



30 June 2005

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

Dear Chairman Principi,

The Electronic Warfare and Information Operations Association (AOC), has expressed its continuing concern that the BRAC process may have overlooked, or undervalued, the contribution of EW/IO warfighting technologies.

As you may know, the AOC is the single international professional association representing the EW/IO mission area with over 14,000 military, government, industry and education members with 65 Chapters in 53 countries.

Herewith attached are three position papers that document important concerns about existing Electronic Warfare and Information Operations capabilities at Pt. Mugu, CA, Fort Monmouth, NJ and Crane, IN and the impact of moving them elsewhere.

We ask that you continue to factor these and other positions received from the growing sectors of the population that believe maintaining our EW/IO military capability is more than an "intellectual thought process." Shortchanging this infrastructure not only erodes our nation's scientific and engineering community, but it also has direct impact upon our defense posture.

The ongoing war against terrorism places an even greater importance on maintaining our EW/IO infrastructure as these resources are called upon on a daily basis, and are vital to the successful outcome of this effort.

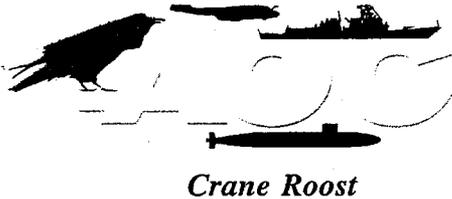
We appreciate your attention and thorough review of the information provided and for factoring it into your final BRAC findings and report.

Please let us know if we can be of any assistance or should you have any questions or require additional information please contact me at (703) 549-1600 or richetti@crows.org.

Respectfully,

Donald N. Richetti
 Executive Director

Enclosures: As stated.



AOC Crane Roost Base Realignment and Closure Concerns

22 June 2005

1.0 INTRODUCTION

After a thorough review of the Department of Defense (DoD) 2005 Base Realignment and Closure (BRAC) recommendations, the AOC Crane Roost is greatly concerned about the potential for a significant negative impact to the ability of the U.S. Department of Defense (DoD) to develop and support Electronic Warfare (EW) systems. The closure of Ft. Monmouth, with the subsequent move of EW capabilities to the Aberdeen Proving Grounds, plus realignment actions at the Pt. Mugu Division, Naval Air Warfare Center (NAWC Pt. Mugu), the Naval Support Activity, Crane, Indiana (NSA Crane), and others would combine to create a severe disruption to a capability that is already fragile.

Illustrative of this fragility is the fact that out of concern for the ability of the DoD to conduct EW operations, the U.S House of Representatives created an Electronic Warfare Working Group (EWWG) to encourage awareness of and support for EW capabilities. This was followed by the DoD decision to form an EW Integrated Process Team (IPT) chartered to develop a roadmap that would correct existing deficiencies. The BRAC recommendations, if implemented as is, will aggravate rather than correct those deficiencies. It is apparent from the data that has been released to date that the BRAC analysts did not have a full appreciation of the special needs of the EW community and therefore further analysis is critically needed to prevent a capability loss that will take decades to recover from.

2.0 GENERAL CONCERNS

2.1 Military Value not a Primary Consideration. The BRAC evaluation criteria list military value as the primary determining factor for realignment and closure decisions. However, in the examples listed below and others, it appears that military value was either not considered, or other, undocumented factors were used as the primary determiner due to repeated examples of work being moved to activities with lower military value scores. The justification for any action that involves the movement of work to an activity with a lower military value should be re-analyzed. If any other factors were given primary consideration over and above military value, these recommendations should be subjected to significant additional scrutiny.

2.2 Access to Electromagnetic Spectrum not Considered. The ability to develop and support Electronic Warfare systems is unique in that it requires the ability to radiate electromagnetic energy in a manner that attacks communications, radar and navigation systems. However, this radiating must be done carefully to avoid disrupting the ever-increasing commercial and military use of these capabilities. This is difficult or impossible in densely populated areas. Because of that, access to the electromagnetic spectrum should have been a military value weighting factor, but reports show that it was not. As a result, recommendations regarding EW are flawed and should be re-evaluated using more appropriate military value weighting.

2.3 Relatively few Joint Recommendations. Throughout released BRAC documentation, the statement is made that “Joint Cross-Service Groups (JCSGs) are the backbone of the effort” but this is not supported by the recommendations made. In fact, reports to the Secretary of Defense show concerns that the Army and Navy “worked closely with the JCSGs, but leaned toward service centric rather than joint solutions.” This is particularly true in EW where not a single recommendation was joint in nature. Consideration should be given to a Joint solution for EW support to the DoD. A Joint EW Readiness Center, building on the synergies resulting from collocation of development, acquisition, logistics and maintenance functions across many platforms and multiple services is one possibility that should be seriously considered.

2.4 Impacts on Specific Functional Capabilities not Addressed. The number one “Final Selection Criteria” for BRAC decisions is: “The current and future mission capabilities and the impact on operational readiness of the total force of the DoD, including the impact on joint warfighting, training and readiness.” However, it does not appear that any recommendations involving EW considered current and future mission capabilities or operational readiness. As an example, BRAC history has shown that only 20-30% of an activity’s personnel relocate. This potential loss of skilled personnel is a serious concern due to the fragility of the existing DoD EW capability and should receive additional review.

2.5 Bases Removed from Closure List not Given Consideration for Receiving Workload. An analysis of the specific scenarios shows that many bases were placed on the closure list early in the BRAC process, and then scenarios were repeatedly run in an attempt to justify the recommendation. In many cases, these bases were later removed from the closure list, some very late in the process, showing that the earlier decision was premature or flawed. Most troubling is the fact that since scenarios were run focusing on the decision to take work out of these activities, they were not considered for receiving scenarios. Since these activities were improperly placed on early closure lists, they should receive special consideration for receiving workload potential during any subsequent analysis.

3.0 CONCERNS REGARDING SPECIFIC RECOMMENDATIONS

The Army, Industrial Joint Cross-Service Group (JCSG), and Technical JCSG recommendations all included EW impacts. These will be addressed separately in the paragraphs that follow.

3.1 Army

3.1.1 Summary of Proposed Recommendation:

Actions:

- *Close Fort Monmouth, NJ...Relocate Information Systems, Sensors, Electronic Warfare, and Electronics Research and Development & Acquisition (RDA) to Aberdeen Proving Ground, MD.*
- *Realign Fort Belvoir, VA by relocating and consolidating Sensors, Electronics, and Electronic Warfare Research, Development and Acquisition activities to Aberdeen Proving Ground, MD.*

Justification:

- Retain DoD installations with the most flexible capability to accept new missions.
- Consolidate or colocate common business functions with other agencies to provide better level of services at a reduced cost.
- The recommendation increases efficiency through consolidation.
- Consolidation of RDA at fewer sites achieves efficiency and synergy at a lower cost than would be required for multiple sites.
- Fort Monmouth is an acquisition and research installation with little capacity to be utilized for other purposes.

Payback:

- The total estimated one-time cost to implement this recommendation is \$822.3M.
- The net of all costs and savings during the implementation period is a cost of \$395.6M.
- Annual recurring savings after implementation are \$143.7M with a payback expected in 6 years.
- The net present value of the costs and savings over 20 years is a savings of \$1,025.8M.

Economic Impact on Communities:

- Maximum potential reduction of 9,737 jobs (5,272 direct and 4,465 indirect jobs) in the Edison, NJ Metropolitan Division, which is 0.8 percent of economic area employment.
- Maximum potential reduction of 1,218 jobs (694 direct and 524 indirect jobs) in the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division, which is 0.04 percent of economic area employment.

3.1.2 Crane Roost Recommended Changes:

3.1.2.1 Reversal. The first preference is to reverse both decisions to maintain the needed EW capability within the DOD. If the decisions are not reversed, the following alternative recommendations should be considered:

3.1.2.2 Alternate Location. If relocation of EW Research, Development & Acquisition (RDA) at Ft. Monmouth and Ft. Belvoir is imminent, the work should be sent to *NSA Crane, IN vice Aberdeen Proving Ground, MD* for the reasons outlined below.

3.1.2.2.1 Jointness. It appears the Army did not consider any joint solutions when justification did not appear to consider a joint solution when making relocation recommendations. The specific relocation actions of this recommendation should be reconsidered using joint selection criteria for maximum efficiency and synergy increases and lowest cost.

3.1.2.2.2 Electromagnetic Spectrum Access. Aberdeen Proving Grounds, MD is in a crowded urban area midway between Baltimore, MD and Washington, D.C. Additionally, the Aberdeen Proving Grounds, MD is within line-of-sight to an extremely heavily traveled air traffic corridor that runs up the east coast. This places Aberdeen in one of the densest electromagnetic environments in the U.S. NSA Crane, by comparison, is in a rural area with little air traffic and minimal electromagnetic spectrum interference concerns.

3.1.2.2.3 Military Value. NSA Crane has a much higher Military Value score than Aberdeen in all areas of Sensors, Electronics and Electronic Warfare as evaluated by the Technical Joint Cross Service Group:

Category	Crane (Rank/Score)	Aberdeen (Rank/Score)
Development & Acquisition	#2 (0.4834)	#21 (0.2250)
Research	#15 (0.2589)	#24 (0.1783)
Test & Evaluation	#8 (0.3355)	#31 (0.1126)

NSA Crane also had the highest EW Military Value for Industrial Maintenance Activities as evaluated by the Industrial Joint Cross Service Group:

Activity	Score
NSA Crane, IN	62.2%
Tobyhanna Army Depot	55.48%
SPAWARSYSCEN San Diego	31.83%
Aberdeen Proving Ground	Not listed

The combination of high EW military values in both the Technical and Industrial areas provides a synergy that was not considered during prior BRAC analysis and could potentially serve as the foundation for a truly transformational Joint EW cradle-to-grave capability that should be considered.

3.1.2.2.4 Return on Investment. NSA Crane provides a cheaper alternative for faster payback and greater savings. This is in part to the fact that NSA Crane has a lower Locality Pay rate than Aberdeen resulting in a reduced labor cost. NSA Crane also has extensive existing EW infrastructure that will result in a significant decrease in the investment that will be required relocating to an activity such as Aberdeen which has little or no EW infrastructure as illustrated by the military value scores above. Additionally, NSA Crane is also subject to several other realignment actions that could result in a number of facilities being vacated. The potential availability of these facilities should not be overlooked when considering NSA Crane as a receiving activity for this workload.

3.1.2.2.5. Economic Impact on Communities. Martin County, IN had the second highest economic impact as a result of other BRAC recommendations (over 15%). A decision to relocate this EW workload to NSA Crane would lessen that impact considerably.

3.2 Industrial JCSG

3.2.1 Summary of Proposed Recommendation:

Actions:

- Fleet Readiness Centers - Realign Naval Support Activity Crane, IN, by relocating the depot maintenance workload and capacity for ALQ-99 Electronic Warfare to Fleet Readiness Center Northwest, Naval Air Station Whidbey Island, WA.

Justification:

- Realigns and merges depot and intermediate maintenance activities.
- It creates 6 Fleet Readiness Centers (FRCs), with 13 affiliated FRC Sites at satellite locations.
- Supports both DoD and Navy transformation goals by reducing the number of maintenance levels and streamlining the way maintenance is accomplished with associated significant cost reductions.
- Supports the Naval Aviation Enterprise's (NAE's) goal of transforming to fewer maintenance levels, i.e., from 3 to 2 levels; and it supports the NAE's strategy of positioning maintenance activities closer to fleet concentrations when doing so will result in enhanced effectiveness and efficiency, greater agility, and allows Naval Aviation to achieve the right readiness at the least cost.
- Produces significant reductions in the total cost of maintenance, repair and overhaul plus the associated Supply system PHS&T as well as reparable inventory stocking levels as a result of reduced total repair turn-around times, reduced transportation, lower spares inventories, less manpower, and more highly utilized infrastructure.
- Combined annual facility sustainment savings of \$1.1M; elimination of a total of 529,000 square feet of depot/intermediate maintenance production space and military construction cost avoidances of \$0.2M.
- This recommendation also includes a military construction cost of \$85.7M.

Payback:

- The total estimated one time cost to implement this recommendation is \$298.1M.
- The net of all costs and savings during implementation period is a savings of \$1,528.2M.
- Annual recurring savings after implementation are \$341.2M with a payback expected immediately.
- The net present value of the costs and savings over 20 years is a savings of \$4,724.2M.

Economic Impact on Communities:

- Maximum potential reduction of 221 jobs (152 direct jobs and 69 indirect jobs) in the Martin County, IN, economic area, which is 2.6 percent of economic area employment.

3.2.2 Crane Roost Recommended Changes:

The following alternate recommendations are provided in order of preference

3.2.2.1 Joint EW Readiness Center. The first preference is to establish NSA Crane as a Joint EW Readiness Center. Rather than moving existing EW workload out, NSA Crane should be considered as a receiving site, building on the existing synergy between technical and industrial EW capabilities for the reasons outlined below.

3.2.2.1.1 Jointness. The FRC recommendation is not joint in nature since it only impacts Department of Navy activities. In fact, not only is the recommendation not joint, it only considers Navy aviation, ignoring the synergies that currently exist at activities such as NSA Crane that provide industrial and technical support for closely related air, land, sea and undersea platforms. The FRC Northwest portion of the recommendation is particularly limited in scope as it focuses entirely on one function (depot maintenance) of one system (the ALQ-99 Tactical Jamming System) on one aircraft (the EA-6B). The establishment of a Joint EW Readiness Center would provide synergies far in excess of the proposed FRC Northwest recommendation, which actually decreases existing synergies. Tab G of the 6 April 05 minutes of the Secretary of Defense Weekly BRAC Update Meeting is a report on the Department of the Navy, which illustrates this point by

stating that the Navy “Worked Closely with joint cross-service groups, but leaned toward service centric rather than joint solutions.” The specific relocation actions of this recommendation, and particularly the FRC Northwest recommendation, should be reconsidered using joint selection criteria for maximum efficiency and synergy increases and lowest cost.

3.2.2.1.2 Electromagnetic Spectrum Access. Whidbey Island, WA is in the immediate proximity of the Seattle, WA metropolitan area and borders on the Puget Sound, which is a heavily trafficked shipping corridor. This places Whidbey Island in a dense electromagnetic environment. NSA Crane, by comparison, is in a rural area with little air traffic and minimal electromagnetic spectrum interference concerns. Access to the Electromagnetic Spectrum should have, but was not given a Military Value weighting by the Industrial JCSG. This recommendation should be reconsidered with appropriate emphasis given to Electromagnetic Spectrum access.

3.2.2.1.3 Military Value. NSA Crane has the highest EW Military Value score of any Industrial Maintenance Activity as analyzed by the Industrial JCSG. Whidbey Island, on the other hand, had no score. The decision of the Industrial JCSG to send workload away from the activity with the highest Military Value score to an activity with no Military Value score in that area should be reconsidered.

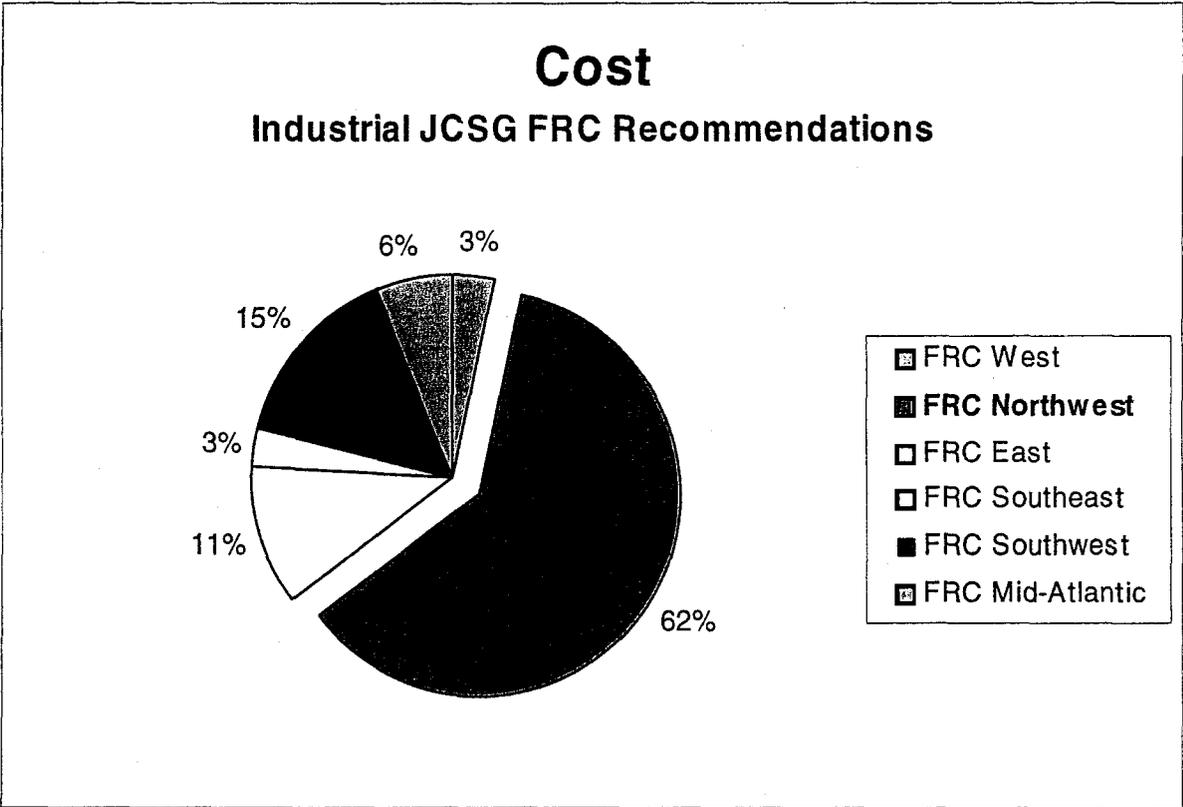
Activity	EW Maintenance Score
NSA Crane, IN	62.2%
Tobyhanna Army Depot	55.48%
SPAWARSYSCEN San Diego	31.83%
Whidbey Island	Not listed

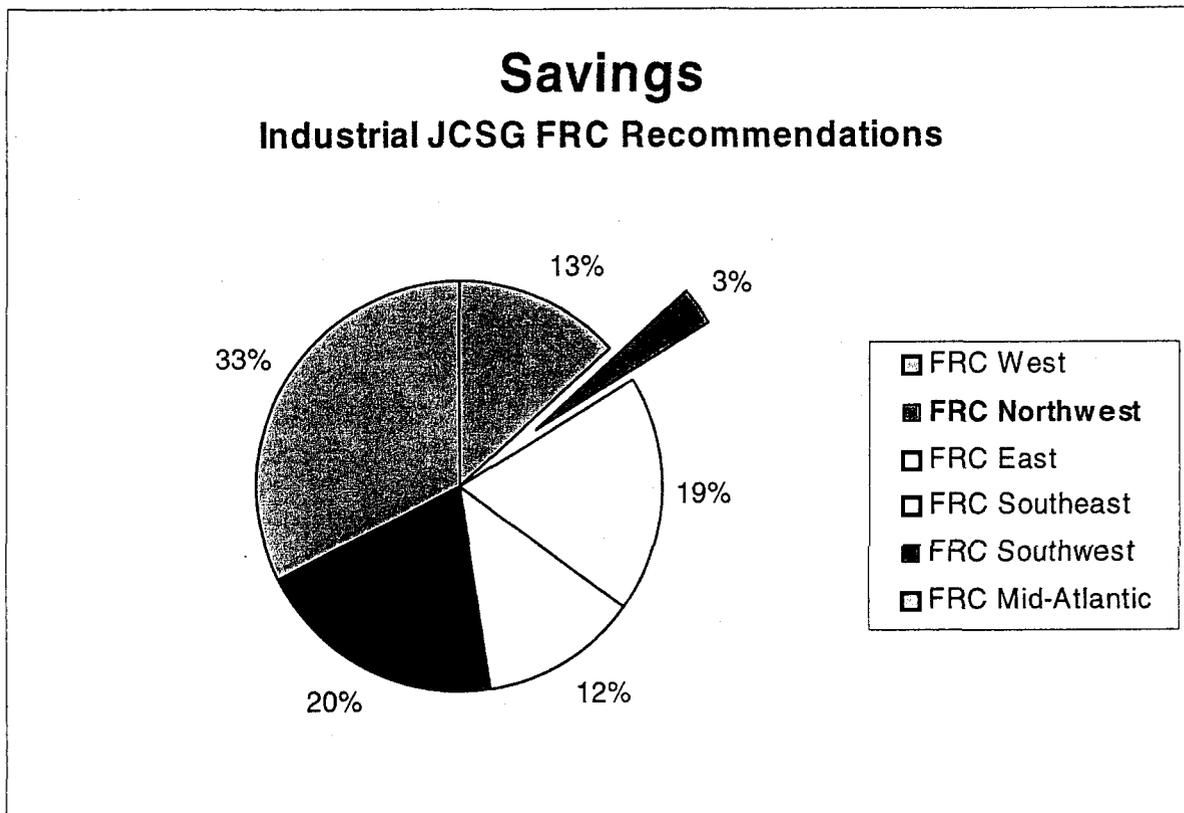
NSA Crane also had very high Military Value scores in all areas of Sensors, Electronics and Electronic Warfare as evaluated by the Technical Joint Cross Service Group. Again, Whidbey Island had no scores in this area.

Category	Crane (Rank/Score)	Whidbey Island (Rank/Score)
Development & Acquisition	#2 (0.4834)	Not listed
Research	#15 (0.2589)	Not listed
Test & Evaluation	#8 (0.3355)	Not listed

The combination of high EW military values in both the Technical and Industrial areas at NSA Crane provides a synergy that was not considered during prior BRAC analysis and could potentially serve as the foundation for a truly transformational Joint EW cradle-to-grave capability. This alternative should be considered rather than the existing recommendation to disrupt an existing capability to establish a single service, single platform site.

3.2.2.1.4 Return on Investment. The current FRC recommendation calls for the creation of six separate regional FRCs. Of the six, the FRC Northwest recommendation represents over 60% of the total recommendation cost, but only 3% of the projected savings as illustrated in the following charts.





The dramatic difference in projected cost to savings for the FRC Northwest recommendation as compared to the other FRC recommendations is cause for additional scrutiny. When the recommendation to relocate the ALQ-99 from NSA Crane to Whidbey Island is considered by itself, the cost to savings ratio becomes so large that the projected return on investment payback is "NEVER."

An additional concern of the Return on Investment calculation provided by the Industrial JCSG is that the FRC recommendation has a far larger projected savings (\$4.7B) than any other BRAC recommendation. When considering that this recommendation is limited only to Naval aviation maintenance, additional scrutiny of the calculations used to determine these savings is merited.

The potential ROI of a Joint EW Readiness Center at NSA Crane should also be considered as an alternative.

3.2.2.1.5. Economic Impact on Communities. Martin County, IN had the second highest economic impact as a result of other BRAC recommendations (over 15%). A decision to establish a Joint EW Readiness Center at NSA Crane would lessen that impact considerably.

If the FRC Northwest recommendation is implemented, data submitted with the BRAC recommendation also shows that the median housing cost in Martin County, IN is \$98,773 while the median cost Whidbey Island housing cost is \$223,100. It is highly unlikely that depot personnel will be able to afford selling their current homes and

relocating to Whidbey Island. It will be cheaper for them to remain in the Martin County, IN area, even with lower paying jobs.

3.2.2.1.6 Effectiveness and Efficiency. Minutes from the Industrial JCSG meetings and the justification for the proposed FRC realignments indicate that the Maintenance Subgroup sought to address the “Naval Aviation Enterprise (NAE) strategy of positioning maintenance activities closer to fleet concentrations when doing so will result in enhanced effectiveness and efficiency, greater agility, and allows Naval Aviation to achieve the right readiness at the least cost.” This again illustrates the lack of jointness of the FRC recommendation, but also points out the fact that effectiveness and efficiency were purported to be primary considerations.

However, the IND0103R FRC Combined Recommendation Military Value report of the Industrial JCSG dated 21 May 2005 shows that Military Value was not the basis for the FRC recommendations stating “military judgment was the primary factor” used to make decisions. Using military judgment for a decision of this scope is troublesome by itself, but particularly so when considering that most of the experts who are involved in the current processes were not able to participate in the decision making process due to BRAC disclosure rules. A cursory review would have rapidly illustrated that this military judgment was flawed due to an incomplete understanding of current EW capabilities and synergies in existence at NSA Crane.

For example, the recommendation documentation states, “This candidate recommendation supports reduction of DoD Infrastructure and its associated costs.” In fact, the decision to relocate the ALQ-99 Depot to FRC Northwest does exactly the opposite. This decision requires a new MILCON facility at Whidbey Island and duplication of a huge amount of equipment since engineering and logistics support functions for the ALQ-99, plus engineering, support and maintenance of many other EW systems will remain a part of NSA Crane’s mission. If this recommendation is implemented, there will be an increase in infrastructure, duplication of resources, and an increase in costs.

Military judgment was also used as the basis for the assumption that positioning maintenance activities closer to fleet concentrations was more effective and efficient. Again, the case of moving the ALQ-99 depot to Whidbey Island illustrates the fallacy of that assumption. Both the Navy and Marine Corps utilize ALQ-99 pods. While Navy squadrons that utilize these pods are located at Whidbey Island, Marine Corps squadrons are located at Cherry Pt., NC making the result of this relocation a huge increase in distance from the Marine Corp squadrons to the depot. This is exacerbated by the fact that the Navy is in the process of developing the Next Generation Jammer that will replace the ALQ-99 and will therefore stop using the pod long before the Marine Corps. When Navy ALQ-99 pods are phased out, will FRC Northwest continue to provide depot maintenance support to the aging USMC pods, or will another costly move be required?

As the ALQ-99 is phased out, it will also be increasingly difficult to obtain spare parts due to obsolescence issues. NSA Crane has received DoD-wide recognition for leadership in the management of technology obsolescence and rapid deployment of refreshed technology. NSA Crane will also retain other engineering and logistics

functions associated with ALQ-99. While the Maintenance subgroup did not recognize the synergies of collocation of this type of function with depot maintenance, the Industrial JCSG minutes show that the Munitions and Armaments subgroup actually recommended co-location of design, engineering and maintenance. The FRC recommendation, and particularly FRC Northwest, should be reconsidered with an analysis of the existing effectiveness and efficiency of current operations due to these existing collocations.

3.2.2.2 Reversal. If the Joint EW Readiness Center recommendation is not accepted, the second preference is to reverse the decision to establish FRC Northwest. As shown above, the recommendation does not appear to meet the criteria established for BRAC actions and should be rescinded if a preferable alternative is not available.

3.2.2.3 Specialty Site. If the first two options above are not accepted, a third option would be to establish NSA Crane as a Specialty Site within FRC Northwest. Every FRC site except for FRC Northwest has at least one Specialty Site designated. Due to the considerations above, it is apparent that the NSA Crane ALQ-99 depot should not be relocated. If military judgment, however, is used as the basis for the decision to continue with the establishment of FRC Northwest to create synergy with the rest of the FRC construct, establishment of NSA Crane as a specialty site provides an alternative that maintains the perceived synergy without the associated negative effect on Military Value, ROI and Economic Impacts to Communities listed above.

3.3 Technical JCSG

3.3.1 Summary of First Proposed Recommendation:

Actions:

- Consolidate Maritime C4ISR RDAT&E: Realign Naval Weapons Station Charleston, SC and Naval Submarine Base Point Loma, San Diego, CA as follows:
 - Relocate Surface Maritime Sensors, Electronic Warfare, and Electronics RDAT&E of the Space Warfare Center to Naval Surface Warfare Center Division, Dahlgren, VA.

Justification:

- These recommended realignments and consolidations provide for multifunctional and multidisciplinary Centers of Excellence in Maritime C4ISR.
- This recommendation will also reduce the number of technical facilities engaged in Maritime Sensors, Electronic Warfare, & Electronics and Information Systems RDAT&E from twelve to five.
- This, in turn, will reduce overlapping infrastructure increase the efficiency of operations and support an integrated approach to RDAT&E for maritime C4ISR.
- Another result would also be reduced cycle time for fielding systems to the warfighter.

Payback:

- The total estimated one-time cost to implement this recommendation is \$106.1M.
- The net of all costs and savings during the implementation period is a savings of \$88.6M.
- Annual recurring savings after implementation are \$38.7M with a payback expected in 1 year.
- The net present value of the costs and savings over 20 years is a savings of \$455.1M.

Economic Impact on Communities:

- Maximum potential reduction of 74 jobs (28 direct jobs and 46 indirect jobs) in Charleston-North Charleston, SC, Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.
- Maximum potential reduction of 88 jobs (44 direct jobs and 44 indirect jobs) in the San Diego-Carlsbad-San Marcos, CA, Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

3.3.2 Crane Roost Recommended Changes:

3.3.2.1 Joint EW Readiness Center. In keeping with prior recommendations, the Surface Electronic Warfare RDT&E portion of this workload should be relocated to NSA Crane vice Naval Surface Warfare Center Division, Dahlgren, VA. This recommendation is consistent with the establishment of NSA Crane as a Joint EW Readiness Center.

3.3.2.1.1 EW vice C4ISR. Joint Doctrine clearly establishes that Electronic Warfare is not a part of C4ISR. There are enough unique aspects to the technologies required to support EW that it should not have been lumped into this category by the Technical JCSG. This recommendation should be reconsidered with EW treated as a separate capability.

3.3.2.1.2 Jointness. This recommendation is not joint in nature since it focuses only on Department of Navy activities. In fact, not only is the recommendation not joint, it only considers Maritime C4ISR, ignoring the synergies that currently exist at activities such as NSA Crane that provide industrial and technical support for closely related air, land, sea and undersea systems. The establishment of a Joint EW Readiness Center would provide synergies far in excess of the proposed recommendation. As mentioned previously, Tab G of the 6 April 05 minutes of the Secretary of Defense Weekly BRAC Update Meeting is a report on the Department of the Navy, which illustrates this point by stating that the Navy "Worked Closely with joint cross-service groups, but leaned toward service centric rather than joint solutions." The specific relocation actions of this recommendation, and particularly those EW-related, should be reconsidered using joint selection criteria for maximum efficiency and synergy increases and lowest cost.

3.3.2.1.3 Electromagnetic Spectrum Access. Dahlgren, VA is located between the Washington, DC and Hampton Roads, VA metropolitan areas. It borders on the Potomac River and is near the Chesapeake Bay. All of this combines to place Dahlgren in a dense electromagnetic environment. NSA Crane, by comparison, is in a rural area with little air traffic and minimal electromagnetic spectrum interference concerns. Access to the Electromagnetic Spectrum should have, but was not given a Military Value weighting by the Industrial JCSG. This recommendation should be reconsidered with appropriate emphasis given to Electromagnetic Spectrum access.

3.3.2.1.4 Military Value. NSA Crane has a higher Military Value score than Dahlgren in the Development & Acquisition and Test & Evaluation areas of Sensors, Electronics and Electronic Warfare as evaluated by the Technical Joint Cross Service Group:

Category	Crane (Rank/Score)	Dahlgren (Rank/Score)
Development & Acquisition	#2 (0.4834)	#12 (0.3001)
Research	#15 (0.2589)	#10 (0.3152)
Test & Evaluation	#8 (0.3355)	#13 (0.2722)

Since the work being relocated from Charleston and Pt. Loma to Dahlgren is primarily Development & Acquisition vice Research or Test & Evaluation, NSA Crane's high military value in this area should be given consideration. NSA Crane also had the highest EW Military Value for Industrial Maintenance Activities as evaluated by the Industrial Joint Cross Service Group:

Activity	Score
NSA Crane, IN	62.2%
Tobyhanna Army Depot	55.48%
SPAWARSYSCEN San Diego	31.83%
Dahlgren	Not listed

The higher Technical Military Value score in Development & Acquisition plus the combination of high military values in both the Technical and Industrial areas provides a synergy that was not considered during prior BRAC analysis and could potentially serve as the foundation for a truly transformational Joint EW cradle-to-grave capability that should be considered.

3.3.2.1.5 Return on Investment. NSA Crane provides a cheaper alternative for faster payback and greater savings. This is in part to the fact that NSA Crane has a lower Locality Pay rate than Dahlgren resulting in a reduced labor cost. NSA Crane also has extensive existing EW infrastructure that will result in a significant decrease in the investment that will be required relocating to an activity such as Dahlgren which has less EW infrastructure as illustrated by the military value scores above. Additionally, NSA Crane is also subject to several other realignment actions that could result in a number of facilities being vacated. The potential availability of these facilities should not be overlooked when considering NSA Crane as a receiving activity for this workload.

The potential ROI of a Joint EW Readiness Center at NSA Crane should also be considered as an alternative.

3.3.2.1.6 Economic Impact on Communities. Martin County, IN had the second highest economic impact as a result of other BRAC recommendations (over 15%). A decision to establish a Joint EW Readiness Center at NSA Crane would lessen that impact considerably.

3.3.3 Summary of Second Proposed Recommendation:

Actions:

- Navy Sensors, Electronic Warfare, and Electronics RDAT&E:
 - Realign Naval Air Warfare Center, Weapons Division, Point Mugu, CA. Relocate the Sensors, Electronic Warfare (EW), and Electronics Research, Development, Acquisition, Test & Evaluation (RDAT&E) functions to Naval Air Warfare Center, Weapons Division, China Lake, CA.

Justification:

- Consolidating the Sensors, EW, and Electronics RDT&E functions at China Lake will eliminate redundant infrastructure between Point Mugu and China Lake and provide for the more efficient use of the remaining assets including the Electronic Combat Range and other integration laboratories at China Lake.

Payback:

- The total estimated one-time cost to implement this recommendation is \$72.7M.
- The net of all costs and savings during the implementation period is a cost of \$50.9M.
- Annual recurring savings after implementation are \$6.7M with a payback expected in 12 years.
- The net present value of the costs and savings over 20 years is a savings of \$16.9M.

Economic Impact on Communities:

- Maximum potential reduction of 1,075 jobs (479 direct jobs and 596 indirect jobs) over the 2006-2011 period in the Oxnard-Thousand Oaks-Ventura, CA, Metropolitan Statistical Area economic area, which is 0.3 percent of economic area employment.

3.3.4 Crane Roost Recommended Changes:

It is anticipated that the implementation of this recommendation would result in a major impact to the DoD capability to conduct airborne electronic warfare due to the loss of skilled personnel who would not make the recommendation. The military value of the facility has already been demonstrated by the Navy through its decision to relocate other work to Pt. Mugu to keep the base open. The projected 20 year ROI for this recommendation (\$16.9M) is one of the lowest of any proposed recommendation, and is a mere fraction of the overall cost of implementation (\$72.7M). These factors combine to suggest that this recommendation should be reversed.

4.0 CONCLUSION

The impacts to DoD EW infrastructure that will result if all proposed BRAC recommendations are significant and should be thoroughly reviewed to make sure no devastating losses occur. Released BRAC documentation shows that EW was not treated as a unique capability, which is a mistake for the reasons stated previously. The AOC Crane Roost believes that a further review with specific emphasis on EW would result in the change or reversal of many if not all of the recommendations listed above.

BRAC documentation also shows that fairly early in the BRAC process, NSA Crane was placed on the list for bases to close. Only very late in the process was that decision reversed. The AOC Crane Roost believes that this unfairly eliminated NSA Crane from consideration as a receiving activity, and that further analysis should be conducted, particularly in the area of EW.

AOC Garden State Chapter
P. O. Box 206
Fort Monmouth, New Jersey 07703

28 June 2005

AOC Headquarters
Mr. Don Richetti, Executive Director
1000 North Payne Street, Suite 300
Alexandria, Virginia 22314-1652

Subject: BRAC EW/IO Impacts at Fort Monmouth

Reference: AOC Letter to Chapter Presidents Dated 7 June 2005

Dear Mr. Richetti:

In response to the letter received by the Garden State Chapter (GSC) of the AOC, the following will summarize our concerns relative to the 2005 BRAC and its impact on the Electronic Warfare/Information Operations (EW/IO) efforts on-going here at Fort Monmouth.

Fort Monmouth Background

As you know, Fort Monmouth is included on the current BRAC list and is slated for closure. Since World War I, Fort Monmouth has been instrumental in providing the U.S. Military with critical communications, command and control, intelligence, surveillance and reconnaissance technologies. Today we call this "C4ISR," and it has become the "glue" that integrates all of our Military forces on the modern battlefield. This is accomplished via the efforts of a highly technical staff as detailed as follows:

Research Development and Engineering

- Lead 3 of 8 Advanced Technology Demonstration Programs
- Manage and Execute 46 of 181 Army Science and Technology Programs
- 2nd Largest Army S&T Organization

Program Management & System Acquisition

- 98 Major Defense C4ISR Programs – \$34.5B in Total Obligation Authority (FY05-11)

Readiness & Sustainment

- Sustaining the Current Force - \$1.9B (FY04)
- 247 Logistics Assistant Representative / 161 Field Software Engineers
- 51,426 National Stock Numbers Managed - Half the Army Inventory
- 200+ Systems/215M Lines of Code – Software for the Majority of the Army's Deployed Systems
- 887 Fieldings/762 New Equipment Training Missions in FY04
- Managed and Executed \$714M in Joint C4ISR Depot Workload

Procurement

- \$8B/14,700 Contract Actions for FY04
- \$450M in Foreign Military Sales in FY04

In support of OEF/OIF, Fort Monmouth has provided:

- 24/7 Emergency Operations Center for C4ISR Systems
- Quick Reaction Solutions
- Immediate Access to Subject Matter Experts
- Urgent Acquisition of Supplies and Services

Key to accomplishing the above outlined tasks is the Intellectual Capital resident here at Fort Monmouth:

• Government Engineers and Scientists:	1,885
• Government Technical and Subject Matter Experts:	1,164
• Mission Support:	1,095
• Government Other:	632
• Scientific and Engineering Technical Assistance (Embedded):	1,543
Total	6,319

Of this total, 66% hold Bachelors Degrees, 25% hold Masters Degree or Higher. Many hold security clearances above the SECRET level.

The 2005 BRAC Recommendations

A rough outline of the recommendations relative to Fort Monmouth is as follows:

* PEO C3T, PEO IEW&S, and CECOM would relocate to Aberdeen Proving Ground, Maryland (APG) as Life Cycle Management Command (LCMC). This would include the Software Engineering Center (SEC) and elements of the Logistics and Readiness Center (LRC). However, procurement management & related support functions in support of DLR (Depot Level Repairable) items would relocate to APG as a detachment of DLA Defense Supply Center in Columbus, OH.

* Specified ICP (Inventory Control Point) functions in support of consumable items & the acquisition center's contracting support for consumable items will relocate to the DLA Defense Supply Center in Columbus, OH.

* CERDEC elements, including the Intelligence and Information Warfare Directorate (I2WD), currently located at Fort Monmouth would relocate to APG.

* PEO EIS elements would relocate to Fort Belvoir, VA.

* DISA element would relocate to Ft Meade, MD.

As we look at these recommendations, we feel it is essential for the BRAC Committee to review the past internal Army Materiel Command (AMC) organizational initiatives such as the Army Materiel and Acquisition Review Committee (AMARC) Re-visited lessons and the 1993 BRAC Commission recommendations. Both reviews recognized that the synergism that currently exists at Fort Monmouth must be preserved by keeping the PEO/PM's charged with developing, fielding and sustaining C4IEWS systems for the warfighter contiguous to the acquisition, logistics and materiel management expertise located in the Communications Electronics Life Cycle Management Command. Separating these organizations would disrupt the day-to-day interaction, concurrent system and logistics engineering, acquisition, item management and sustainment that would adversely impact the readiness of the Army in time of war and indeed the

other Services and Federal Agencies who depend on the proven performance of Team C4IEWS at Fort Monmouth.

As an integrated entity, the civilian, contractor, and military workers located at Fort Monmouth "Develops, Acquires, Fields and Sustains Tactical, Strategic, and Sustaining Base Command and Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance Systems for the Joint Warfighter." Some recent specifics are as follows:

- Joint Network Node (JNN)
- Blue Force Tracking (BFT)
- Joint Combat Friendly Identification
- Improvised Explosive Device Jammers (Warlock)
- Persistent Surveillance & Dissemination
- Hand Held Standoff Mine Detection
- Long Range Advanced Scout Surveillance
- Battle Command On The Move
- Prophet Cobra/Hammer
- Man Portable Battlefield Surveillance
- Guardian Eagle
- Light Weight Counter Mortar Radar
- Kuwait Iraq C4 Commercialization
- Counter Remote Control Improvised Explosive Device (RCIED)
- Electronic Warfare System (CREW) Spiral 2

The above list is by no means complete. If one includes sustainment of fielded systems by the Logistics and Readiness Center (LRC) and the Software Engineering Center (SEC) the list is extensive. Classified Quick Reaction Capability (QRC) efforts, although numerous, are not listed above but will be covered below.

2005 BRAC Impact on EW/IO

The civilians, contractors, and military that are resident at Fort Monmouth have been a leader in the development of electronic warfare systems dating back to the early work in the development of radar marked perhaps by Project Diana in the late 1940s. Recent examples their development, acquisition, fielding, and sustainment efforts includes:

- Guardrail/Common Sensor (GR/CS)
- ARL
- Prophet
- DVE
- PPS-5 Radar
- LCMR
- REMBASS
- ALQ-144
- APR-39
- VVR-1
- AVR-2
- Combat Identification Systems
- Shortstop
- Warlock

Again, the above list is not complete and only covers a selection of EW/IO related highlights. There are numerous classified examples of QRC efforts in support of various agencies, Program Managers, or Army units where a need arrives at I2WD, the SEC, or the LRC and solutions are rapidly developed, acquired, and fielded to the user. This ability is directly tied to the quality of the technical team, the depth of knowledge, their experience, and their education. Any disruption of this staff would directly negatively impact the ability of the warfighter to acquire those rapid solutions required on today's rapidly changing battlefield environment.

While a majority of the Fort's EW worked is accomplished within the Intelligence and Information Warfare Directorate (I2WD) it is not done in a vacuum. System development, acquisition, fielding, and sustainment is accomplished by engineers from within I2WD, the Program Management offices under PEO IEW&S, the Software Engineering Center (SEC), and the Logistics and Readiness Center (LRC). It is truly a team effort. It's a team of experienced engineers, logisticians, acquisition staff, and contractors capable of providing materiel needs of the warfighter.

Prior DoD civilian relocations have had extremely low success rates with only about 10% of the workforce relocating in a) the CSTA Lab move from Camp Evans to Ft. Belvoir, VA, b) the ARL (former ET&D Lab) move from the Myer Center to Adelphi, MD, c) the IEW Directorate and PM SW activities from Vint Hill Farms, VA, to Ft. Monmouth, d) Aviation Command from St. Louis, MO, to Hunstville, AL, etc. The potential loss of 90% of the workforce is equivalent to shutting down the function and starting over again. The rebuilding period would be measured in years, perhaps as many as 10 to 15 years. This may be acceptable in an extended peacetime of two decades, however the nation is currently at war and the conflict is expected to extend for 5 to 10 years.

Along with the people, various specialized facilities within I2WD's Headquarters building, the McAfee Center, are key. (For example, the Electronic Warfare and Signals Intelligence Lab Simulates Guardrail/Common Sensor Equipment) The McAfee Center Anechoic Chamber is a shielded facility which protects highly sensitive Testing from counter-intelligence and without external interference. This chamber is large enough for ground vehicles and certain air frames to be tested within an anechoic environment. Also at the McAfee Center one will find the Improvised Explosive Device Lab.

Summary

Closing Fort Monmouth will have a significant impact on EW/IO, especially during this critical time in support of OEF/OIF.

Fort Monmouth maintains extensive intellectual capital in the engineering, development, acquisition and sustainment of complex EW Systems. This is accomplished via the Fort's location within New Jersey and the ready access to highly trained personnel from both industry and academia. While other BRAC locations will be discussing loss of intellectual capital, Fort Monmouth is unique in that more than 5,000 mostly degreed people will need to relocate as part of the current BRAC recommendations. It has been shown in previous BRAC rounds that the number of relocations simply does not occur (estimated that less than 20% will make the move) and Aberdeen does not have the industrial or academic sources to pull from to provide the experienced new-hires required to fill the void.

Any new staff that must be hired and then educated in the ways of EW/IO, there by re-creating the lost intellectual capital. One must then keep in mind that most of the Fort Monmouth engineers involved in EW/IO hold clearances above the SECRET level. This will result in a

significant time lag in the development of new staff while clearances are processed for new hires. This would severely disrupt EW/IO efforts in support of the warfighter and in the support of OEF/OIF. This would be especially critical in the fast paced QRC efforts that are so often focused on the EW/IO needs of the warfighter.

Further, there is also cost to reconstruct the specialized facilities currently in use in support of EW/IO programs and QRC efforts such as the McAfee Center Anechoic Chamber and the test labs found in the SEC.

Since World War I, the engineers resident at Fort Monmouth have been called upon to provide a variety of critical capabilities to deployed forces. Most recently, in support of Operation Enduring Freedom and Operation Iraqi Freedom, Fort Monmouth has answered the call. For the purposes of this letter and focusing only on EW/IO, it can be shown that there will be a significant negative impact on EW/IO if Fort Monmouth is closed and the development, acquisition, fielding, and sustainment moves to Aberdeen Proving Grounds.

In closing, it is apparent that the real loser is the warfighter. The real negative impact will be the delays the closure of Fort Monmouth will have in providing the materiel solutions needed in a timely manner by the warfighter. The closure will result in a loss of talent which will be directly responsible for a loss of life on the battlefields of Afghanistan and Iraq. This should not be an acceptable cost in pursuit of BRAC.

Sincerely,

J.R. May
Past President, GSC AOC
Chapter Director
President, Melvin M. May Associates, Inc.

Major General Robert D. Morgan, USA RET

17 June 2005

AOC Mugu Chapter
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Camarillo, CA 93011-0443

AOC Headquarters
Mr. Don Richetti, Executive Director
1000 North Payne Street, Suite 300
Alexandria, Virginia 22314-1652

Dear Mr. Richetti,

The AOC letter of 7 June requested a survey of adverse impacts upon the EW/IO infrastructure in the Mugu Chapter's area. Simply put, the DoD BRAC recommendation to group EW functions with sensors and electronics, and move the collection to China Lake will have a catastrophic impact upon EW/IO support to the Navy, and the nation. The Mugu Chapter is developing an on-line survey of our EW/IO teammates, but informal surveys indicate a very small fraction of our membership, which constitutes the Navy's EW/IO intellectual capital, will follow the Navy to the desert. As the Navy's defacto center of excellence for airborne EW/IO, Point Mugu is central to the nation's capability in the top three EW/IO focus areas; Airborne Electronic Attack, Counter ManPADS and Counter IED.

We don't believe that the Technical Joint Cross Service Group intended to "break EW". However, through the aggregated impact of their recommendation to move Point Mugu, Ft. Monmouth, Crane and Eglin EW/IO functions it has, in fact, been broken. The ability to fix this oversight now rests with the BRAC commission, and we hope that the national AOC leadership will join with our public and industry team as we ensure the full impact of this mistake is considered during public deliberations.

The irreversible loss of intellectual capital from the proposed moves will exact a direct cost to the nation, measured in the lives of our service members. We see immediate and long-term impact:

Immediate

- The loss of intellectual capital will directly impact ongoing 24/7 support to the war in Iraq and Afghanistan. The EW/IO effort at Point Mugu resolved thousands of trouble calls from the Fleet every year. Unlike other warfare areas, we face a continuously evolving threat and mission. Our response to this threat must be vigilant, analogous to "Virus protection" required to safely operate on the Internet.
- The sole support for Airborne Electronic Attack in the nation will be in grave jeopardy and our support of Navy, Marine Corps, Army and Air Force missions will be directly impacted.

- Helicopter Aircraft Survivability Equipment (ASE) support will be severely degraded during a time of war.

Long Term

- The IOC of the AEA systems-of-systems will slip several years, possibly negating any potential savings realized by the move.
- The average EW experience of our workforce exceeds 15 years, which means that reconstituting our specialized capability, that is not taught in our educational institutions, will be a long and difficult process.
- The loss of laboratory simulation and test capability will severely impact the DoD thrust to conduct distributed, networked development and testing. This capability is essential to our nation's ability to evaluate advanced EW/IO networked systems.
- Point Mugu is the Navy's center of excellence in non-kinetic, EW/IO weaponry. China Lake is the Navy's center of excellence in kinetic weaponry. There is very little synergy between the two, and the proposed movement would diminish the value to the Navy and country.

We encourage National AOC to consider ways to document the direct warfighting impact of the proposed changes. Uniformed military could most effectively represent the impact. However, recognizing that the uniformed military may feel obligated to support the Department's position, we recommend approaching recently retired military who could testify to the dramatic impact EW/IO has on the modern battlefield, and the effect such a loss would bring.

The Mugu Crows Chapter represents a unique capability centered around the Point Mugu/Port Hueneme Navy complex. We have established a government industry partnership between the best of the southern California aerospace expertise and the largest government EW/IO center in the country. I'm sure that working with national AOC, we can help the BRAC commissioners and Congress recognize the devastating impact that all the EW/IO movements will have to our country's defense.

Respectfully,

Mark Schallheim
President, AOC Mugu Chapter