



DEPARTMENT OF THE NAVY  
OFFICE OF THE SECRETARY  
1000 NAVY PENTAGON  
WASHINGTON DC 20350-1000

16 August 2005

The Honorable Anthony J. Principi  
Chairman  
Defense Base Closure and Realignment Commission  
2521 South Clark Street, Suite 600  
Arlington, VA 22202

Dear Chairman Principi:

This is in response to the August 8, 2005 inquiry (DSE #40) from Mr. Frank Cirillo of your staff regarding BAE Systems (formerly United Defense) and Raytheon contracts performed at Naval Surface Warfare Center, Port Hueneme Division (NSWC, PHD) Louisville, Kentucky. His questions and our responses follow:

*As discussed during the phone conversation this afternoon involving Anne Davis, Lester Farrington, and myself, this letter to the clearinghouse is to request that you contact NAVSEA and other relevant DOD organizations and request an explanation of what functionality, is required by the contracts under which United Defense (now BAE Systems) and Raytheon perform work at Louisville. Of particular interest are the contracts which resulted from the public-private partnership that was a by-product of prior BRACs. Please also separately provide information as to what level of COTR-like oversight is appropriate for contracts and contractors of the indicated sizes. Functionality issues include what types of in-service engineering, Research and Development, or similar work the Navy is obligated to provide. If possible, tell us what level of on-site support, if any, the Navy feels is appropriate, above and beyond what the Navy is already contractually obligated to provide.*

Although, the NSWC PHD Louisville, Kentucky has operated in partnership with the Original Equipment Manufacturers (OEMs) over the past 10 years, it is not contractually obligated to provide on-site support. Rather, they are there because historically it had made business and mission sense.

The current BRAC recommendation is aimed at gaining efficiencies through joint work in the technical area and proposes to consolidate Guns and Ammunition work at Picatinny Arsenal. While this recommendation severs existing synergies, each of the actions in the recommendation contributes to the establishment of an integrated, robust joint gun and ammunition center. This comprehensive center will promote new technical synergies, reduce duplication, and increase efficiencies across DoD.

The number of personnel required at Louisville to provide direct on-site support to the contractors cannot be quantified at this time, but any capabilities now provided to

contractors, but moved in BRAC, will be dealt with through contract negotiations. Regardless of the number of people that may be identified to support the contract, the Department of the Navy continues to support the candidate recommendation as submitted. The actual number required will need to be determined during implementation if the BRAC recommendations become law.

I trust this information satisfactorily addresses your concerns. If we can be of further assistance, please let me know.

Sincerely,

A handwritten signature in cursive script, appearing to read "Anne R. Davis".

Anne Rathmell Davis  
Special Assistant to the Secretary of the Navy  
for Base Realignment and Closure



DEPARTMENT OF THE NAVY  
OFFICE OF THE SECRETARY  
1000 NAVY PENTAGON  
WASHINGTON DC 20350-1000

Louisville

16 August 2005

The Honorable Anthony J. Principi  
Chairman  
Defense Base Closure and Realignment Commission  
2521 South Clark Street, Suite 600  
Arlington, VA 22202

Dear Chairman Principi:

This is in response to the August 8, 2005 inquiry (DSE #40) from Mr. Frank Cirillo of your staff regarding BAE Systems (formerly United Defense) and Raytheon contracts performed at Naval Surface Warfare Center, Port Hueneme Division (NSWC, PHD) Louisville, Kentucky. His questions and our responses follow:

*As discussed during the phone conversation this afternoon involving Anne Davis, Lester Farrington, and myself, this letter to the clearinghouse is to request that you contact NAVSEA and other relevant DOD organizations and request an explanation of what functionality, is required by the contracts under which United Defense (now BAE Systems) and Raytheon perform work at Louisville. Of particular interest are the contracts which resulted from the public-private partnership that was a by-product of prior BRACs. Please also separately provide information as to what level of COTR-like oversight is appropriate for contracts and contractors of the indicated sizes. Functionality issues include what types of in-service engineering, Research and Development, or similar work the Navy is obligated to provide. If possible, tell us what level of on-site support, if any, the Navy feels is appropriate, above and beyond what the Navy is already contractually obligated to provide.*

Although, the NSWC PHD Louisville, Kentucky has operated in partnership with the Original Equipment Manufacturers (OEMs) over the past 10 years, it is not contractually obligated to provide on-site support. Rather, they are there because historically it had made business and mission sense.

The current BRAC recommendation is aimed at gaining efficiencies through joint work in the technical area and proposes to consolidate Guns and Ammunition work at Picatinny Arsenal. While this recommendation severs existing synergies, each of the actions in the recommendation contributes to the establishment of an integrated, robust joint gun and ammunition center. This comprehensive center will promote new technical synergies, reduce duplication, and increase efficiencies across DoD.

The number of personnel required at Louisville to provide direct on-site support to the contractors cannot be quantified at this time, but any capabilities now provided to

contractors, but moved in BRAC, will be dealt with through contract negotiations. Regardless of the number of people that may be identified to support the contract, the Department of the Navy continues to support the candidate recommendation as submitted. The actual number required will need to be determined during implementation if the BRAC recommendations become law.

I trust this information satisfactorily addresses your concerns. If we can be of further assistance, please let me know.

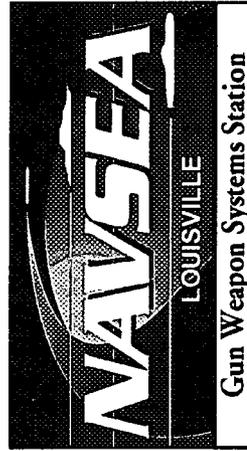
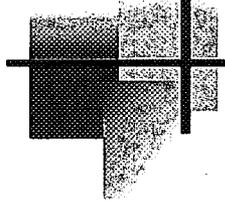
Sincerely,

A handwritten signature in cursive script, appearing to read "Anne R. Davis".

Anne Rathmell Davis  
Special Assistant to the Secretary of the Navy  
for Base Realignment and Closure

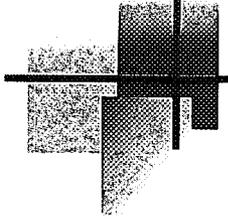
# BRAC 2005

# Louisville Detachment



# Benefits of Louisville as Receiving Site

---



- Preserves critical elements of support to deployed forces from military-industrial partnership created by BRAC '95
- Achieves concentration on the end user through manufacturing, shipboard integration and life cycle support
- Simultaneously consolidates and co-locates Navy gun weapon system production development and acquisition with Navy OEM
- Retains intellectual capital for current and future naval gun weapon systems
- Preserves and grows synergy with gun production capability

# Effects of Dissolution of Navy- Industry Partnership at Louisville

- Disbanding of Navy expert-level gun weapon system personnel
- Dramatic reduction in standards of living for families relocated to high cost-of-living region
- Fracturing of Navy's assessment capability in technical and operational communities

DCN:11703

**COPY**



**KENTUCKY COMMISSION ON MILITARY AFFAIRS**

**CONFIDENTIALITY NOTICE**

The information contained in this facsimile message, and in any accompanying document, constitutes confidential information belonging to the Kentucky Commission on Military Affairs. This information is intended only for the use of the individual or entity named below. If you are not the intended recipient of this information, you are hereby notified that any dissemination, copying, distribution, or the taking of any action in reliance on this information is strictly prohibited. If you have received this facsimile message in error, please immediately notify the sending party by telephone at (502) 564-0269 to arrange for its retransmission. Thank you.

**FAX MESSAGE**

KCMA  
66 Wilkinson Boulevard  
Frankfort, Kentucky 40601  
502-564-0269  
502-564-0273 - FAX

Date: 5 August 2005

To: David Epstein

**Executive Committee**

CHAIR  
BG (R) JULIUS L. "BUD" BERTHOLD

VICE CHAIR  
DON WILLIAMS

MG DONALD C. STORM  
ADJUTANT GENERAL

MARVIN E. STRONG, SECRETARY  
CABINET FOR ECONOMIC  
DEVELOPMENT

BG (Ret) JAMES E. SHANE  
EXECUTIVE DIRECTOR

BG (Ret.) LES BEAVERS  
COMMISSIONER,  
VETERANS AFFAIRS

LARRY FIELDS

DONNA G. BROWN

JAMES FALLIN

FAX Number: 703-699-2735

From: BG (R) Jim Shane

No. of pages (including cover sheet): 8

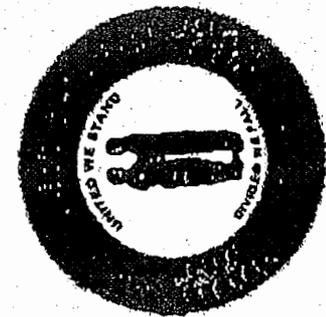
Comments/Remarks/Messages: David, Attached are the slides I promised you today at the BRAC Commission. If you have any questions, please call me at 502-564-0269. I will follow up with a telephone call on Monday.

**KCMA Staff**

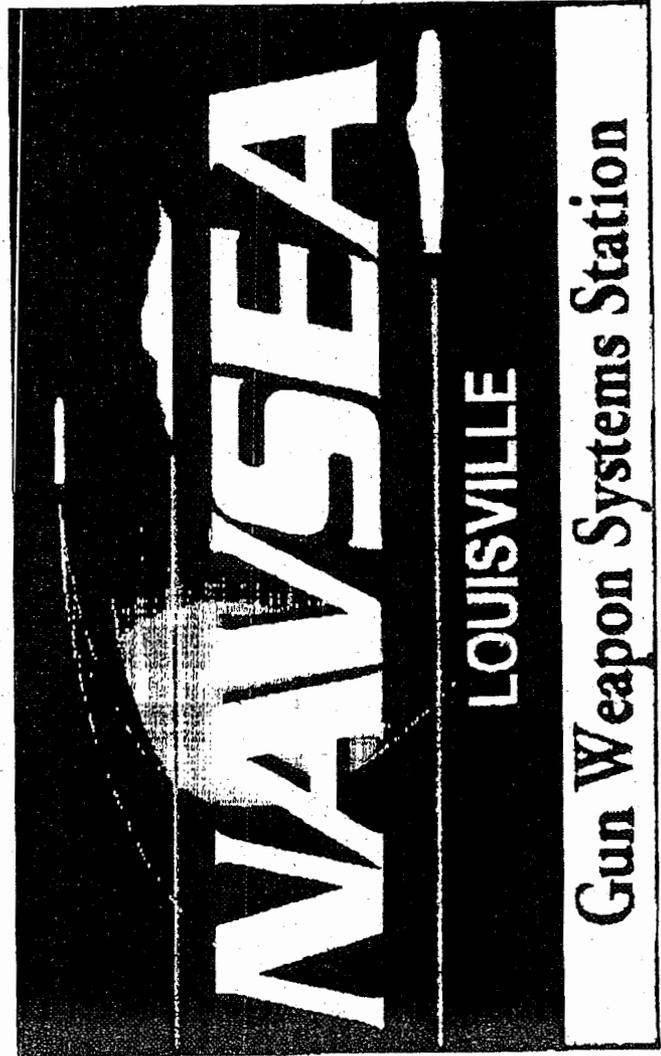
STACEY GAMES  
EXECUTIVE ASSISTANT

COLLEEN POMPER  
EXECUTIVE SECRETARY

DCN:11703



**Naval Surface  
Warfare Center (NSWC)  
Port Hueneeme Division,  
Louisville Detachment**





# Naval Surface Warfare Center (NSWC) Port Hueneme Division, Louisville Detachment



Forces/Units Lost or Gained	From/To	Personnel Impact		Remarks
		Lost	Gained	
Realign Naval Surface Warfare Center - Port Hueneme Div, Louisville Detachment	Picatinny Arsenal, NJ	223		
	Subtotal:	223		

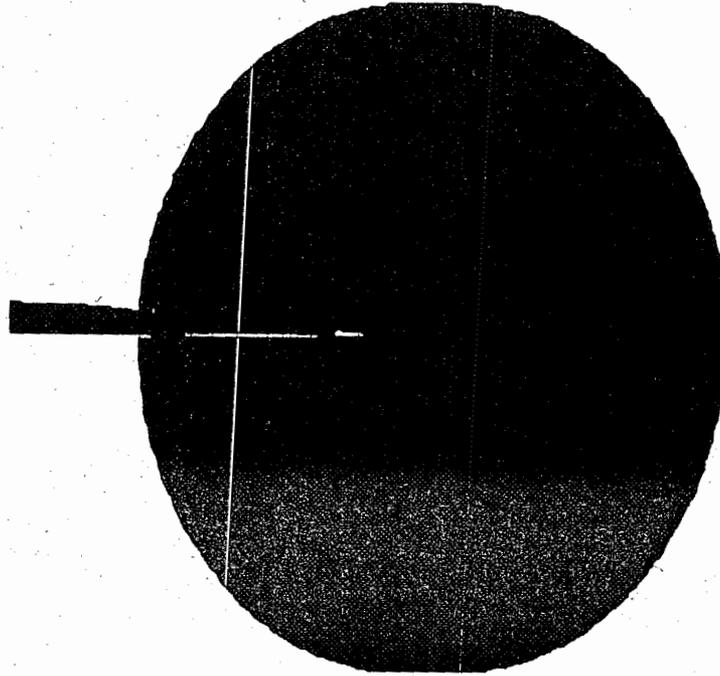
**Concerns:** Recommendation mistakenly includes NSWC-PHD, Louisville as a major RDT&E site  
(See White Paper – Briefing Book Tab B)

**Missed opportunities:** None

**Community Support Assessment:** The community support infrastructure can support these recommendations. Excess capacity exists within the community to support additional missions and future growth.

# Workload Distribution at Louisville

■ Research & Development  
1%

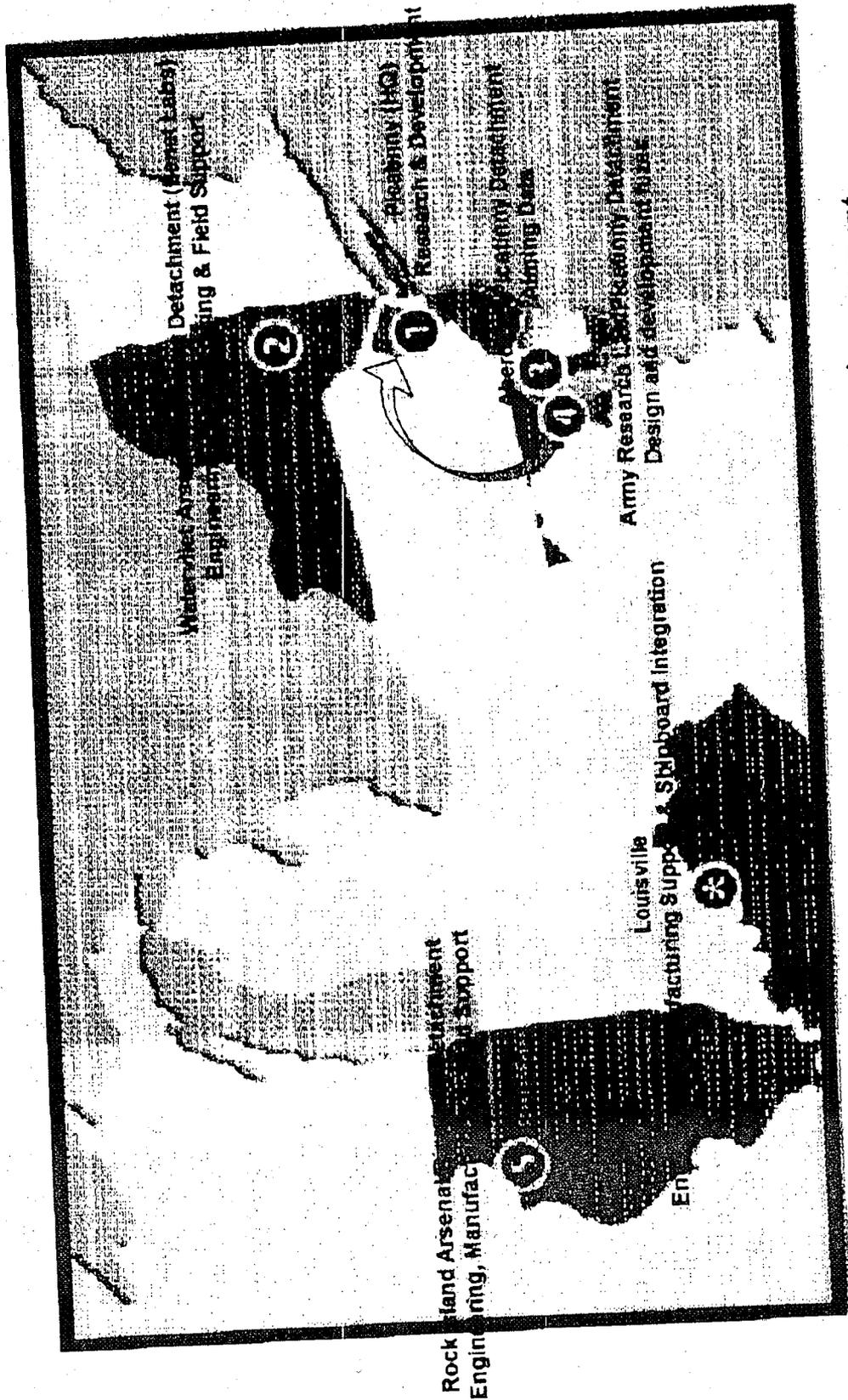


- 99% of organization synergistic with Louisville Original Equipment Manufacturers (OEMs)
- 1% synergistic with Research & Development

■ Engineering, Manufacturing Support & Shipboard Integration  
99%

DCN:11703

# Current ARDEC Sites and Louisville

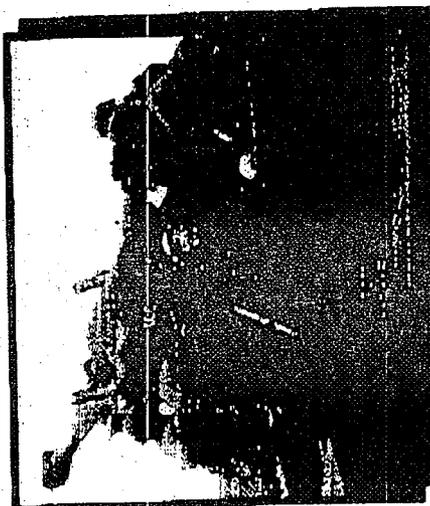


Rock Island, Watervliet, and Louisville represent the main armament manufacturing sites for the Army and Navy.

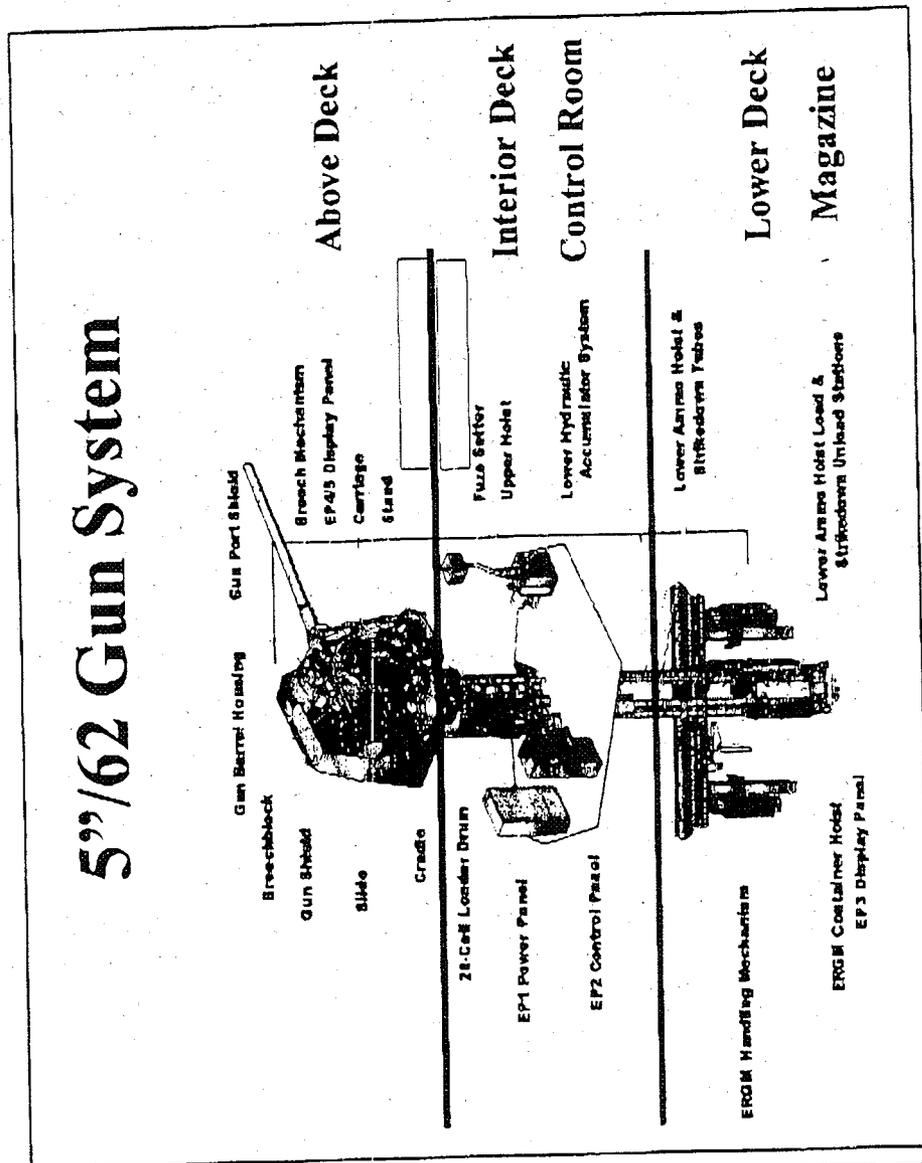
DCN:11703

# Artillery and Naval Gun Systems

## 155mm Howitzer

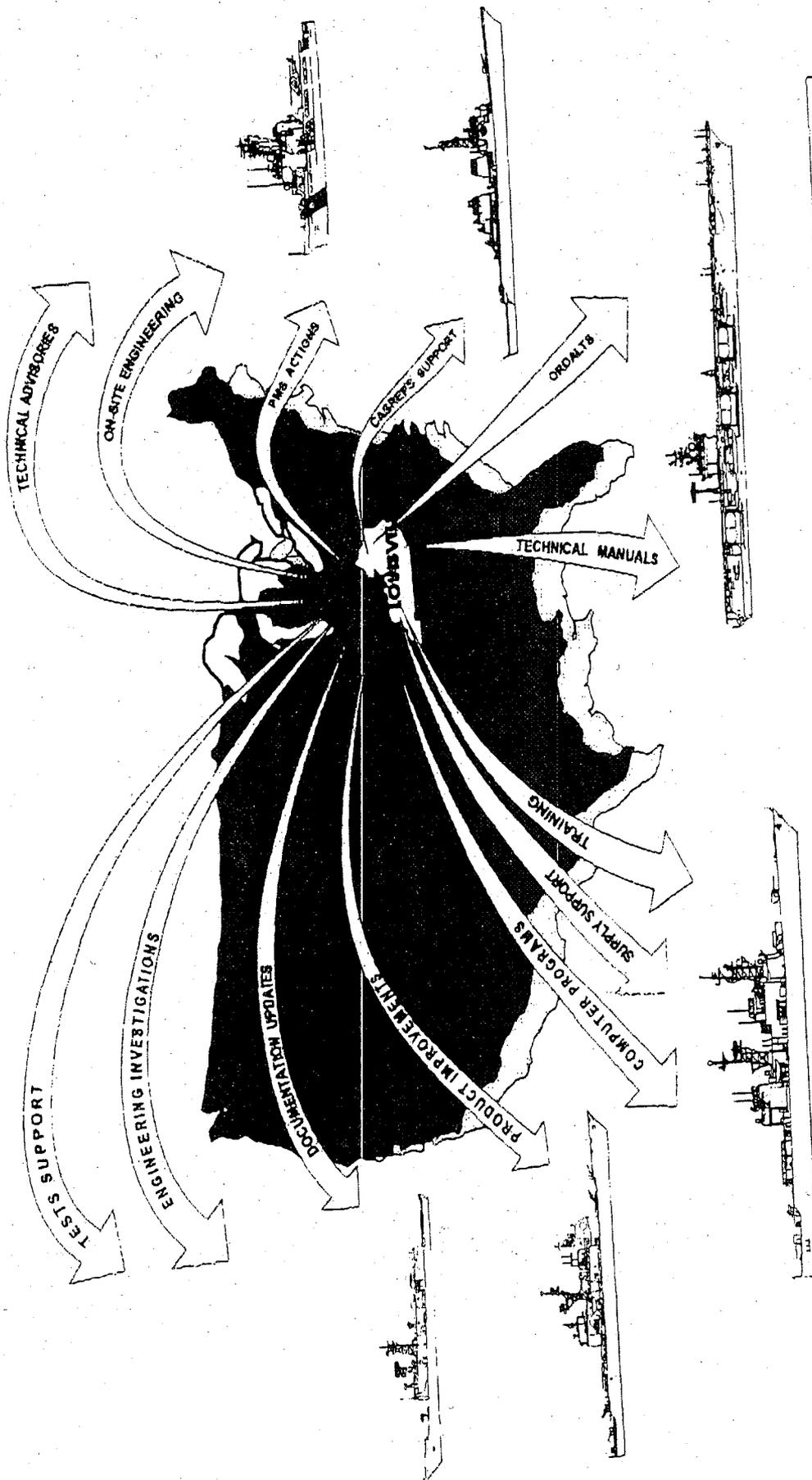


## 5"/62 Gun System



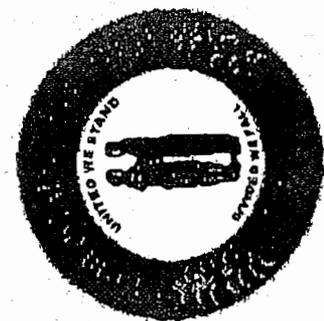
DCN:11703

# Navy and Coast Guard Fleet Support



# Engineering & Shipboard Integration

DCN:11703



# NSWC - PHD, Louisville

## Summary of Key Points

- Military-Industrial partnership that exists at NSWC-PHD, Louisville is a critical element of the military support to deployed naval forces (*Similar to Rock Island and Watervliet - which are recommended to remain co-located*)
- NSWC-PHD, Louisville focuses on the end user through manufacturing shipboard integration and life-cycle support of naval armaments
- NSWC- PHD, Louisville is an integral part of the Navy's Network Centric Combat Weapon System support structure.
- 1% of work at NSWC-PHD, Louisville is RDT&E related
- No cost savings or efficiencies are realized from this recommendation

DCN:11703

**Congresswoman Anne M. Northup**

600 Martin Luther King, Jr. Place  
Suite 216  
Louisville, KY 40202  
Phone: (502) 582-5129  
Fax: (502) 582-5897

**Fax Cover Sheet**

**To:** David Epstein

**Fax No.:** 703-699-2740

**From:** Sherri Craig, District Director  
U.S. Rep. Anne M. Northup

**Date:** 8/4/05

Rep. Northup would appreciate the opportunity to speak with you on Monday, August 8 at 2:00 p.m.

DCN:11703

MITCH MCCONNELL    JIM BUNNING    ANNE NORTHUP    JERRY ABRAMSON  
UNITED STATES SENATOR    UNITED STATES SENATOR    UNITED STATES REPRESENTATIVE    MAYOR OF LOUISVILLE

June 17, 2005

The Honorable Anthony Principi  
Chairman, Base Realignment and Closure Commission  
2005 Defense Base Realignment and Closure Commission  
2521 South Clark Street, Suite 600  
Arlington, VA 22202

Dear Chairman Principi:

We are writing in response to the recent recommendation of the Department of Defense (DOD) to realign the Louisville, Kentucky Detachment of the Naval Surface Warfare Center, Port Hueneme Division (Louisville Detachment), by relocating gun and ammunition research, development & acquisition capabilities to Picatinny Arsenal, New Jersey.

The city of Louisville and the Kentucky congressional delegation support the Base Realignment and Closure (BRAC) Commission process and agree with DOD on the need for strategic closures and the realignment of various military installations. Further, we see the wisdom in DOD's recommendation to consolidate all gun and ammunition facilities that emphasize research and development. However, we must take issue with DOD's recommendation that the Louisville Detachment's mission primarily involves research and development and therefore is a candidate for relocation to New Jersey.

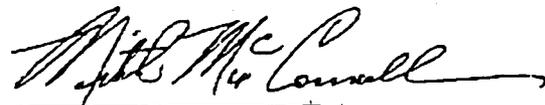
Our central concern with regard to the Louisville Detachment is that its mission is focused on manufacturing, shipboard integration and life-cycle support, with only peripheral involvement in the research and development elements of guns and ammunition. Only a handful of the Louisville Detachment's staff work on research and development activities; the vast majority focus on non-research and development activities, such as direct end user support and in-service support of armaments. The Louisville detachment, therefore, is incorrectly considered a research and development facility. Due to the demonstrable difference in the core missions between the Detachment and the Picatinny installation, we believe the Department mistakenly recommended the Louisville Detachment for realignment.

In addition to our concern about the different missions served by the two installations, we also believe that such a relocation would result in the termination of an effective public-private partnership, which was itself a creation of the 1995 BRAC process. Moreover, such relocation would likely result in higher costs to the U.S. taxpayers due to, among other things, the higher cost of living in northern New Jersey.

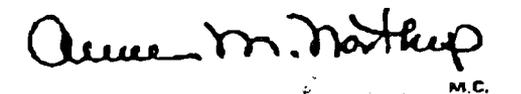
DCN:11703

In sum, we request that you revisit DOD's recommendation to relocate the Detachment. We thank you for your attention to this matter and are happy to answer any questions that you and the Commission might have.

Sincerely,

  
MITCH McCONNELL  
UNITED STATES SENATOR

  
JIM BUNNING  
UNITED STATES SENATOR

  
ANNE NORTHUP  
UNITED STATES REPRESENTATIVE

  
JERRY ABRAMSON  
MAYOR, CITY OF LOUISVILLE

DCN:11703

**Louisville, KY Detachment  
Naval Surface Warfare Center,  
Port Hueneme Division**

**Executive Summary**

The Louisville Detachment of the Naval Surface Warfare Center was included in a BRAC recommendation (see attachment to memo) as one of eight installations contributing functions and personnel to form a new "Integrated Weapons & Armaments Specialty Site for Guns and Ammunition" at Picatinny Arsenal, NJ. The recommendation would realign gun and ammunition Research and Development & Acquisition (RDA) by relocating 296 jobs from the Louisville Detachment.

While the other seven installations may have capabilities appropriately included in this recommendation, only a small portion of the work conducted at Naval Surface Warfare Center PHD, Louisville Detachment is research and development in nature. In fact, the unique and specialized activity in Louisville is nearly entirely focused on Fleet-user support, through manufacturing, shipboard integration, and life-cycle support of naval armaments. Louisville Detachment should not be included in the final recommendation because:

- The considerable majority of the work performed at the Louisville Detachment does not fit within this recommendation's intended mission profile;
- Relocation of Louisville's mission per this recommendation would result in an erosion of the existing public-private partnership, itself a creation of the 1995 BRAC Commission, critical to the success of this vital mission support activity;
- Such relocation would likely result in a higher cost to the Department and the U.S. taxpayer.

**Discussion: Louisville Detachment Performs Minimal Research and Development**

The recommendation, to create a "more robust center for gun and ammunition Research, Development & Acquisition," has a coherent rationale and, if properly executed, could create a strong support base for warfighters throughout the military. However, the Louisville Detachment's mission focus is on manufacturing, shipboard integration and life-cycle support, with only minor and peripheral involvement in the research and development elements of guns and ammunition. Specifically, the involvement of the Louisville Detachment's staff in research and development is quantified at fewer than ten personnel, while the remaining 200-plus personnel are focused directly on Fleet support and in-service engineering of armaments. Essentially, Louisville Detachment's mission is unique and different that the work targeted by this recommendation, and as such nothing is gained by its inclusion, but much stands to be lost.

Generally, there are three basic operating constructs shipboard: (1) sensors, (2) effectors and (3) command and control. The Louisville Detachment activity works in all three areas, with the gun engineering accounting for a little more than a half of the work force, and with only a fraction of

DCN:11703

those personnel engaged in research or development activity. These few R&D personnel are located in place to support the larger mission of Louisville Detachment, rather than the larger Navy research and development mission. The remainder of the Louisville workforce is focused on the shipboard integration of sensor systems designed to operate in the at-sea environment, command and control, high-speed computation and a variety of additional end user support functions – work with no relationship to energetics research conducted at Picatinny Arsenal, or the research and development work conducted at the other named facilities. The research and development facilities identify and evolve new and vital technologies, in contrast to Louisville Detachment's personnel work in direct partnership with the OEMs to integrate these systems shipboard and support them while in service.

Vital to this discussion is the fact that no measurable military benefit would result from relocation of Louisville's engineering core, focused on shipboard Naval armaments, to the Army's energetics research laboratory at Picatinny Arsenal, NJ. In fact, an erosion of the current capabilities would be the likely result. It is important to keep in mind that Naval weapons consist of 10% recoiling gun and 90% automated ammunition-handling systems that are integrated into each ship's unique platform, while Army weapons consist of 90% recoiling gun and 10% ammunition handling systems that are integrated into various mobile platforms by the Army Tank-Automotive Command (TACOM) in Detroit, MI. There is very little overlap between the manufacturing and support of large caliber automatic naval rifles and their unique loading systems, and the similar caliber ground-based system's employed by the Army. Accordingly, no benefit accrues from co-location of the systems support personnel.

In general, the proposed realignment would not make a material contribution to the new center or transformation. Instead, it would disrupt the Louisville Detachment's crucial mission of supporting the naval warfighters.

#### **Discussion: Partnership With OEMs Is Vital**

Not only would the proposed realignment of the Louisville Detachment fail to serve the purposes of the recommendation, it also would result in a devastating loss of synergy and shared intellectual capital between the OEMs and the Navy's personnel who work in partnership within the Louisville operations. This public-private partnership was created by an express action of the 1995 BRAC Commission<sup>1</sup>, and has proven a highly successful and efficient operation to date. In contrast to the research and development corps located at the other named facilities, Louisville Detachment's personnel are focused on direct and real time support of the warfighter, the sustainment of their armaments and the integration of technologies shipboard. This mission requires the close and constant joint efforts of both the Navy and its industrial base located in Louisville, KY. The military-industrial dynamic that exists at sites such as Louisville is critical element of the military portfolio supporting deployed naval forces.

---

<sup>1</sup> "The commission found that the gun systems engineering functions at Louisville are consistent with operational requirements, and that co-location of these engineering functions with the maintenance and overhaul functions performed at the facility has contributed substantially to the effectiveness of the facility in serving the Department of the Navy. These integrated engineering, maintenance and overhaul capabilities led the Commission to strongly urge the Department of the Navy to allow privatization of these assets." *Excerpted from the recommendations of the 1995 BRAC Commission Report.*

DCN:11703

The BRAC law requires that military value be given primary consideration. In fact, the highest military value for the Louisville Detachment results from the partnership between the Navy's engineering staff and the industrial base. The Army, and apparently the Technical JCSWG, recognized this tenet when it wisely recommended maintaining Watervliet Arsenal and Benet Laboratory as an operating unit geographically separate from Picatinny Arsenal, but co-located with the relevant industrial base. This action demonstrates a clear recognition that higher military value and benefit results when the manufacturers of gun and ammunition systems are co-located with the service's engineers who are charged with the integration, maintenance and support of the same equipment. The organizational construct of Louisville Detachment, integrated within the manufacturing base of the weapon systems it supports, is no different than the structure of the Army's Watervliet Arsenal and Benet Labs (which are recommended to remain in place), but considerably different than the other facilities named in the Department's recommendation.

In short, the mission necessitates a partnership and joint-location of the gun and ammunition industrial base and the Navy support personnel, no differently than the Army's mission requirements at Watervliet. Relocation of the Louisville Detachment would have a direct and negative impact on the effectiveness and efficiency of the in-service support of naval armaments. The recommendation should be rejected in order to continue reaping the operational and financial benefits the cooperative relationship between installation personnel and private contractors.

#### Discussion: Flawed Cost Savings

As outlined above, military value is optimized through maintaining the ongoing operations of the Louisville Detachment, preserving efficiencies gained through public-private partnership. Further, while one could argue that moving all of Louisville Detachment could arguably achieve some cost savings in the form of reduced overhead, it is likely that this move could actually result in higher costs.

Serious questions remain regarding actual cost savings realized by the relocation of the Louisville Detachment. Such questions are predicated on several factors, most prominently the significantly higher costs of doing business in northern New Jersey over Louisville, Kentucky, as is evident from the below chart listing data cited directly from DoD's own COBRA analysis.

Cost Element	Louisville	Picatinny Arsenal
Enlisted BAH/Month	\$743	\$1,832
Civilian Locality Pay	1.109	1.193
Area Cost Factor	0.96	1.2
Per Diem Rate/Day	\$112	\$157

In fact, the joint element of the work performed at Louisville Detachment and its industrial partners is such a vital ingredient of mission success, the Navy may need to recreate some elements of the activity in Louisville to ensure continued mission success. Such action would only create additional redundancies and a practical higher cost to the Department. Finally, there are always considerable cost issues related to moving a work force, not to mention the risk of losing valuable human capital.

DCN:11703

### Conclusion

In light of the demonstrable difference in the nature of the work performed by the majority of the staff at the Louisville Detachment and the capabilities sought for the new center described in the recommendation, the Commission is requested to remove Detachment Louisville from the final recommendation. Such action would continue to produce higher military value in support of the warfighter due to the highly efficient partnership existing between the Navy's engineering work force and their industrial base, value that was in fact created by the actions of the 1995 BRAC Commission.

The 2005 BRAC Commission should find that including the Louisville Detachment in this recommendation deviates substantially from the letter and spirit of Selection Criteria One as a result of the detrimental impact on operational readiness.

DCN:11703

**Attachment: Relevant Parts of BRAC Recommendation for  
Louisville, KY Detachment of Naval Surface Warfare Center**

---

**Create an Integrated Weapons & Armaments  
Specialty Site for Guns and Ammunition**

**Recommendation:** Realign the Adelphi Laboratory Center, MD, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Crane, IN, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign the Fallbrook, CA, detachment of Naval Surface Warfare Center Division Crane, IN, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Dahlgren, VA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign the Louisville, KY, detachment of Naval Surface Warfare Center Division Port Hueneme, CA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Air Warfare Center Weapons Division China Lake, CA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Indian Head, MD, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Earle, NJ, by relocating weapon and armament packaging Research and Development & Acquisition to Picatinny Arsenal, NJ.

**Justification:** This recommendation realigns and consolidates those gun and ammunition facilities working in Weapons and Armaments (W&A) Research (R), Development & Acquisition (D&A). This realignment would result in a more robust joint center for gun and ammunition Research, Development & Acquisition at Picatinny Arsenal, NJ. This location is already the greatest concentration of military value in gun and ammunition W&A RD&A.

Picatinny Arsenal is the center-of-mass for DoD's Research, Development & Acquisition of guns and ammunition, with a workload more than an order of magnitude greater than any other DoD facility in this area. It also is home to the DoD's Single Manager for Conventional Ammunition. Movement of all the Services' guns and ammunition work to Picatinny Arsenal will create a joint center of excellence and provide synergy in armament development for the near future and beyond, featuring a Joint Packaging, Handling, Shipping and Transportation (PHS&T) Center, particularly important in this current time of high demand for guns and ammunition by all the services. Technical facilities with lower quantitative military value are relocated to Picatinny Arsenal.

This recommendation includes Research, Development & Acquisition activities in the Army and Navy. It promotes jointness, enables technical synergy, and positions the Department of Defense to exploit center-of-mass scientific, technical, and acquisition expertise within the weapons and armament Research, Development & Acquisition community that currently resides at this DoD specialty location.

**Economic Impact on Communities:** Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 506 jobs (296 direct jobs and 210 indirect jobs) over the 2006-2011 periods in the Louisville, KY-IN, Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

4 Aug 05

*Information Requested by Messrs. Epstein And Farrington as a Result of 28 Jul 05 Meeting to Discuss NSWC PHD Det Louisville Issues Within TECH-0018B*

Messrs. Epstein and Farrington requested clarification of factual errors (particular emphasis on the Support Contractors area) contained in the DOD TECH-0018B scenario with respect to NSWC PHD Det Louisville (hereafter referred to as “the activity”). Additionally, Messrs. Epstein and Farrington requested explanatory information concerning various COBRA model runs. In response to this request, the following information in this document pertaining to NSWC PHD Det Louisville is respectfully submitted.

**FACTUAL ERRORS WITHIN TECH-0018B**

**Support Contractors:**

The scenario data call requested report of the number of support contractor personnel at the losing activity. The question received was the following:

**DoD42846 Report the net number of contractor mission support employees that would be directly affected by the proposed BRAC action. Use positive numbers (+) for net gains and negative numbers (-) for net losses.**

The term “mission support” was interpreted to mean contractors directly supporting the activity’s product mission. e.g. contractors performing engineering and logistics support of In-Service gun weapon systems via task orders on the activity’s Omnibus engineering and logistics support contract. The activity reported 86 contractors would be lost in FY2009 (FY2009 used per higher guidance as best guess of Army’s intentions given no opportunity to communicate with proposed receiving activities) as detailed below.

Action # (List)	FY 2006 Number of Contractors (#)	FY 2007 Number of Contractors (#)	FY 2008 Number of Contractors (#)	FY 2009 Number of Contractors (#)	FY 2010 Number of Contractors (#)
02					
03					
04					
05					
06					
07					
08					
09					
010					
011					
012					
013					
014					
015					
X15	0	0	0	-86	0
FY 2011 Number of Contractors (#)					
0					

Once DOD released the BRAC data it became clear that the intent of the data call question was aimed at contractors providing support services generally categorized as overhead or sometimes referred to as General and Administrative e.g. fire protection, security, etc. An assumed reduction (15% appears to be utilized in the COBRA model) for fire protection, security, etc. would make sense as a result of co-locating personnel at Picatinny. The activity’s misinterpretation of the data call question resulted in a very

large number of contractor support employees and is glaringly apparent when compared to the number associated with all the other activities in the data call performing guns and ammunition functions. This gross error significantly skews and invalidates the entire COBRA model results.

Messrs. Epstein and Farrington requested a breakout of the 86 contractors contained in the submission. The breakout is as follows:

CONTRACTOR	Number of FTEs (Full Time Equivalents)	Function Performed
CACI	41	Product/In-Service Life-Cycle Support
ICS	19	Product/In-Service Life-Cycle Support
MTTC (Senator McConnell Technology and Training Center)	18	Product/In-Service Life-Cycle Support
Unidyne	4	Product/In-Service Life-Cycle Support
OMNI	4	Product/In-Service Life-Cycle Support
Total:	86	

Since the data call question was aimed at contractors providing support services generally categorized as overhead or sometimes referred to as General and Administrative e.g. fire protection, security, etc., the data submission should have reported five contractors would be lost to the receiving activity. A breakout of these five contractors is as follows (no fire protection or security as these functions provided by the city of Louisville's police and fire protection agencies to the privatized technology park):

CONTRACTOR	Number of FTEs (Full Time Equivalents)	Function Performed
ERI	5	Administrative/Clerical Support
Total:	5	

**Tonnage for Moving Mission Equipment:**

The scenario data call requested report of the tonnage of Mission Equipment being relocated to the receiving activity. The following was submitted:

DoD42809 For each closure/realignment action applicable to your activity identified in the SCENARIO DESCRIPTION, provide, by year, the tonnage of Mission Equipment being RELOCATED to each Receiving Activity. Provide a complete answer row for each Action listed in the SCENARIO DESCRIPTION as it applies to your activity.

Action # (List)	FY 2006 (Tons)	FY 2007 (Tons)	FY 2008 (Tons)	FY 2009 (Tons)	FY 2010 (Tons)
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
(X)5	0	0	0	858	0
FY 2011 (Tons)					
0					

DoD42510 For each closure/realignment action applicable to your activity identified in the SCENARIO DESCRIPTION, list the Mission Equipment to be RELOCATED and the rationale for relocating this equipment, to include the FY chosen for relocation.

Action # (List)	Equipment Type (Text)	Tonnage (Tons)	Rationale for Relocating (Text)
01			
02			
03			
04			
05			
06			
07			
08			
(X)4	ORDALT Kits	20	Weapons Upgrade
(X)4	SHIPALT Kits	80	Ship Upgrades
(X)4	CBRP/INCO Parts	268	Fleet Support
(X)4	Special Test Eqpt	20	System Testing
(X)4	SPMR Kits	80	Pierside Maintenance
(X)4	Lifting Fixtures	20	System Installation/Removal
(X)4	New Construction Hardware	40	Ship Installation
(X)4	2J COG Carcasses	60	Depot Repair Assets
(X)4	Masters, Aperture Cards, and Cabinets	17	Support ISEA Function
(X)4	Aperture Cards and Cabinets	102	Support Navy Systems
(X)4	Technical Data	54	Support ISEA Function
(X)4	Contractor Maintained Technical Data	22	Support ISEA Function
(X)4	Electro-Optical Test Station	5	Support ISEA Function
(X)4	2-Ton Movable Lifting Fixtures	2	Support ISEA Function

Once DOD released the BRAC data it was apparent that the activity's tonnage for masters, aperture cards, file cabinets, technical data and classified material within safes was reduced to 33% of the requested amount. The only plausible rationale for not moving the technical data would be that some was historical or there were expected data synergies with Picatinny Arsenal. Louisville historical data was transferred to the Federal Record Center in St. Louis as part of BRAC 95. There are no expected data synergies between shipboard deck mounted gun systems and tanks or field artillery, therefore the reduction of 858 tons to 687.14 in the COBRA analysis is incorrect.

**Tonnage for Moving Support Equipment:**

The scenario data call requested report of the tonnage of Mission Equipment being relocated to the receiving activity. The following was submitted:

DoD42815 For each closure/realignment action applicable to your activity identified in the SCENARIO DESCRIPTION, provide, by year, the tonnage of Support Equipment being RELOCATED to each Receiving Activity. Provide a complete answer row for each Action listed in the SCENARIO DESCRIPTION as it applies to your activity.

Action # (List)	FY 2006 (Tons)	FY 2007 (Tons)	FY 2008 (Tons)	FY 2009 (Tons)	FY 2010 (Tons)
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
(X)15	0	0	0	104	0

DoD42516 For each closure/realignment action applicable to your activity identified in the SCENARIO DESCRIPTION, list the Support Equipment to be RELOCATED and the rationale for relocating this equipment, to include the FY chosen for relocation.

Action # (List)	Equipment Type (Text)	Tonnage (Tons)	Rationale for Relocating (Text)
02			
03			
04			
05			
06			
07			
08			
(X)4	5 Battery Powered EZ Go Carts	2	Support ISEA Function. To transport heavy items between test stands.
(X)4	220 Sets of Files and Containers	44	Support ISEA Function
(X)4	Furniture for 3000 SF of conference space	5	Support ISEA Function at receiving site.
(X)4	Test Gear: File Servers	1	Support ISEA Function
(X)4	10 Pro Engineer CADD Stations	2	Support ISEA Function
(X)4	9 Copiers	1	Support ISEA Function at receiving site.
(X)4	5 VTC/Projection Gear	1	Support ISEA Function to provide Distance Support and Mitigate Travel
(X)4	41 Classified Material Safes/7 Weapons Safes	20	Support ISEA Function
(X)4	Unique JEDMICS Equipment, computers, scanners, plotter, digitizer and printers	2	Support ISEA Function
(X)4	5 Electric Forklifts	25	Support ISEA Function by Transporting Heavy Materials within Test Stands/Labs

Once DOD released the BRAC data it was apparent that 6 of the activity's 104 tonnage for support equipment was accepted without reduction. Of the remaining 98 tons, 9 tons were deleted (furniture, copiers, VTC and JEDMICS), 64 tons (220 sets of Files and Classified Material Safes/Weapons Safes) were reduced to 21.2 tons, and 25 tons (Electric Forklifts) were reduced 10 tons to 15 tons. The activity believes the 9 tons that were deleted and the 10 tons reduction to the electric forklifts could be reasonable deletions/reductions, however, reducing 64 tons of Files and Classified Material Safes/Weapons Safes by 42.8 tons to 21.2 is incorrect. There are no expected synergies between shipboard deck mounted gun systems and tanks or field artillery, therefore the reduction of 104 tons to 42.2 in the COBRA analysis is incorrect and should be at least increased from 42.2 to 85 tons.

**Support Contract Termination Costs:**

The scenario data call requested report of support contract termination costs due to relocation to the receiving activity. The following was submitted:

DoD42825 Based on the aggregate information provided for Support Contract Termination Costs, provide the list of items considered, individual costs, and rationale for both numbers and FY on which relocation occurs.

Action # (List)	Support Contract Termination Costs Item (Text)	Cost (\$K)	Rationale (Text)
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
X15	Louisville Redevelopment Authority (LRA) 50 year lease termination expense	101	Repair and clean 110K SF after vacating premises Repair and clean 110K SF after vacating premises

Once DOD released the BRAC data it was apparent that the activity’s support contract termination costs were disallowed. The activity personnel are located in a 50 year rent-free facility (direct outcome of BRAC 95 privatization), however, lease terms require the facility to be vacated in a reasonably clean and ready for lease condition. The activity believes the reported costs of \$101K for repair and clean of 110,000 square feet is a reasonable cost and should not have been disallowed.

**COBRA RUNS EXPLANATIONS**

As discussed previously, the Basic Picatinny Scenario’s COBRA analysis is flawed due to errors and should be corrected. During discussions with Messrs. Epstein and Farrington, they pointed out that any analysis must look at the entire scenario or it becomes difficult or impossible to compare the impact of any errors or modifications. Therefore the appropriate analysis is comparison of the basic reported scenario COBRA run to a COBRA run that incorporates the corrections detailed above (Support Contractors, tonnage for Moving Mission Equipment, Tonnage for Moving Support Equipment, and Support Contract Termination Costs as detailed above).

Accordingly, the basic Picatinny Scenario COBRA results as reported in the DOD data are summarized as Run 1 in the below Table. The basic Picatinny Scenario COBRA results incorporating the corrections are summarized as Run 2 in the below Table. Comparison of the two runs (Run 1 vs. Run 2) demonstrates the significant impact of the errors related to the activity in the published COBRA for the scenario. Instead of a 13 year payback, the Picatinny scenario will take at least 17 years to achieve a payback and the NPV savings will be only \$2.4M instead of the expected \$32.6M.

RUN	DESCRIPTION	1-TIME COST (K)	NPV in 2025 (K)	PAYBACK YR
1	Basic Picatinny Scenario J - TECH-0018B of 04272005	\$116,250	(\$32,581)	2021 (13 yrs)
2	Basic Picatinny Scenario J - TECH-0018B with Corrections	\$116,442	(\$2,438)	2025 (17 yrs)
3	Alternate Scenario (Product/In-Service Life Cycle Support at Louisville)	\$89,749	(\$16,927)	2022 (14 yrs)

As an alternative to the anticipated \$116.4M one-time cost and 17 year payback of the Picatinny Scenario (Run 2), a modification was made to leave Louisville in place and relocate 13 gun system positions from NSWC Crane to Louisville. This would create a specialty site for Product & Life-Cycle Support functions for Navy deck mounted guns. The COBRA results of this alternative are summarized as Run 3 in the above Table and

demonstrate that the one-time cost would decrease from \$116.4M to \$89.7M and result in a quicker payback of 14 years instead of 17 years. Additionally, NPV savings would increase from \$2.4M to \$16.9M..

Additional explanation of the above three COBRA runs is provided below:

**RUN 1—Basic Picatinny Scenario J - TECH-0018B dated 04272005**

This is the original Department of Defense COBRA run creating an Integrated Weapons & Armaments Specialty Site for Guns and Ammunition at Picatinny Arsenal. The total estimated one-time cost to implement this recommendation was reported as \$116.3M. The payback was reported to be 13 years, with a reported NPV savings of \$32.6M over 20 years.

**RUN 2— Basic Picatinny Scenario J - TECH-0018B with corrections incorporated**

Run 2 is a modified Run 1 with all corrections incorporated, including changing the number of support contractors from 86 to 5, increasing tonnage for moving mission equipment from 687.14 to 858, increasing tonnage for moving support equipment from 42.2 to 85, and reinserting contract lease termination costs of \$101K.

The total estimated one-time cost to implement this modified recommendation is \$116.4M. The payback is expected in 17 years, with a NPV savings of \$2.4M over 20 years.

**RUN 3—Alternate Scenario (Louisville as receiver for 13 NSWC Crane product & life-cycle support positions)**

Run 3 is a modification to Run 1, where Louisville is designated as a receiver and 13 positions are transferred from NSWC Crane to Louisville. The original 201 positions at Crane are split to relocate 13 product & life-cycle support positions for Navy deck mounted guns to Louisville and the remaining 188 R&D positions would still be relocated to Picatinny Arsenal. All relevant NSWC Crane data inputs were prorated by 13/201 and 188/201 ratios.

The total estimated one-time cost to implement this recommendation is \$89.7M. The payback is expected in 14 years, with a NPV savings of \$16.9M over 20 years.

**RECOMMENDATION**

Modify the original TECH-0018B Scenario to change Louisville to a receiver and relocate 13 NSWC Crane positions to Louisville per Run 3. This logical approach establishes Louisville as a specialty site for Product & Life-Cycle Support functions for Navy deck mounted guns.

DCN:11703

**Louisville, KY Detachment  
Naval Surface Warfare Center,  
Port Hueneme Division**

**Executive Summary**

The Louisville Detachment of the Naval Surface Warfare Center was included in a BRAC recommendation (see attachment to memo) as one of eight installations contributing functions and personnel to form a new "Integrated Weapons & Armaments Specialty Site for Guns and Ammunition" at Picatinny Arsenal, NJ. The recommendation would realign gun and ammunition Research and Development & Acquisition (RDA) by relocating 296 jobs from the Louisville Detachment.

While the other seven installations may have capabilities appropriately included in this recommendation, only a small portion of the work conducted at Naval Surface Warfare Center PHD, Louisville Detachment is research and development in nature. In fact, the unique and specialized activity in Louisville is nearly entirely focused on Fleet-user support, through manufacturing, shipboard integration, and life-cycle support of naval armaments. Louisville Detachment should not be included in the final recommendation because:

- The considerable majority of the work performed at the Louisville Detachment does not fit within this recommendation's intended mission profile;
- Relocation of Louisville's mission per this recommendation would result in an erosion of the existing public-private partnership, itself a creation of the 1995 BRAC Commission, critical to the success of this vital mission support activity;
- Such relocation would likely result in a higher cost to the Department and the U.S. taxpayer.

**Discussion: Louisville Detachment Performs Minimal Research and Development**

The recommendation, to create a "more robust center for gun and ammunition Research, Development & Acquisition," has a coherent rationale and, if properly executed, could create a strong support base for warfighters throughout the military. However, the Louisville Detachment's mission focus is on manufacturing, shipboard integration and life-cycle support, with only minor and peripheral involvement in the research and development elements of guns and ammunition. Specifically, the involvement of the Louisville Detachment's staff in research and development is quantified at fewer than ten personnel, while the remaining 200-plus personnel are focused directly on Fleet support and in-service engineering of armaments. Essentially, Louisville Detachment's mission is unique and different that the work targeted by this recommendation, and as such nothing is gained by its inclusion, but much stands to be lost.

Generally, there are three basic operating constructs shipboard: (1) sensors, (2) effectors and (3) command and control. The Louisville Detachment activity works in all three areas, with the gun engineering accounting for a little more than a half of the work force, and with only a fraction of

*Less than 10% work is RDT&E 1*

*BG James Shane  
502 226-0141  
office 564-0269*

DCN:11703

those personnel engaged in research or development activity. These few R&D personnel are located in place to support the larger mission of Louisville Detachment, rather than the larger Navy research and development mission. The remainder of the Louisville workforce is focused on the shipboard integration of sensor systems designed to operate in the at-sea environment, command and control, high-speed computation and a variety of additional end user support functions – work with no relationship to energetics research conducted at Picatinny Arsenal, or the research and development work conducted at the other named facilities. The research and development facilities identify and evolve new and vital technologies, in contrast to Louisville Detachment's personnel work in direct partnership with the OEMs to integrate these systems shipboard and support them while in service.

Vital to this discussion is the fact that no measurable military benefit would result from relocation of Louisville's engineering core, focused on shipboard Naval armaments, to the Army's energetics research laboratory at Picatinny Arsenal, NJ. In fact, an erosion of the current capabilities would be the likely result. It is important to keep in mind that Naval weapons consist of 10% recoiling gun and 90% automated ammunition-handling systems that are integrated into each ship's unique platform, while Army weapons consist of 90% recoiling gun and 10% ammunition handling systems that are integrated into various mobile platforms by the Army Tank-Automotive Command (TACOM) in Detroit, MI. There is very little overlap between the manufacturing and support of large caliber automatic naval rifles and their unique loading systems, and the similar caliber ground-based system's employed by the Army. Accordingly, no benefit accrues from co-location of the systems support personnel.

In general, the proposed realignment would not make a material contribution to the new center or transformation. Instead, it would disrupt the Louisville Detachment's crucial mission of supporting the naval warfighters.

#### **Discussion: Partnership With OEMs Is Vital**

Not only would the proposed realignment of the Louisville Detachment fail to serve the purposes of the recommendation, it also would result in a devastating loss of synergy and shared intellectual capital between the OEMs and the Navy's personnel who work in partnership within the Louisville operations. This public-private partnership was created by an express action of the 1995 BRAC Commission<sup>1</sup>, and has proven a highly successful and efficient operation to date. In contrast to the research and development corps located at the other named facilities, Louisville Detachment's personnel are focused on direct and real time support of the warfighter, the sustainment of their armaments and the integration of technologies shipboard. This mission requires the close and constant joint efforts of both the Navy and its industrial base located in Louisville, KY. The military-industrial dynamic that exists at sites such as Louisville is critical element of the military portfolio supporting deployed naval forces.

---

<sup>1</sup> "The commission found that the gun systems engineering functions at Louisville are consistent with operational requirements, and that co-location of these engineering functions with the maintenance and overhaul functions performed at the facility has contributed substantially to the effectiveness of the facility in serving the Department of the Navy. These integrated engineering, maintenance and overhaul capabilities led the Commission to strongly urge the Department of the Navy to allow privatization of these assets." *Excerpted from the recommendations of the 1995 BRAC Commission Report.*

The BRAC law requires that military value be given primary consideration. In fact, the highest military value for the Louisville Detachment results from the partnership between the Navy's engineering staff and the industrial base. The Army, and apparently the Technical JCSWG, recognized this tenet when it wisely recommended maintaining Watervliet Arsenal and Benet Laboratory as an operating unit geographically separate from Picatinny Arsenal, but co-located with the relevant industrial base. This action demonstrates a clear recognition that higher military value and benefit results when the manufacturers of gun and ammunition systems are co-located with the service's engineers who are charged with the integration, maintenance and support of the same equipment. The organizational construct of Louisville Detachment, integrated within the manufacturing base of the weapon systems it supports, is no different than the structure of the Army's Watervliet Arsenal and Benet Labs (which are recommended to remain in place), but considerably different than the other facilities named in the Department's recommendation.

In short, the mission necessitates a partnership and joint-location of the gun and ammunition industrial base and the Navy support personnel, no differently than the Army's mission requirements at Watervliet. Relocation of the Louisville Detachment would have a direct and negative impact on the effectiveness and efficiency of the in-service support of naval armaments. The recommendation should be rejected in order to continue reaping the operational and financial benefits the cooperative relationship between installation personnel and private contractors.

#### Discussion: Flawed Cost Savings

As outlined above, military value is optimized through maintaining the ongoing operations of the Louisville Detachment, preserving efficiencies gained through public-private partnership. Further, while one could argue that moving all of Louisville Detachment could arguably achieve some cost savings in the form of reduced overhead, it is likely that this move could actually result in higher costs.

Serious questions remain regarding actual cost savings realized by the relocation of the Louisville Detachment. Such questions are predicated on several factors, most prominently the significantly higher costs of doing business in northern New Jersey over Louisville, Kentucky, as is evident from the below chart listing data cited directly from DoD's own COBRA analysis.

Cost Element	Louisville	Picatinny Arsenal
Enlisted BAH/Month	\$743	\$1,632
Civilian Locality Pay	1.109	1.193
Area Cost Factor	0.96	1.2
Per Diem Rate/Day	\$112	\$157

In fact, the joint element of the work performed at Louisville Detachment and its industrial partners is such a vital ingredient of mission success, the Navy may need to recreate some elements of the activity in Louisville to ensure continued mission success. Such action would only create additional redundancies and a practical higher cost to the Department. Finally, there are always considerable cost issues related to moving a work force, not to mention the risk of losing valuable human capital.

DCN:11703

### Conclusion

In light of the demonstrable difference in the nature of the work performed by the majority of the staff at the Louisville Detachment and the capabilities sought for the new center described in the recommendation, the Commission is requested to remove Detachment Louisville from the final recommendation. Such action would continue to produce higher military value in support of the warfighter due to the highly efficient partnership existing between the Navy's engineering work force and their industrial base, value that was in fact created by the actions of the 1995 BRAC Commission.

The 2005 BRAC Commission should find that including the Louisville Detachment in this recommendation deviates substantially from the letter and spirit of Selection Criteria One as a result of the detrimental impact on operational readiness.

**Attachment: Relevant Parts of BRAC Recommendation for  
Louisville, KY Detachment of Naval Surface Warfare Center**

---

**Create an Integrated Weapons & Armaments  
Specialty Site for Guns and Ammunition**

**Recommendation:** Realign the Adelphi Laboratory Center, MD, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Crane, IN, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign the Fallbrook, CA, detachment of Naval Surface Warfare Center Division Crane, IN, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Dahlgren, VA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign the Louisville, KY, detachment of Naval Surface Warfare Center Division Port Hueneme, CA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Air Warfare Center Weapons Division China Lake, CA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Indian Head, MD, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Earle, NJ, by relocating weapon and armament packaging Research and Development & Acquisition to Picatinny Arsenal, NJ.

**Justification:** This recommendation realigns and consolidates those gun and ammunition facilities working in Weapons and Armaments (W&A) Research (R), Development & Acquisition (D&A). This realignment would result in a more robust joint center for gun and ammunition Research, Development & Acquisition at Picatinny Arsenal, NJ. This location is already the greatest concentration of military value in gun and ammunition W&A RD&A.

Picatinny Arsenal is the center-of-mass for DoD's Research, Development & Acquisition of guns and ammunition, with a workload more than an order of magnitude greater than any other DoD facility in this area. It also is home to the DoD's Single Manager for Conventional Ammunition. Movement of all the Services' guns and ammunition work to Picatinny Arsenal will create a joint center of excellence and provide synergy in armament development for the near future and beyond, featuring a Joint Packaging, Handling, Shipping and Transportation (PHS&T) Center, particularly important in this current time of high demand for guns and ammunition by all the services. Technical facilities with lower quantitative military value are relocated to Picatinny Arsenal.

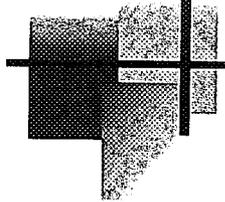
This recommendation includes Research, Development & Acquisition activities in the Army and Navy. It promotes jointness, enables technical synergy, and positions the Department of Defense to exploit center-of-mass scientific, technical, and acquisition expertise within the weapons and armament Research, Development & Acquisition community that currently resides at this DoD specialty location.

**Economic Impact on Communities:** Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 506 jobs (296 direct jobs and 210 indirect jobs) over the 2006-2011 periods in the Louisville, KY-IN, Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

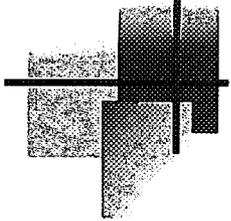


# BRAC 2005

# Louisville Detachment

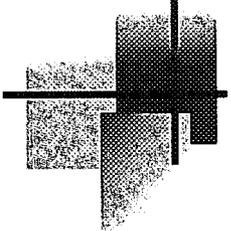


# Benefits of Louisville as Receiving Site



- Preserves critical elements of support to deployed forces from military-industrial partnership created by BRAC '95
- Achieves concentration on the end user through manufacturing, shipboard integration and life cycle support
- Simultaneously consolidates and co-locates Navy gun weapon system production development and acquisition with Navy OEM
- Retains intellectual capital for current and future naval gun weapon systems
- Preserves and grows synergy with gun production capability

# Effects of Dissolution of Navy- Industry Partnership at Louisville



- Disbanding of Navy expert-level gun weapon system personnel
- Dramatic reduction in standards of living for families relocated to high cost-of-living region
- Fracturing of Navy's assessment capability in technical and operational communities

DCN:11703

## **Create an Integrated Weapons & Armaments Specialty Site for Guns and Ammunition**

**Recommendation:** Realign the Adelphi Laboratory Center, MD, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Crane, IN, by relocating gun and ammunition Research and Development & Acquisition(except for Maritime/Littoral gun systems product/service life cycle support) to Picatinny Arsenal, NJ.

Realign the Fallbrook, CA, detachment of Naval Surface Warfare Center Division Crane, IN, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Dahlgren, VA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign the Louisville, KY, detachment of Naval Surface Warfare Center Division Port Hueneme, CA, by relocating gun and ammunition Research to Picatinny Arsenal, NJ.

Realign Naval Air Warfare Center Weapons Division China Lake, CA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Indian Head, MD, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Earle, NJ, by relocating weapon and armament packaging Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Crane, IN, by relocating Maritime/Littoral gun systems Development & Acquisition product/in service life cycle support to Louisville, KY detachment of Naval Surface Warfare Center Division Port Hueneme Division, CA.

**Justification:** This recommendation realigns and consolidates those gun and ammunition facilities working in Weapons and Armaments (W&A) Research (R), Development & Acquisition (D&A). This realignment would result in a more robust joint center for gun and ammunition Research, Development & Acquisition at Picatinny Arsenal, NJ. This location is already the greatest concentration of military value in gun and ammunition W&A RD&A. Additional synergistic realignments for W&A was achieved at another receiver site for specific focus. The Naval Surface Warfare Center, Louisville, KY, is a receiver specialty site for Maritime/Littoral gun systems Development & Acquisition product/in service life cycle support. Created in BRAC 95, this Louisville Detachment currently collocated with Navy OEMs is the center-of-mass for Navy gun weapon system product support and life cycle maintenance.

Picatinny Arsenal is the center-of-mass for DoD's Research, Development & Acquisition of guns and ammunition, with a workload more than an order of magnitude greater than any other DoD facility in this area. It also is home to the DoD's Single Manager for

Conventional Ammunition. Movement of all the Services' guns and ammunition work to Picatinny Arsenal will create a joint center of excellence and provide synergy in armament development for the near future and beyond, featuring a Joint Packaging, Handling, Shipping and Transportation (PHS&T) Center, particularly important in this current time of high demand for guns and ammunition by all the services. Technical facilities with lower quantitative military value are relocated to Picatinny Arsenal. This recommendation includes Research, Development & Acquisition activities in the Army and Navy. It promotes jointness, enables technical synergy, and positions the Department of Defense to exploit center-of-mass scientific, technical, and acquisition expertise within the weapons and armament Research, Development & Acquisition community that currently resides at this DoD specialty location.

**Payback:** The total estimated one-time cost to the Department of Defense to implement this recommendation is \$89.8M. The net of all costs and savings to the Department during the implementation period is cost of \$64.2M. Annual recurring savings to the Department after implementation is \$8.0M with a payback expected in 14 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$16.9M.

**Economic Impact on Communities:** Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 11 jobs (5 direct jobs and 6 indirect jobs) over the 2006-2011 period in Bakersfield, CA, Metropolitan Statistical Area which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 83 jobs (43 direct jobs and 40 indirect jobs) over the 2006-2011 period in the Bethesda-Frederick-Gaithersburg, MD, Metropolitan Division, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 421 jobs (289 direct jobs and 132 indirect jobs) over the 2006-2011 period in Martin County, IN, economic area, which is 4.94 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 421 jobs (289 direct jobs and 132 indirect jobs) over the 2006-2011 period in Martin County, IN, economic area, which is 4.94 percent of economic area employment

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 302 jobs (146 direct jobs and 156 indirect jobs) over the 2006-2011 periods in the San Diego-Carlsbad-San Marcos, CA, Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 76 jobs (43 direct jobs and 33 indirect jobs) over the 2006-2011

periods in the Washington-Arlington-Alexandria, DC-VA-MD-WV, Metropolitan Division, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 202 jobs (93 direct jobs and 109 indirect jobs) over the 2006-2011 periods in the King George County, VA, economic area, which is 1.43 percent of economic area employment.

The aggregate economic impact of all recommended actions on these economic regions of influence was considered and is at Appendix B of Volume I.

**Community Infrastructure:** A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

**Environmental Impact:** This recommendation is expected to impact air quality at Picatinny, which is in severe non-attainment for Ozone. This recommendation may have a minimal effect on cultural resources at Picatinny. Additional operations may further impact threatened/endangered species at Picatinny, leading to additional restrictions on training or operations. This recommendation has no impact on dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; waste management; or wetlands. This recommendation will require spending approximately \$0.3M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

**Farrington, Lester, CIV, WSO-BRAC**

NSWC, PORT HUENEME  
LOUISVILLE DETACHMENT

**From:** Craig, Sherri [Sherri.Craig@mail.house.gov]  
**Sent:** Thursday, August 04, 2005 3:44 PM  
**To:** 'lester.farrington@wso.whs.mil'  
**Subject:** FW: Rep. Anne M. Northup

TECH 19

Lester and David,

As we discussed, Rep. Anne Northup (KY-03) would like to speak with you on Monday, August 8 at 2:00 p.m. Also joining in the call will be Ms. Ann Davis, Deputy Assistant Secretary of the Navy (Infrastructure Strategy & Analysis). We will place the call to you. (David, of course, your participation is pending.)

Please check your fax machine for a position paper regarding the Louisville, Kentucky detachment of the Naval Surface Warfare Center, Port Hueneme Division, as well as a letter from Senators Mitch McConnell and Jim Bunning, Rep. Northup, and Mayor Jerry Abramson. If you need additional information prior to the call, please feel free to let me know.

Thank you so much for your attention to this matter.

Sherri Craig  
District Director  
U.S. Rep. Anne Northup  
(502) 582-5129 office  
(502) 396-8801 mobile

DCN:11703



## Congresswoman Anne M. Northup

600 Martin Luther King, Jr. Place  
 Suite 216  
 Louisville, KY 40202  
 Phone: (502) 582-5129  
 Fax: (502) 582-5897

### Fax Cover Sheet

**To:** Lester Farrington

**Fax No.:** 703-699-2740

**From:** Sherri Craig, District Director  
 U.S. Rep. Anne M. Northup

**Date:** 8/4/05

Rep. Northup appreciates the opportunity to speak with you on Monday, August 8 at 2:00 p.m.

DCN:11703

MITCH MCCONNELL    JIM BUNNING    ANNE NORTHUP    JERRY ABRAMSON  
UNITED STATES SENATOR    UNITED STATES SENATOR    UNITED STATES REPRESENTATIVE    MAYOR OF LOUISVILLE

June 17, 2005

The Honorable Anthony Principi  
Chairman, Base Realignment and Closure Commission  
2005 Defense Base Realignment and Closure Commission  
2521 South Clark Street, Suite 600  
Arlington, VA 22202

Dear Chairman Principi:

We are writing in response to the recent recommendation of the Department of Defense (DOD) to realign the Louisville, Kentucky Detachment of the Naval Surface Warfare Center, Port Hueneme Division (Louisville Detachment), by relocating gun and ammunition research, development & acquisition capabilities to Picatinny Arsenal, New Jersey.

The city of Louisville and the Kentucky congressional delegation support the Base Realignment and Closure (BRAC) Commission process and agree with DOD on the need for strategic closures and the realignment of various military installations. Further, we see the wisdom in DOD's recommendation to consolidate all gun and ammunition facilities that emphasize research and development. However, we must take issue with DOD's recommendation that the Louisville Detachment's mission primarily involves research and development and therefore is a candidate for relocation to New Jersey.

Our central concern with regard to the Louisville Detachment is that its mission is focused on manufacturing, shipboard integration and life-cycle support, with only peripheral involvement in the research and development elements of guns and ammunition. Only a handful of the Louisville Detachment's staff work on research and development activities; the vast majority focus on non-research and development activities, such as direct end user support and in-service support of armaments. The Louisville detachment, therefore, is incorrectly considered a research and development facility. Due to the demonstrable difference in the core missions between the Detachment and the Picatinny installation, we believe the Department mistakenly recommended the Louisville Detachment for realignment.

In addition to our concern about the different missions served by the two installations, we also believe that such a relocation would result in the termination of an effective public-private partnership, which was itself a creation of the 1995 BRAC process. Moreover, such relocation would likely result in higher costs to the U.S. taxpayers due to, among other things, the higher cost of living in northern New Jersey.

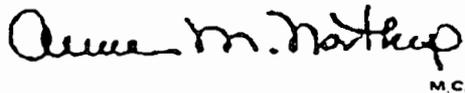
DCN:11703

In sum, we request that you revisit DOD's recommendation to relocate the Detachment. We thank you for your attention to this matter and are happy to answer any questions that you and the Commission might have.

Sincerely,



MITCH McCONNELL  
UNITED STATES SENATOR

  
JIM BUNNING  
UNITED STATES SENATOR

ANNE NORTHUP  
UNITED STATES REPRESENTATIVE



JERRY ABRAMSON  
MAYOR, CITY OF LOUISVILLE

DCN:11703

**Louisville, KY Detachment  
Naval Surface Warfare Center,  
Port Hueneme Division**

**Executive Summary**

The Louisville Detachment of the Naval Surface Warfare Center was included in a BRAC recommendation (see attachment to memo) as one of eight installations contributing functions and personnel to form a new "Integrated Weapons & Armaments Specialty Site for Guns and Ammunition" at Picatinny Arsenal, NJ. The recommendation would realign gun and ammunition Research and Development & Acquisition (RDA) by relocating 296 jobs from the Louisville Detachment.

While the other seven installations may have capabilities appropriately included in this recommendation, only a small portion of the work conducted at Naval Surface Warfare Center PHD, Louisville Detachment is research and development in nature. In fact, the unique and specialized activity in Louisville is nearly entirely focused on Fleet-user support, through manufacturing, shipboard integration, and life-cycle support of naval armaments. Louisville Detachment should not be included in the final recommendation because:

- The considerable majority of the work performed at the Louisville Detachment does not fit within this recommendation's intended mission profile;
- Relocation of Louisville's mission per this recommendation would result in an erosion of the existing public-private partnership, itself a creation of the 1995 BRAC Commission, critical to the success of this vital mission support activity;
- Such relocation would likely result in a higher cost to the Department and the U.S. taxpayer.

**Discussion: Louisville Detachment Performs Minimal Research and Development**

The recommendation, to create a "more robust center for gun and ammunition Research, Development & Acquisition," has a coherent rationale and, if properly executed, could create a strong support base for warfighters throughout the military. However, the Louisville Detachment's mission focus is on manufacturing, shipboard integration and life-cycle support, with only minor and peripheral involvement in the research and development elements of guns and ammunition. Specifically, the involvement of the Louisville Detachment's staff in research and development is quantified at fewer than ten personnel, while the remaining 200-plus personnel are focused directly on Fleet support, and in-service engineering of armaments. Essentially, Louisville Detachment's mission is unique and different that the work targeted by this recommendation, and as such nothing is gained by its inclusion, but much stands to be lost.

Generally, there are three basic operating constructs shipboard: (1) sensors, (2) effectors and (3) command and control. The Louisville Detachment activity works in all three areas, with the gun engineering accounting for a little more than a half of the work force, and with only a fraction of

DCN:11703

those personnel engaged in research or development activity. These few R&D personnel are located in place to support the larger mission of Louisville Detachment, rather than the larger Navy research and development mission. The remainder of the Louisville workforce is focused on the shipboard integration of sensor systems designed to operate in the at-sea environment, command and control, high-speed computation and a variety of additional end user support functions – work with no relationship to energetics research conducted at Picatinny Arsenal, or the research and development work conducted at the other named facilities. The research and development facilities identify and evolve new and vital technologies, in contrast to Louisville Detachment's personnel work in direct partnership with the OEMs to integrate these systems shipboard and support them while in service.

Vital to this discussion is the fact that ~~no measurable military benefit would result from relocation of Louisville's engineering core, focused on shipboard Naval armaments, to the Army's energetics research laboratory at Picatinny Arsenal, NJ.~~ In fact, an erosion of the current capabilities would be the likely result. It is important to keep in mind that Naval weapons consist of 10% recoiling gun and 90% automated ammunition-handling systems that are integrated into each ship's unique platform, while Army weapons consist of 90% recoiling gun and 10% ammunition handling systems that are integrated into various mobile platforms by the Army Tank-Automotive Command (TACOM) in Detroit, MI. There is very little overlap between the manufacturing and support of large caliber automatic naval rifles and their unique loading systems, and the similar caliber ground-based system's employed by the Army. Accordingly, no benefit accrues from co-location of the systems support personnel.

In general, the proposed realignment would not make a material contribution to the new center or transformation. Instead, it would disrupt the Louisville Detachment's crucial mission of supporting the naval warfighters.

#### Discussion: Partnership With OEMs Is Vital

Not only would the proposed realignment of the Louisville Detachment fail to serve the purposes of the recommendation, it also would result in a devastating loss of synergy and shared intellectual capital between the OEMs and the Navy's personnel who work in partnership within the Louisville operations. This public-private partnership was created by an express action of the 1995 BRAC Commission<sup>1</sup>, and has proven a highly successful and efficient operation to date. In contrast to the research and development corps located at the other named facilities, Louisville Detachment's personnel are focused on direct and real time support of the warfighter, the sustainment of their armaments and the integration of technologies shipboard. This mission requires the close and constant joint efforts of both the Navy and its industrial base located in Louisville, KY. The military-industrial dynamic that exists at sites such as Louisville is critical element of the military portfolio supporting deployed naval forces.

---

<sup>1</sup> "The commission found that the gun systems engineering functions at Louisville are consistent with operational requirements, and that co-location of these engineering functions with the maintenance and overhaul functions performed at the facility has contributed substantially to the effectiveness of the facility in serving the Department of the Navy. These integrated engineering, maintenance and overhaul capabilities led the Commission to strongly urge the Department of the Navy to allow privatization of these assets." *Excerpted from the recommendations of the 1995 BRAC Commission Report.*

DCN:11703

The BRAC law requires that military value be given primary consideration. In fact, the highest military value for the Louisville Detachment results from the partnership between the Navy's engineering staff and the industrial base. The Army, and apparently the Technical JCSWG, recognized this tenet when it wisely recommended maintaining Watervliet Arsenal and Benet Laboratory as an operating unit geographically separate from Picatinny Arsenal, but co-located with the relevant industrial base. This action demonstrates a clear recognition that higher military value and benefit results when the manufacturers of gun and ammunition systems are co-located with the service's engineers who are charged with the integration, maintenance and support of the same equipment. The organizational construct of Louisville Detachment, integrated within the manufacturing base of the weapon systems it supports, is no different than the structure of the Army's Watervliet Arsenal and Benet Labs (which are recommended to remain in place), but considerably different than the other facilities named in the Department's recommendation.

In short, the mission necessitates a partnership and joint-location of the gun and ammunition industrial base and the Navy support personnel, no differently than the Army's mission requirements at Watervliet. Relocation of the Louisville Detachment would have a direct and negative impact on the effectiveness and efficiency of the in-service support of naval armaments. The recommendation should be rejected in order to continue reaping the operational and financial benefits the cooperative relationship between installation personnel and private contractors.

#### Discussion: Flawed Cost Savings

As outlined above, military value is optimized through maintaining the ongoing operations of the Louisville Detachment, preserving efficiencies gained through public-private partnership. Further, while one could argue that moving all of Louisville Detachment could arguably achieve some cost savings in the form of reduced overhead, it is likely that this move could actually result in higher costs.

Serious questions remain regarding actual cost savings realized by the relocation of the Louisville Detachment. Such questions are predicated on several factors, most prominently the significantly higher costs of doing business in northern New Jersey over Louisville, Kentucky, as is evident from the below chart listing data cited directly from DoD's own COBRA analysis.

Cost Element	Louisville	Picatinny Arsenal
Enlisted BAH/Month	\$743	\$1,632
Civilian Locality Pay	1.109	1.193
Area Cost Factor	0.95	1.2
Per Diem Rate/Day	\$112	\$157

In fact, the joint element of the work performed at Louisville Detachment and its industrial partners is such a vital ingredient of mission success, the Navy may need to recreate some elements of the activity in Louisville to ensure continued mission success. Such action would only create additional redundancies and a practical higher cost to the Department. Finally, there are always considerable cost issues related to moving a work force, not to mention the risk of losing valuable human capital.

DCN:11703

### Conclusion

In light of the demonstrable difference in the nature of the work performed by the majority of the staff at the Louisville Detachment and the capabilities sought for the new center described in the recommendation, the Commission is requested to remove Detachment Louisville from the final recommendation. Such action would continue to produce higher military value in support of the warfighter due to the highly efficient partnership existing between the Navy's engineering work force and their industrial base, value that was in fact created by the actions of the 1995 BRAC Commission.

The 2005 BRAC Commission should find that including the Louisville Detachment in this recommendation deviates substantially from the letter and spirit of Selection Criteria One as a result of the detrimental impact on operational readiness.

DCN:11703

**Attachment: Relevant Parts of BRAC Recommendation for  
Louisville, KY Detachment of Naval Surface Warfare Center**

**Create an Integrated Weapons & Armaments  
Specialty Site for Guns and Ammunition**

**Recommendation:** Realign the Adelphi Laboratory Center, MD, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Crane, IN, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign the Fallbrook, CA, detachment of Naval Surface Warfare Center Division Crane, IN, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Dahlgren, VA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign the Louisville, KY, detachment of Naval Surface Warfare Center Division Port Hueneme, CA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Air Warfare Center Weapons Division China Lake, CA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Indian Head, MD, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Realign Naval Surface Warfare Center Division Earle, NJ, by relocating weapon and armament packaging Research and Development & Acquisition to Picatinny Arsenal, NJ.

**Justification:** This recommendation realigns and consolidates those gun and ammunition facilities working in Weapons and Armaments (W&A) Research (R), Development & Acquisition (D&A). This realignment would result in a more robust joint center for gun and ammunition Research, Development & Acquisition at Picatinny Arsenal, NJ. This location is already the greatest concentration of military value in gun and ammunition W&A RD&A.

Picatinny Arsenal is the center-of-mass for DoD's Research, Development & Acquisition of guns and ammunition, with a workload more than an order of magnitude greater than any other DoD facility in this area. It also is home to the DoD's Single Manager for Conventional Ammunition. Movement of all the Services' guns and ammunition work to Picatinny Arsenal will create a joint center of excellence and provide synergy in armament development for the near future and beyond, featuring a Joint Packaging, Handling, Shipping and Transportation (PHS&T) Center, particularly important in this current time of high demand for guns and ammunition by all the services. Technical facilities with lower quantitative military value are relocated to Picatinny Arsenal.

This recommendation includes Research, Development & Acquisition activities in the Army and Navy. It promotes jointness, enables technical synergy, and positions the Department of Defense to exploit center-of-mass scientific, technical, and acquisition expertise within the weapons and armament Research, Development & Acquisition community that currently resides at this DoD specialty location.

**Economic Impact on Communities:** Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 506 jobs (296 direct jobs and 210 indirect jobs) over the 2006-2011 periods in the Louisville, KY-IN, Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.