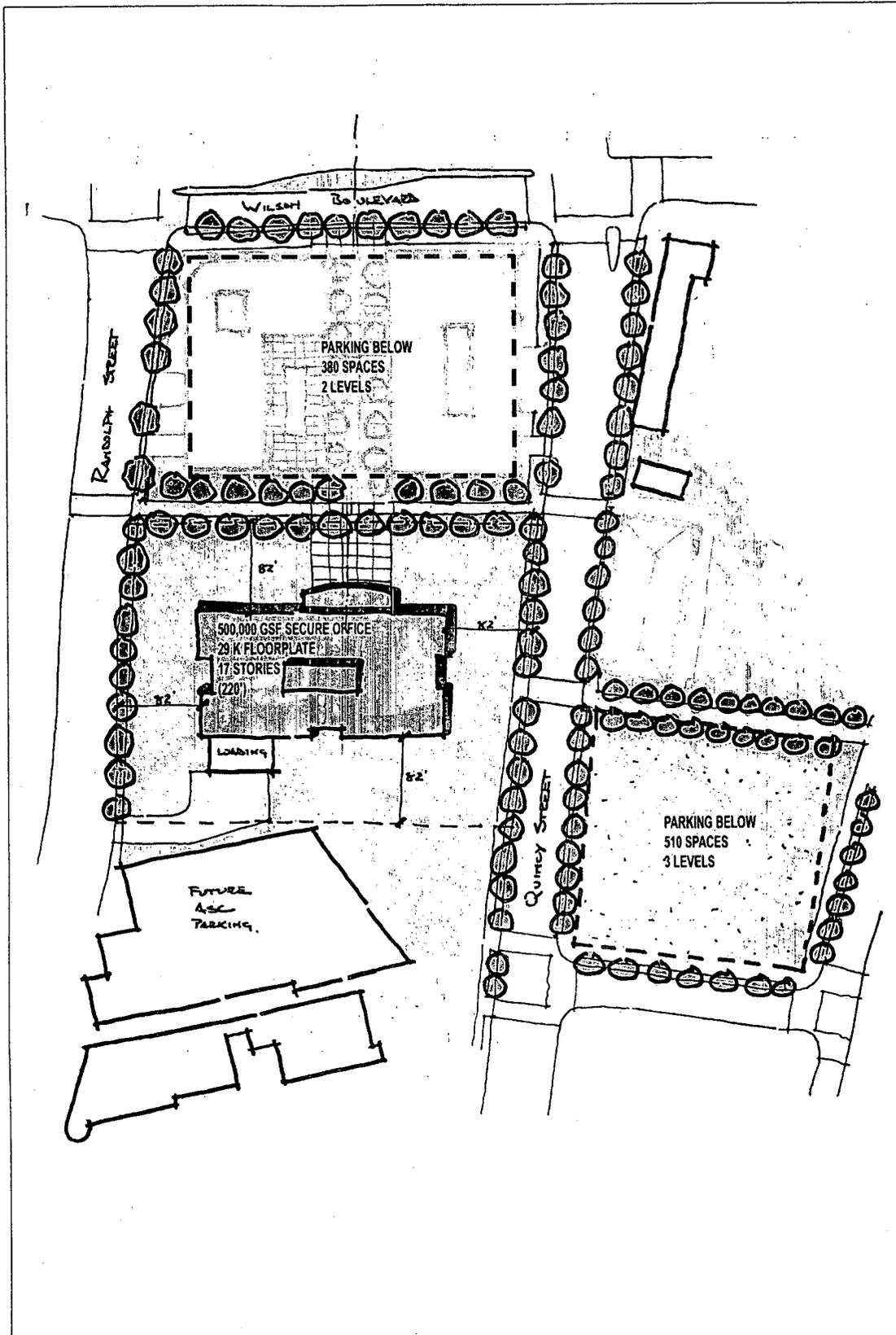
Within the boundaries of the NVRC, there are 121 DoD Facilities and 6 Military Installations.

<b>Legend</b>	
←	Proposed Movements
■	Facilities
▣	Military Installation
—	Major Roads
□	NVRC Counties



# Military Extramural Research Agencies With Proposed Receptor Sites





BALLSTON SITE



BALLSTON, VA

DRAFT DEVELOPMENT PLAN



RTKL



BRAC CONCEPT PLAN

6.21.2005



## Section 1: DOD Process Substantially Deviated from Congressional Criteria

On May 13<sup>th</sup>, DOD announced its 2005 BRAC recommendations, which include the proposal to transfer over 26,000 personnel nationwide from twelve million square feet of existing leased commercial space onto DOD military installations. With over 23,000 personnel located in Northern Virginia, it is one of the most severely impacted communities during this BRAC round.

By statute, DOD's BRAC recommendations were to be based on eight Selection Criteria, approved by Congress. This structure provides for a process by which military value is analyzed by data that have been collected for the past several years, and from which alternative realignment and closure options, "Scenarios," are developed, costed, and selected.

DOD substantially deviated from the mandated criteria in the following ways:

- Process violated DOD procedures (Section 1.1);
- Leased space analysis ignored military value (Section 1.2);
- Military value scores deviated from BRAC Criteria (Section 1.3) in the following ways:
  - Employed attributes and metrics that had little to do with mission capabilities;
  - Assigned leased space a value of zero in Military Value due to non-DOD ownership alone, resulting in leased space receiving a lower score than DOD's most dilapidated facilities;
  - Weighted metrics for modular buildings to score greater than any leased space;
  - Denied activities housed in leased space the opportunity to provide information on the quality of their own facilities;
  - Performed no analysis on any leased space for compliance with AT/FP standards and automatically assumed failure.

Even after conducting a flawed process, designed to achieve pre-determined outcomes, recommendations related to the extramural research functions (TECH-0040) were changed just a week before issuing its Final Report due to after-the-fact rationalizations (Section 1.4).

Furthermore, the cost analysis of DOD's recommendation would undermine the mission-effectiveness of critical DOD war-fighting research due to the following (Section 1.5):

- The recapitalization rate for facilities violated established DOD policy;
- Sustainment costs are underfunded, which would undoubtedly lead to accelerated deterioration;
- The schedule for implementation is unrealistically aggressive;
- AT/FP improvements costs are inappropriately assessed;
- Government overhead costs are shifted to assume savings.

The substantial deviation applies across all of the headquarters and administrative services activities. It also heavily impacts extramural research activities.

### **1.1 Process Violated DOD Procedures**

The process used by DOD to develop its BRAC recommendations began with a well-considered approach, in which the Selection Criteria that were established pursuant to law and regulation would provide the structure for a data-driven analysis of military value, from which alternative realignment and closure options ("Scenarios") would be developed, costed and selected. As the process progressed, however, the process fell apart in several inter-related ways:

- In violation of DOD's defined process, realignment and closure Scenarios were drafted before data existed, prejudicing all subsequent thinking;
- The statutory Selection Criteria were displaced by other considerations, such as OSD Imperatives, one of which was "Eliminate leased space";
- Data was displaced by arbitrary assumptions that frequently were erroneous and were heavily biased against all leased space regardless of the facts of a particular case.

This is amply demonstrated within the records of the Headquarters and Support Activities Joint Cross-Service Group (HSA JCSG) and the Technical Joint Cross-Service Group (TJCSG), the two JCSGs that addressed the DOD extramural research agencies: DARPA, ONR, AFOSR, and ARO.

The premature drafting of Scenarios before data was collected resulted in OSD Imperatives driving the development of Scenarios involving leased space based on assumptions that often were inaccurate, but which were adhered to despite

contradicting data. As documented in the TJCSG meeting minutes, TJCSG was to follow OSD BRAC direction “regardless of what the data might indicate” and **“the Military Value analysis is irrelevant as this scenario strives to get out of leased space per the OSD imperative.”**<sup>3</sup> (Emphasis in original.)

Particularly with regard to leased space and the extramural research agencies, these failures in the process constitute significant deviation from the BRAC Selection Criteria.

**Scenarios Before Data or Analysis: Answers First, Questions Later.** With regard to leased space, DOD’s BRAC process quickly moved from what was conceived as an objective assessment to a justification of a predetermined outcome. As documented within the TJCSG in November 2004:

Not one scenario is the output of the Linear Optimization Model, 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.***

The process was designed to be ***data-driven***, 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.<sup>4</sup> (Emphasis in original. The recommended proactive measures were not taken.)

Under the DOD BRAC process, scenario development was to occur only after capacity analysis and then military value analysis had been performed based on certified data.

As reflected in the BRAC Process overview slide, there are several steps in the BRAC analytical process. The **first major step is a capacity analysis** to establish the baseline for rationalizing infrastructure across the Department. The **capacity analysis is followed by a military value analysis** in which measures of merit will quantify facility attributes and provide a means to rank order facilities. **These two steps, in turn, are the foundation of the final step, scenario development**, in which the JCSG will array alternative configurations to arrive at closure and realignment recommendations.<sup>5</sup> (Emphasis added.)

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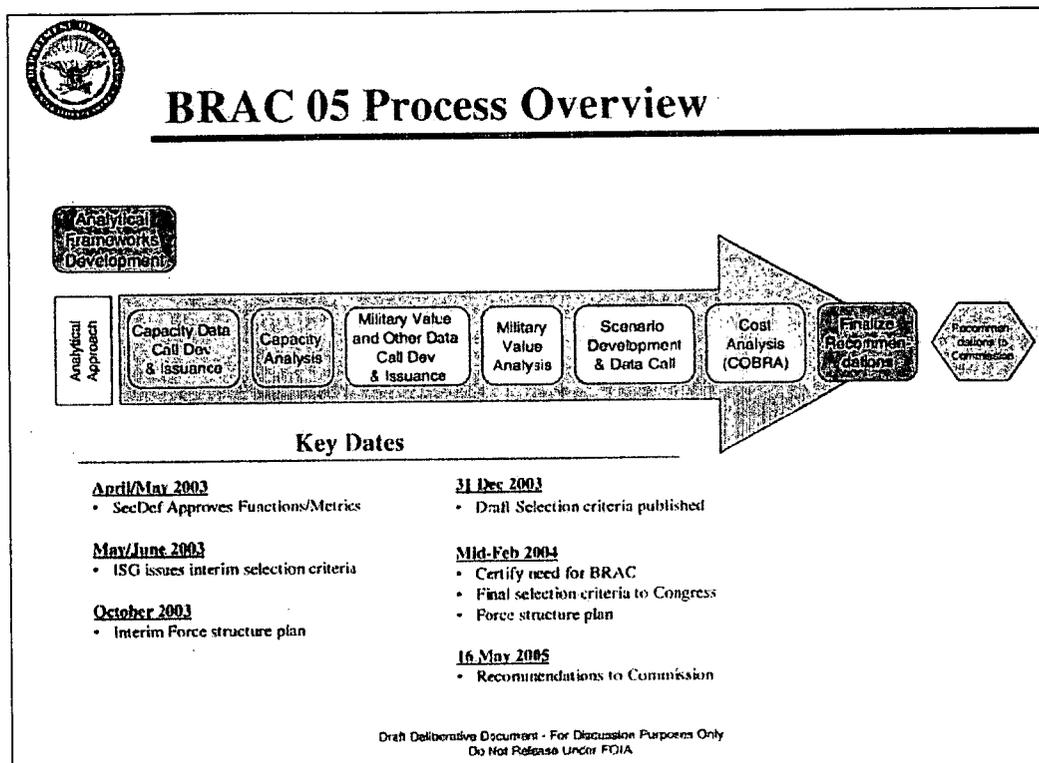
<sup>3</sup> TJCSG Meeting Minutes, 13 December 2004 and 19 January 2005.

<sup>4</sup> “Military Judgment: Necessary – But Not Sufficient. Issue #11-15-04-01” 14 November 2004, p.

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<sup>5</sup> USD (AT&L) memoranda “BRAC 2005 Guidance for the Headquarters and Support Activities Joint Cross-Service Group” and “BRAC 2005 Guidance for the Technical Joint Cross-Service Group,” 16 July 2003

The BRAC Process overview slide referred to by the Under Secretary AT&L is as follows:



This data-driven methodical approach continued to be held forth as the DOD BRAC process moved into 2004, as reflected in a 29 January 2004 briefing chart<sup>6</sup>, which is essentially identical to the chart above.

However, this methodical process began to fall apart in multiple ways. In November 2004, the TJCSG documents how the development of Scenarios, i.e., the actual options for realignment and closing of facilities, was accelerated in the process prior to the conducting of capacity analysis or military analysis:

**The drift away from a data-driven process began on 23 July (2004) 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 our 30 July TJCSG meeting, the OSD BRAC Office ... asserted that scenario development is "the front-end of the analytical process,"<sup>7</sup> which was a departure from its guidance, issued a year ago that called it "the final step." The moment we produced our first scenarios without the**

<sup>6</sup> "Military Value Modeling in Support of the Joint Cross Service Group for Headquarters and Support Activities," 29 January 2004, slide 4

<sup>7</sup> TJCSG Meeting Minutes, 30 July 2004

**benefit of capacity and military value data, we lost the right to call the TJCSG process data-driven.**<sup>8</sup> (Emphasis added.)

By forcing the development of Scenarios to the front of the process, Scenarios were built on pre-existing notions and prejudices (such as prejudices against leased space), which could have been precluded by following the originally prescribed process of developing Scenarios based on actual data (such as data on the condition, cost and protectability of leased space). Once Scenarios were developed, the process became one of choosing among the prematurely drafted options for realignment and closure, and selective use of data as it became available to justify the choices.

This was recognized by the TJCSG in October 2004 and again in November 2004, where worries were expressed about the "superficial" rationalizations the Group was adopting for its 'answers first, questions later' approach:

Lately, our process has been described as "strategy-driven,"<sup>9</sup> because the scenarios generated by that process conform to the TJCSG's overarching strategy. 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 of the objectives of the strategy. The other is to reduce the number of sites in a way that aligned them for efficiency and synergy, but how does one align them successfully without objective data on their military value?<sup>10</sup>

Given these facts, in November 2004, concerns were strongly expressed within the TJCSG that the TJCSG's candidate recommendations would be seen not only as invalid, but also as cooked, and with good reason:

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 pre-existing judgments, or preferred outcomes, will be difficult to dispel.<sup>11</sup> (Emphasis in original.)

This was not viewed merely as a problem of perception. Rather, the recommended realignments and closures were viewed as being simply wrong as a result of this 'answers first, questions later' approach, and "the integrity of the BRAC process" was viewed as being jeopardized:

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<sup>8</sup> "Military Judgment: Necessary – But Not Sufficient. Issue #11-15-04-01" 14 November 2004, p. 1-2

<sup>9</sup> TJCSG Meeting Minutes, 26 October 2004

<sup>10</sup> "Military Judgment: Necessary – But Not Sufficient. Issue #11-15-04-01" 14 November 2004, p. 3

<sup>11</sup> "Military Judgment: Necessary – But Not Sufficient. Issue #11-15-04-01" 14 November 2004, p. 3

OSD policy, established by the Deputy Secretary of Defense, directs us to: "...determine military value through the exercise of military judgment **built upon a quantitative analytical foundation.**" 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.** 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 the 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.<sup>12</sup> (Emphasis added)

Given that the integrity of the BRAC process was viewed as being compromised, the 'answers first, questions later' process was reported to the DOD Inspector General.<sup>13</sup>

Of far greater concern was that the 'answers first, questions later' approach places at risk the Nation's security:

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 that excess capacity does indeed exist, can yield fair outcomes that reduce infrastructure and preserves an in-house system that meets long-term national interests. **The second approach can heighten the risk to America's security.**<sup>14</sup> (Italics in original.)

These concerns led one TCSG member (Navy), who had considerable prior BRAC experience, to make several recommendations to try to mitigate the problems of the 'answers first, questions later' approach and to produce valid recommendations. While Army and Air Force TJCSG members did not concur in those specific recommendations, the available documentation indicates that none of them disputed his description of the inverted process and its consequences.

In fact, the TJCSG as a whole fully understood that the process they had pursued turned the originally prescribed process on its head, basing recommended realignments and closures on prejudgments and preferred outcomes rather than on a data-driven analysis of Military Value. This is reflected in the Meeting Minutes for the TJCSG meeting of December 13, 2004:

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<sup>12</sup> "Military Judgment: Necessary – But Not Sufficient. Issue #11-15-04-01" 14 November 2004, p. 4

<sup>13</sup> DeYoung memo to DOD Inspector General, "Decision to Abstain from Scenario Prioritization," 4 November 2004

<sup>14</sup> "Military Judgment: Necessary – But Not Sufficient. Issue #11-15-04-01" 14 November 2004, p. 6

**OSD BRAC directed** the TJCSG to apply Expert Military Judgment whenever it makes sense **regardless of what the data might indicate.**<sup>15</sup>  
(Emphasis in original.)

The practical meaning of this OSD BRAC Office direction to substitute “judgment” for data was captured in the Meeting Minutes for the TJCSG meeting on January 19, 2005, which discusses the Scenario TECH-0040 to move extramural research program managers from Northern Virginia to across the Potomac River:

The TJCSG must submit the Military Value analysis for TECH-0040 prior to submitting it as a candidate recommendation. **However, the Military Value analysis is irrelevant as this scenario strives to get out of leased space per the OSD imperative** and there is currently no Military Value for Research at Anacostia.<sup>16</sup> (Emphasis added.)

As discussed below, the “justify the arbitrary answer” mentality was painfully evident when, less than a week before its Final Report and recommendations were submitted, the TJCSG changed the receiving location for the extramural research agencies from the Anacostia Annex to the National Naval Medical Center (Bethesda) and significantly altered the justification and military value “analysis” it had previously adopted.

### **1.2 DOD Analysis of Leased Space: Imperatives Trump Military Value**

**General Approach.** Early in the process, before data was in hand, the DOD BRAC teams’ consideration of leased space moved from an objective assessment to a presumed outcome: “Eliminate leased space.” From this presumed outcome, it crafted “analysis” and substituted assumptions for data in order to justify the answer with which it started.

Initially, the HSA JCSG staff sought out opinions about leased space. During 2003, the HSA JCSG staff interviewed HSA JCSG Members, Military Department BRAC Chiefs, the OSD BRAC Chief and the former HSA JCSG chairman regarding matters within the JCSG’s domain, including leased space. Among the questions it posed was “Can leases (in or out of NCR) have inherent military value and warrant retention?” Five out of the six responses recorded in the Group’s memorandum reflect an understanding that different leased properties have different characteristics and therefore must be examined individually.

“Not all leases are bad, but you have to approach it from a business perspective. Leasing is outsourcing. If it’s cheaper to lease than to build

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<sup>15</sup> TJCSG Meeting Minutes, 13 December 2004

<sup>16</sup> TJCSG Meeting Minutes, 19 January 2005

and maintain yourself then you should lease. It needs to be done on a case-by-case basis.”

“My experience has proven that even though an organization may be in an old lease that may not be the best, if it’s critical or important for them to be in a certain location, then we have to carefully measure the rationale for our decisions. We privatize housing because it’s too expensive to operate.”

“Have to look at two things. First is location and second is time. A lease is good if it put a HQ in a location where you need them, but how long do you keep them there? Generally, leases are bad. There must be an overarching issue to justify a lease. An example would be someone needing to be close to [a non-DOD research organization]. Then it may make sense to have a lease for that partnership.”

“Not all leases are bad. It’s a fact of life sometimes and there can be value in location but we can’t buy.”

“Not all are bad ... we don’t have enough land to do what is smart ... co-locating research activities in Ballston facilities to be near the National Science Foundation.... Real weakness is the security side, being able to maintain security.”<sup>17</sup>

The sixth respondent, however, reflected the ‘answer first, questions later’ mindset, stating: “No, there is no leased space that meets the AT/FP. They are not survivable.” This is a factually inaccurate assumption and flawed mindset of asserting facts before data was obtained. It quickly came to characterize the HSA JCSG’s approach to leased space as a result of guidance from elsewhere in DOD.

In June 2003, the Army Deputy Chief of Staff (G-8) articulated the working assumptions being used by the HSA JCSG as a basis for Transformational Options, including “Moving from leased space to military installations will contribute to security of those functions and can lower sustainment (O&M) costs. It was emphasized that these were assumptions and that additional guidance was being sought. But based on these assumptions, it was proposed that a Transformational Option could be **“Elimination of all leased space in the NCR.”**<sup>18</sup>

By late January 2004, the HSA JCSG was working with a series of “Imperatives,”<sup>19</sup> among which was **“Reduce Leased Space in NCR; relocate activities to operational bases.”**<sup>20</sup>

<sup>17</sup> BRAC 2005 Military Value Interview Questionnaire, p. 12

<sup>18</sup> G-8 Memo to USD (AT&L), “Transformational Options for BRAC 2005”, 23 June 2003

<sup>19</sup> HSA JCSG Meeting Minutes, 22 January 2004

The HSA JCSG's Military Value Analysis Report opens by stating, "The Military Value Analysis phase of the Base Realignment & Closure (BRAC) process begins with development of a quantitative method for assessing the military value...." But two paragraphs later, the Report informs us that, in developing models for military value, one of the HSA JCSG's "**foundational objectives**" for its "overarching guiding principles" **was the "movement of headquarters in leased space onto installations."**<sup>21</sup>

These DOD Imperatives became embedded in the Transformational Options guiding the work of the JCSGs and developed in response to OSD Guidance. According to a 22 June 2004 briefing, Transformation Options being pursued in response to OSD Guidance included<sup>22</sup>:

- **Replace DOD leased space with owned space by creating secure, enclaved campuses**
- **Eliminate 70% of leased space within 100 miles of the Pentagon**
- **Eliminate XX% (stet) of leased space within the statutory NCR**

In its Final Report on May 10, 2005, the HSA JCSG candidly reports that a key element of its "overarching strategy" was to "eliminate leased space" and states that this "helped to guide the HSA JCSG's scenario development, deliberation and declaration of Candidate Recommendations."<sup>23</sup>

**This substitution of OSD Imperatives for the statutory BRAC Selection Criteria constitutes a significant deviation from the Selection Criteria.**

***Arbitrary Assumptions Trump Data.*** In performing its Military Value "analysis," the HSA JCSG attributed scores to organizations and facilities within its domain using a hierarchy of goals, attributes, and metrics. As discussed in the Antiterrorism & Force Protection section, the goals (and therefore the subordinate attributes and metric) used often were established in significant deviation from the actual BRAC Selection Criteria.

Beyond that, however, in conducting this scoring against these goals, the HSA JCSG acted with extreme arbitrariness in addressing activities not on a military installation, and most especially activities located in leased space. As a general matter, the HSA JCSG assigned a score of zero, or a score equal to the worst military installation, to activities in leased space, even when data existed or was easily obtainable to provide an objective measure. In the case of leased space,

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<sup>20</sup> HSA JCSG Draft Imperatives, 29 January 2004. See also Military Value Modeling in Support of the Joint Cross Service Group for Headquarters & Support Activities, slide 9, 29 January 2004

<sup>21</sup> Military Value Analysis Report, HSA JCSG, p. 2

<sup>22</sup> Draft Transformational Options, 22 June 2004

<sup>23</sup> Volume VII, Final BRAC 2005 Report, HSA JCSG, 10 May 2005, p. 16

with few exceptions, the objective measure could only have increased the score of the activity occupying leased space.

**In the case of the extramural research agencies, the HSA JCSG scoring methodology automatically and arbitrarily reduced their military value by more than 67%. Much of that arbitrarily reduced score could be regained if an objective analysis using real data were employed.** The situation is even worse for certain other types of activities in leased space, such as personnel centers, whose military value was automatically and arbitrarily reduced by 90% and by 80% for military and civilian personnel centers in leased space, respectively.<sup>24</sup>

Conversely, military installations are automatically and arbitrarily awarded maximum scores on numerous metrics even though an objective analysis based on actual data would in many instances justify a lower score.

Given OSD's extremely strong prejudice (Imperative) to move activities from leased space to military installations, these arbitrary scoring reductions to leased space, and additions to military installations, served to rationalize OSD's predetermined answer through the false appearance of data-based analysis.

***To put it plainly: the HSA JCSG manipulated data to create military value scores that supported its predetermined answer; in contrast, the TJCSG developed meaningful quantitative military value scores, but ignored them because they contradicted their predetermined answer.***

The subsections below review scoring done by the HSA JCSG for selected Attributes and Metrics.

### **1.3 Military Value Scores**

Criterion 1 is "current and future mission capabilities." The Technical JCSG developed quantitative military value scores for the extramural research agencies, e.g., scoring DARPA and ONR high quantitative military value scores, due to the co-location of research program managers at the different defense agencies to each other, and to non-DOD research program managers, notably those of the National Science Foundation (NSF) in the Ballston area of Arlington, VA. The Technical JCSG analysis of military value was directly related to the mission of the defense research agencies and what factors contributed to mission effectiveness, notably:

- The aforementioned co-location with each other and with NSF;
- Accessibility to the Pentagon and Capitol Hill for the agencies' personnel;

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<sup>24</sup> Based on *ibid.*, Appendix: Military Value Analysis Results Report, pp. B-1 to B-12

- Accessibility to the defense research agencies for non-DOD and non-government researchers who might not ever have dealt with the defense research agencies;
- Close proximity to the defense research agencies' contractor experts, who constitute nearly three quarters of DARPA's "internal" staff and over 85% of DARPA's internal/external combined team;
- Quality of life to attract highly trained, high quality technical experts, who have many other career options at much higher pay. They are the ultimate Low-Density, High-Demand (LDHD) Asset.

In contrast, and in significant deviation from the BRAC Selection Criteria, the Attributes and Metrics used by the HSA JCSG under the heading "Criterion 1: Current & Future Mission Capabilities" sometimes have little to do with mission capabilities. Together, the six Attributes and ten Metrics used constitute over 40% of the possible score an installation or activity under the HSA JCSG could earn. Yet, the HSA JCSG simply defined by fiat that activities, including all organizations located at leased facilities, would not be eligible for the majority of these points. The only points for which activities at leased facilities were eligible were if they are required by law to remain in the National Capitol Region (NCR) or if they provide security & defense to, or direct administrative support of, NCR. These Metrics obviously have nothing to do with the mission capabilities of DOD-extramural research agencies and provide no basis for measuring these research agencies' current and future mission capabilities. (These Metrics are also not inherently related to all military installations, yet every military installation was assigned the highest possible score for them regardless of the facts.)

Other Metrics used by HSA JCSG for measuring Criterion 1 are relevant for the defense research agencies, but of course they were not eligible to participate in these, and were arbitrarily assigned a score of zero, or equal to the worst military installation. A review of these Metrics makes obvious the irrational and arbitrary basis for HSA JCSG's treatment of activities at leased facilities.<sup>25</sup>

- Percentage of the (organization's) network backbone is fiber optic?
- Percentage of the organization's buildings will be connected to the network via fiber?
- Special communication capabilities, e.g., NIPRNET, SIPRNET, VTC, VOIP switch
- Frequency of presidential declaration of disaster
- Quality of Life as measured by owner-occupied housing in area
- Percentage of bachelor's degrees or higher in the area
- Distance to a major airport

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<sup>25</sup> *ibid.*, pp. B-5 to B-8

Many of these Metrics are quite relevant to the mission capabilities of defense research agencies – notably IT bandwidth, special communications capabilities, education levels of the local workforce, and quality of life – and the defense research agencies would generally score very well on them, **if they were allowed to participate**. Instead, they were not even queried on the facts regarding these matters and were assigned scores equal to the worst military installation, or zero.

Beyond this, the assignment of scores equal to the worst military installation flies in the face of all reason. In evaluating whether to move the defense extramural research agencies across the Potomac to Anacostia Annex or NNMC, the current Ballston site in Arlington should be directly compared to those proposed receiving locations. Given that Ballston, Anacostia and NNMC are all in the same metropolitan area, it would be sensible if they all scored the same on such Metrics as owner-occupied housing in the area, percentage of bachelor's degrees or higher in the area and distance to a major airport. Yet, under HSA JCSG's irrational and arbitrary scoring system, Ballston is scored equal to the installation in the country with the lowest percentage of owner-occupied housing, equal to the installation in the country with the least educated local population and equal to the military installation located the farthest in the country from a major airport.

This is absurd and absolutely unnecessary since the data was and is available, and obviously designed for the purpose of tilting the scales away from leased facilities and toward military installations.

*Finally, HSA JCSG failed to consider certain factors that are critical to the mission effectiveness of the defense extramural research agencies.*

- Close proximity to contractor base;
- Close proximity to non-DOD research program managers;
- Accessibility of the extramural research agencies to non-DOD, non-USG researchers who might never have dealt with DOD or USG before.

**Ownership.** Ownership constitutes “the most important attribute in this model” to measure military value, and is given a higher scoring weight (14.6%) than any other factor.<sup>26</sup> Leased space was scored a zero in this Metric, while DOD-owned space was scored a 1.0, the highest possible score. The explanation is grounded in the HSA JCSG’s listed Assumptions, the first of which is “All leased and temporary locations are ranked as less desirable than owned space.” The rationale for this Assumption is merely further Assumptions contained in the 9 October 2003 Capacity Analysis Report, namely “realignments from leased space to military installations contribut(e) to enhanced security for DOD activities” and existing leased space is generally more expensive in the long run.<sup>27</sup>

The AT/FP Assumption, while often true, as a blanket generalization is contradicted by DOD’s Minimum Antiterrorism Standards for Buildings (UFC 4-010-01). The cost Assumption is much less likely to be true, particularly when proper accounting is made for the cost of maintaining DOD-owned facilities, as well as the costs that result when, inevitably, DOD fails to properly maintain its facilities. In addition, proper accounting needs to be made of the personnel cost involved in DOD-owned facilities, even when contractors are providing facilities maintenance service, and the burden this imposes as DOD struggles to shift personnel resources from administrative and support functions to combat and other operational functions.

These Assumptions are addressed in greater detail below (see Condition Scores and the Antiterrorism/Force Protection Scores).

**Modular Buildings.** Within the Metric of “Leased, Temporary or Owned,” the HSA JCSG Military Value Analysis Report states that modular buildings are “viewed as only slightly better than leased space and given a relatively high priority for realignment.” Accordingly, activities in modular buildings are scored 0.25 out of a possible 1.0 on this heavily weighted metric. Yet despite the purported importance of this consideration, military installations are automatically given the highest possible score regardless of the facts involved. In fact, leased and modular (and leased modular) buildings are regularly used on military installations. Locally, one of the Army’s largest Major Commands has its headquarters in a leased modular building on Fort Belvoir. By objective measures, it is a new and efficient building. By the HSA JCSG’s hierarchy of values, however, it should score 0.25. Yet due to HSA JCSG’s arbitrary “analytical” methodology, it scores 1.0, the maximum possible.

Moreover, DOD’s recommended BRAC actions would result in a massive influx of activities and personnel onto military installations. It is unrealistic that this influx could be accommodated within the timeframe required through the construction of permanent buildings. (This also is likely to be exacerbated by the movement of tens of thousands of soldiers from overseas to military installations

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<sup>26</sup> *ibid.*, p. B-9

<sup>27</sup> *ibid.*, p. B-9

in the U.S.) Instead, a significant portion of the activities and personnel relocated by BRAC to military installations likely would be housed in modular or other "temporary" buildings. Furthermore, a significant portion of these modular buildings is likely to be leased. Although DOD hopes to meet the aggressive schedule of building new permanent structures on military installations, as implied in DOD's BRAC recommendations, it probably will have to pursue a military building privatization initiative analogous to the Military Housing Privatization Initiative. This initiative uses not only private capital, but also private sector expertise to accelerate the construction of military housing compared to what is possible under ordinary Military Construction processes.

In other words, in order to get people out of leased and/or modular/temporary buildings, DOD will move them to leased and/or modular/temporary buildings – all at great expense and mission disruption – thanks to arbitrary and irrational scoring rules and an "analytical" approach that steadfastly refuses to consider factual data.

**Condition Scores.** Availability and condition is one of the BRAC Military Value Selection Criteria established through law and regulation. In scoring the condition and quality of space, the HSA JCSG scored *military installations* according to their condition code; e.g., the Naval National Medical Center in NNMC has a facility condition code of C3 ("marginally meets mission demands with major difficulty") and accordingly was scored 0.25 out of a possible 1.00. *Activities*, however, were not asked to respond to any question regarding the condition and quality of their space and instead were "assigned a score of C4" ("does not meet vital demands of the mission"), scoring zero.

No explanation is given why activities, which include all organizations in leased space, were denied an opportunity to provide information on the condition and quality of their space. There are well-established, standard measures used to categorize commercial office real estate by condition and quality (e.g., Class A, Class B, etc.) that are as objective as facility condition codes.

Moreover, no explanation is offered why all activities, without exception and without justification, were assumed to be in buildings that "do not meet vital demands of the mission," i.e., in C4 condition.

A general assumption that leased space is of inferior condition and quality than DOD-owned space is belied both by extensive DOD experience and by DOD policies that aggressively pursue leased space in the housing arena because of its higher quality and faster time to field.

The condition of DOD facilities is linked to the recapitalization rate to replace those facilities, which is the standard measure for how well DOD is keeping up with its large and aging facilities asset base. Up until the recent rapid increase in the defense budget, the recapitalization rate for DOD facilities was well over two

centuries. Since this is well beyond the useful life of these facilities, the consequence was that the condition of facilities was steadily and often rapidly declining. This was a result of the historically recurring practice of tapping real property maintenance accounts to pay for other Operations & Support and modernization needs whenever defense budgets flatten out.

With the large spike in defense spending during the last five years, the recapitalization rate has been cut in half, although it is still well above the mark of 67 years, which is deemed the rate that would "halt obsolescence" of DOD's facilities overall. Moreover, with defense budgets appearing to plateau, even at historically high levels, new strains are already appearing in MilCon budgets.

The President's FY-2005 budget had forecast an improvement in the recapitalization rate for defense facilities from 104 years in FY-2005 to 78 years in FY-2006. **Instead, we are now losing ground, with the President's FY-2006 budget saying that recapitalization rates will get worse, lengthening to 110 years in FY-2006 rather than declining to 78 years as he had projected just a year ago.**<sup>28</sup>

Given these realities, and the recurring history of tapping real property maintenance accounts when the defense budget flattens (as is now occurring again), we should be skeptical of assertions that facilities on military installations will be properly maintained and kept in good condition. In contrast to leased property, where incentive structures can encourage appropriate facility maintenance, the incentives embedded in DOD budget processes work against proper maintenance of DOD-owned facilities. The fact that the progress made in recent years has required sustained senior-level attention attests to this natural incentive structure within DOD to not properly maintain the condition of DOD-owned facilities.

Because of the significant negative effect this natural DOD incentive structure was having on the morale of troops and their families living in substandard military housing, DOD undertook a decade ago to break out of the MilCon trap by exploiting the private sector capital, expertise and initiative. Prior to the Military Housing Privatization Initiative, two-thirds of military housing on-base was in need of repair (compared to 15% off base). Military Construction was deemed incapable of addressing the problem both because of competing MilCon demands and because MilCon processes require so much time.

In contradiction to DOD's successful effort to partner with the private sector in providing high quality leased housing to our troops and their families at a lower cost than DOD could do on its own, DOD in its BRAC recommendations, declares without factual basis that leased facilities inherently are inferior in condition and more costly compared to government-owned facilities. This not

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<sup>28</sup> Defense Installations Strategic Plan 2005

only contradicts the facts, it contradicts DOD's decade-long policy that is being aggressively pursued by the current Administration.

***Antiterrorism/Force Protection-related Scores.*** The HSA JCSG's Military Value Analysis Results Report claims that "Each leased building will be analyzed for compliance with AT/FP standards for buildings" and, more specifically, that "Each location occupied by an activity will be assessed for compliance with UFC 4-010-01." **In fact, not a single leased building was analyzed, not a single location was assessed.** Instead, all leased space was assumed to fail to meet the conditions of UFC 4-010-01 and scored zero.<sup>29</sup>

This assumption that UFC 4-010-01 standards cannot be met by leased buildings appears to be based on assumptions of the stand-off distance achievable by leased buildings. In some cases, such stand-off does exist; a local example involves USJFCOM-leased buildings on a leased property in Suffolk, VA.

Moreover, UFC 4-010-01 clearly states that for existing buildings "lesser stand-off distances (i.e., less than 25 meters) may be allowed where the required level of protection can be shown to be achieved through analysis or can be achieved through building hardening or other mitigating construction or retrofit."<sup>30</sup> Of note in this regard is that one of the extramural research organizations, ONR, recently moved into an office building in Ballston section of Arlington, VA, that was specifically engineered with a blast resistant design and construction upgrade directed by DOD, which cost DOD \$7.75 million (plus additional security upgrades from GSA funds). Nonetheless, the HSA JCSG's assumption-driven, data-free military value analysis treats this blast-resistant ONR building as the equivalent of a canvas tent. On this absurd basis, HSA JCSG recommends moving ONR onto a military installation primarily for reasons of force protection.

In contrast, the HSA JCSG's assumption-driven, data-free military value analysis automatically gives military installations the highest possible score for antiterrorism/force protection, even when that is demonstrably in error. In fact, there are a number of examples of DOD buildings on military installations that do not meet the UFC 4-010-01 AT/FP criteria and yet were scored as full AT/FP compliant. A few prominent examples follow:

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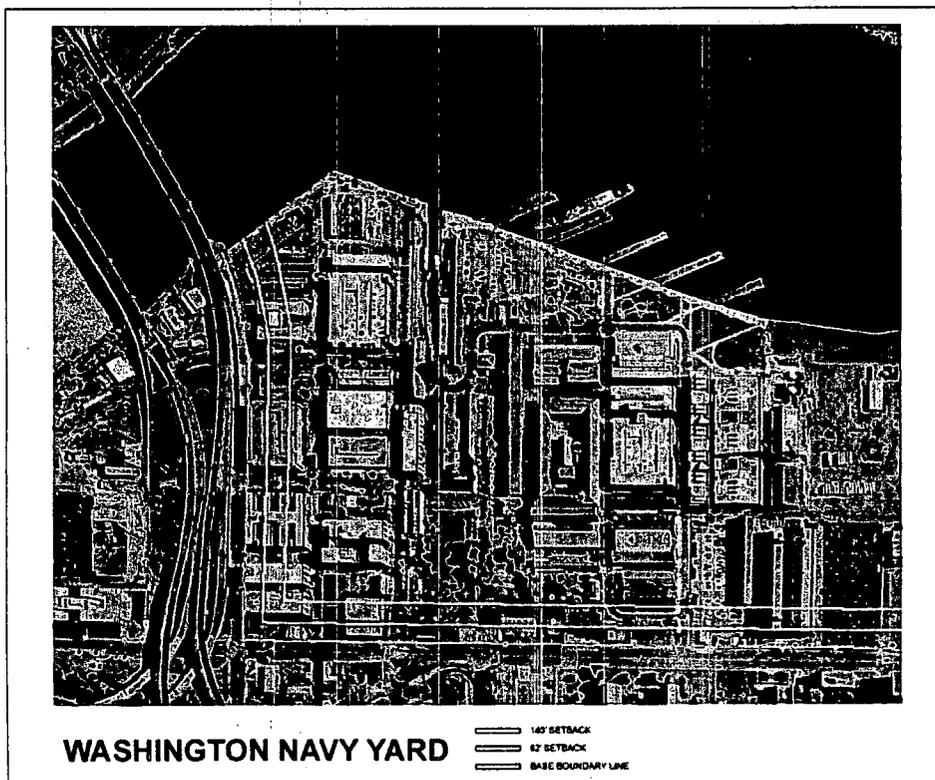
<sup>29</sup> Exception was made for activities occupying less than 25% of a building, in which case UFC 4-010-01 does not apply as such activities are deemed to be at less risk. HSA JCSG's Military Value Analysis Results Report, p. B-5.

<sup>30</sup> DOD Minimum Antiterrorism Standards for Buildings, UFC 4-010-01, 31 July 2002, p. 2-5 and p. B-1

**The Washington Navy Yard.** Locally, at the Washington Navy Yard, a significant number of buildings appear to not meet the UFC 4-010-01 AT/FP standards, in particular the 25-meter stand-off for conventionally constructed buildings within a controlled perimeter.<sup>31</sup>

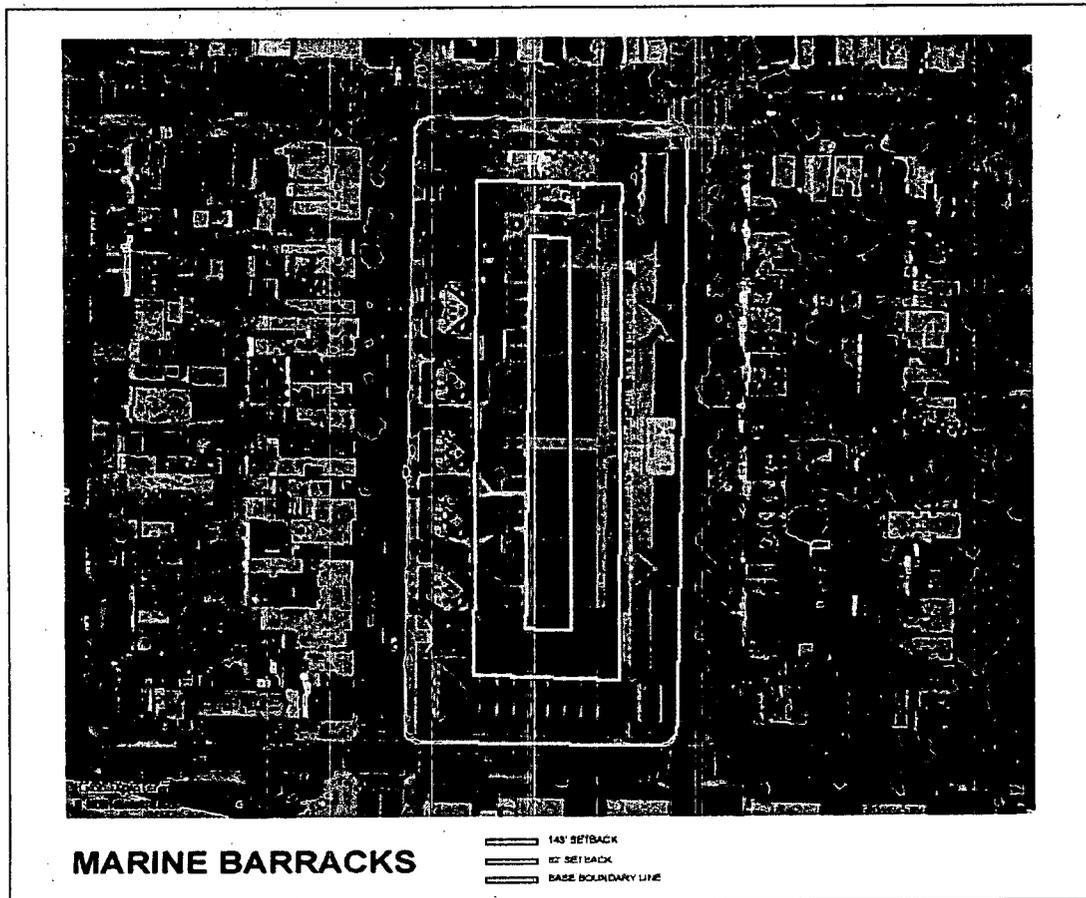
The aerial photo below shows the core of the Washington Navy Yard, its many administrative buildings, and the surrounding road network (north is to the bottom of the photo). It is clear from the photo, that several buildings on the east side of the property (left of photo) abut the local, uncontrolled street network and do not have the necessary setbacks. Worse, these same buildings also abut an elevated roadway from which the blast from a terrorist bomb would be even greater. To the north of the property (bottom of photo), a number of buildings face the uncontrolled public street.

According to the BRAC 2005 assessment, these buildings would all be scored as 100% AT/FP compliant, despite the fact that these buildings do not meet DOD's own AT/FP minimum standards.



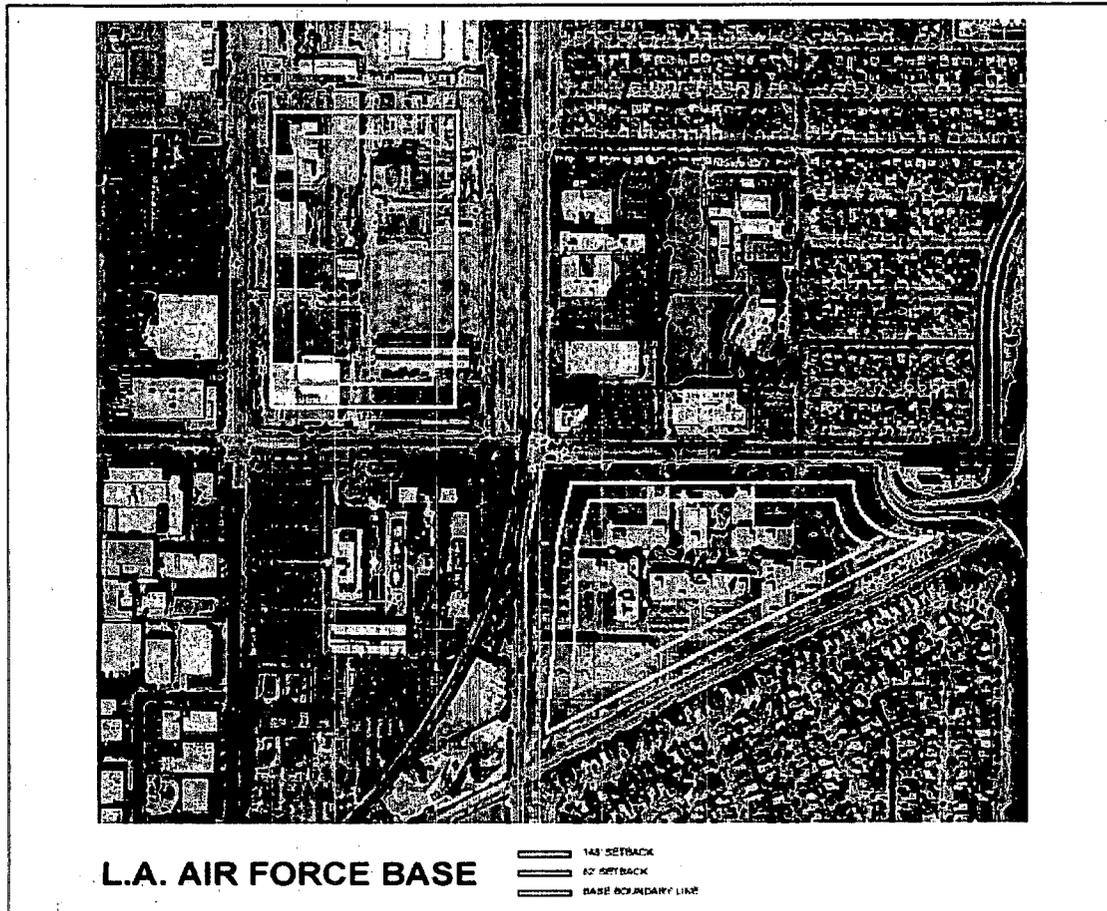
<sup>31</sup> In reviewing these aerial photographs, note that UFC 4-010-01 states, p. 2-3: "**Waterborne Vessel Bombs.** For the purpose of these standards, waterborne vessels will also be assumed to contain quantities of explosives associated with explosive weight I. (The same as vehicle bombs.) That weight was selected because areas beyond the shoreline are assumed not to be controlled perimeters."

**U.S. Marine Corps Barracks.** Similarly, the U.S. Marine Corps barracks at 8<sup>th</sup> & I Streets, SE, do not appear to meet the UFC 4-010-01 standards. As illustrated below, the barracks encompass an entire block but are surrounded on all four sides by uncontrolled, public access streets without the required 25-meter setbacks. However, the BRAC 2005 process scored these properties as fully AT/FP compliant.



Curiously, DOD's BRAC process did not recommend the closure and relocation to a military installation with appropriate setbacks of the functions operating there, even though it is a Primary Gathering Building [and Billeting location].

**Los Angeles Air Force Base.** The Los Angeles Air Force Base, depicted below and outlined in green, is located in a heavily built-up area just south of the Los Angeles International Airport. In the lower right area, it is clear that at least two of the buildings at the lower edge of the property do not meet the DOD AT/FP standards and yet were scored by the BRAC process as 100% compliant.



Even more relevant for the extramural research agencies, a number of buildings at the Navy's Anacostia Annex appear to not meet this same UFC 4-010-01 AT/FP standard. This includes the installation commander's headquarters and other "Primary Gathering Buildings" (as defined in UFC 4-010-01) such as the large Media Center and the Enlisted Club. Ironically, the Anacostia Annex was DOD's intended relocation site for the extramural research agencies until a week before DOD's completion of the Final Report, at which point the receiving site was abruptly changed to NNM for reasons unrelated to AT/FP protection.

#### 1.4 Development of Recommendations

**After-the-Fact Rationalization.** Late in 2004, there was concern within the TJCSG that its actions would be seen as an after-the-fact rationalization of preferred outcomes that were predetermined. The Group's behavior in early 2005 offers further evidence that this is precisely what occurred.

Just a week before producing its Final Report in May 2005, the TJCSG changed its recommended action regarding the defense extramural research agencies from relocating them to Anacostia Annex to relocating them to NNMC. The evolution of the Scenario Quad Charts traces the final effort to match rationalization to arbitrary decision:

Consistently for several months, the Quad Charts reflect the planned recommendation to move the research agencies to Anacostia Annex. The Military Value summary asserts: "Anacostia provides highest overall MV because of enhanced force protection, accessibility to Pentagon and Capitol Hill by metro, and quality of buildings."

Then when the late change to NNMC is made, a simple swap accomplishes the deed: "Bethesda provides the highest overall MV because of enhanced force protection, accessibility to Pentagon and Capitol Hill by metro." Apparently, Bethesda cannot be said to have higher quality buildings, but nonetheless somehow edges out Anacostia without any explanation.

Also of note is the change made to explain why DARPA and ONR lose out even though they have a higher quantitative Military Value (MV). The original explanation, carried in several iterations of the "Anacostia wins" version, notes that "DARPA and ONR had higher quantitative MV than Anacostia, but both are in unprotected lease space." By the time TJCSG acts in May 2005 to swap NNMC for Anacostia just before the Final Report is released, ONR has moved into its blast-resistant offices, undermining the rationale used heretofore. The "Bethesda wins" Quad Chart therefore simply says, "DARPA and ONR had higher quantitative MV scores than Bethesda". No attempt at explanation is even offered for why the higher quantitative MV should lose.

Even more curious is the explanation of why DARPA and ONR have a higher MV. The "Anacostia wins" quad consistently stated that "military judgment said quantitative scores high because of research managers co-location," consistent with TJCSG's recognition of synergy among the DOD and non-DOD research agencies as critical to the agencies' mission effectiveness. The "Bethesda wins" Quad, however, no longer can trump mission effectiveness with force protection as Anacostia had claimed to do. So the commentary on DARPA and ONR's high MV is altered to state: "military judgment said quantitative scores high because of research managers, not location." This appears to be a feeble attempt to finagle the prior words to make them assert that the effectiveness of the research

managers is unrelated to their location, which contradicts two years of TJCSG statements and documents.

Finally, the "Anacostia wins" Quad Charts in their various iterations are consistent in listing as a Justification "Vacate Leased Space in the NCR," along with "Enhance Force Protection." Cleaning up the Quad Chart to make it ready for presentation to the public and Commission, the TJCSG in its final version drops any reference to vacating leased space in order to promote the belief that eliminating leased space was not an objective in and of itself, but merely a byproduct of enhancing force protection.

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## Tech-0040 Consolidate Extramural Research Program Managers to NAS Anacostia

Condense and consolidate: Close the Office of Naval Research, Arlington, VA; the Air Force Office of Scientific Research, Arlington, VA; the Army Research Offices, Durham, NC, Fort Belvoir, VA, and Arlington, VA; and the Defense Advanced Research Project Agency, Arlington, VA. Relocate all functions to Anacostia Annex, Washington, DC. Reassign the Defense Threat Reduction Agency Eisenhower Annex facility, Alexandria, VA, by moving the Extramural Research Program Management function to Anacostia Annex, Washington, DC.

<p style="text-align: center;"><b>Justification</b></p> <ul style="list-style-type: none"> <li>• Foster coordination among extramural research activities</li> <li>• Enhance force protection</li> <li>• Vacate Leased Space in National Capital Region</li> <li>• Form a major element of the Defense Research Laboratory</li> </ul>	<p style="text-align: center;"><b>Military Value</b></p> <ul style="list-style-type: none"> <li>• DARPA and ONR had higher quantitative MV scores than Anacostia, but both are in unproctored leased space.</li> <li>• Military judgment said quantitative scores high because of research managers co-location.</li> <li>• Anacostia provides highest overall MV because of enhanced force protection, accessibility to Pentagon and Capital Hill by metro, and quality of buildings.</li> </ul>
<p style="text-align: center;"><b>Costs</b></p> <ul style="list-style-type: none"> <li>• One-time cost: \$104.5M</li> <li>• Net implementation savings: \$110.4M</li> <li>• Annual recurring savings: \$2.3M</li> <li>• Payback time: 1 year</li> <li>• NPV (savings): \$262.2M</li> </ul>	<p style="text-align: center;"><b>Benefits</b></p> <ul style="list-style-type: none"> <li>• Criteria 6: -191 jobs (121 direct, 70 indirect), &lt;0.1%</li> <li>• Criteria 7: No issue</li> <li>• Criteria 8: No impediments</li> </ul>

Army     Coast Guard/Dept of Justice     DOD/DoS/DoI/DoE/DoH/DoA/DoM/DoJ/DoS/DoT/DoU/DoV/DoW/DoY/DoZ/DoAA/DoAB/DoAC/DoAD/DoAE/DoAF/DoAG/DoAH/DoAI/DoAJ/DoAK/DoAL/DoAM/DoAN/DoAO/DoAP/DoAQ/DoAR/DoAS/DoAT/DoAV/DoAW/DoAX/DoAY/DoAZ/DoBA/DoBB/DoBC/DoBD/DoBE/DoBF/DoBG/DoBH/DoBI/DoBJ/DoBK/DoBL/DoBM/DoBN/DoBO/DoBP/DoBQ/DoBR/DoBS/DoBT/DoBV/DoBW/DoBX/DoBY/DoBZ/DoCA/DoCB/DoCC/DoCD/DoCE/DoCF/DoCG/DoCH/DoCI/DoCJ/DoCK/DoCL/DoCM/DoCN/DoCO/DoCP/DoCQ/DoCR/DoCS/DoCT/DoCV/DoCW/DoCX/DoCY/DoCZ/DoDA/DoDB/DoDC/DoDD/DoDE/DoDF/DoDG/DoDH/DoDI/DoDJ/DoDK/DoDL/DoDM/DoDN/DoDO/DoDP/DoDQ/DoDR/DoDS/DoDT/DoDV/DoDW/DoDX/DoDY/DoDZ/DoEA/DoEB/DoEC/DoED/DoEE/DoEF/DoEG/DoEH/DoEI/DoEJ/DoEK/DoEL/DoEM/DoEN/DoEO/DoEP/DoEQ/DoER/DoES/DoET/DoEV/DoEW/DoEX/DoEY/DoEZ/DoFA/DoFB/DoFC/DoFD/DoFE/DoFF/DoFG/DoFH/DoFI/DoFJ/DoFK/DoFL/DoFM/DoFN/DoFO/DoFP/DoFQ/DoFR/DoFS/DoFT/DoFV/DoFW/DoFX/DoFY/DoFZ/DoGA/DoGB/DoGC/DoGD/DoGE/DoGF/DoGG/DoGH/DoGI/DoGJ/DoGK/DoGL/DoGM/DoGN/DoGO/DoGP/DoGQ/DoGR/DoGS/DoGT/DoGV/DoGW/DoGX/DoGY/DoGZ/DoHA/DoHB/DoHC/DoHD/DoHE/DoHF/DoHG/DoHH/DoHI/DoHJ/DoHK/DoHL/DoHM/DoHN/DoHO/DoHP/DoHQ/DoHR/DoHS/DoHT/DoHV/DoHW/DoHX/DoHY/DoHZ/DoIA/DoIB/DoIC/DoID/DoIE/DoIF/DoIG/DoIH/DoIJ/DoIK/DoIL/DoIM/DoIN/DoIO/DoIP/DoIQ/DoIR/DoIS/DoIT/DoIV/DoIW/DoIX/DoIY/DoIZ/DoJA/DoJB/DoJC/DoJD/DoJE/DoJF/DoJG/DoJH/DoJI/DoJJ/DoJK/DoJL/DoJM/DoJN/DoJO/DoJP/DoJQ/DoJR/DoJS/DoJT/DoJV/DoJW/DoJX/DoJY/DoJZ/DoKA/DoKB/DoKC/DoKD/DoKE/DoKF/DoKG/DoKH/DoKI/DoKJ/DoKK/DoKL/DoKM/DoKN/DoKO/DoKP/DoKQ/DoKR/DoKS/DoKT/DoKV/DoKW/DoKX/DoKY/DoKZ/DoLA/DoLB/DoLC/DoLD/DoLE/DoLF/DoLG/DoLH/DoLI/DoLJ/DoLK/DoLL/DoLM/DoLN/DoLO/DoLP/DoLQ/DoLR/DoLS/DoLT/DoLV/DoLW/DoLX/DoLY/DoLZ/DoMA/DoMB/DoMC/DoMD/DoME/DoMF/DoMG/DoMH/DoMI/DoMJ/DoMK/DoML/DoMN/DoMO/DoMP/DoMQ/DoMR/DoMS/DoMT/DoMV/DoMW/DoMX/DoMY/DoMZ/DoNA/DoNB/DoNC/DoND/DoNE/DoNF/DoNG/DoNH/DoNI/DoNJ/DoNK/DoNL/DoNM/DoNN/DoNO/DoNP/DoNQ/DoNR/DoNS/DoNT/DoNV/DoNW/DoNX/DoNY/DoNZ/DoOA/DoOB/DoOC/DoOD/DoOE/DoOF/DoOG/DoOH/DoOI/DoOJ/DoOK/DoOL/DoOM/DoON/DoOP/DoOQ/DoOR/DoOS/DoOT/DoOV/DoOW/DoOX/DoOY/DoOZ/DoPA/DoPB/DoPC/DoPD/DoPE/DoPF/DoPG/DoPH/DoPI/DoPJ/DoPK/DoPL/DoPM/DoPN/DoPO/DoPP/DoPQ/DoPR/DoPS/DoPT/DoPV/DoPW/DoPX/DoPY/DoPZ/DoQA/DoQB/DoQC/DoQD/DoQE/DoQF/DoQG/DoQH/DoQI/DoQJ/DoQK/DoQL/DoQM/DoQN/DoQO/DoQP/DoQQ/DoQR/DoQS/DoQT/DoQV/DoQW/DoQX/DoQY/DoQZ/DoRA/DoRB/DoRC/DoRD/DoRE/DoRF/DoRG/DoRH/DoRI/DoRJ/DoRK/DoRL/DoRM/DoRN/DoRO/DoRP/DoRQ/DoRR/DoRS/DoRT/DoRV/DoRW/DoRX/DoRY/DoRZ/DoSA/DoSB/DoSC/DoSD/DoSE/DoSF/DoSG/DoSH/DoSI/DoSJ/DoSK/DoSL/DoSM/DoSN/DoSO/DoSP/DoSQ/DoSR/DoSS/DoST/DoSV/DoSW/DoSX/DoSY/DoSZ/DoTA/DoTB/DoTC/DoTD/DoTE/DoTF/DoTG/DoTH/DoTI/DoTJ/DoTK/DoTL/DoTM/DoTN/DoTO/DoTP/DoTQ/DoTR/DoTS/DoTT/DoTV/DoTW/DoTX/DoTY/DoTZ/DoUA/DoUB/DoUC/DoUD/DoUE/DoUF/DoUG/DoUH/DoUI/DoUJ/DoUK/DoUL/DoUM/DoUN/DoUO/DoUP/DoUQ/DoUR/DoUS/DoUT/DoUV/DoUW/DoUX/DoUY/DoUZ/DoVA/DoVB/DoVC/DoVD/DoVE/DoVF/DoVG/DoVH/DoVI/DoVJ/DoVK/DoVL/DoVM/DoVN/DoVO/DoVP/DoVQ/DoVR/DoVS/DoVT/DoVV/DoVW/DoVX/DoVY/DoVZ/DoWA/DoWB/DoWC/DoWD/DoWE/DoWF/DoWG/DoWH/DoWI/DoWJ/DoWK/DoWL/DoWM/DoWN/DoWO/DoWP/DoWQ/DoWR/DoWS/DoWT/DoWV/DoWW/DoWX/DoWY/DoWZ/DoXA/DoXB/DoXC/DoXD/DoXE/DoXF/DoXG/DoXH/DoXI/DoXJ/DoXK/DoXL/DoXM/DoXN/DoXO/DoXP/DoXQ/DoXR/DoXS/DoXT/DoXV/DoXW/DoXX/DoXY/DoXZ/DoYA/DoYB/DoYC/DoYD/DoYE/DoYF/DoYG/DoYH/DoYI/DoYJ/DoYK/DoYL/DoYM/DoYN/DoYO/DoYP/DoYQ/DoYR/DoYS/DoYT/DoYV/DoYW/DoYX/DoYY/DoYZ/DoZA/DoZB/DoZC/DoZD/DoZE/DoZF/DoZG/DoZH/DoZI/DoZJ/DoZK/DoZL/DoZM/DoZN/DoZO/DoZP/DoZQ/DoZR/DoZS/DoZT/DoZV/DoZW/DoZX/DoZY/DoZZ

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## #TECH 0040Rv2: Co-locate Extramural Research Program Managers to Bethesda

**Candidate Recommendation (summary):** Close the Office of Naval Research facility, Arlington, VA; the Air Force Office of Scientific Research facility, Arlington, VA; the Army Research Office facilities, Durham, NC, Fort Belvoir, VA, and Arlington, VA; and the Defense Advanced Research Project Agency facility, Arlington, VA. Relocate all functions to Bethesda, MD. Realign the Defense Threat Reduction Agency Telegraph Road facility, Alexandria, VA, by relocating the Extramural Research Program Management function (except conventional armaments and chemical biological defense research) to Bethesda, MD.

<p style="text-align: center;"><u>Justification</u></p> <ul style="list-style-type: none"> <li>■ Foster coordination among extramural research activities</li> <li>■ Enhance force protection</li> </ul>	<p style="text-align: center;"><u>Military Value</u></p> <ul style="list-style-type: none"> <li>■ DARPA and ONR had higher quantitative MV scores than Bethesda.</li> <li>■ Military judgment said quantitative scores high because of research managers, not location. Bethesda provides highest overall MV because of enhanced force protection, accessibility to Pentagon and Capital Hill by metro.</li> </ul>
<p style="text-align: center;"><u>Payback</u></p> <ul style="list-style-type: none"> <li>■ One-time cost: <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">\$154M</span></li> <li>■ Net implementation savings: \$108M</li> <li>■ Annual recurring savings: \$49M</li> <li>■ Payback time: 2 years</li> <li>■ NPV (savings): \$574M</li> </ul>	<p style="text-align: center;"><u>Impacts</u></p> <ul style="list-style-type: none"> <li>■ Criteria 6: -193 jobs (122 direct, 71 indirect); &lt;0.1%</li> <li>■ Criteria 7: No issues</li> <li>■ Criteria 8: No impediments</li> </ul>

Also, the TJCSG Final Report purposefully misrepresents the current situation in order to justify the recommended action. Currently, DARPA, ONR, AFOSR and an element of ARO are co-located within close proximity (walking distance) in the Ballston area of Arlington, VA; other elements of ARO are in Fort Belvoir, VA, and Durham, NC, while an element of the Defense Threat Reduction Agency (DTRA) proposed to be moved is in Alexandria, VA. This technically constitutes four distinct locations in which defense extramural research managers are located, although in reality, it is far more accurate to characterize it as two locations since the ARO office in Fort Belvoir and the DTRA office are exceedingly small.

The TJCSG Final Report, however, deceptively states that:

**Justification:** Currently, these **program managers are at seven separate locations**. The relocation allows technical synergy by bringing research managers from **disparate locations together to one place**. The end state will be co-location of the named organizations at a single location in a single facility, **or a cluster of facilities**. This "Co-Located Center of

Excellence" will foster additional coordination among the extramural research activities of OSD and the Military Departments<sup>32</sup>.

By the TJCSG's definition of "separate locations" and "disparate locations" to describe the defense agency cluster in Ballston, the TJCSG's proposed end-state of a cluster of facilities would constitute "separate" and "disparate" locations. The reality is that DOD already has a "Co-Located Center of Excellence" for extramural research: it is the existing cluster in Ballston. Moving the ARO office from Durham would enhance the synergy among the defense extramural research agencies, but this could much more sensibly be accomplished at the existing cluster in Ballston – at much less cost and with much less mission disruption than DOD's recommendations to move of all the agencies to NNMC.

It is worth noting that the deliberately deceptive Justification differs from that which appeared in an earlier draft of the TJCSG recommendations, which more accurately described the current situation. The weakness of the justification for the recommended action, which as TCJSG documents clearly reveal, was an after-the-fact rationalization for a predetermined preferred outcome, combined with the swap of receiving locations in the last week of the process. This appears to have driven the TJCSG writers to feel the need to mislead in order to justify their actions.

Finally, the TJCSG Justification fails to address the reduction in Military Value that would result from the relocation of the defense extramural research agencies from their present Ballston cluster due to the loss of the critical synergy with other non-DOD and non-USG research organizations such as the National Science Foundation, among others.

Likewise, the TJCSG justification fails to address the reduction in Military Value that would result from the loss of critical synergy with contractors of these agencies. There is serious question as to how many contractors will relocate to Bethesda. But even with regard to those who do relocate to Bethesda, there will be a significant decline of synergy since the contractors will not be able to relocate to the NNMC military installation.

As was emphasized to the Red Team in March 2005, as it performed its review, "leveraging capabilities of other government activities or the private sector" is an important factor for these agencies.<sup>33</sup>

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<sup>32</sup> TJCSG Final Report, May 2005

<sup>33</sup> Red Team Briefing, 22 March 2005

**TECH-0040: Comparison of Ballston, Anacostia & NNMC.** The TJCSG Quad Chart for the version of TECH-0040 recommended by DOD (TECH-0040Rv2) states that even though DARPA and ONR had higher quantitative Military Value scores, "Bethesda provides highest overall Military Value because of enhanced force protection, accessibility to Pentagon and Capital (sic) Hill by metro."

Of course, the credibility of this comparison of what TJCSG must have considered qualitative Military Value measures (force protection; accessibility to Pentagon & Capitol Hill) to justify a higher "overall Military Value" is undermined by several factors:

- Exactly the same thing was said just weeks earlier with regard to Anacostia Annex: "Anacostia provides highest overall Military Value because of enhancement of force protection, accessibility to Pentagon and Capital (sic) Hill, and quality of buildings." This assessment of Anacostia Annex as having the highest overall MV occurred at a time that the NNMC option was under consideration at the instruction of the Infrastructure Steering Group. In fact, this "Anacostia wins" assessment was at a time when the TJCSG erroneously believed the one-time cost to move the defense agencies to NNMC was only \$28M, far less than the \$106M cost to move to Anacostia Annex.<sup>34</sup> Note that the one-time cost to move to NNMC was later adjusted upward to \$154M.
- **Accessibility to the Pentagon and Capitol Hill are quantifiable measures.** When one uses objective measures, whether travel time by Metro or by automobile, the **Ballston/Arlington locations are notably more accessible to the Pentagon and to Capitol Hill.**<sup>35</sup> That TJCSG missed this not-at-all-surprising result is due to the fact that TJCSG at times had difficulty keeping track of where the defense extramural research agencies are locating, misplacing them for a time in Alexandria, VA.<sup>36</sup>
- The Ballston/Arlington alternative scenarios being offered by Arlington County provide even greater co-location synergy than the current Ballston cluster.
- TJCSG documents, themselves, warn us to mistrust the credibility of the TJCSG recommended actions, since they were formulated before data was gathered, much less analyzed. Recall the earlier concerns within TJCSG regarding the integrity of the BRAC process being undermined and the TJCSG meeting minutes that reported: "**the Military Value**

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<sup>34</sup> Technical Joint Cross Service Group Candidate Recommendations, 8 February 2005

<sup>35</sup> Metro Trip Planner, [www.wmata.com](http://www.wmata.com); and AAA Mid-Atlantic Drive Times, [www.aaamidatlantic.com](http://www.aaamidatlantic.com)

<sup>36</sup> TJCSG Meeting Minutes, 1 February 2005

analysis is irrelevant as this scenario strives to get out of leased space per the OSD imperative."<sup>37</sup>

### 1.5 Cost Analysis

The costing of DOD's recommendation, "Co-Location of Extramural Research Program Managers" to a new facility, the NNMC, does not comply with its own established DOD policy and would likely result in improperly maintained facilities that would undermine the mission effectiveness of critical DOD warfighting research. Important recurring costs, critical to maintaining the quality of the proposed facility, are underestimated by almost 50%. In addition, the one-time implementation costs of the recommendation are underestimated as a result of an unrealistically aggressive timeline for design, construction and population of the new proposed 500,000 sq. ft. facility. Further, assumed savings from BRAC actions are significantly overestimated.

**BRAC Costing Violates DOD Policy: Recapitalization Rate.** Secretary Rumsfeld has set a clear policy of 67 years for the recapitalization rate for DOD facilities. (The recapitalization rate is the rate at which DOD renews or rebuilds its physical infrastructure, to include its administrative office buildings.) In testimony before the House Armed Services Committee (HASC), June 28 2001<sup>38</sup>, Secretary Rumsfeld noted, "in the private sector the standard for overall facility replacement is 57 years. DOD's target is 67 years..." This DOD standard was codified in the Department's Report to Congress, Identification of the Requirements to Reduce the Backlog of Maintenance and Repair of Defense Facilities, April 2001.<sup>39</sup>

Analysis of the COBRA data for the proposed new facility at the NNMC indicates that the COBRA analysis was done using a recapitalization rate of 114 years. This information is not plainly visible in the COBRA reports provided by the BRAC 2005 team. On page 41 of the COBRA report for TECH 0040, 2 May 2005, the plant replacement value for the new building at the NNMC is valued at \$117,066,842. On the same page, the funds allocated to NNMC for recapitalization of this new building on an annual basis are \$1,026,902. This indicates a recapitalization rate of 114 years and not the 67 years directed by the Secretary.<sup>40</sup>

The importance of first-rate facilities to the DOD mission and the reason for setting the 67-year target was articulated clearly by Raymond DuBois, then Deputy Undersecretary of Defense for Installations and Environment in testimony

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<sup>37</sup> TJCSG Meeting Minutes, 19 January 2005

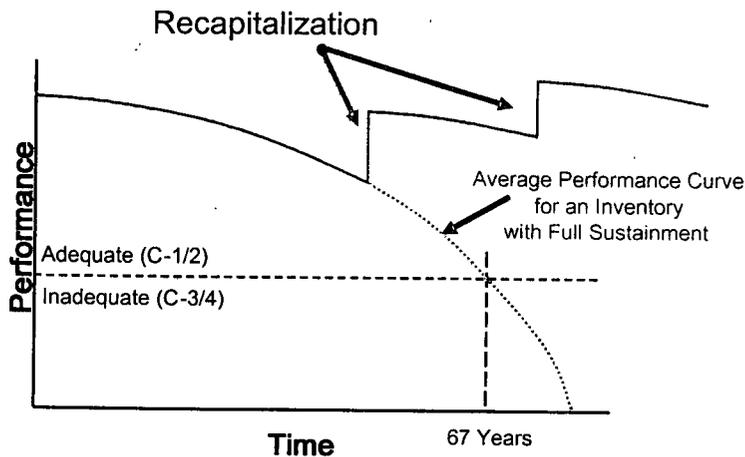
<sup>38</sup> Secretary Rumsfeld Testimony to House Armed Services Committee, June 28, 2001

<sup>39</sup> This DOD standard was codified in the Department's Report to Congress, "Identification of the Requirements to Reduce the Backlog of Maintenance and Repair of Defense Facilities", April 2001.

<sup>40</sup> COBRA for TECH 0040, 2 May 2005, p 41

to the Senate Armed Services Committee (SASC). He stated that DOD's goal is to "provide facilities that possess the qualities needed to support military operations, training, maintenance, housing and community support, which in turn enable readiness."<sup>41</sup>

Secretary Rumsfeld's Front End Assessment of Facility Recapitalization (August 2002) provides a useful graphic on the importance of recapitalization.



**Figure: Facilities Restoration and Modernization<sup>42</sup>**

In DOD's own assessment, at the 67-year point, the condition on average of a reasonably well-maintained facility drops from "adequate" to "inadequate". Applying the proposed reduced level of recapitalization funding would result in a shortfall to requirements over 67 years on this building alone of over \$48M. This underfunding would shorten the expected life of the building by some 40% before its condition dropped to "inadequate". The insufficient funding provided by the BRAC 2005 Team would result in early deterioration of the buildings to a condition of "inadequate" and degradation of mission effectiveness for the high-tech researchers who populate the building.

**BRAC 2005 Costing Violated DOD Policy: Sustainment Funding.** DOD employs a highly-detailed and specific set of cost factors to determine the required level of sustainment funding for its facilities. The DOD Facilities Cost Factor Handbook details that for a "General Administrative Building", facility code 6100, the sustainment cost factor is \$3.47/sqft<sup>43</sup>.

<sup>41</sup> Subcommittee on Readiness and Management Support, SASC, August 2, 2001 – Testimony of Ray DuBois

<sup>42</sup> Facilities Recapitalization Front-End Assessment, Department of Defense, August 2002, p 6.

<sup>43</sup> The DOD Facilities Cost Factor Handbook.

The importance of high quality, well-maintained facilities to DOD's ability to accomplish its mission effectively has been discussed above. Nevertheless, at the same time DOD is proposing to underfund the recapitalization of the new building by over 40%, it is also proposing to underfund the sustainment costs.

The sustainment rate is not easily evident in the COBRA analysis provided by DOD. On page 40, sustainment funding added to support the new building is \$885,713/year. For the proposed building, this equates to a sustainment cost factor of only \$1.80/sqft. On an annual basis, the BRAC 2005 Team is underfunding the sustainment of the proposed building by \$819,705, or approximately 48%.

The severe impact on DOD's mission effectiveness of the underfunding is difficult to quantify. It is clear, however, that significant underfunding of recapitalization costs (over 40%), combined with even greater underfunding of sustainment costs (over 48%), would lead to significantly accelerated deterioration of the proposed new facility at NNMC. In turn this would negatively impact mission effectiveness at DOD's leading edge warfighting research agencies proposed for re-location at the site.

**DOD Underestimates Costs for Recapitalization and Sustainment.**

Secretary Rumsfeld admitted to the SASC that even his policy of 67-year recapitalization for facilities was at least 10 years longer than the commercial rate of 57 years. Fully funding the proposed DOD facility in Bethesda on a commercial basis would require the BRAC 2005 team to double proposed funding to over \$2M per year.

Commercial rates for spending on sustainment of buildings also exceed DOD rates. According to the National Research Council (NRC), annual spending on facility maintenance and repair should be in the range of 2-4% of the current replacement value of the building<sup>44</sup>. The comparable rate proposed by DOD is 0.76%. While this difference may appear to be small, for the NNMC building, valued at \$117M, the difference in proposed upkeep costs on an annual basis is significant.

DOD proposes to spend an inadequate \$885,713 per year, while the recommended totals for comparable commercial grade buildings ranges from \$2,341,137 to \$4,682,674 per year. If we take the average of these figures, \$3,512,005 per year, it would appear that DOD is proposing to underfund the upkeep on the new NNMC building on an annual basis by no less than approximately \$2.3M per year.

If the underfunding of the recapitalization costs is combined with the underfunding of the sustainment costs, DOD is proposing to underfund the new

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<sup>44</sup> Committee on Advanced Maintenance Concepts for Buildings; Building Research Board, National Research Council, National Academy of Sciences. 1990.

NNMC building by approximately \$3.3M per year, or by 74%, when compared to a commercial grade building than the organizations currently occupy.

**BRAC 2005 Assumes an Unrealistically Aggressive Schedule for Implementation.** The implementation plan for co-locating the extramural resource agencies at the NNMC site is unrealistically aggressive and unlikely to be accomplished. The BRAC proposal assumes 12 months for design of the building and 12 months for construction and outfitting to allow the research organizations to move in by 2008. This unrealistically aggressive schedule allows the BRAC 2005 Team to assume book savings quickly and estimate a complete payback on the project within two years.

A reasonably rapid schedule for completing a 500,000 sq. ft. building on-time would require a total of 32-54 months, including 12-18 months for design and site approval, and 20-24 months for construction<sup>45</sup>. The BRAC recommendation also does not appear to include the time necessary for the required Environmental Impact Statement (EIS). The EIS process could proceed in parallel with the design effort but is likely to last 18-30 months, depending on findings and local involvement in the issue. A construction contract cannot be issued until the EIS is completed and approved. The longer timelines would decrease the projected savings by \$50-100M and extended the implementation period to over 4 years.

**BRAC 2005 Does Not Appropriately Assess Costs for AT/FP Improvements.** The BRAC Team in its data call states that each facility will be assessed on the degree to which it complies with AT/FP standards. As discussed in the section regarding AT/FP Analysis, DOD did not, in fact, seek to assess compliance with AT/FP standards, but resorted to scoring directed on the basis of whether a building was leased or on a military installation. Similarly, the HAS JCSG decided to compound error with error by assuming that all leased facilities would require a full upgrade for AT/FP costing at \$28.28 per sq. ft.<sup>46</sup> The Memorandum makes clear that there is an assumption that all current lease space is fully non-AT/FP compliant. This assumption is clearly false and results in overestimating the savings gleaned from the co-location of the offices to NNMC.

The building occupied by the Office of Naval Research in Arlington, VA is a newly built leased property that received \$6.5 million in DOD-directed AT/FP upgrades as recently as 2004/5. In fact, ONR could not occupy the building until several DOD-directed AT/FP upgrades were completed. The upgrades were completed and ONR occupied the building on May 14, 2005, the day after DOD released its recommendations. The HSA JCSG, however, in its data call on military value uses directed scoring to assign this building with its recent, substantial AT/FP upgrades an AT/FP value of zero. HAS JCSG improperly assumed a savings of \$28.28 per sq. ft. for this facility and books one-time savings of over \$1.5 million.

<sup>45</sup> Standard timelines in Montgomery County, MD and Arlington, VA.

<sup>46</sup> Memorandum for Chairman, Infrastructure Steering Group; from Chairman, HSA JCSG, December 22, 2004.

**U.S. Government Overhead and Cost Shifting Account for +30% of Lease Costs.** The HSA team worked under the invalidated assumption that lease space was more expensive than DOD-owned facilities. A memorandum to the Chairman of the HSA from the Director of Washington Headquarter Services (WHS) makes clear that DOD leased properties in the National Capital Region must pay a huge 30.8% premium.<sup>47</sup>

- GSA charges an Administrative Fee of 8% on all leases;
- Pentagon Force Protection Agency (PFPA) charges a 15% fee on all leases;
- WHS charges a 6.8% fee on leases above the GSA cost.

These premiums contribute significantly to the cost of leased space and, by extension, to the assumed savings taken by the BRAC 2005 Team. In fact, the Government pays these fees to itself and in the case of the PFPA and WHS, the Department of Defense is paying itself.

DOD appears to assume that the full cost of the leases vacated by the move to the NNMC property is money saved by the Government. In DOD included the overhead costs in the COBRA model, no more than 69% of the lease's costs are recoverable to the Government as a whole since 31% of the costs are paid to the Government itself already.

### **1.6 Conclusion**

The Department of Defense substantially deviated from the Congressional criteria in several ways. First, DOD did not follow well-established processes by drafting scenarios before data existed. This caused all subsequent thinking to be biased in order to conform to the scenarios. In addition, criteria were displaced by other considerations, such as the OSD Imperatives that called for the elimination of all leased space. Next, DOD replaced data with arbitrary assumptions on issues such as leasing and force protection that were, despite the facts, heavily biased and often times based on flawed data.

Furthermore, the recommendation, "Co-Location of Extramural Research Program Mangers" to a new facility the NNMC, does not comply with established DOD policy. The processes that were used by DOD violated established procedures, and would result in improperly maintained facilities that would undermine the mission effectiveness of critical DOD warfighting research. Important recurring costs, critical to maintaining the qualities of the proposed

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<sup>47</sup> Memorandum for Chairman, HSA-JCSG, from Director, Washington Headquarters Services, 27 December 2004.

facility, are underestimated by almost 50%. In addition, the one-time costs of implementing the recommendation are underestimated as a result of an unrealistically aggressive timeline for design, construction and population of the new proposed 500,000 sq. ft. facility. Further, assumed savings from BRAC actions are over-estimated.

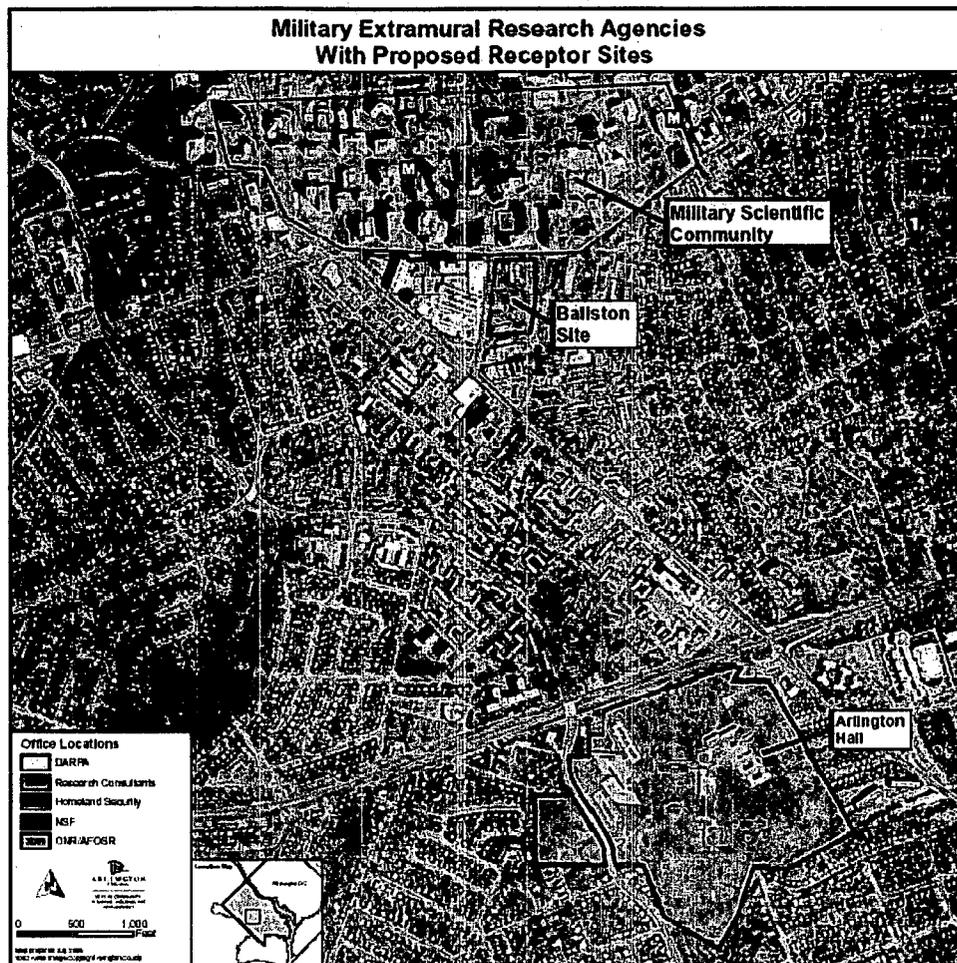
Taken together, the wildly inaccurate, inconsistent, and unrealistically aggressive approach taken by the BRAC 2005 Team to the costing of this proposal for realignment, risking significant negative impact on vital DOD missions, must call into question the assessment of cost and savings on this realignment as a whole.

**Section 2:**  
**Arlington Alternatives –**  
**Safe, Better, Cheaper Solutions for Extramural Research**

The Arlington Alternatives have been developed to demonstrate that there are better options available if communities are given the opportunity to work with DOD -- solutions that achieve greater military value, at lower cost, with less disruption, and that meet anti-terrorism/force protection standards. The Arlington Alternatives focus specifically on one set of DOD functions, as described below, but they can also be considered prototypical for dealing with challenges of leased space. The BRAC process was never designed to deal with leased space and, as shown, does so very poorly and with negative results. The Arlington Alternatives have the potential to achieve more positive results for DOD for a number of functions that have gravitated to leased space in the past quarter century to meet their military needs.

**2.1 Extramural Research –**  
**Preserving the Current “Center of Excellence”**

The Arlington Alternatives focus on the extramural scientific research agencies: the Defense Advanced Research Projects Agency (DARPA), the Office of Naval Research (ONR), the Air Force Office of Scientific Research (AFOSR), and the Army Office of Research (AOR). These four agencies (along with the research contract functions of the Defense Threat Reduction Agency currently located in Alexandria, VA and Durham, NC) are proposed for relocation to the National Naval Medical Center in Bethesda, MD. The current location of these agencies within two buildings is only five blocks apart and proximate to the locations of the National Science Foundation (NSF), as well as the Pentagon, the White House, and Capitol Hill. The current location maximizes military value through proximity, synergy, and the density of private contractors serving the multiple agencies. Relocation from their current “Center of Excellence” would significantly and unnecessarily disrupt and decrease their military effectiveness.



The Arlington Alternatives were developed in sufficient detail to demonstrate the ability to implement them in the BRAC timeframe. At the same time, they are scalable and can be mixed and matched to best meet DOD's needs.

Most importantly, the Arlington Alternatives achieve the following:

- **Maximize military value** by maintaining the current synergies and inter-relationships with each other, NSF, and the private contractor community, which is heavily concentrated in the Ballston area of Arlington;
- **Cost less, both short-term and long term, than the NNMC alternative;**
- **Comply fully with DOD anti-terrorism/force protection criteria (UFC 4-010-01).**

**The Arlington Alternatives represent very realistic, researched, cost effective options that had not been considered during the DOD analysis in the BRAC process.**

The Arlington Alternatives are the result of a substantial process to develop, analyze, and rank alternatives to the DOD proposal that maintain military value, meet force protection requirements, and are cost effective for DOD. These options include a mixture of owned and leased space. The alternatives presented to the BRAC Commission appear to be the "best fit" of the dozen that were analyzed for consideration. Each of these has been thoroughly analyzed relative to construction costs, accessibility and transit options, environmental considerations, and planning and zoning compliance.

Arlington supports the establishment of a two-year time period for Arlington, DOD and the Commonwealth of Virginia, to thoroughly investigate alternatives and to arrive at the option for implementation that would achieve the greatest military value at the lowest cost.

## **2.2 The Arlington Alternatives: Ballston & Arlington Hall**

Arlington offers two specific alternatives that were not considered, nor evaluated, in the preparation of the DOD BRAC recommendation process. The first alternative constructs a new joint, secure, leased facility in Ballston, in immediate proximity to the current locations of the scientific research agencies. A second alternative co-locates the extramural research agencies on a secure federal facility at Arlington Hall, approximately 1.5 miles away from their current location, in new leased buildings. The Arlington Alternatives have been developed in conjunction with the private sector and the Commonwealth of Virginia and are meant to provide maximum flexibility for DOD. While they are presented as leased options, built with private capital, they could be converted to ownership. They could also be built with DOD funds.

**Military Value of Arlington Alternatives.** The principal argument for maintaining the extramural research agencies at their current locations, or in alternative leased space in the immediate area, is the maximization of military value. Both Arlington Alternatives achieve this. The agencies are already co-located in proximity to NSF, which adds extra scientific and military value and synergy. The density and proximity of private contractors that provide services to multiple agencies is already in place. The leaders of ONR and DARPA indicated to the BRAC Commission on Friday, May 20, 2005 that an urban environment with proximate housing, hotels, restaurants and other amenities better meets their mission needs. NNMC measures poorly in military value against Arlington locations in that there is no synergy between the research agencies and a hospital use. The same is true at Anacostia.

**There is no military value justification for relocation from Arlington.** As will be shown below, force protection can be achieved in Arlington and cost comparisons compel retention in Arlington. (Details on Military Value analysis can be found in Section 3.)

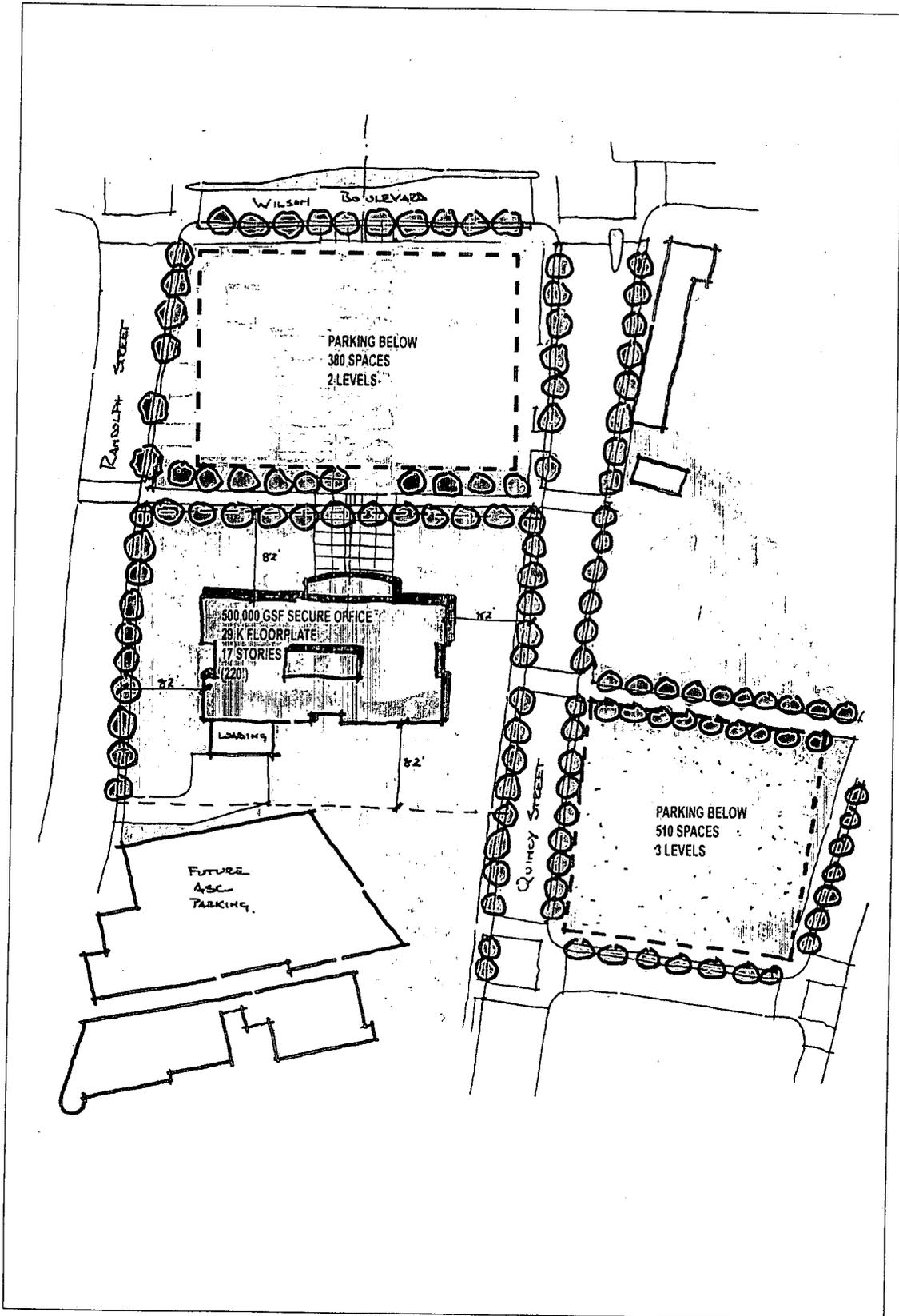
**Cost Comparison Assumptions.** Substantial errors were found in the cost analysis for the NNMC recommendation for extramural research. If the documented challenges were applied to the NNMC option, they would represent a more accurate picture of the financial impact of this alternative. Even without correcting, these errors, the Arlington Alternatives are significantly better than the NNMC option.

- **Both Arlington scenarios have an immediate payback;**
- **In the first six years, savings over the NNMC model range from \$58 to \$51.3 million;**
- **Over a twenty-year NPV the savings range from \$25.6 to \$4 million; and**
- **Significant savings on one-time costs equals \$122 million.**

Notwithstanding these substantial errors, the Arlington Alternatives are based on the direct application of the BRAC assumptions in order to provide an "apples to apples" comparison with the proposed relocation to the NNMC. As such, the COBRA model of evaluating the cost of each alternative is run with no deviation from the DOD input assumptions, even though there are significant errors and omissions in the assumptions that lead to a substantial overstatement of savings represented by the NNMC proposal. **Even with the bad data, both Arlington Alternatives result in lower costs.** (Details on the COBRA analysis can be found in Section 4.)

### **2.3 Alternative A: The Ballston Site**

Alternative A: The Ballston Site is the construction of a new facility for the co-location of the extramural research agencies in the immediate proximity of their current location in the Ballston area of Arlington. It would also **maximize military value by allowing the research functions to remain in proximity to NSF** as well as the private contractor community. It would require **minimal disruption of the agencies** and meet the desires of existing staff by remaining in an urban environment. The new facility would **comply with DOD force protection and security standards for new construction.** The Ballston Site **results in savings of \$52 million** in the 2006-2011 period over the DOD NNMC recommendation, based on a COBRA analysis.



BALLSTON SITE

BALLSTON, VA

DRAFT DEVELOPMENT PLAN



RTKL



BRAC CONCEPT PLAN

6.21.2005

***Ballston Description:*** The Ballston Site would locate the agencies on the current Washington Metropolitan Area Transit Authority (WMATA) Bus Yard Site. The WMATA block is located in Ballston along Wilson Boulevard between North Randolph Street and North Quincy Street. It is approximately one block from Liberty Center I, the current home of ONR, AFOSR, and AOR and about five blocks from DARPA's current location. The National Science Foundation is two blocks away and the site is an easy three-block walk to Metro.

The re-development of this site has been in active planning that is scheduled to bring forward specific proposals this calendar year. A development agreement is in negotiation with WMATA, Arlington County and a private developer who currently has the option on the site. Supplemental parcels are actually owned by Arlington County. Arlington can provide assurances that this proposal meets local development plans and zoning criteria. A site plan submission is expected by the end of 2005 with development scheduled to begin in 2007. The existing bus garage will be relocated in 2007, allowing for occupancy in new construction in late 2009, well within the current window for completion of BRAC moves. Bringing the extramural research functions into the project actually accelerates the development through the identification of the tenant for the major office structure. The extramural research activities would be in a 485,000 sq. ft. building of 17 stories with a floor plate of 28,500 square feet. The building would be for the sole use of the DOD research agencies.

The Ballston Site alternative is scaled to accommodate all of the research functions recommended for NNMC; however, it could be scaled in either direction to best meet DOD's needs. For example, a smaller building could be constructed for DARPA on the WMATA site and allow the other extramural research agencies to remain at Liberty Center I. This would result in a new building of approximately 285,000 square feet and 10 stories tall.

The Ballston Site alternative is presented as a leased proposal, but could be converted to an ownership option.

***Ballston Anti-terrorism / Force Protection.*** The Ballston Site alternative is in full compliance with anti-terrorism/force protection standards. The preliminary plan for the site is illustrated on the preceding page. The new building would be set back from the sidewalk by a minimum distance of 82 feet. The main entrance would be from a pedestrian walkway extending between Randolph and Quincy Streets. Access to the loading dock would be from Randolph Street and could be fully secured.

A secure parking garage would be constructed off-site on the east side of Quincy Street in a structure separate from the main building. This parking facility will be underground and would incorporate a vehicle screening function. A secure underground walkway could extend from the garage to the building.

**Ballston Cost Savings.** Compared to the DOD recommendation, the Ballston Site alternative lowers the one time cost to DOD by \$122 million. Over the implementation period, it saves \$52 million over 6 years and a NPV of \$4 million over a 20 year period. The COBRA model also indicates that this option represents a cost savings of \$58 million over the initial six year BRAC period and a long term (20 year) savings of \$576 million. The complete COBRA analysis is included on the Supplemental CD.

The cost estimates for the Ballston Site have been prepared by a developer and contractor currently constructing similar buildings in the Arlington market.<sup>48</sup> This alternative assumes that the developer would build and lease-back the new building to DOD. State and local contributions would be used to defray a portion of the cost of the project. Detailed pro forma analysis of the construction costs are included on the Supplemental CD.

The construction of the Ballston Site alternative could be financed by the Virginia Resources Authority (VRA), which would provide both construction and long term financing. VRA is rated as an AAA lender and their cost of capital is among the lowest in the market. An analysis of the imputed net lease costs and financing plan is included on the Supplemental CD.

A further option associated with this alternative would permit DOD to own the building after the lease period. The cost of this option is not included in the COBRA analysis, but is an approach the developer and County would consider.

**Ballston Community Infrastructure and Environmental Considerations.** The Ballston Site will meet all local planning and zoning provisions in terms of use and density. It is currently shown on the General Land Use Plan for Medium Office-Apartment-Hotel with 2.5 FAR allowable office density. The 2.5 FAR of allowable office development would support the development of a 485,000 sq. ft. office project based on the overall consolidated site area of 218,652 sq. ft. A local development company has control of the entire site. Project approval is fully within the control of the County Board. The costs of the environmental remediation from the WMATA use and the removal of the existing gas station are included in the site development costs.

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<sup>48</sup> The developer is the John Shooshan Company which constructed Liberty Center I, the building currently occupied by ONR, AFOSR and AOR.

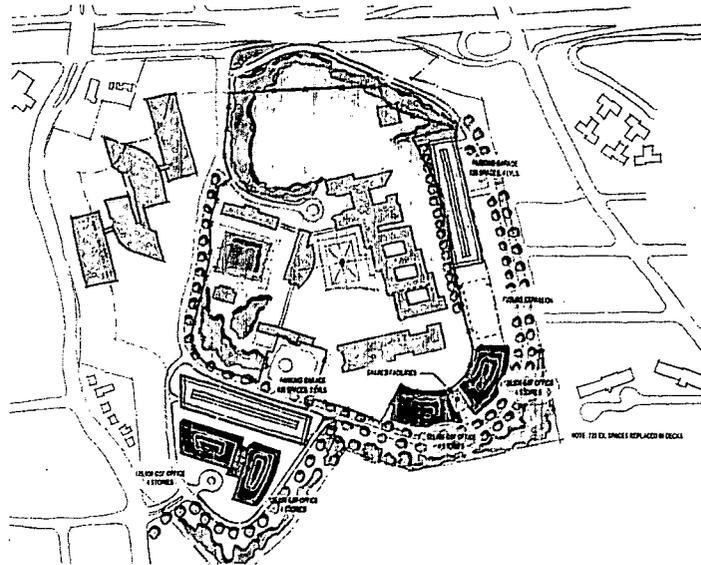
## 2.4 Alternative B: The Arlington Hall Site

The second alternative site is Arlington Hall, a secured federal facility only 1.5 miles from the current location of the extramural research functions. This option also preserves the existing "Center of Excellence" and is the only secured federal facility that could do so. It meets the most rigorous anti-terrorism/force protection standards. This alternative beats the NNMC recommendation by \$122 million in one-time costs, \$58 million over the implementation period, and \$25 million over 20 years.

**Arlington Hall Description.** Arlington Hall is the current location of the Army National Guard (ANG) and the State Department's National Foreign Affairs Training Center (NFATC). This 78- acre campus is behind a secure federal gate, but has an atmosphere more representative of a campus than a military base or compound. The NFATC accommodates an ever-changing cadre of visitors who access the center for training for a few days or weeks at a time. Like the extramural research agencies, the NFATC requires a level of security that not only permits, but welcomes pre-cleared visitors. There are extramural research personnel located in most U.S. embassies; the NFATC is operated by the State Department's Foreign Service Institute.

The 485,000 sq. ft. of development needed to house the extramural research agencies could be accommodated on this site in a campus environment. Co-location is not only possible on this site, but several optional approaches of clustering the agencies are feasible, as illustrated. **Agencies could be co-located in a single building or each could have a separate but adjacent facility. All of the benefits of creating an extramural research Center of Excellence can be gained without any loss of synergy with NSF and the consultants and contractors that support the functions in Ballston, which is literally down the street.**

Use of the Arlington Hall site would require the concurrence of the Department of State. Arlington has already initiated discussions with senior State Department officials concerning this proposal and opportunities to take into account their objectives as well. The Department of State has not been asked for, nor has issued, an official position on the Arlington proposal. If the commission were to take the actions requested, it would open the door to a full and open discussion among stakeholders, including the Department of State, where the best option could be developed and agreed.



ARLINGTON HALL SITE



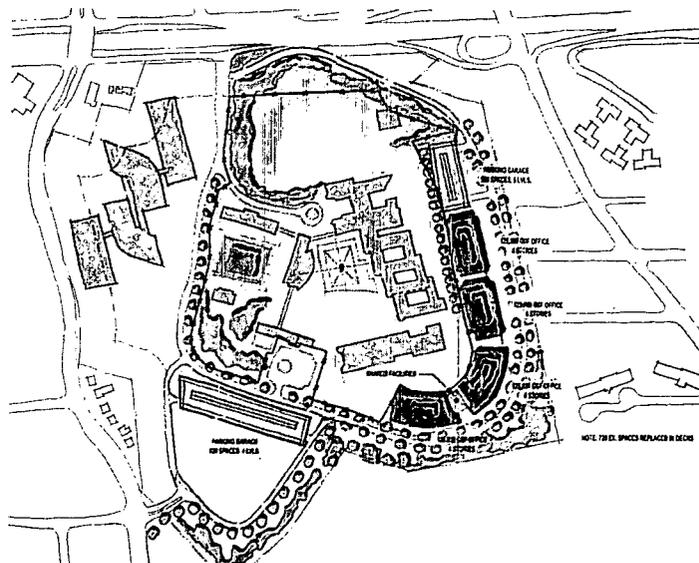
RTKL



ARLINGTON, VA

BRAC CONCEPT PLAN 1

4/21/2005



ARLINGTON HALL SITE



RTKL



ARLINGTON, VA

BRAC CONCEPT PLAN 2

4/21/2005

These figures illustrate optional locations of future buildings on the Arlington Hall site. The total site area is 3,405,045 sq. ft. or slightly more than 78 acres. The addition of 485,000 sq. ft. of new office space can be accommodated outside the interior security fence erected around the NFATC, and without intrusion onto the portion of the site occupied by the ANG Headquarters. In developing detailed

plans, it will be important to fully involve the existing users of the site to ensure that everyone's long-term needs can be met. Preliminary cost estimates are included on the Supplemental CD.

**Arlington Hall Force Protection and Anti-terrorism.** The proposals for new office development on this site would fully meet the more rigorous DOD UFC Standards. Not only would the operations be behind a federal fence line, but would achieve setbacks exceeding 148 feet around the perimeter – something not achieved on a number of federal installations.

**Arlington Hall Cost Savings.** This alternative is structured similarly to the Ballston alternative as a privately constructed lease-back on public land. The lack of land cost, coupled with state and local contributions, results in reduced construction costs of \$95 million, making the Arlington Hall alternative the lowest cost option.

The Arlington Hall alternative can also be structured as a lease purchase, with the building reverting to federal ownership after the lease period. Additionally, DOD could develop at Arlington Hall the same way proposed at NNMC, using MilCon funding to construct the facility.

COBRA analysis indicates that the Arlington Hall site developed privately and leased back to DOD represents the most cost effective option, saving \$165 million during the six-year BRAC period and \$598 million over the 20 year cycle. This alternative beats the NNMC proposal by \$58 million over six years and \$25 million over the 20-year period. The complete COBRA analysis is included on the Supplemental CD.

**Arlington Hall Community Infrastructure and Environmental Considerations.** The Arlington Hall site is located along Arlington Boulevard between George Mason Drive and South Oakland Street. It is currently designated on the General Land Use Plan as "Public" and is zoned "S-3A" consistent with current and proposed uses. The height limit in the zoning category of "S-3A" is 45 feet, which would accommodate 4 story structures as a matter of right. There are no known regulatory, environmental, or infrastructure restrictions that would prevent the development proposed.

## **2.5 Other Alternatives in Arlington**

As explained at the beginning of this section, the two alternatives presented above serve two purposes:

- They are both realistic, achievable options for the extramural research functions, that provide better and cheaper alternatives to NNMC;

- These are prototypes of what can be achieved if DOD works collaboratively with local and state officials to provide solutions to evolving military needs in its leased space.

In developing these proposals, the Arlington County team reviewed several potential sites that either met, or could be modified or developed to meet, the new force protection standards. To make sure that all options were considered, the team went further and held extensive meetings with individuals and groups of DOD personnel, area property owners and developers. As a result of these interactions, more than a dozen potential installations in Arlington County were investigated as possible alternatives for DOD personnel. The list of potential installations included existing DOD property in Arlington County, existing office locations, vacant land, property which was known to be coming available and even sites for which extensive development plans had been formed and/or received preliminary approval. These additional sites also represent cost effective alternatives that meet force protection standards and potentially enhance military value not only for the extramural research agencies, but for other DOD commands as well.

DOD's UFC standards make specific provisions for leased space that allow cost effective solutions to force protection, outside of the BRAC process and within the full discretion of DOD.

Arlington, Virginia has served as a resource for DOD for many years. Development in the County has provided DOD with flexible office space to meet its needs and requirements in the past and well into the future. Arlington County remains committed to providing essential community services, infrastructure, and an environment in which the Pentagon, DOD personnel and contractors can thrive. In fact, upon release of the UFC Standards, Arlington County elected officials and staff initiated a process to fully evaluate and develop plans for sites that would meet the new standards and requirements. This was done to enable DOD to continue to take advantage of the existing workforce, contractor and institutional relations, convenience, security and variety that Arlington's unique environment and location have created for and been attractive to DOD personnel over the last 50+ years. This long history of a mutually successful relationship, spanning numerous administrations, should not be aborted through the BRAC process.

### **Section 3:** **Military Value Analysis of Arlington Alternatives**

The Commonwealth of Virginia and Arlington have developed two concrete options for the proposed re-location of the DOD Extramural Research Programs within the immediate proximity of their current locations. The two options in Arlington -- Ballston and Arlington Hall -- were not previously considered by the Department of Defense. Both options have a higher military value and a lower cost than the proposed re-location of the research activities to the NNMC (or, as also discussed, to Anacostia Naval Annex), while also meeting the Department's force protection objectives.

These options were culled from over a dozen possibilities reviewed by Arlington during a rapid, two-month process. It is important for the Commission to note that the DOD BRAC review process did not consider these options during its almost 24-month investigation. During a rapid, two-month effort, Arlington's leadership brought to bear its extensive knowledge of the County and experience with public, private and joint public-private development together the leadership and resources of the Commonwealth of Virginia to rapidly develop these two options for consideration by the Commission.

Arlington sees these options, not only as concrete, stand-alone possibilities, but also as evidence that, given additional time further, creative options could be developed through a joint effort by DOD, Arlington and the Commonwealth of Virginia. The specific alternatives are prototypical of possible solutions with greater military value and lower costs for a number of the activities currently is leased space in Northern Virginia.

#### **3.1 Military Value Comparison**

To provide an "apples to apples" basis on which to demonstrate the higher military value of the Ballston and Arlington Hall sites, when compared either to the NNMC site or to the Anacostia Naval Annex site, this analysis will follow the HSA's framework for military value. Included is discussion of each of the HSA's four criteria and their associated metrics and an open comparison of the four siting options based upon the objective facts and data concerning each of the sites as applied to the HSA's criteria and metrics.

It should be noted that the HSA JCSG, as discussed in detail in Section 1.2, prepared its assessment of military value with the express objective of removing DOD activities from leased space. Rather than follow its own process to evaluate each property on its own merits, the HSA assumed, but did not substantiate, that leased space was in all cases both more expensive and offered less protection from terrorist attack than buildings on military facilities. To ensure that the military value assessment substantiated this assumption, the HSA used directed-scoring. For the large majority of the metrics assessed, the HSA

arbitrarily assigned all leased properties, regardless of specifications, a score equal to the worst military installation. The net effect of HSA's directed-scoring was to immediately reduce the military value of leased properties by at least 67%.

In addition to the work of the HSA, the Technical Joint-Cross Service Group also undertook a military value assessment of the DOD research establishment. However, the TJCSG determined that, regarding the specific recommendation for re-location of the extramural research organizations, its **"Military Value analysis is irrelevant as this scenario strives to get out of leased space per the OSD imperative."** While the TJCSG maintained copious notes for the record, the TJCSG did not fully and transparently document its work. Therefore, it is not possible to replicate the TJCSG's assessment of military value and apply it in an open and data-based approach to new options not previously considered by DOD.

Before a detailed discussion of the criteria and metrics the HSA deemed important enough for military value, it is necessary to note the core, mission-related issues for the DOD extramural research organizations that the HSA did not address. Both the HSA and TJCSG addressed the need of the DOD research organizations for synergy with other researchers. In fact, a primary DOD justification for the re-location of the DOD research organizations is to enhance synergy within the DOD research community (synergy already evident by the co-location of DARPA, ONR, AOR and AFOSR in the Ballston area). Both the HSA and TJCSG, however, appear to have missed that the primary mission of the DOD extramural research organizations is to work with the non-DOD civilian research community, as well as the DOD research community.

The National Science Foundation (NSF), the leading national institution for the non-defense funding of extramural research, is currently located within walking distance of the defense extramural research agencies in Ballston. The operations of the NSF and the defense agencies are highly integrated in appropriate ways. Relocating the defense agencies would break this connection and eliminate a significant synergy that is critical to the mission effectiveness of the defense extramural research agencies. Unlike other local defense research agencies such as Naval Research Laboratory, the extramural agencies are by their very mission charged with intense interaction with non-DOD and non-USG researchers and institutions.

For this same reason, moving the extramural research agencies onto a military installation could have a significant negative impact on their mission effectiveness, which depends on the ease with which they can interact with outside researchers, particularly those who have little or no experience with DOD. Just as military recruiting stations need to have a high degree of interaction with the public in order to perform their mission, the extramural research agencies cannot perform their mission without such ease of access.

(The Arlington Hall alternative discussed above addresses this issue by placing the defense research agencies on a campus that has an effective security perimeter, and is not a military installation but an educational campus.)

**Criteria 1: “The current and future mission capabilities and impact on operational readiness of the Department of Defense’s total force, including the impact on joint warfighting, training and readiness.”**

The HSA, for the purposes of evaluating headquarters and administrative functions, developed six attributes for review: communications/IT infrastructure; vulnerability to natural disasters due to geographic location; whether the activity was required to be in a specific location; whether the activity has a mission in direct support to Washington-based organizations; quality of life; and access to commercial and military air fields. Each will be discussed as it applies to the four options under discussion.

***Communications/IT Infrastructure.*** Assessed on a factual basis, the NNMC, Anacostia, Ballston and Arlington Hall options would all have the same military value regarding their communications and IT infrastructure. Each would require new construction that would be built with the most up-to-date communications and IT infrastructure. The special, secure networks identified by the HAS -- such as the Defense Red Switch Network, SIPRNET, DISN Video Global Service -- do not require that the facility be DOD-owned and on a military installation and would be installed in any new DOD facility, should it be determined that the mission of the organization required the capability. The recently completed building hosting ONR, ARO and AFOSR in Arlington, has a state-of-the-art communications and IT infrastructure, including a full fibre-optic network, access to DOD secure internet (SIPRNET) and a full suite of secure communications capabilities.

**NOTE:** HSA directed-scoring of this attribute assumed that all leased space -- including the recently completed ONR building, and DARPA’s facility -- has a communications/IT infrastructure no better than the worst military installation. Given DOD’s extremely poor record of maintaining and updating DOD-owned facilities (as discussed above in Section 1.3), the HSA assumption appears to contradict a reasonable assessment of the facts.

***Geographic Location.*** The HSA requested information regarding a military installation’s susceptibility to natural disasters, specifically hurricane, flooding, tornado, wild fire and earthquake. The NNMC, Anacostia, Ballston and Arlington Hall options all occupy the same geographic area and therefore would all have the same military value regarding the vulnerability to the natural disasters identified by the HSA.

**NOTE:** HSA directed-scoring assumed that all lease space would be as vulnerable to natural disasters—regardless of the actual location—as the most

vulnerable military installation. In this case, HSA would equate Arlington with military installations in hurricane-prone locations, such as Florida, earthquake zones, such as Los Angeles, and tornado zones, such as Kansas. Records for Arlington show no recent incidents of wild fires.

**Statutory Requirement for Location.** The HSA requested that all activities indicate whether they had a statutory requirement to be located in the Washington, DC area. None of the extramural research organizations have such a requirement in law. Nevertheless, all four of the siting options are within 100 miles of Washington, DC and therefore are equally eligible sites for activities with a statutory requirement to be in the Washington area.

**NOTE:** HSA directed-scoring assumes that all activities on military installations have a statutory requirement for their current location. Only activities in leased spaces were required to prove their requirement to be in their current location. Given the purposes of the BRAC endeavor, which includes identification of opportunities for realignment, the HSA's direction on this attribute appears to run contrary to the BRAC objectives and likely obscures important opportunities for realignment.

**Mission in Relation to the DC Area.** All four siting options are within the Washington, DC area and therefore are equally eligible to host activities that would have a supporting mission in the Washington, DC area.

**NOTE:** HSA directed-scoring assumes that all activities on military installations have a mission related to the DC area. Again, given the purposes of BRAC, to identify opportunities for realignment, the HSA's direction on this attribute is counterproductive and likely hides important opportunities for realignment.

**Quality of Life.** Applying the specific quality of life metrics requested by HSA to all locations equally -- value of owner occupied housing and percentage of population with a Bachelor's degree or higher -- the locations in Arlington would score higher than NNMC or Anacostia.

According to US Census data for 2000, the median value of owner-occupied housing in Arlington is \$262,400, compared with \$221,800 for Montgomery County (NNMC) and \$157,000 for Washington, DC. Similarly, according to the 2002 Census, 60.2% of Arlington's population has a Bachelor's degree or higher, compared with 54.6% for Montgomery County and 39.1% for Washington, DC.

**NOTE:** Seemingly setting aside the readily available Census data, HSA directed-scoring for quality of life assumes that activities in leased properties are also in communities with a low quality of life, equal to that of the worst military installation. This would have the perverse effect of scoring Arlington, VA -- with a high quality of life and one of the most highly educated populations -- as

equivalent to the most economically deprived and educationally underserved communities in the nation.

**Air Field Access.** The HSA's application of this attribute to the issue of siting DOD's extramural research demonstrates the difficulty of a one-size-fits-all approach to assessing military value. This attribute includes two parts: access to a commercial air field, and access to a military air field. For the activities under discussion -- DARPA, ONR, etc -- easy access to a well-served commercial airport is essential to sustaining the substantial and regular flow of researchers from around the nation who are integral to mission of the organizations. At the same time, there is no obvious requirement for these research organizations to have access to a nearby military airfield to support their mission.

Using the HSA's metrics for distance in miles to the nearest commercial airport, the Ballston, Arlington Hall and Anacostia options would score essentially equal as all are quite close to Reagan National Airport in Washington, DC. By contrast, the NNMC site is three times further away. The estimated times for each of the distances shown below are "best estimates" and clearly do not take account of the substantial traffic on the Washington Beltway (Interstate 495) that a traveler going to-and-from NNMC and the airport would encounter at all hours and especially during morning and afternoon rush hours.

	<b><u>Reagan National Airport</u></b>	<b><u>Pentagon</u></b>
Ballston	6.4 m./13 min	3.3m/8min
Arlington Hall	5.6 m./10 min	2.8m/5min
NNMC	12.1 m./32 min	10.5m/28min
Anacostia NS	4.6 m./8 min	9.4m/17min.

More relevant for the DOD extramural research organizations than access to a military air field is access to the Pentagon and the ability to interact quickly and easily with DOD leadership. Again, the Ballston and Arlington Hall sites have a significant location advantage over NNMC for access to the Pentagon. Bethesda is over three times as distant and requires at least (not including regular traffic) three to four times as distant by time.

**NOTE:** HSA directed scoring of airfield access would assess leased facilities in Arlington as having air field access--commercial and military--equal to the most remotely located military facilities in the United States.

**Criteria 2: "The availability and condition of land, facilities and associated airspace (including training areas suitable for maneuver by ground, naval or air forces throughout a diversity of climate and terrain areas for the use of the Armed Forces in homeland defense missions) at both potential existing and potential receiving locations."**

HSA developed three attributes for the purposes of evaluating Criteria 2: condition/quality of space; ownership/type of space; and, survivability, as defined by compliance with DOD Minimum Antiterrorist Standards for Buildings (UFC 4-010-01). HAS's arbitrary and unsupportable scoring of these attributes will be addressed here in detail.

**Condition/Quality of Space.** Availability and condition of space is one of the BRAC Military Value Selection Criteria established through law and regulation. In scoring the condition and quality of space, the HSA JCSG scored military installations according to their condition code; e.g., the Naval National Medical Center in Bethesda has a facility condition code of C3 ("marginally meets mission demands with major difficulty") and accordingly was scored 0.25 out of a possible 1.00. Activities, however, were not asked to respond to any question regarding the condition and quality of their space and instead were "assigned a score of C4" ("does not meet vital demands of the mission"), scoring zero.

No explanation is given why activities, which include all organizations in leased space, were denied an opportunity to provide information on the condition and quality of their space. There are well-established, standard measures used to categorize commercial office real estate by condition and quality (e.g., Class A, Class B, etc.) that are as objective as facility condition codes.

Moreover, no explanation is offered why all activities without exception and without justification were assumed to be in buildings that "do not meet vital demands of the mission," i.e., in C4 condition.

A general assumption that leased space is of inferior condition and quality than DOD-owned space is belied both by extensive DOD experience and by DOD policies that aggressively pursue leased space in the housing arena because of its higher quality and faster time to field.

In the case of the Arlington Alternatives, both Ballston and Arlington Hall would be new state-of-the-art facilities.

**NOTE:** The net affect of the HSA's directed-scoring of leased space as C4, "do[es] not meet vital demands of the mission", is to declare without factual basis that leased facilities inherently are inferior in condition and more costly compared to government-owned facilities. This not only contradicts the facts, it contradicts DOD's decade-long policy that is being aggressively pursued by the current Administration.

**Ownership/Type of Space.** Ownership constitutes "the most important attribute in this model" to measure military value, and is given a higher scoring weight (14.6%) than any other factor.<sup>49</sup> Leased space was scored as zero in this metric, while DOD-owned space was scored as 1.0, the highest possible score. The

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<sup>49</sup> *ibid.*, p. B-9

explanation rests on the HSA JCSG's Assumptions, the first of which is "All leased and temporary locations are ranked as less desirable than owned space." The rationale for this Assumption is merely further assumptions contained in the 9 October 2003 Capacity Analysis Report, namely "realignments from leased space to military installations contribut(e) to enhanced security for DOD activities" and existing leased space is generally more expensive in the long run.<sup>50</sup>

The AT/FP assumption, while often true, as a blanket generalization is contradicted by DOD's Minimum Antiterrorism Standards for Buildings (UFC 4-010-01). The cost assumption is much less likely to be true, particularly when proper accounting is made for the cost of maintaining DOD-owned facilities, as well as the costs that result when, inevitably, DOD fails to properly maintain its facilities. In addition, proper accounting needs to be made of the personnel cost involved in DOD-owned facilities, even when contractors are providing facilities maintenance service, and the burden this imposes as DOD struggles to shift personnel resources from administrative and support functions to combat and other operational functions.

Within the Metric of "Leased, Temporary or Owned," the HSA JCSG Military Value Analysis Report states that modular buildings are "viewed as only slightly better than leased space and given a relatively high priority for realignment." In fact, leased and modular (and leased modular) buildings are regularly used on military installations. Locally, one of the Army's largest Major Commands, Army Materiel Command, has its headquarters in a leased modular building on Ft. Belvoir, VA. By objective measures, it is a new and efficient building that, according to the HSA JCSG's should score a low 0.25. Yet due to HSA JCSG's arbitrary "analytical" methodology and its location on a military installation, it scores 1.0, the maximum possible.

With regard to the Arlington Alternatives, Ballston and Arlington Hall are proposed as leased facilities -- which would be ensure their sustainability over time; however, either alternative could be developed for DOD ownership.

**NOTE:** As a result of HAS's irrational and analytically unsound directed scoring of building types, DOD BRAC recommendations are likely to result in moving people out of leased and/or modular/temporary buildings, in order to move them to leased and/or modular/temporary buildings -- all at great expense and mission disruption -- thanks to an "analytical" approach that steadfastly refuses to consider factual data.

***Survivability.*** The HSA JCSG's Military Value Analysis Results Report claims that "Each leased building will be analyzed for compliance with AT/FP standards for buildings" and, more specifically, "Each location occupied by an activity will be assessed for compliance with UFC 4-010-01." In fact, not a single leased building was analyzed, not a single location was assessed. Instead, all leased

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<sup>50</sup> *ibid.*, p. B-9

space was assumed to fail to meet the conditions of UFC 4-010-01 and scored zero.<sup>51</sup>

This assumption, that UFC 4-010-01 standards cannot be met by leased buildings, appears to be based on assumptions of the stand-off distance achievable by leased buildings. In some cases, such stand-off does exist; a nearby example involves USJFCOM-leased buildings on a leased property in Suffolk, VA. Moreover, UFC 4-010-01 clearly states that for existing buildings "lesser standoff distances (i.e., less than 25 meters) may be allowed where the required level of protection can be shown to be achieved through analysis or can be achieved through building hardening or other mitigating construction or retrofit."<sup>52</sup> Of note in this regard is that one of the extramural research organizations, ONR, recently moved into an office building in Ballston section of Arlington, that was specifically engineered with a blast resistant design and construction upgrade directed by DOD. The design and construction of this blast-resistant upgrade cost DOD \$6.5 million. Nonetheless, the HSA JCSG's assumption-driven, data-free military value analysis treats this blast-resistant ONR building as the equivalent of a canvas tent. On this absurd basis, HSA JCSG recommends moving ONR onto a military installation primarily for reasons of force protection.

Both Arlington Alternatives fully comply with UFC 4-010-01. Ballston employs an 82-foot setback with building hardening and parking off-site. Arlington Hall is both behind a fence line and has 148-foot setback.

**NOTE:** The HSA JCSG's assumption-driven, data-free military value analysis automatically gives military installations the highest possible score for anti-terrorism/force protection, even when that is demonstrably in error. In fact, there are a number of examples of DOD buildings on military installations that do not meet the UFC 4-010-01 anti-terrorism/force protection criteria and yet were scored as full AT/FP compliant, to include at the Washington Navy Yard, Los Angeles Air Force Base, and the Marine Corps Barracks in Washington, DC (See Section 1 for graphics).

**Criteria 3: "The ability to accommodate contingency, mobilization, and future total force requirements at both existing and potential receiving locations to support operations and training."**

Criteria 3 is designed to elicit from large military installations important information regarding the installation's ability to support surge requirements and training of military units -- such as buildable parcels of land, communications/IT

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<sup>51</sup> Exception was made for activities occupying less than 25% of a building, in which case UFC 4-010-01 does not apply as such activities are deemed to be at less risk. HSA JCSG's Military Value Analysis Results Report. p. B-5.

<sup>52</sup> DOD Minimum Antiterrorism Standards for Buildings, UFC 4-010-01, 31 July 2002, p. 2-5 and p. B-1

infrastructure and currently vacant administrative space. The HSA's wholly irrelevant application of these criteria to DOD's extramural research community again demonstrates the difficulty in a one-size-fits-all approach to assessing military value of specific sites. None of the DOD activities—such as DARPA and ONR—are involved in supporting contingency or mobilization requirements for operational military units. This criteria as drafted is not relevant to determining the military value of a site to locate extramural research programmers and should not be used to differentiate between Ballston, Arlington Hall, NNMC or Anacostia options.

Both of the Arlington Alternatives can be scaled to meeting current and future needs. Ballston offers extensive options because of the large inventory of commercial office space. Arlington Hall can be master-planned to meet future needs.

**NOTE:** It is important to note that regarding assessment of "vacant administrative space" the HSA, likely inadvertently, has given appropriate credit to the use by DOD activities of leased space. HSA directed-scoring assigns a value to leased space equal to the worst military installation, i.e. a military installation with no vacant administrative space. In fact, one of the most important qualities of leased space is its flexibility. DOD activities in leased space are highly unlikely to have any vacant space because this is space they have to pay for directly. Conversely, should a DOD activity require additional space, leasing allows for rapid and flexible access to suitable space to support the activity's DOD mission.

**Criteria 4: "The cost of operations and manpower implications"**

The HSA developed two attributes to assess costs and manpower: estimated cost of location and workforce pay factors.

***Estimated Cost of Location.*** HSA uses DOD's Basic Allowance for Housing (BAH) for an O-3 (Major or Commander) with dependents as a metric to determine the relative cost of maintaining military personnel in various locations around the country. In fact, DOD BAH regulations have a single rate for the entire Washington, DC metro area of \$2,012/mo for an O-3 with dependents.

This means that the cost to DOD for BAH for military personnel to support the four siting options is identical.

**NOTE:** In spite of DOD's own regulations governing an identical BAH for all personnel in the Washington, DC area, the HSA's directed scoring assigns activities in leased space with a score equal to the worst, in this case expensive, military installation. According to DOD, the highest BAH rates are for San Francisco, \$3,135/mo<sup>53</sup>. Using HSA's arbitrarily negative approach to leased

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<sup>53</sup> <http://www.defenselink.mil/cgi-bin/rmc.pl>

properties, the DOD extramural research activities would be assessed, incorrectly, as costing DOD 36% more for BAH.

**Workforce Pay Factors.** HSA uses DOD locality pay as a measure of the cost to DOD of a employee staff at a specific location. Locality pay is the added amount that the Federal Government pays to its civilian employees who live in areas with a high cost of living. In fact, locality pay cannot be reasonably used to distinguish among the options under discussion as all are in the Washington, DC area and by Federal regulation there is a single rate for locality pay for the entire Washington, DC of 14.63%.<sup>54</sup>

There is no difference in pay, and therefore no difference in cost to DOD, whether the researchers are in Arlington, NNMC, or Anacostia.

**NOTE:** By using the HSA's directed scoring, however, all activities in leased space are arbitrarily assigned a score equivalent to the worst military installation, i.e., the military installation in the most expensive area. In this case, the highest locality pay, 24.21%, is for DOD in the San Francisco area. Through its assessment, the HSA would inaccurately calculate that the cost differential in locality pay to DOD to have employees in Arlington, VA is almost 40% greater than the cost of those same employees at a military installation in Bethesda, MD.

### **3.2 Conclusion**

A summary assessment of the attributes developed by the HSA show a demonstrably higher military value for the Ballston and Arlington Hall sites than for NNMC or Anacostia. While for many of the attributes the four sites should be considered essentially equivalent, there are important mission-related metrics regarding greater accessibility to commercial airports, higher quality of life and better quality facilities that weigh in favor of the Ballston and Arlington Hall sites.

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<sup>54</sup> Source: Office of Personnel Management, website:  
<http://www.opm.gov/oca/04tables/indexGS.asp>.

**Section 4:**  
**COBRA Analysis of Arlington Alternatives**

**4.1 Explanation of the COBRA Analyses  
Applied to the Arlington Alternatives**

The Arlington County Alternatives have been analyzed for cost effectiveness using the COBRA analytical model with the assumptions comparing existing leased space and the NNMC unchanged. This is an “apples to apples” comparison. Inputs were derived for the alternatives matching all of the cost and expenditure parameters included for the baseline sites. The fully detailed COBRA runs and notes are included on the supplemental CD.

<b>COBRA Model Comparison</b>					
Scenario	Payback Time Period (Years)	20-year NPV Savings	One-Time Cost	Total Net Implementation Savings 2006-2011	Annual Total Recurring
NNMC Bethesda	2	-573 m	153 m	-107 m	-49 m
Arlington WMATA	Immediate	-577 m	31 m	-159 m	-44 m
Arlington Hall	Immediate	-598 m	31 m	-165 m	-45 m

Each Arlington Alternative provides greater cost savings than the NNMC recommendation. The payback period is immediate versus two years at NNMC. The 20-year NPV savings are greater. The one-time costs of both Arlington Alternatives are significantly lower. The Total Net Implementation savings are greater for the Arlington Alternatives. And, the Annual Total Recurring Costs are lower than the NNMC option. Both Arlington Alternatives provide DOD with better choices than the DOD Recommendation.

**COBRA Model Excursions – Arlington Lease Space**

COBRA Excursions were completed by modifying the DOD Recommendation COBRA for the Technical Joint-Cross Service Group (TJCSG) recommendation to consolidate activities from leased space in Northern Virginia and North Carolina in Bethesda, MD. The Excursions modified the TJCSG COBRA File: J – TECH-0040R NNMC 28 APR 05 (Mod MAY 02). CBR, as follows:

- Are parking costs in the COBRA model for NNMC substantially underestimated? The model assumption for parking is estimated at \$1.5 million, which would require five to six acres of surface parking. There does not appear to be sufficient surface space at the NNMC to park the required number of cars once the buildings are complete. Structured parking is estimated to cost \$17.8 million or \$16.3 million more than is included in the assumptions.
- Since the lease on Liberty Center runs through 2012, and remains a liability to the U.S. Government through that period. How can DOD take cost savings on the lease liability from 2008 through 2012? Savings could be overstated by some \$35 million.
- If the DOD agencies can reduce their contractor load and expenses by relocating, as implied in COBRA, why could they not do the same in their current locations? How can this factor be included in any cost savings calculation when it is totally unrelated to BRAC or relocation?
- If DOD were to substitute a recommendation for the Anacostia site for the NNMC, are the COBRA numbers from 28 December 04, which show a 16-year payback and no net savings over the status quo, the appropriate comparator?

**Financial Impact of COBRA Challenges on NNMC.** If the above documented challenges were applied to the NNMC option, they would represent a more accurate picture of the financial impact of this alternative:

- The **payback period would take 6 years not 2 years;**
- The **costs to construct the proposed facility would be \$16 million greater;**
- In the first six years, **the relocation would cost an additional \$170 million.**

#### **4.2 Conclusion**

The Arlington Alternatives represent very realistic, researched, cost-effective options that had not been considered during the DOD analysis in the BREAC process. The BRAC Commission must perform an independent analysis of the calculations of military value and cost savings in a fair and unbiased review of the DOD recommendations. The resulting commission recommendation should require DOD to thoroughly investigate and negotiate the feasibility and cost of the alternatives presented by Arlington County before any BRAC relocation or realignment of leased space becomes final.

## **DOCUMENTATION**

### **00 Arlington County Proposal to the Base Realignment and Closure Commission.doc**

- 01 TJCSG Meeting Minutes 13 December 2004.pdf
- 02 TJCSG Meeting Minutes 19 January 2005.pdf
- 03 Military Judgment Necessary – But Not Sufficient. Issue #11-15.pdf
- 04 USD (AT&L) Memoranda BRAC 2005 Guidance for the Headquarters.pdf
- 05 Military Value Modeling in Support of the Joint Cross Service.pdf
- 06 TJCSG Meeting Minutes 30 July 2004.pdf
- 07 TJCSG Meeting Minutes 26 October 2004.pdf
- 08 BRAC 2005 Military Value Interview Questionnaire.pdf
- 09 G-8 Memo to US (AT&L) Transformational Options for BRAC 2005.pdf
- 10 HSA JCSG Meeting Minutes of 22 January 2004.pdf
- 11 HSA JCSG Draft Imperatives 29 January 2004. See also Militar.pdf
- 12 Military Value Analysis Results HSA JCSG 10 May 2005.pdf
- 13 Draft Transformational Options 22 June 2004.pdf
- 14 Volume VII Final BRAC 2005 Report HSA JCSG 10 May 2005.pdf
- 15 Military Value Analysis Results Report.pdf
- 16 Defense Installations Strategic Plan 2005.pdf
- 17 Technical Joint Cross Service Group Candidate Recommendation.pdf
- 18 TJCSG Meeting Minutes 1 February 2005.pdf
- 19 Subcommittee on Readiness and Management Support SASC August.pdf
- 20 Facilities Recapitalization Front-End Assessment Department.pdf
- 21 Committee on Advanced Maintenance Concepts for Building Bui
- 22 Memorandum for Chairman Infrastructure Steering Group from C.pdf
- 23 Arbitrary Penalties Against Leased Space in HSA JCSG's Calcu.pdf
- 24 Arlington Hall COBRA.doc
- 25 Ballston COBRA.doc
- 26 Arlington Proposed Alternatives.pdf
- 27 DoD Minimum Anti-Terrorism Standards for Buildings UFC 4-010-.pdf
- 28 Memorandum for Chairman HSA-JCSG from Director Washington He.pdf
- 29 Red Team Briefing 22 March 2005.pdf