

BRAC Commission

DCN: 7244

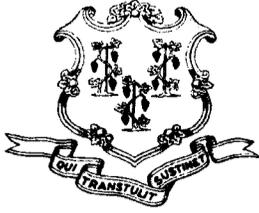
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UNITED STATES CONGRESS



M. JODI RELL, GOVERNOR
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JOSEPH LIEBERMAN, SENATOR
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CHRISTOPHER SHAYS, MEMBER OF CONGRESS
ROSA DELAURO, MEMBER OF CONGRESS
JOHN B. LARSON, MEMBER OF CONGRESS
ROB SIMMONS, MEMBER OF CONGRESS



August 8, 2005

The Honorable Anthony Principi
Base Realignment and Closure Commission
Polk Building, Suites 600 and 625
2521 South Clark Street
Arlington, VA 22202

Dear Secretary Principi:

We are providing the enclosed paper on trends in the submarine fleet strength of other countries for your information as you consider our nation's submarine force structure and the infrastructure requirements to support the submarine fleet.

As you will see in the paper, the submarine development of other nations is growing. Some nations are now producing increasing numbers of submarines that are far quieter and more lethal than previous models. This comes at a time when the United States is reducing its submarine force. If the Navy recommendation to close Submarine Base New London stands, the break-up of the United States' Submarine Center of Excellence will lock-in the reduction of our submarine force, putting the United States on the opposite path of other nations, including potential adversaries.

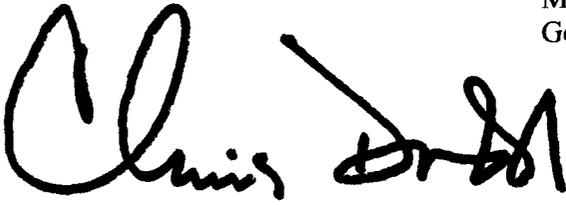
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Please have your staff contact Alan Payne at (202) 224-4041 in Senator Lieberman's office, or Neal Orringer at (202) 224-2680 in Senator Dodd's office, or Justin Bernier at (202) 225-2076 in Representative Simmons' for additional information.

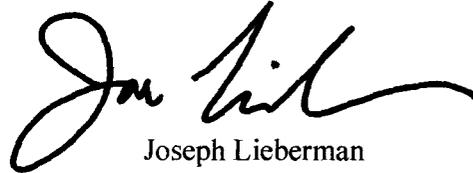
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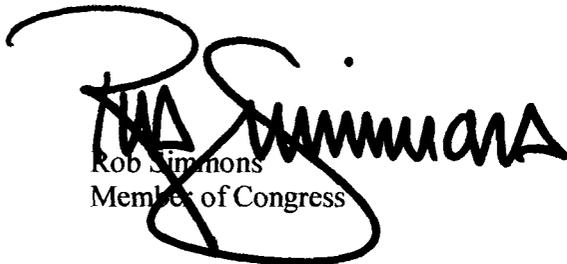
M. Jodi Rell
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United States Senator



Joseph Lieberman
United States Senator

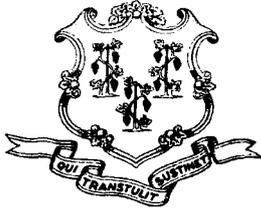


Rob Simmons
Member of Congress

BRAC Commission

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ROB SIMMONS, MEMBER OF CONGRESS

August 8, 2005

General Lloyd W. Newton
2005 Base Realignment and Closure Commission (BRAC)
2521 South Clark Street
Suite 600
Arlington, VA 22202

Dear General Newton:

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Sincerely,



M. Jodi Rell
Governor



Christopher J. Dodd
United States Senator



Joseph Lieberman
United States Senator



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Member of Congress

BRAC Commission

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UNITED STATES CONGRESS



August 8, 2005

The Honorable Phillip Coyle
2005 Base Realignment and Closure Commission (BRAC)
2521 South Clark Street
Suite 600
Arlington, VA 22202

Dear Commissioner Coyle:

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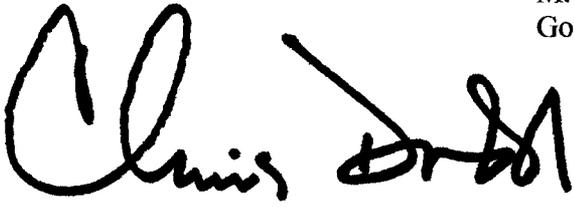
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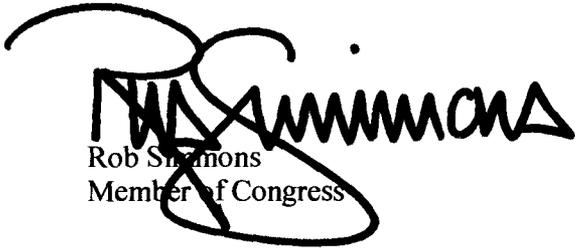
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Rob Simmons
Member of Congress

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ROB SIMMONS, MEMBER OF CONGRESS



August 8, 2005

Admiral Harold W. Gehman, Jr.
2005 Base Realignment and Closure Commission (BRAC)
2521 South Clark Street
Suite 600
Arlington, VA 22202

Dear Admiral Gehman:

We are providing the enclosed paper on trends in the submarine fleet strength of other countries for your information as you consider our nation's submarine force structure and the infrastructure requirements to support the submarine fleet.

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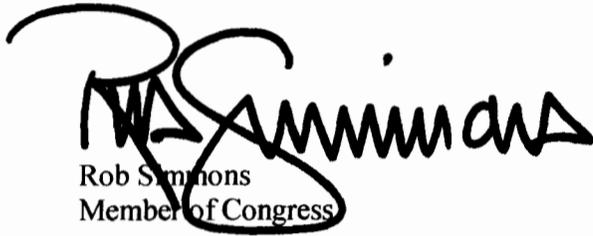
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United States Senator



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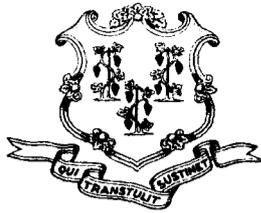
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ROB SIMMONS, MEMBER OF CONGRESS



August 8, 2005

The Honorable James V. Hansen
2005 Base Realignment and Closure Commission (BRAC)
2521 South Clark Street
Suite 600
Arlington, VA 22202

Dear Commissioner Hansen:

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Sincerely,



M. Jodi Rell
Governor



Christopher J. Dodd
United States Senator



Joseph Lieberman
United States Senator



Rob Simmons
Member of Congress

BRAC Commission

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August 8, 2005

General James T. Hill
2005 Base Realignment and Closure Commission (BRAC)
2521 South Clark Street
Suite 600
Arlington, VA 22202

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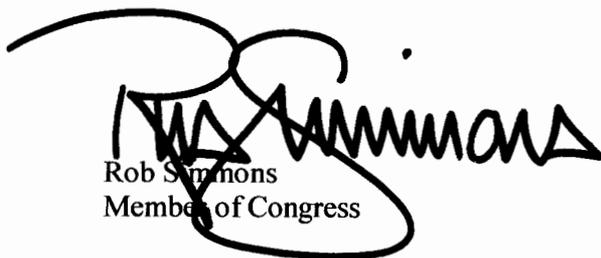
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Christopher J. Dodd
United States Senator



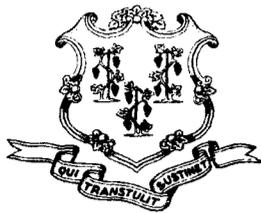
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United States Senator



Rob Simmons
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ROB SIMMONS, MEMBER OF CONGRESS

August 8, 2005

Brigadier General Sue E. Turner
2005 Base Realignment and Closure Commission (BRAC)
2521 South Clark Street
Suite 600
Arlington, VA 22202

Dear General Turner:

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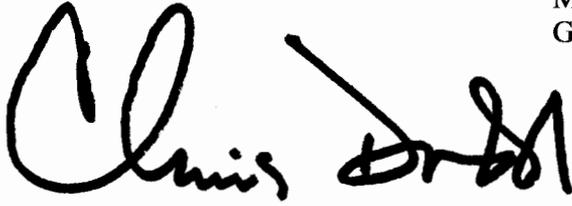
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Sincerely,



M. Jodi Rell
Governor



Christopher J. Dodd
United States Senator



Joseph Lieberman
United States Senator



Rob Simmons
Member of Congress

BRAC Commission

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ROB SIMMONS, MEMBER OF CONGRESS



August 8, 2005

The Honorable Samuel K. Skinner
2005 Base Realignment and Closure Commission (BRAC)
2521 South Clark Street
Suite 600
Arlington, VA 22202

Dear Commissioner Skinner:

We are providing the enclosed paper on trends in the submarine fleet strength of other countries for your information as you consider our nation's submarine force structure and the infrastructure requirements to support the submarine fleet.

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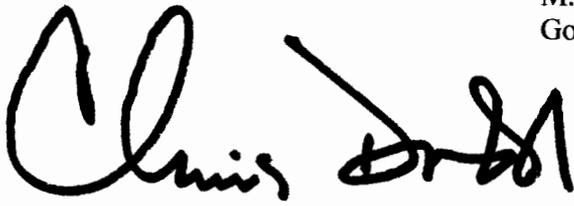
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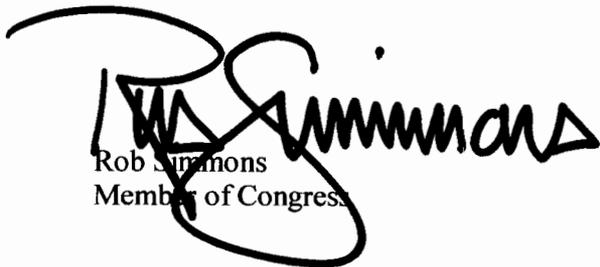
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UNITED STATES CONGRESS



August 8, 2005

The Honorable James H. Bilbray
2005 Base Realignment and Closure Commission (BRAC)
2521 South Clark Street
Suite 600
Arlington, VA 22202

Dear Commissioner Bilbray:

We are providing the enclosed paper on trends in the submarine fleet strength of other countries for your information as you consider our nation's submarine force structure and the infrastructure requirements to support the submarine fleet.

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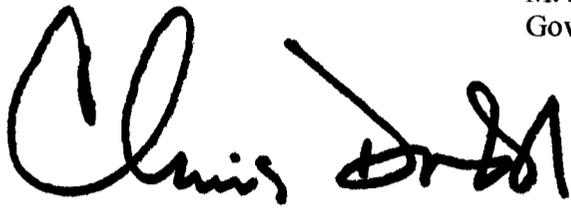
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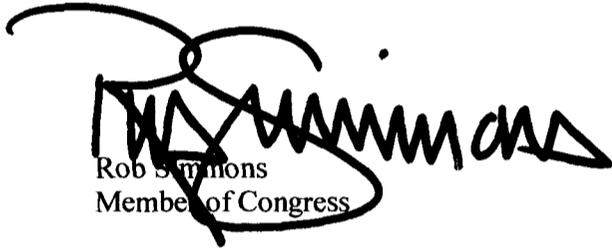
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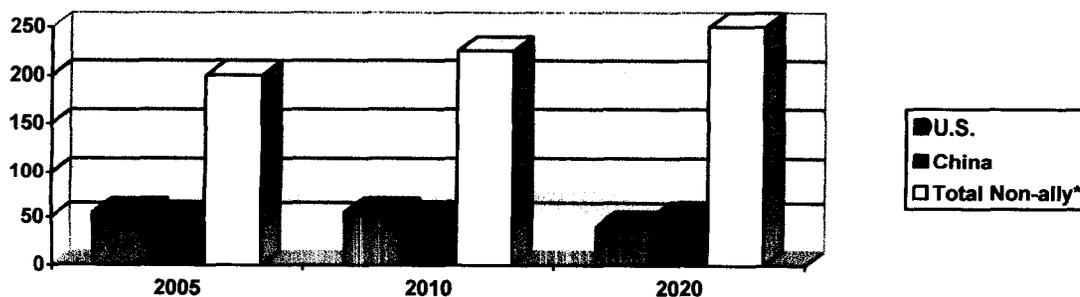


Rob Simmons
Member of Congress

The World's Growing Submarine Challenges

The United States is facing a consistent upward trend in the size and capability of subsurface naval forces around the globe, presenting a rapidly increasing potential for a threat to national security. At present, approximately 400 submarines are operating in the world's oceans, but only half belong to friends and allies. And the other half continues to grow. Other nations are increasing their fleets at an alarming rate, building submarines that will be faster, quieter, and more lethal opponents to our fleet. Consider the following:

- Nineteen submarines were launched last year worldwide — nine of them in China.
- China is building at least five new nuclear fast attack submarines, and two new ballistic-missile nuclear submarines.
- China's submarine force is roughly equal in numbers—at present—to that of the U.S.
- China's production of nuclear submarines clearly shows bluewater ambitions, extending their reach well beyond their coast and the straits of Taiwan.
- China is building submarine-launched ballistic missiles capable of reaching every point in the continental U.S.
- Russian diesel submarines are being operated by Iran and India, and North Korea operates its own diesel submarine.
- Russia will launch newer and more lethal fast-attack and ballistic missile submarines within the next year.
- The U.S. Navy's primary anti-submarine warfare weapon is a submarine.
- The U.S. has launched just four submarines in the last five years.



*Extrapolated from current unclassified analyses

Despite these daunting facts, the former Chief of Naval Operations proposed that the U.S. Navy decrease its submarine force structure by 21 percent, from 55 to 41 nuclear fast attack submarines. Such a move could place our national security at significant risk, as attested by a formidable list of experts in naval warfare, including retired Chiefs of Naval Operations and Directors of Nuclear Propulsion. It is essential that Congress, the Department of Defense, and the White House closely examine all the relevant intelligence before undertaking a move that could do irreparable harm to our maritime superiority and national security.

The World's Growing Submarine Challenges

“As a minimum our Navy must have the capability and capacity, if required, to neutralize the potential undersea threats posed by China, North Korea and Iran, today.”¹

Thus declared Vice Admiral John Grossenbacher in 2002, then Commander of Submarine Forces, Atlantic. These threats are by no means insignificant, and must not be ignored. In testimony before the BRAC Commission in Boston on July 6, 2005, Vice Admiral Al Konetzni, USN (ret) asserted that of the approximately 400 submarines operating in the world today, fewer than half belong to our friends and allies.² Admiral Tom Fargo, the recently retired Commander of U.S. Forces Pacific, gave an even more telling statistic in testimony before the Senate Armed Services Committee in April 2004:

“USPACOM faces the greatest undersea warfare challenge in the world. 250 submarines call the Pacific home – but only 30 percent of these submarines belong to allied nations. A robust and integrated Anti-Submarine Warfare (ASW) architecture, more capable force structure and a committed investment in future technologies are essential to counter the growing submarine threat. **Submarines remain the premier ASW asset... To ensure sufficient submarines are available to counter future threats and defeat anti-access strategies, we must seriously consider funding the remaining refuelings of 688 Class submarines and sustain an adequate VIRGINIA class submarine build rate.”³**

Many details of the world submarine threat are highly classified. But more than enough is unclassified to paint an accurate picture of the challenges facing the United States. The Navy Admirals quoted above signal a spiraling threat to U.S. national security and international peace in the Pacific rim that will continue to intensify in the coming years as nations continue to assert and expand their sovereignty and prevent access to their waters in critical strategic areas. This paper will present a snapshot of the greater subsurface threats, and projections for near-future developments, illustrating the urgent necessity for the United States to maintain and develop its

¹ VADM John J. Grossenbacher, remarks at National Defense Industrial Association “Clambake” at Newport, RI, 17 Sept 2002, as published in *Submarine Review* (Jan 2003), p. 12.

² VADM Albert H. Konetzni, Jr., testimony to Base Realignment and Closure Commission, 6 July 2005.

³ ADM Thomas B. Fargo, testimony to Senate Armed Services Committee, 1 April 2004 (emphasis added).

submarine fleet in order to match this ever-growing trend. At a time when the U.S. is contemplating a reduction to its submarine force, other nations are rapidly *increasing* their submarine force. They are building their submarines to be faster, quieter, and more lethal opponents. These potential adversaries are constructing more solid and impenetrable defenses to their own waters, and extending their reach into the high seas, presenting a serious threat to U.S. naval forces.

China: “Submarines are the maritime weapons posing the greatest threat to an aircraft carrier formation. Submarines are also our Navy’s core force.”⁴

When authorities such as Admirals Fargo and Konetzni speak of the growing submarine threat, they are largely referring to the threat posed by the People’s Republic of China. China is rapidly developing its submarine fleet to meet its strategic concerns, and while it remains largely focused upon denying access to its 9000-mile coastline and monitoring the straits of Taiwan, recent developments include greater capacity for endurance, suggesting an interest in expanding its influence beyond local waters.

The Office of the Secretary of Defense (OSD) issued its *Annual Report to Congress: the Military Power of the People’s Republic of China* in July 2005, therein providing extremely vital findings about the status of projection of China’s submarine capabilities. The current structure of the Chinese fleet includes a total of 51 diesel submarines and six nuclear submarines. These figures contrast with a total of four diesel submarines belonging to Taiwan⁵. This is a rather revealing statistic about the balance of power should a conflict erupt in which the United States will be compelled to enter—a quite conceivable scenario as seen by the Departments of State and

⁴ Wang Jiasuo, “Aircraft Carriers: Suggest You Keep Out of the Taiwan Strait,” Junshi Wenzhai, 1 April 2001.

⁵ Office of the Secretary of Defense, *Annual Report to Congress: The Military Power of the People’s Republic of China, 2005*, p. 44.

Defense. And the Chinese fleet is evolving rapidly. While the current fleet is aging and noisy, the Chinese are adopting modern, Russian-influenced technology, and will soon consist of an equivalent number of much quieter and elusive submarines.⁶ From a fleet roughly equal in size to the U.S. attack submarine fleet, China will, within the coming years, regenerate itself with technology which is virtually undetectable by current U.S. technology. And yet, as a conflict in the Straits of Taiwan grows more realistic, the U.S. Navy intends to reduce its force structure to 41 submarines. Developments to China's fleet include:

- Serial production of its SONG-class diesel submarine
- Further construction of MING-class diesel submarine
- Acquisition of upgraded KILO-class submarines from Russia
- Development of a new YUAN-class conventional submarine
- Development of the Type-093 nuclear attack submarine
- Development of the Type-094 nuclear ballistic missile submarine

This growth will only continue to increase the threat to U.S. and allied forces. The Kilo, for example, "is one of the quietest diesel submarines in the world,"⁷ and is probably the most significant factor at the current moment. The upgrades which are being incorporated on these new acquisitions include "superior batteries, an enhanced digital sonar system, slower turning screws, and quieter main engines". The cache of weaponry will also be expanded well beyond the existing wake-homing anti-ship torpedoes to include "the versatile and potent Klub weapon system, giving them the capability to fire land-attack cruise missiles anti-ship cruise missiles with supersonic terminal homing, and rocket thrown antisurface and antisubmarine torpedoes". Furthermore, it is anticipated that the Kilo will be armed with the Russian Skval torpedo, capable of traveling faster than 200 knots; some reports suggest the Skval may already be in use.⁸

⁶ John R. Benedict, "The Unraveling and Revitalization of U.S. Navy Antisubmarine Warfare", *Naval War College Review*, Spring 2005, p. 102.

⁷ Office of Naval Intelligence, *Worldwide Submarine Challenges*, 1997, p. 20.

⁸ Lyle Goldstein and LCDR Bill Murray, "China's Subs Lead the Way," *U.S. Naval Institute Proceedings*, March 2003, p. 58.

Of particular concern is the Type-093, whose nuclear technology will enable greater endurance in time and distance.⁹ At the present moment, Taiwan is the primary source of concern among U.S. policymakers, and the driving force behind the majority of China's force development. The latest acquisitions demonstrate that Beijing's purpose is "an 'active offshore defense,' to protect and advance its maritime interests, including territorial claims, economic interests, and critical sea lines of communication."¹⁰ However, OSD points out that "some of China's military planners are surveying the strategic landscape beyond Taiwan," foreseeing that "control of Taiwan would enable China's PLA Navy to move its maritime defensive perimeter further seaward and improved Beijing's ability to influence regional sea lines of communication."¹¹ Indeed, Chinese naval operations have extended beyond the littoral waters with increasing frequency; the most dramatic example occurred in 2004 when a HAN-class nuclear submarine intruded into Japan's territorial waters.¹² But concern about the Type-093 stems not only from its range, but also from its lethality: it is suspected that it will be capable of firing 65 cm torpedoes, weapons which were developed by the Soviet Union with the express purpose of sinking a U.S. aircraft carrier.¹³ Indeed, all appearances suggest decidedly blue-water ambitions in the PLA Navy.

Looking further into the future, China is expressly interested in developing "a credible, survivable, sea-based deterrent with the capability to reach the United States." Its answer to this goal is the Type 094, a new ballistic missile submarine under current development using Chinese design and Russian technical assistance, which would be armed with a sixteen Submarine-Launched Ballistic Missile (SLBN) with an intercontinental range in excess of 5,000 nautical

⁹ Office of the Secretary of Defense, p. 33

¹⁰ Ibid, p. 12.

¹¹ Ibid, p. 12.

¹² Ibid, p. 13.

¹³ Benedict, p. 102.

miles. This range would threaten the entire continental United States when launched from within the projected range of the Type 094, and will likely be operational between 2008 and 2010.¹⁴ Furthermore, the Type-094 would be even quieter than the Russian TYPHOON-class, currently the most formidable rival to the U.S. SSBN fleet.¹⁵

The production rate of the Chinese fleet is indeed impressive—China launched nine submarines in 2004 alone, half of the number launched worldwide. And yet the U.S. has launched only four submarines since 2000¹⁶, and has already set a decommissioning schedule for the 688-class. China's resources are plentiful and Russia has been more than forthcoming with its equipment, technology, and assistance.

Russia

Whereas Russia's fleet of nuclear fast attack and ballistic missile submarines declined sharply in the 1990's, it has currently stabilized and is regaining its footing. Russia is close to completing construction on the third generation AKULA-class attack submarine (SSN) and the larger OSCAR II-class (SSGN). Additionally, 2005 should see the much-delayed launch of the fourth generation SEVERODVINSK SSN, "a multimission platform incorporating extensive sound quieting, upgraded sonar systems, and new antiship and land-attack cruise missiles."¹⁷ The next generation submarine equipped with nuclear ballistic missiles (SSBN), the DOLGORUKIY, is only just around the corner, set to launch in 2006 as just announced by

¹⁴ Office of Naval Intelligence, *Worldwide Maritime Challenges*, 2004, p. 37.

¹⁵ Goldstein and Murray, p. 58.

¹⁶ Albert H. Konezni, Jr. "Sinking the Fleet", *New York Post*, editorial, 5 July 2005.

¹⁷ Office of Naval Intelligence, *Worldwide Maritime Challenges*, 2004, p. 13.

Russian Defense Minister Sergei Ivanov. It will employ a newer and more potent submarine launched ballistic missile (SLBM), the Bulava-30.¹⁸

World Diesel Submarines

In addition to the Russian KILO, which has propagated throughout the world, numerous other classes of diesel submarines are being utilized and developed by nations beyond Russia and China. More and more, these submarines incorporate Air independent propulsion (AIP), allowing the submarine to remain submerged for extended periods—up to two weeks, currently—while operating at low speeds and maintaining a full charge on its batteries. Four or five submarines are currently employed with AIP, and fifteen more are in the development or acquisition stages; by 2015-2020 it will be the standard mode of propulsion for non-nuclear submarines.¹⁹ Future technology may permit submersions of a full month, meaning that a submarine might never surface through the duration of its patrol.²⁰ U.S. Navy experience in international exercises demonstrates a clear disadvantage against diesel submarines: carrier battlegroup defense perimeters have been broken by submarines from South Africa, Chile, and Australia, leading to simulated attacks on the carriers themselves. Among the countries employing or developing a diesel submarine fleet:

- North Korea, which continues production of the SANGO class
- Iran, continuing work on Russian KILO submarines
- India, developing advanced weaponry for Russian KILO
- Pakistan and Israel, possibly exploring nuclear land-attack missiles²¹

The implications for national security of the above list are readily apparent. The submarine developments around the world—both nuclear and conventional--present formidable challenges to U.S. Navy Anti-submarine warfare tactics and technology. More than forty nations

¹⁸ www.chinaview.cn, 29 Jul 2005.

¹⁹ Benedict, p. 101.

²⁰ Office of Naval Intelligence, p. 11.

²¹ Benedict, p. 103.

are operating below the surface, and the U.S. can ill afford to lower its guard or reduce its force structure at a time of such rapid buildup amongst non-allied nations. “The U.S. Navy appears to be on the brink of a real commitment to revitalize antisubmarine warfare, but the pace of this revitalization will be significantly less than it needs to be if sustained support, effective organization, and ample resources are not forthcoming.”²²

It is critically important that policymakers within both the executive and legislative branches fully evaluate these emerging capabilities and the potential threats they might pose to U.S. national security before determining the appropriate composition of the United States Navy’s submarine force, military installations, and support structure. Such an assessment would necessarily include review of the most up-to-date classified accounts by the Office of Naval Intelligence (ONI), the Secretary of Defense’s Program Analysis and Evaluation Office, and U.S. Combatant Commanders. It is to be presumed that the 2005 Quadrennial Defense Review (QDR) is drawing on these assessments in its prescriptions for the Navy’s future force structure. In developing the QDR, the Department of Defense should consider, as reported above, that requirements for America’s most essential anti-submarine warfare assets—the fast attack submarine—only grow as the U.S. Navy develops strategies to offset burgeoning undersea capabilities of the People’s Republic of China, Russia, and Iran. The ambitions of these and other nations with respect to advanced submarine development must not be allowed to occur to the detriment of regional stability. Maritime superiority must remain a cornerstone of US defense policy to preserve peace and security not only within our nation, but in all corners of the globe. Such naval dominance will undoubtedly require a robust U.S. fast attack submarine force, to perform critical anti-submarine warfare operations as well as ongoing anti-terrorism missions involving intelligence collection, precision strikes, and special operations.

²² Benedict, p. 94.