DCN 8173

Jeffrey Titrud
215 Arrowhead Drive
Montgomery AL 36117-4105
August 21, 2005

RE: COBRA Methodology and BRAC 2005 Technical Joint Cross Service Group Recommended Consolidation of Air and Space C4ISR Research Development Test and Evaluation

BRAC Commission
AUG 24 2005
Received

The Office of Counsel,
2005 Defense Base Closure and Realignment Commission
2521 S. Clark St., Ste. 600
Arlington, VA 22202

Dear Sir;

I am an AF civilian employee at OSSG in Montgomery AL, one of three current software sustainment and modernization activities for Air Force combat support business systems that are slated to be moved to Hanscom AFB under subject recommendation. Thank you for soliciting comments from affected locations on your public www.BRAC.gov website.

Use of the COBRA methodology and data to support analysis of BRAC realignment recommendations does not, in my view, comply with legal and regulatory requirements to assess the operational risk and to manage the risk associated with major government actions as required by OMB Circular A-94, para. 9. This paragraph requires that all Federal Programs consider uncertainty, probability distributions and sensitivity analyses (e.g. risk management) in assessing the net present value of Federal Program changes. Similarly, any decision to list DOD activities in the FAIR Act inventory for possible outsourcing also requires that risk assessment and management be applied (Enclosure 8 to DOD FAIR Guide- DOD Guide for Inventory of Commercial and Inherently Governmental Functions FAIR Act and DODI 4100.33 Commercial Activities Program Procedures, September 9, 1985, ASD(P&L)

The COBRA methodology appears to have been developed for base closure recommendations to identify the relative contributions and value of different installations in a context of excess capacity. The activity realignment actions in the Technical volume of the BRAC 2005 recommendations generally are not "closing" installations but realigning existing activities to other installations. Although the COBRA methodology can "rank" installations' military value, it is not designed to assess the relative risk impact of the realignment on broader military capabilities as compared to alternate realignment scenarios.

For example, OSSG was evaluated as an R&D C4ISR installation even thought it is a combat support and sustainment activity that supports existing combat support automated information systems and the acquisition of commercial information technology hardware

and software and its support across the Air Force. Under the modified COBRA ranking methodology, this sustainment and combat support activity did not rank as high as other traditional R&D activities. OSSG's operation is nevertheless critical to successful operation of over 146 Air Force combat support systems valued at $3.1 Billion and providing aircraft maintenance, supply, payment systems for supply and other critical logistics systems.

The realignment of OSSG to Hanscom AB is likely to affect the Air Force's ability to sustain and upgrade these combat support systems given the history of prior BRAC actions. Typically, a large number of the Air Force civilians and local resident contractor personnel will choose not to relocate 1600 miles to a different region of the country that has a much higher cost of living. These employees have detailed experience with these systems and it will take some period of time to re-establish that skill and knowledge base. On 23 March 2001, General Lester Lyles, former AFMC Commander testified to the House Armed Services Committee about the impact of BRAC 95:

> "As a result of BRAC, we transferred approximately 40% of our organic workload to our remaining three ALCs. This workload included ground communications electronics, F-15 aircraft, exchangeables, A-10 and software from SM-ALC, and nuclear weapons, gas turbine engines, F100 engine, and nuclear weapons, fuel accessories, C-5 and electronic support equipment from SA-ALC. These transfers did not occur without difficulties. The exchangeable repair workloads proved to be difficult. Parts shortages, transferred support equipment calibration, and out of date technical data delayed our ability to provide these items in the quantity needed to satisfy readiness requirements. Labor shortages caused F-100 engine repair to drop below the requirements needed for war readiness reserve. We continue to increase production, mitigating these readiness risks. These limitations on industrial production will soon run their course as workload transitions are completed"

The COBRA methodology does not directly identify the relative risk to Air Force mission capability (the most important BRAC criteria) arising from these realignments or consider relative risk arising from alternate realignment scenarios. While Hanscom AB may have a higher rating under COBRA as an R&D activity, virtually no software development is currently done there (while the programs are overseen from Hanscom AB, the software development being managed is typically done at the user's site) and virtually no software sustainment of these combat support logistics systems is being done there. In other words, there is no existing information technology workforce infrastructure to take over the combat support and sustainment activities proposed for realignment at Hanscom AB. The COBRA methodology does not even identify this type of risk so there is no discussion as to how to manage this risk by alternate realignment strategies. For example, realigning the wholesale logistics support activities at DSFG at Wright Patterson AFB to OSSG in Montgomery might result in a greater transfer rate of Federal employees and there would be an existing experienced workforce to assume this activity. This is not even considered in the recommendation. The postulated "synergy" benefits by realigning all activities to Hanscom AB are essentially "assumed" but there is

no risk management assessment to weigh against this subjective, assumed benefit. The COBRA methodology encourages this type of recommendation and would not be approved in the setting of a FAIR ACT inventory proposal for outsourcing, a major non-BRAC Federal program under OMB Circular A-94 or even a DOD acquisition program managed under DOD Directive 5000.2 R, all of which require assessment and management of operational risk.

I would ask you to reassess whether the current application of the BRAC COBRA methodology for realignment actions complies with governing regulation or whether it is an arbitrary methodology because it does not identify or manage the operational risk that arises from the realigment actions. I have attached the Point Paper that I developed at home that identifies the weakness of the COBRA methodology as applied to OSSG.

Sincerely,

Jeffrey S. Titrud

1 Attachment
Point Paper

more than 10 year's experience required to get same 2.0 weighting under experience factor)

- Weighting inconsistent with practice for valuing experience with contracted technical IT work and significantly undervalues experience
  - GCSS-AF Contract for IT enterprise architecture and software development (complex) required 10 year's experience for the Program Manager Level I category and only 3 year's experience for a Level I System Engineering Manager, 5 year's experience for a Level I Software Engineering Manager, 4 year's experience for a Level I System's Engineer-5 year's experience for a Level II System's Engineer
  - Actual practice for contract personnel experience for skilled IT personnel, like OSSG, indicates that multipliers would use 5 year increments for weighting vice 10 year increments
- Rules for measurement of experience period undervalues experience of prior military service personnel
  - Metric and Scoring Plan counts experience from date first college degree awarded or Service Computation date whichever is earlier
  - Large percentage of civilian personnel at OSSG have prior military experience in same organization (often as enlisted personnel)
  - This military experience not counted if prior to award of college degree (as enlisted person working on same projects) or prior to civilian Service Computation Date
    - Rule significantly undercounts years of experience of prior military service personnel working in this organization that are now AF Civilian

- Combined impact of weighting biases for college degrees and experience and rules for counting experience significantly undervalue military value of OSSG personnel
  - C4ISR D&A counted "people as 20% of factor with education and experience as 60% of that factor(20 % education and 40% experience)
  - Undervaluing and counting of experience significantly impacts and arbitrarily discounted contribution of OSSG operations and sustainment workforce under the Metric and Scoring Plan optimized for R&D Research organizations
- Metric and Scoring Plan similarly undercounts relevant certifications and awards
  - Metric and Scoring Plan counts DAWIA Certification levels only for GS-14 and above personnel
    - OSSG, as Operations and Sustainment activity, has lower grade structure with larger number of military personnel (enlisted 45% of organization) and lower civilian grades(low cost area, only 21 of 1248 personnel are GS-14 and above) so that Acquisition Certifications of GS-13 and below or military equivalents not counted
  - Professional/Technical Workforce Certifications geared to R&D Basic Engineering rather than Commercial Software Certifications

        - IEEE Certified Software Development, International Institute for Software Testing, and Rational Unified Process Certification or Software Engineering Instititute (SEI) Certification Program (Note that inclusion of single software vendor proprietary certification program (Rational) without inclusion of other software vendor certification programs appears arbitrary)
        - OSSG as operations and sustainment organization relies on Commercial Software vendor proprietary certification programs rather than basic engineering certifications to perform mission
            - OSSG has Sun JAVA Center of Excellence Certification program, SEI certification as level III software development organization, and various other vendor certification programs such as Microsoft and Oracle certification programs that were not considered relevant in the Metric and Scoring Plan
    - Patents, Publications and Awards
        - This Metric and Scoring Plan factor clearly focused on basic research organizations and not operations and sustainment organizations like OSSG that do not develop patentable technology or license government developed software to civilian businesses
        - Awards include research oriented National Academy of Science awards and other activity focused awards such as Space Technology Hall of Fame but do not include awards relevant to Information Technology
            - OSSG has won numerous COTS IT acquisition awards that were not elegible for counting such as Air Force Acquisition Special Recognition Award for the Air Force Information Technology Commodity Council in 2004 and Air Force Information Technology Commodity Council-finalist for FOSE Federal Executive Leadership Council's 2005 Showcase of Excellence Award
- Physical Environment factor of Metric and Scoring Plan focuses on applied research physical testing facilities but ignores relevant test and control facilities for an IT operations and sustainment facility like OSSG
    - Physical Environment factor considers live ordnance capabilities, chem.-bio capability, high power laser capability facilities all optimized for basic research missions
    - OSSG includes special test and integration labs for GCSS-AF enterprise architecture and Air Force network simulation as well as AFNOSC command and control facility for AF network and consolidated 24x7 Help Desk (FAB) for all AF combat support systems but these facilities not considered relevant to R&D criteria in Metric and Scoring Plan for determining Military Value

The TJCSG Metric and Scoring Plan in Section 4 of the Technical Volume of the BRAC recommendation uses a methodology not consistent with other personnel planning actions in not including a Risk Management approach and produces Synergy benefit values that do not consider the impact of operational risk factors

- The TJCSG Metric and Scoring Plan did not apply any risk management or operational risk assessment to its recommended realignment of facilities and workforces to provide a more accurate and complete picture of the potential benefits as compared to potential negative impacts and costs of the realignment on the BRAC military value/military capability final selection criteria
- OMB Circular A-94, para. 9 requires that all Federal Programs consider uncertainty, probability distributions and sensitivity analyses (e.g. risk management) in assessing the net present value of Federal Program changes
- DOD Directive 5000.2R requires that integrated risk management be applied to all major acquisitions to assess and reduce risk between the design, development and sustainment phases of acquisitions
- DOD Policy for determining whether in-house activities should be listed as outsourcing candidates or are inherently governmental (FAIR Act Inventory) requires that risk assessment and management be applied (Enclosure 8 to DOD FAIR Guide-DOD Guide for Inventory of Commercial and Inherently Governmental Functions FAIR Act and DODI 4100.33 Commercial Activities Program Procedures, September 9, 1985, ASD(P&L)
- These DOD policies are not intended to avoid actions that involve risk but to identify and manage risk so that prudent management decisions can be made
- Failure to include risk assessment and risk management in the TJSCG recommendations precludes BRAC Commission review and evaluation of potential alternate realignment actions since there is no basis to assess differences in relative risk associated with the recommendation and any alternate action
    - TJCSG recommendations appear only to have considered sensitivity and uncertainty with respect to military value calculations under their Metric and Scoring Plan of alternative realignment scenarios-the Metric and Scoring Plan only considers the value of inputs (e.g. personnel, education, experience, facilities, BUT not results or actual impact on the Air Force military mission and capability
    - On 23 March 2001, General Lester Lyles, former AFMC Commander testified to the House Armed Services Committee about the impact of BRAC 95
        - "As a result of BRAC, we transferred approximately 40% of our organic workload to our remaining three ALCs. This workload included ground communications electronics, F-15 aircraft, exchangeables, A-10 and software from SM-ALC, and nuclear weapons, gas turbine engines, F100 engine, and nuclear weapons, fuel accessories, C-5 and electronic support equipment from SA-ALC. These transfers did not occur without difficulties. The exchangeable repair workloads proved to be difficult. Parts shortages, transferred support equipment calibration, and out of date technical data delayed our ability to provide these items in the quantity needed to satisfy readiness requirements. Labor shortages caused F-100 engine repair to drop below the requirements needed for war readiness reserve. We continue to increase production, mitigating these readiness risks. These limitations on industrial production will soon run their course as workload transitions are completed"

        - BRAC 2005 will impact Air Force readiness in unanticipated and potentially dangerous ways if risk assessments are not required as part of the BRAC Panel's review process
- Realignment of the MSG AFC4ISR development and OSSG operations and sustainment AFC4ISR activities to Hanscom AB during the same BRAC stipulated time frames does involve significant levels of operational risk to AF combat support capabilities
    - MSG is planning initial Enterprise Resource Planning (ERP) COTS software acquisition and integration to replace the critical AF financial (DEAMS) and logistics (ECSS) combat support business systems
        - The AF has not successfully implemented ERP modernizations in the recent past (failed efforts for SBSS and IMDS logistics systems in 1996-1999)
        - ERP modernizations frequently fail in commercial and government sector based on difficulties in realigning internal business processes and complexity of transition from legacy systems to new systems
            - Support of the ERP modernization by government activities that understand the legacy systems and current business processes is critical technical requirement
        - In the past, AF has had to revert to use and modernization of legacy business systems when these ERP modernizations failed in order to maintain AF combat support capabilities (SBSS and IMDS refresh and modernization in 2000-2002)
    - If MSG does not succeed or slips these ERP modernizations (2005-2009), OSSG capability to upgrade and sustain the operational legacy systems will be critical to AF combat support capability
        - Prior BRAC realignments typically transferred only 30% of current government personnel
            - Loss of highly experienced OSSG combat support functional analysts and programmers as a result of BRAC realignment to Hanscom AB could delay AF ability to reconstitute experienced government or contractor workforce to provide key support to ERP modernizations or to upgrade operational legacy systems during critical 2005-2009 time frame
            - Operational risk impacts as result of BRAC are not hypothetical as reflected in AFMC/CC, Gen. Lester Lyles' testimony to House Armed Services Committee on 23 March 2001 outlining impact on combat support capabilities of AFMC depots as a result of BRAC 1993 and 1995 realignments

Based on these considerations, I believe that the TJCSG Metric and Scoring Plan methodology and results for the AFC4ISR realignment as it affects OSSG in Montgomery AL need to be reevaluated and recalculated to accurately reflect the mission value of it operations and sustainment activities and that risk assessment methodologies should be applied to the proposed realignments to accurately assess the potential impact

on AF mission capability and to consider alternate realignment strategies that produce synergy benefits with lower operational risk to AF combat support capabilities.

Sincerely,

Jeffrey Titrud
215 Arrowhead Drive
Montgomery AL 36117-4105
August 21, 2005

RE: COBRA Methodology and BRAC 2005 Technical Joint Cross Service Group Recommended Consolidation of Air and Space C4ISR Research Development Test and Evaluation

Honorable Anthony J. Principi, Chairman
2005 Defense Base Closure and Realignment Commission
2521 S. Clark St., Ste. 600
Arlington, VA 22202

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and software and its support across the Air Force. Under the modified COBRA ranking methodology, this sustainment and combat support activity did not rank as high as other traditional R&D activities. OSSG's operation is nevertheless critical to successful operation of over 146 Air Force combat support systems valued at $3.1 Billion and providing aircraft maintenance, supply, payment systems for supply and other critical logistics systems.

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Admiral Harold W. Gehman (USN, Ret.)
2005 Defense Base Closure and Realignment Commission
2521 S. Clark St., Ste. 600
Arlington, VA 22202

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