



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

10 June 2005

The Honorable Joseph I. Lieberman  
United States Senate  
Washington, DC 20510

Dear Senator Lieberman:

Thank you for your letters to the Secretary of the Navy of May 19 and May 23, 2005 requesting information regarding the recommendation to close Naval Submarine Base New London, Connecticut. I am responding on his behalf.

By letters on 20 and 24 May, we provided some of the information you had requested, including the Submarine Base New London recommendation supporting documentation and capacity and military value supplemental data, which was the information that had been cleared for release at that time. Since then, a great deal of information has been posted on the DoD BRAC 2005 website at [www.defenselink.mil/brac](http://www.defenselink.mil/brac). I have noted below the available information that I believe is responsive to part of your requests and generally where that information may be found:

- Force Structure Plan (unclassified within DoD Report)
- RED TEAM Meeting Notes, Reports and Recommendations
- All documentation regarding "other Federal Agency" costs (addressed in OSD BRAC 2005 guidance and within Department of the Navy (DON) minutes)
- JPAT 6 Economic Impact Tool and report (Joint Process Action Team product)
- JPAT 7 Data Base of the "10 Key Community Attributes" (Joint Process Action Team product)
- Minutes and slides from "Oral Briefings" (within DON minutes)
- COBRA Model Software, static data, and users manual
- COBRA Summary Sheet on each scenario evaluated
- Installation Environmental Profiles, Summary of Scenario Environmental Impacts, Summary of Cumulative environmental Impacts (Joint Process Action Team product)
- DON Analysis Group Scoring Matrices (Navy Supplemental report)
- AMPL/CPLEX mixed-integer linear programming solver documentation including all inputs
- IEG Scenarios (within DON minutes and scenario data calls)
- Data Calls pertaining to Other Activities and supporting decision-making data and information (DON databases)
- Configuration Analysis "Rules" and "Constraints" (within DON minutes)
- "Alignment Assessment" tool information and data (within DON minutes)

- "Candidate Recommendation Risk Assessments" tool information and data (within DON minutes)
- Minutes and Notes from "Input of the Secretary of the Navy and Chief of Naval Operation" (within DON minutes)
- BRAC Facilities Planning Guidelines (within DON minutes)
- Installation Criteria 7 Profile for SUBASE New London, SUBASE Kings Bay, NAVSTA Norfolk (Joint Process Action Team product)

My staff and I would be happy to work with your staff to identify the location within the DoD BRAC 2005 website of the exact information you wish to review.

In addition to the above information, you requested data/information on the following, which is not being provided for the reasons noted:

- All "validated and certified" Outside Studies: The Department of the Navy did not use any "validated and certified" outside studies within its deliberative process.
- Information and lists of "Difficult-to-reconstitute" assets: No individual report exists within the DON process. However, specific constraints within the configuration analysis rules, which represent factors considered operationally important, are recorded within the DON minutes.

You also requested the following information, some of which is being provided on the enclosed compact disk.

- DON Analysis Group Optimization Model Software, Documentation, and all inputs: The general optimization methodology is posted on the DoD BRAC 2005 website. An explanation of the DON methodology and outputs is contained within the DON minutes. We are providing on the enclosed disk a compiled document relating to naval station configuration analysis that consists of a spreadsheet that displays the results of the configuration analysis that was shown to the DON Analysis Group in September 2004, another spreadsheet showing the model results update with information from the DON Supplemental Report, the section of the DON Supplemental Report pertaining to surface/subsurface operations, and the code for the model algorithm.
- "Cold Iron Status" definition: "Cold Iron" status means that a ship may be berthed without need of operating engines or generators to provide power, therefore suggesting there are adequate pier connections for shore power, potable water and sewage. Steam was not considered since many ships in the fleet are all electric and do not require steam.
- President's Budget Ship and Aircraft Supplemental Data Tables: These tables were used within the DON analysis of the surface/subsurface function to provide a breakout of ship type in more detail than that provided in the published 20-year Force Structure Plan. For instance, the Force Structure Plan only listed combatants (DDG, CG, DD(X), CG(X), LCS) and did not provide a breakout of ship types within the category. This breakout was

needed in order to more accurately determine ship berthing requirements. However, in the case of attack submarines, the data in the Force Structure Plan was sufficient, since attack submarines were listed separately. The tables are provided on the enclosed disk.

- SECNAV Written Statement: The disk contains Secretary England's written statement submitted at the BRAC Commission hearing of 17 May 2005.
- DASN Davis submission for the record of New London decommissioning costs: Your letter referenced the BRAC Commission hearing of 17 May 2005 as the basis for this request. The costs associated with the SUBASE New London closure, reflected in COBRA, are as follows: \$95.8M in operations and maintenance costs (includes funding of civilian RIFs, moves, and program management); \$18.3M in military personnel costs (includes funding of permanent change of station moves and household goods shipments); \$9.5M in radiological decommissioning costs; and \$60.5M in other costs (includes funding for Homeowner Assistance Program/Relocation Service Entitlement). These costs do not include the other costs for construction at the proposed receiving bases.
- CNO Clark submission of current submarine homeport assignments: Your letter referenced the BRAC Commission hearing of 17 May 2005 as the basis for this request. A table is provided on the enclosed disk.

Your letter of May 19<sup>th</sup> requested data on the number of fast attack submarines in the March 2004 Force Structure Report, the number in the 2005 version noted in the BRAC DON Analysis and Recommendations (Volume IV) on page 21, and the justification for this force level. We obtained input from the Force Structure Division, Office of the Deputy Chief of Naval Operations for Warfare Requirements and Programs, regarding submarine force structure as follows:

Our nuclear Attack Submarines are exceptional platforms with tremendous capability. The sizing of the future fleet is not complete; however, we will not be able to continue funding a force structure that includes 55 SSNs with today's funding constraints, nor are 55 necessarily required to meet future strategy requirements. The March 2004 Force Structure Report provided to Congress by the Joint Staff showed 55 Attack Submarines in 2024. This was based on the best analysis at the time. Navy's submission to the Congress in March of 2005 presented a reduced submarine force of 45 Attack Submarines in 2024. In our effort to analyze undersea warfare, including with a reduced SSN force structure, we are pursuing undersea technologies that address future capabilities gap. Through the employment of off-board and distributed anti-submarine warfare (ASW) systems in a netted architecture with submarines and other components of our battle force, our ASW capability will be further enhanced to meet our nation's future ASW challenges. These and other technologies may help mitigate the reduced SSN force.

The decision to reduce submarine procurement, and therefore submarine numbers overall, was a combination of both strategy and budget considerations. Always mindful of the expense of shipbuilding, we are making the most of our available resources and rebalancing the Navy to meet the challenges of the future. The Navy has been working hard on these issues since the 2001 QDR and our publishing of "SEA POWER 21". We are transforming the Navy to prevail in the Global War on Terror, Homeland Security, deterrence and in major combat operations. The Navy of the future will possess the right mix of capabilities. It will be properly postured and it will balance power and persistence with speed and agility. We have a number of initiatives already underway in support of this future fleet capability. One example is the forward basing of SSNs in Guam, which will enable what we envision to be a more efficient operating cycle, and a more rapid response to emerging crises.

Your letter of May 23rd requested information regarding Explosive Safety Quantity Distance (ESQD). We obtained input from the Ordnance and Logistics Operations Division of the Office of the Chief of Naval Operations to respond to your questions as follows:

*1) Please define and explain concept of Explosives Safety Quantity Distance (ESQD).*

The term Explosives Safety Quantity Distance (ESQD) refers to the minimum safe separation distance from a weapons facility (one that is used for weapons storage, manufacture, assembly, loading, unloading, repair, etc.), for different levels of accepted risk, based on an overpressure and fragment hazard from a potential detonation, to non-weapons related exposed facilities. These levels of risk, are defined and authorized by the Department of Defense Explosives Safety Board (DDESB) for all U.S. military installations. The highest level of protection (though not 100%) from a weapons facility is called Inhabited Building Distance (IBD). This is provided to all non-weapons-related sites, such as administrative buildings, base boundaries, hospitals, housing, and schools. Roads, navigable waterways, and open-air recreation areas are afforded a separation distance termed public traffic route (PTR) distance. There are two levels of protection afforded weapons storage and operating areas; they are called intraline (IL) distance, which provides a minimum-required separation distance between weapons manufacturing and operating facilities, and intermagazine (IM) distance, which is used to provide the minimum-required separation distance between weapons storage locations. With respect to Naval Ships, the DDESB (since 1964) permits Naval combatant ships to berth at piers and anchorages without applying ESQD arcs. This is primarily due to the Naval combatant ships construction to preclude explosive propagation. This exemption does not apply to Naval vessels that are cargo ammunition ships.

*2) What activities are permitted to be permanently located within such arcs which would result from expected activities at a given location; what routine activities such as berthing, messing, training, and administrative are not permitted?*

Activities permitted within ESQD arcs:

(a) Explosives operations (storage, loading/unloading, maintenance, etc) which generated the requirement for the ESQD arc in the first place.

(b) Activities which directly support the explosives operations or which cannot be done elsewhere. These include land and water security functions; waterfront operations; construction, maintenance, and repair of shore-based waterfront infrastructure; assembly, maintenance, and repair of weapon systems; combatant minor maintenance and repair; and Naval combatants' berthing; Naval combatant personnel onboard their combatant performing berthing, messing, training, and administrative functions; and, weapon loading and unloading operations training(non-concurrent with actual weapon loading/unloading operations).

Not Permitted within ESQD arcs: Activities (outside of a combatant) unrelated to the explosives operations and which can be accomplished elsewhere. These include: berthing, messing, training, and administrative functions.

3) *What is the radius of the ESQD for TRIDENT missile?*

(a) Submarines are considered combatants, and are therefore exempt from the application of ESQD arcs while moored and not loading or offloading missiles or while conducting missile maintenance.

(b) One Trident missile, not on a submarine (in storage, maintenance), casts an ESQD arc of 2770 feet, based upon the 200,000 lb Net Explosive Weight (NEW) of the missile.

(c) While loading one Trident missile onboard a submarine, the NEW of all loaded Tridents must be applied (max of 24 Tridents) to the ESQD equation, therefore a total NEW of 4,800,000 lbs is possible, which generates an ESQD arc of 3,434 feet.

4) *When must the ESQD restrictions be placed in effect?*

(a) While loading or unloading explosives on a vessel.

(b) A moored non-combatant loaded with explosives.

(c) Explosives ashore in storage or maintenance.

5) *What limits or restrictions, including access to activities, are placed on activities and personnel of other naval and civilian vessels located within an ESQD while in effect?*

(a) If the ESQD arc is generated by an occasional explosive operation, such as loading or unloading at a pier, all activities not directly or indirectly supporting

the explosives operation must cease for that time in question. Exceptions to this policy may be obtained via the DDESB.

(b) Explosives storage (such as ashore magazines) and operating structures (such as maintenance buildings) cast a permanent ESQD arc, and all operations not directly or indirectly supporting the explosives operations in this area, or which can be done elsewhere, are prohibited.

(c) Construction of facilities not supporting the explosives operations within ESQD arcs are not permitted.

The two items of data and information that I do not believe have yet been provided are as follows:

- For SUBASE New London (an all tenant commands), NAVSTA Norfolk, Naval Shipyard Norfolk, SUBASE Kings Bay, Trident Refit Facility Kings Bay: 1. Initial data entered into the DON Information Transfer System, 2. Data entered into the DON Information Transfer System at each and every succeeding level in the chain of command: While the final data used by DON in its analysis have been posted on the DoD BRAC 2005 website, we have not yet provided you the noted information. We are compiling the report and will provide it to you the week of 13 June.
- Fenceline Activity Database: The DON Fenceline Activity Database is not a "database" as such, but rather a tool that was used for tracking the status of scenarios and their effects on a fenceline (base). We would like the opportunity to show it to your staff within my offices spaces so they can determine what aspects of the tool are of particular interest. We will contact them to set up a time for the demonstration.

This response is based upon the best information that is releasable at this time. I hope this information satisfactorily addresses your concerns. If we can be of further assistance, please let me know. Similar letters have been sent to the Honorable Christopher J. Dodd and the Honorable Robert R. Simmons.

Sincerely,



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

Enclosure