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Calling to foreign ports: a re-emerging practice for US nuclear-armed submarines?

Summary

The latest visit of the USS Kentucky (SSBN-737) to Busan, South Korea, on 18 July 2023 has gained media attention worldwide as it marked the first time a US ballistic missile submarine (SSBN) conducted a port visit to South Korea in four decades.¹ During the Cold War, the US Navy arranged SSBN visits in foreign ports regularly, but post-Cold War the frequency of these calls has decreased significantly. However, even if the media still qualify them as "rare" and "unusual", port visits have started to become more prominent since 2015. This change of pattern raises questions on the rationale for this increase in port visits after the practice was almost given up for twenty years. This analysis describes the change of attitude of the US Navy towards sending its SSBN to foreign ports, sheds light on the reasons that pushed the United States to discontinue these operations and explains the importance of port visits in the current context.

Introduction

Since the 1960s, the United States has relied extensively on its nuclear-powered ballistic missile submarines (also known as boomers) as part of its strategic nuclear force, constituting the largest fleet in the world.² These submarines are armed with nuclear-tipped submarine-launched ballistic missiles (SLBM). The latest Ohio-class SSBN carries up to twenty D-5 Trident ballistic missiles.³ The ability to sail undetected around the globe and to keep submarines permanently at sea provides the United States with an assured second-strike capacity, since it is virtually impossible to destroy the SSBN fleet in a preventive strike. The stealth of the SSBNs allows them to operate in silence, undetected, and untraceable, owing them the

¹ "US Nuclear-Armed Submarine Visits S. Korea for First Time in Decades", <u>The Defense Post</u>, 18 July 2023.

² Barbara Starr, "US Navy sends message to adversaries with a rare submarine port visit in Indian ocean", <u>CNN</u>, 2 December 2022.

³ Tony Capaccio, "U.S. submarines are popping up more often and it's not clear why", <u>The Japan Times</u>, 6 May 2023.

nickname of "the Navy's silent service".⁴ Protecting its invulnerability, and especially preventing potential adversaries from tracking it on the high seas, is a major priority for a SSBN. This means that its patrol are usually shrouded in secrecy. As each SSBN carries highly attractive data for any potential adversary interested in tracking the vessel, port visits may appear unadvisable for these submarines. Indeed, they may open up vulnerabilities and offer intelligence gathering opportunity if potential adversaries are informed that SSBNs will be docking at a specific location.⁵ Despite these potential risks, US SSBNs stopped at foreign ports during the Cold War and more recently. Each time it decided for it, the US government visibly considered that the benefits provided by port calls outweigh the possible risks entailed.

The first SSBN to call on a foreign port was the *USS John Marshall* (SSBN-611), which docked in Izmir (Turkey) in 1962. Since that date, port visits have played an important but discreet role in the US naval mission and as of 2023, Washington has conducted foreign port visits to at least 22 countries, including, to name a few, South Korea, the United Kingdom, Canada, and Italy. Over the course of forty years, from 1962 to 2000, the Navy conducted at least 160 port visits.⁶ Most noticeably, the submarines went to British and South Korea) in 1976-1981. However, there was a steady decline in 1990-2000, with probably only around 20 port calls during that decade, before the United States eventually stopped conducting port visits for fifteen years (2000-2015). The resumption of visits to South Korea but also to other parts of the globe is an interesting testimony of the ongoing geopolitical changes and may reflect several important political, operational and strategic priorities for the United States and its allies.

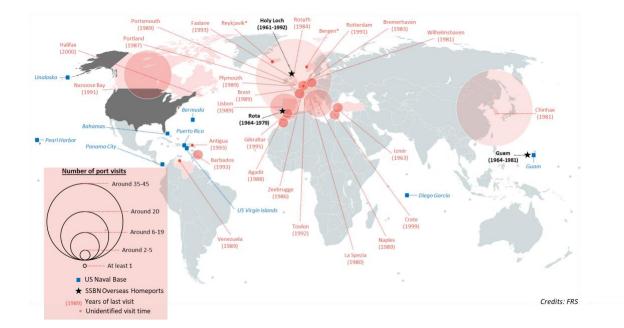
1. In the Cold War: a regular pattern of deterrence patrols

While it did not receive a lot of attention or was usually not reported publicly, stopping in foreign ports was a common pattern for American boomers during the Cold War, especially from the end of the 1970s to the end of the 1980s. This practice was justified by a number of reasons and evolved as the Navy developed its arsenal of SSBNs in the Atlantic and Pacific theatres.

⁴ Ibid.

⁵ Masashi Murano, "What are the appropriate SSBN forward deployment options?", <u>Hudson</u>, 5 May 2023.

⁶ This data is collected from open-source archives and documents, and may not be exhaustive as patrol history has been largely underreported and kept secret. Main sources used include Hans M. Kristensen and Robert S. Norris, "A History of US nuclear weapons in South Korea", <u>Bulletin of the Atomic Scientists</u>, vol. 73, n° 6, Fall 2017, and Brent Alan Ditzler, "Naval Diplomacy Beneath the Waves: A Study of the Coercive Use of Submarines Short of War", Master's dissertation, <u>Naval Postgraduate School</u>, 1989, pp. 97-99, as well as official and non-official history pages of the SSBNs, official archives of patrol and sailor's personal testimonies.



Map 1: US SSBN Port visits (out of continental United States) and overseas deployment – 1962-2000.

After the Cuban Missile Crisis, the United States agreed to remove nuclear medium-range ballistic missiles deployed in Turkey (PGM-19 Jupiter) in exchange for the elimination of Soviet missiles in the Caribbean. Following this secret understanding, Washington signed a memorandum with the Turkish government whereby the United States agreed to provide higher levels of military aid to compensate for the withdrawal of the Jupiter missiles. As part of the confidence-building measures agreed to, the United States deployed the *USS John Marshall* (SSBN-611) to the port of Izmir (Turkey) in October 1962. This marked the first-ever foreign port visit by a USS ballistic missile submarine; this aimed to reassure Turkey regarding the US commitment to its security. A second visit to Izmir took place on 14 April 1963 (*USS Houston* (SSBN-609)) and received positive media coverage in the country. Not only did the visit serve as a strategic statement of the power of the US Navy in the Mediterranean, but it also meant to improve the bilateral relationship between Washington and Ankara.⁷

It must be recalled that the first generations of US submarines were equipped with Polaris submarine-launched ballistic missiles (SLBMs), and later Poseidon SLBMs, whose range was respectively inferior or slightly above 5,000 km. To hold targets based in the Soviet Union or China at risks, US SSBNs were obliged to patrol far from the American continent, especially in the North Pacific and the North Atlantic. To enable these patrols away from the homeland, the United States used a network of naval bases outside the US continental territory (see map 1), spreading over the Pacific (Unalaska, Pearl Harbor, Panama City, Guam), the Atlantic (Bahamas, Bermuda, Ceiba/Puerto Rico, Rota, Holy Loch, US Virgin Islands), and the Indian oceans (Diego Garcia).

⁷ Leopoldo Nuti, "The Jupiter Missiles and the Cuban Missile Crisis Endgame", <u>Briefing Book</u> n° 828, National Security Archive, George Washington University, 20 April 2023.



USS John Marshall (SSBN-611), swim call off the Bahamas, July 1968. Credits: US Naval Undersea Museum.

To increase the effective time of patrol while ensuring that the crew had adequate resting time, the Navy based the submarines overseas and made stops abroad to allow for changes of shifts. In addition, these naval bases could be used to carry out crew rotation mid-patrol in case of personal problems or technical issues,⁸ and after the end of a patrol (for instance in Pearl Harbor). The change of shift away from the continental United States appeared crucial to optimise the operational time of the vessel as well as to improve the work-life balance of crew members.⁹ Returning to a continental homeport after the completion of a mission in Europe or Asia would cost roughly 10 up to 14 days from each operational cycle.¹⁰ Basing the submarines abroad increased their effective patrolling time and allowed for more efficient cycles for the crew.

Thus, Holy Loch, in Scotland, was used as a US naval base from 1961 to 1992 (Submarine Squadron 14), and Rota, in Spain, was used from 1964 to 1979 (Submarine Squadron 16), when the renegotiation agreement with the Spanish government ruled out the use of the base for permanently stationing SSBNs.¹¹ The use of advanced bases in Europe and in Asia had a crucial strategic and logistical importance. Interestingly, however, from the end of the 1970s onward, it did not discourage the United States from sending its SSBNs to foreign ports for visits, which shows that while some ports may have been considered for operational and technical reasons (such as Halifax in Canada), most calls matched political motivations and alliance management goals. These visits were extremely rare in the 1960s and until 1975,¹² but then became a feature of patrols in the Euro-Mediterranean theatre and in Asia (see Map 1).

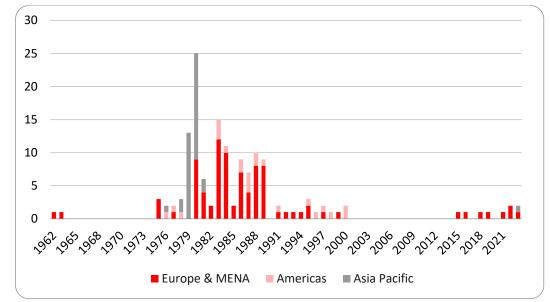
⁸ Technical difficulties specifically on navigation, fire control, sonar, communications, and shore-to-submarine connectivity (see more here: Ernest L. Holmboe and Samuel J. Seymour, "APL's Submarine Security Program", *John Hopkins APL Technical Digest*, vol. 13, n° 1, 1992.

⁹ "USS Alabama conducts crew change at sea", <u>United States Navy</u>, 3 June 2022.

¹⁰ Brian Lavery, "The British government and the American Polaris base in the Clyde", <u>Journal for Maritime</u> <u>Research</u>, vol. 3, n° 1, Fall 2001.

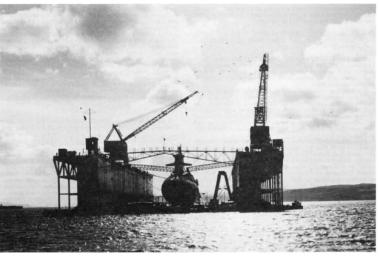
¹¹ "Submarine Squadron Sixteen", <u>*Global Security*</u>, 31 January 2001.

¹² For instance, a dozen patrols conducted from Holy Loch and Rota from 1961 to 1971 are extensively reported by Vice-Admiral Frank D. McMullen but none refers to port visits. See Franck D. McMullen, <u>Cold War Submariner: The Memoirs of Vice Admiral Frank D. McMullen, Jr.</u>, 2020.



Number of port visits conducted each year (outside US bases overseas) – 1962-2023. Non-exhaustive list compiled from various sources.

For instance, starting from Holy Loch, US submarines conducted at least 30 port visits to the United Kingdom, specifically to HMNB Clyde, in Faslane, home base to British SSBNs, Plymouth, Portsmouth, Portland, and Rosyth.



USS Abraham Lincoln (SSBN-602), Holy Loch, 19 March 1963. Credits: US Navy.

Calling to foreign ports: a re-emerging practice for US nuclear-armed submarines?



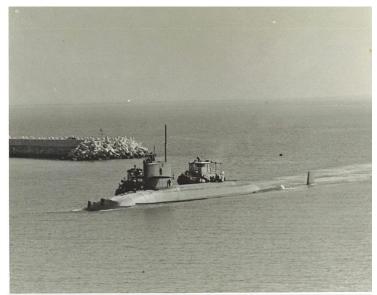
USS John C. Calhoun (SSBN-630), Holy Loch, 1972. Credits: Photographer's Mate Third Class A.H. Jones, US Navy.



USS Nathanael Greene (SSBN-636), Faslane, August 1984. Credits: Peter Fall, Lieutenant Royal Navy, Clyde Submarine Base Photographic Unit.

US submarines based in Scotland not only made calls at British ports, but also in Rotterdam in the Netherlands (1980 and 1991), and in Wilhelmshaven (1980-1981) and Bremerhaven (1983) in Germany.

From Rota, apart from Turkey, the United States occasionally conducted port visits to other places in the Mediterranean, including Toulon (France), Naples (Italy), Crete (Greece), and Gibraltar (United Kingdom).



USS Francis Scott Key (SSBN-657), Rota, late 1960s. Credits: <u>SSBN 657</u> USS Francis Scott Key Crew Home Page.

In the Pacific, Submarine Squadron 15 was based in Guam from 1964 to 1981. Patrols starting from Guam were frequently interrupted by a few days ashore in South Korea. US SSBNs started calling regularly to Chinhae as early as 1976 and until 1981, with at least 33 recorded visits,¹³ making it one of the most visited foreign ports during the Cold War.¹⁴ This assiduity shows the importance of alliance management concerns, especially in times of heightened geopolitical tensions.



Thomas Jefferson (SSBN-618), Guam, 1979. Credits: Jeff Nieberding, ET1(SS), US Navy.

¹³ Hans M. Kristensen, Robert S. Norris, "A History of US nuclear weapons in South Korea", op. cit.

¹⁴ Brent Alan Ditzler, op. cit.



USS Patrick Henry (SSBN-599), Guam, 1976. Credits: Darryl L. Baker, US Navy.

Beyond political considerations, port visits, including to other US naval facilities located around the world, gave the US Navy the opportunity to train with other naval forces, undergo inspections and certifications, perform Weapon System Readiness Tests (WSRTs),¹⁵ and retargeting exercises and Command and Control exercises.¹⁶ Another important exercise was the SSBN Continuity of Operations Program (known as SCOOP), during which the SSBNs practiced replenishment in foreign ports in case the homeport was destroyed during an attack. Washington focused its SCOOP exercise mostly in the Pacific region (Hawaii, Guam, Alaska) and in the Atlantic region (Puerto Rico and Canada).¹⁷

Finally, some visits could have a very symbolic nature, sometimes linked to the name of the ship. For instance, the *USS Lafayette* (SSBN-616) visited Brest in 1989 and took part in the celebration for the 200th anniversary of the French revolution.¹⁸ The same year, at the request of the Venezuelan government, the *USS Simon Bolivar* (SSBN-641) took part in the commemoration of its namesake's birthday and Venezuela's Navy Day by stopping in Puerto Cabello.¹⁹

2. After the Cold War

The frequency of visits dropped dramatically after the Cold War. Several factors may explain this evolution. In light of the improved geopolitical environment, the risk of a nuclear conflict seemed to decrease, which led all through the board to a lowering of the alert level of nuclear

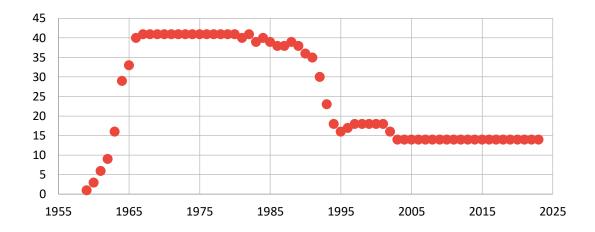
¹⁵ WSRT refers to a simulated launch message sent to an unalerted SSBN on patrol with the purpose to prepare for a simulated missile firing (see John M. Watson, "The Strategic Missile Submarine Force and APL's Role in its Development", *John Hopkins APL Technical Digest*, vol. 13, n° 1, 1992).

 ¹⁶ Hans Kristensen, "U.S. strategic submarine patrols continue at near cold war tempo", <u>FAS</u>, 16 March 2009.
¹⁷ *Ibid*.

¹⁸ Lafayette II (SSBN-616), Naval History and Heritage Command.

¹⁹ Brent Alan Ditzler, op. cit.

forces and a lesser role conferred to nuclear weapons in US security policy. The number of patrols was cut down, and some foreign or overseas bases were closed (Holy Loch) or no longer used as submarine permanent bases (Guam, Rota). Arms control agreements played a part in reducing the number of nuclear weapons deployed at sea, the number of SSBNs in service, and logically the tempo of visits. In application of the Start treaties, the number of SSBNs was limited to 14 in 2002, leading the Navy to convert four Ohio-class SSBNs into conventionally armed nuclear-powered submarines (SSGNs).²⁰ The limited number of SSBNs, compared to the height of the Cold War where more than 40 ships were patrolling the seas, implied a reduced number of deterrent patrols and port calls (see graph below). Indeed, when a submarine is ashore in a foreign port, it is not available as a deterrent. With less boats at sea, the credibility of deterrence mathematically limits the number of days that can be spent visiting foreign ports.



Number of operational SSBNs in the US arsenal (1959-2023)

Security concerns have also been mentioned to explain the reduced number of visits at the beginning of the 21st century. As stated by retired Vice Admiral Michael Connor, the Pentagon refused to risk its submarines being exposed to any possible threats after the September 11 attacks.²¹ This would explain why the United States stopped conducting port calls outside the continental United States in the 2000s.

In addition to these political evolutions, another factor, the modernisation of the SSBNs and SLBMs, contributed to reducing the necessity of stopping abroad. The Ohio-class are equipped with three larger diameter logistics hatches which enable crew members to rapidly transfer supply pallets, equipment replacement modules and machinery components, thereby increasing their operational availability as well as reducing the necessity for them to stop in a

²⁰ "SSBN/SSGN Ohio Class Submarine", *Naval Technology*, 2 July 2020.

²¹ Michael Melia, "For the first time since 9/11, US Navy nuclear-armed subs make port calls", <u>*Christian Science Monitor*</u>, 21 December 2015. It should be recalled, as an element of context, that the USS Cole, an attack nuclear submarine, was victim to an al-Qaeda-fomented terrorist attack while refueling in Aden, Yemen, killing 15 sailors and injuring 37 (2000).

See John F. Burns and Steven Lee Myers, "The Warship Explosion: the Overview; Blast Kills Sailors on U.S. Ship in Yemen", *The New York Times*, 13 October 2000.

port due to technical issues.²² Less port visits allowed the United States to benefit fully from the stealth and the discretion allowed by this new class of SSBNs.

Moreover, with the introduction in 1990 of the SLBM Trident II D5, whose ranges is around 12,000 km, patrolling around Europe or Asia became unnecessary. Missiles launched from waters closer to US continental homeports could easily reach potential enemies, and it became therefore less necessary to patrol in faraway waters and therefore to rotate the crew in oversea or foreign ports.

Politically speaking, although port visits have been tools of naval diplomacy, as exemplified by the Izmir visit in 1962, these activities also created some pushback. First, restrictions linked to the sensitivity of reactors complicated visits as the submarine could only berth at specific docks, without public access, unlike normal visiting warships that can anchor in a civilian port. This limited the visibility of the operation. Additionally, throughout the Cold War port visits attracted protests and negative reactions from the public. The establishment of the US naval base in Holy Loch created backlash among local communities. In 1961, around 2,000 protesters demonstrated against the opening of the base as home port of nuclear weapon armed submarine.²³ In Canada, disarmament groups protested against the very frequent visits of US submarines in Halifax in the 1980s. NGOs claimed that the presence of SSBNs in a Canadian port was a violation of Ottawa's official policy of not allowing nuclear weapons inside the country.²⁴ A group called the Halifax-Dartmouth sub-watchers was constantly on the lookout for the appearance of SSBNs in the port, making it harder for the US Navy to call undetected.²⁵ Protests also happened in Europe, for instance during the visit of USS Will Rogers (SSBN-659) to Rotterdam in 1991, which drew major demonstrations by anti-nuclear activists.²⁶ Earlier, in 1982, Rotterdam's City council had declared itself to be a nuclear-free zone, showing the sensitivity of the issue for local residents.²⁷

²² "Ballistic Missile Submarines (SSBNs)", <u>Commander, Submarine Force U.S. Pacific Fleet</u>, 17 December 2015.

²³ "Anti-Polaris Protest at Dunoon", <u>*The Glasgow Herald*</u>, 15 May 1961.

²⁴ "Protest from Public: Across Canada group says sub has nuclear arms", *Canadian Press*, 23 April 1986.

²⁵ Alan Story, "Nuclear subs quarry of Halifax peace network", *The Toronto Star*, 25 April 1986.

²⁶ Commander N. French Caldwell, "Submarine Force Structure: Peacetime Presence or Wartime Patrols", *in* Jim Hay (ed.), *Submarine Review*, Virginia: The Naval Submarine League, 1993.

²⁷ U. S. Congress, Senate, Committee on Foreign Relations, Report of the Special Committee on Nuclear Weapons in the Atlantic Alliance, 98th Congress, 2nd Session, January 1985.



USS Francis Scott Key (SSBN-657), Halifax, 1978. Credits: Ken Rariden, US Navy.

It is however interesting to notice the limited effect of anti-nuclear legislations on submarine visits. In 1984, New Zealand famously prohibited nuclear submarine visits (ballistic missile and attack submarines), leading to a long-standing feud with Washington which ultimately ended up in the exclusion of Wellington from the ANZUS alliance.²⁸ In addition to New Zealand, Sweden and Denmark also adopted a non-nuclear policy near the end of the Cold War. These national legislations had only a moderate effect on US policy. While Sweden declared its opposition to nuclear ship visits in 1983, the US Navy managed to bring nuclear-armed ships into Sweden six times after that date.²⁹ Denmark's policy against nuclear weapons on its territory goes all the way back to 1957, yet the United States ignored this policy and deployed a nuclear-armed B-52 bomber in the country in 1968.³⁰ Even though these operations were not conducted with SSBNs, the growing sentiment from the public as well as the governments of these countries may have pushed Washington to be more careful in deploying nuclear weapons outside its territory, or at least to be more discreet about operations abroad.³¹

3. Renewed emphasis on port visits since 2015?

Despite these complications, including the fact that public disclosure of SSBN locations can entail vulnerabilities, the United States resumed its port visits in 2015 and began to be more open on its fleet's activities (map 2).

²⁸ Henry Cronic, "New Zealand's Anti-Nuclear Legislation and the United States in 1985", <u>Wilson Center</u>, 26 August 2020.

²⁹ Hans M. Kristensen, William M. Arkin, Joshua Handler, "U.S. Naval Nuclear Weapons in Sweden", <u>Neptune</u> <u>Papers n° 6</u>, September 1990.

³⁰ Hans M. Kristensen, "Nuclear post visits to Denmark during the Cold War", <u>Nukestrat</u>, 2004.

³¹ It must be noted that public backlash also took place during domestic port calls, for instance in 1989, when the *USS Alabama* (SSBN 731) visited Astoria, Oregon. Clatsop County, where Astoria is situated, had declared itself a nuclear-free zone in 1984. The call in port, which allowed resupply and change of crew, took pace with National Guard troops heavily involved in sealing off access (see Robert E. White, "The Neither Confirm Nor Deny Policy Oppressive, Obstructive, And Obsolete", <u>Centre for Peace Studies</u>, Auckland University, December 1990).



Map 2: US SSBN port visits outside continental United States – 2015-2023.

During the USS West Virginia (SSBN-736)'s cruise in the Arabian Sea in October 2022, the US Central Command released photos of CENTCOM Commander Gen. Michael 'Erik' Kurilla on board, an unusual behaviour revealing the vessel's whereabouts.³² The appearance of the SSBN in the Arabian Sea took place in a context of growing tensions between the United States and Iran, which led some to interpret it as a signal sent to Tehran.³³ However, it was probably mostly a message sent to Russia and China, with a display of Washington's ability to hold at risk these two countries from any directions and in particular from the south.³⁴

US SSBN have also visited Faslane six times since 2015. These visits were a demonstration of the US commitment to the United Kingdom's security and complemented military cooperation activities to ensure that the Navy has the capacity to effectively operate around the globe at any time.³⁵ The special relationship with the United Kingdom was also displayed by the *USS Rhode Island* (SSBN-740) making a comeback to Gibraltar in November 2022,³⁶ and by a joint at-sea training involving the *USS Tennessee* (SSBN-734) and a Royal Navy Vanguard-class submarine off the coast of Georgia that same month.³⁷

³² Courtney Kube, Chantal Da Silva, "U.S. makes unusual disclosure of ballistic missile submarine's presence in Persian Gulf", <u>NBC News</u>, 20 October 2022.

³³ "U.S. sends submarine to Middle East to counter Iranian threats to maritime trade", <u>FDD</u>, 11 April 2023.

³⁴ It is interesting to note that in November 2023, in the context of the Israeli-Hamas war, the Pentagon displayed ambiguity and showcased the presence of a Ohio-class submarine in the Suez Canal, without specifying that the boat was the *USS Florida*, a boat which has been converted to an attack submarine. The display of strategic assets in the region therefore seems to serve several purposes, as seen in the media coverage of this announcement ("US Nuclear Submarine in Middle East for 'Deterrence': Pentagon", <u>*The Defense Post*</u>, 7 November 2023).

³⁵ George Allison, "Third American nuclear sub visits Scotland in two weeks", <u>UK Defence Journal</u>, 31 July 2023.

³⁶ "USS Rhode Island (SSBN 740) arrives in Gibraltar", <u>U.S. Naval Forces Europe-Africa</u>, 1 November 2022.

³⁷ "U.S.-United Kingdom Submarine Forces conduct bi-lateral at sea training", <u>DVIDS</u>, 22 November 2022.



Joint exercise between the USS Tennessee (SSBN-734) and a Royal Navy Vanguard-class submarine off the coast of Georgia, November 2022. Credits: Senior Chief Petty Officer John Smolinski, US Navy.

In addition to the unusual publicity regarding these recent port calls, the Navy allowed foreign senior military leaders to embark onboard of one of its SSBN for the first time in April 2023. Vice Admiral Tateki Tawara (Japan Maritime Self-Defence Force) and Rear Admiral Su Youl Lee (South Korea Navy Submarine Force) joined U.S. Navy Rear Admiral Rick Seif, commander, Submarine Group 7/Task Force 74, on the *USS Maine* (SSBN-741) in Guam, not only to tour the submarine but also to better understand the vessel's capabilities.³⁸ This first trilateral embarkment on a SSBN involving foreign senior commanders further shows that the United States has become more open in the effort to strengthen the alliance between the three nations. Noticeably, Guam, while no longer a permanent base, is increasingly used as a US base and a communication hub, with allies in the Pacific region receiving at least five visits since 2016 after a 28-year interruption.



USS Kentucky (SSBN-737), Naval Base Guam, 28 August 2023. Credits: Mass Communication Specialist 3rd Class Darek Leary, US Navy.

³⁸ "First of its kind submarine visit forges relationship", <u>US Navy</u>, 4 May 2023.

The most recent visit to Busan in July 2023 was extensively described as a way to epitomize the US continuous commitment to the security and stability of Northeast Asia.³⁹ The visit also aimed at demonstrating the US dedication to safeguarding South Korea's sovereignty and territorial integrity against its most prominent adversary, North Korea. A few months earlier, as part of the alliance between the two nations, the United States and South Korea released the joint Washington Declaration, which reaffirmed the US commitment to extended deterrence in South Korea, and mentioned a planned port visit to South Korea.⁴⁰ As confirmed by South Korean President Yoon Suk Yeol, Washington will continue to send its SSBNs in the region as a response to the alarming threats of North Korean nuclear and missiles.⁴¹ In contrast with the United States' recent history of reluctance to reveal the location of its sensitive assets,⁴² this policy indicates Washington's willingness to expose its SSBNs as a key and visible component of extended deterrence.



USS Kentucky (SSBN-737), Busan, 18 July 2023. Credits: Mass Communication Specialist 1st Class Michael Chen, US Navy.

³⁹ Brad Lendon, Yoonjung Seo, Gawon Bae, "Nuclear capable US submarine makes first port call in South Korea in four decades", <u>CNN</u>, 18 July 2023.

⁴⁰ Masashi Murano, *op. cit.*

⁴¹ "Submarine visit strengthens ROK-U.S. alliance", <u>Indo-Pacific Defense Forum</u>, 28 July 2023.

⁴² Jihoon Yu, Erik French, "How the US SSBN port call in Busan bolsters extended deterrence", <u>*The Diplomat*</u>, 28 July 2023.

4. Evolving rationales behind port visits

The technical capacities of the Ohio-class and the suspension of port visits for almost fifteen years prove that technical or operational issues are no longer the main motivations for these calls in foreign countries. On the contrary, it is clearly political benefits that are expected, and that need to offset potential security risks. Indeed, bringing a SSBN into a foreign port is not risk-free, and US officials have been described as "uncomfortable" at the prospect.⁴³ Security concerns include the potential risk of intelligence data gathering of the ships' acoustic signatures, facilitating the tracking of the vessel (display of surface coating and propellers) or exposure when in foreign port. In addition, a submarine docking in foreign waters cannot be considered as an operational deterrent.⁴⁴ These potential vulnerabilities may therefore appear as being in opposition to the SSBN's strategic vocation of continuous assured retaliation⁴⁵.

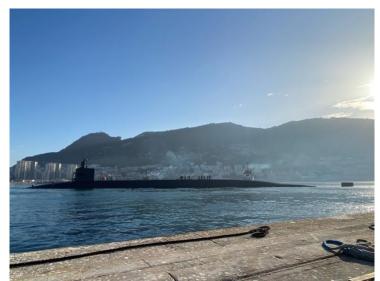
Nonetheless, several factors are now driving the United States to resume inserting regular port visits in its deterrence patrols. The most important reason is alliance management. In a context of growing threats from Russia, China, and North Korea, Washington is determined to continue calling at foreign ports to show its willingness to protect its allies from potential threats and reassure them about the US credibility and accountability. Following the arrival of the *USS Alaska* (SSBN-732) to Gibraltar in 2021, Lieutenant Commander Rotlklein made clear that the visit was in support of US national security interests in Europe and Africa and aimed to strengthen cooperation between the United States and the United Kingdom.⁴⁶ Previous visits to the United Kingdom have therefore been described as a testimony that the US nuclear force is present in the European region, an implicit statement that is probably not missed by Russia and that can be compared to the rotation of strategic bombers on the continent.

⁴³ Lars Schoultz, *National Security and United States Policy Towards Latin America*, Princeton: Princeton Legacy Library, 1987.

⁴⁴ Masashi Murano, op. cit.

⁴⁵ Justin Burke, *Flying the Flag, Beneath the Waves: Submarines in Naval Diplomacy*, <u>Thesis</u>, Macquarie University, 26 February 2021.

⁴⁶ Joseph Trevithick, "U.S. Navy ballistic missile submarine's Gibraltar visit is first in over two decades", <u>The War</u> <u>Zone</u>, 29 June 2021.



USS Rhode Island (SSBN-740), Gibraltar, 1st November 2022. Credits: US Naval Forces Europe-Africa/US Sixth Fleet Public Affairs, US Navy.

Port visits also allow for a symbolic demonstration of power and provide visibility regarding the global presence of the SSBN force. Through port visits, the United States aims to inform its adversaries of the existence of the SSBNs, of their ability to deploy around the world and to strike at any time. Visits in the Indian Ocean also show the ability to operate thousands of miles from home ports and therefore to deploy virtually in any waters of the globe.⁴⁷ SSBNs are one of the most powerful nuclear deterrence platforms and strategic assets of the US nuclear triad. Their use as a tool of strategic communication is very telling in that regard.

Another important aspect that has not attracted a lot of light is the morale of the crew. This played a crucial role in the choice to include port visits during patrols in the past and may be still important today. Foreign port visits provide an opportunity for the submarine crews to see foreign places and go outside after living for several weeks deep under the ocean. By docking for a few days, crew members are able to interact with foreign counterparts, including the representatives of allies' navies. According to retired Vice Admiral Michael Connor, "[t]he fact that a port visit is a possibility, even if it can't be delivered on every patrol, that is a big deal to the sailors. I know it was a big deal to me. It's a huge motivator. It's a reason people want to be in the Navy. It's a reason people want to be up to date on their qualifications so they're allowed to go ashore and take this time".⁴⁸ In an interview with ABC News, Ryan Shirley, a missile technician of the USS Kentucky (SSBN-737), recalled the port visit to Busan Naval Base, South Korea, as "a different change of scenery"; Petty Officer Second Class Tyler Forner labelled the port visit as a "historic and a cool experience for the US Navy submarine force".⁴⁹

Port calls are thus considered important in terms of maintaining the well-being of the crews since deterrent patrols last around 60-90 days for Ohio-class vessels; some occasional patrols

⁴⁷ Ken Moriyasu, "Stealthiest U.S. submarine makes rare appearance in Arabian Sea", <u>*Nikkei Asia*</u>, 20 October 2022.

⁴⁸ Megan Eckstein, "Ballistic missile submarines resume making foreign port calls after 12-year hiatus", <u>USNI News</u>, 22 December 2015.

⁴⁹ Martha Raddatz, Luis Martinez, "ABC News Exclusive: Inside the US nuclear ballistic missile submarine in South Korea", <u>ABC News</u>, 20 July 2023.

exceed 100 days. In recent years, the average time of a deterrent patrol was about 72 days.⁵⁰ Although overlooked, human factors have historically played a part in incidents in the US naval record. In 1976, 37 crewmen of the *USS Thomas Jefferson* (SSBN-618) were removed from the submarine due to a drug investigation.⁵¹ At the apogee of the practice of port calls, in the 1980s, mental health was a prominent issue for the Navy, with 79 suicides recorded in the US Navy in 1986.⁵² Based on this, the importance of allowing the crew a break outside the vessel between the scheduled patrols possibly influenced the decision to do port calls. This may also been seen as playing a role in keeping service in the SSBN fleet attractive to new sailors.

Conclusion

During the Cold War, and with a few notable exceptions, the United States considered port calls to be a discreet but necessary mission for operational, human, and political reasons. At the end of the Cold War, visits became rarer, concerning only a few trusted allies, before disappearing from the operations of the Navy during fifteen years. However, 2015 marked a change as we saw announcements prior to planned visits and publication of information and pictures about the stopovers. Such new practices are possibly driven by the need to provide reassurance to US allies by exposing the presence of its most powerful asset to their adversaries in a strategic environment that has deteriorated.

Even though foreign port visits by the US Navy have been irregular in recent history, it is noteworthy that no other country has used this operational, diplomatic, and political tool quite as much. At the beginning of the Cold war, the limited range of its sea-launched missiles drove the USSR to patrol far from its home bases, in the vicinity of US coasts. However, Soviet SSBNs are not known to have conducted any port visits, having limited access to friendly ports around North America.⁵³ With the introduction of longer-range missiles, Soviet SSBNs retreated closer to their coast and Moscow adopted a "strategic bastion" strategy in the late 1980s that made port calls irrelevant.⁵⁴ China's 092-class first-generation SSBNs never conducted any patrols,⁵⁵ and the six Jin-class SSBNs have just started operating continuous patrols from Hainan Island into the South China Sea.⁵⁶ The United Kingdom has reportedly made a few port calls, the latest in 2011 (according to public sources), when a British SSBN stopped in Halifax.⁵⁷ Following the London-Paris Saint-Malo Agreement in 1998, both

⁵⁰ Hans Kristensen, "U.S. strategic submarine patrols continue at near cold war tempo", op. cit.

⁵¹ William M. Arkin, Joshua Handler, <u>Neptune Paper n° 3: Naval Accidents 1945-1988</u>, Washington: Greenpeace/Institute for Policy Studies, 1989.

⁵² Ibid.

⁵³ However, diesel-electric submarines equipped with nuclear weapons may have patrolled in Caribbean waters and stopped a few times in Cuban ports (see Barry Blechman, Stephanie Levinson, "Soviet Submarine Visits to Cuba", <u>Proceedings</u>, U.S. Naval Institute, vol. 101/9/871, September 1975; Christopher Abel, "A Breach in the Ramparts", <u>Proceedings</u>, U.S. Naval Institute, vol. 106/7/929, July 1980).

⁵⁴ Hans Kristensen, "Russian Nuclear Submarine Patrols", <u>Nuclear Brief</u>, The Nuclear Information Project, 16 April 2005.

⁵⁵ Tong Zhao, "China's sea-based nuclear deterrent", <u>Carnegie Endowment for International Peace</u>, 30 June 2016.

⁵⁶ "China Naval Modernization: Implications for U.S. Navy Capabilities – Background and Issues for Congress", <u>CRS Report</u>, 15 May 2023.

⁵⁷ "British nuclear sub to visit Halifax", <u>CBC News</u>, 19 September 2011.

countries began to organise SSBN cross-visits in the 2000s.⁵⁸ Specifically, the British SSBNs, *HMS Victorious* (S29) and *HMS Vengeance* (S31), visited L'Île Longue, in France, in February 2000 and March 2007.⁵⁹ L'Inflexible (S615) made a stopover at Faslane in 2000 and 2007,⁶⁰ and *Le Triomphant* (S616) in 2012.⁶¹ It is very telling that despite the strategic reluctance to display SSBNs during missions and despite technical difficulties, the political symbol of mooring their SSBNs in a close ally's harbour seemed appealing enough to political authorities to encourage these two countries to conduct these visits.

In comparison to other countries, the United States obviously considers that the introduction of foreign port calls within patrols can play an important role, in addition to the classic use of SSBNs in support of strategic nuclear deterrence. Even though their regularity decreased post-Cold War, port visits have been more frequent since 2015 and it is most likely that Washington will continue conducting them in the future as they are seen as an effective strategy for reassuring allies and communicating strength in the "Third Nuclear Age".

⁵⁸ "Un SNLE type Triomphant accueilli par la marine britannique en Ecosse", <u>ActuNautique</u>, 5 September 2012.

⁵⁹ Laurent Zecchini, "Une collision, en toute discrétion", <u>Le Monde</u>, 26 February 2009.

⁶⁰ Laurent Lagneau, "La France marque sa présence dans le Pacifique en communiquant sur l'escale du sousmarin Émeraude en Australie", <u>Zone Militaire</u>, 11 November 2020.

⁶¹ Dougie Coull, "Le Triomphant (S616) - French Submarine", *Dougie Coull Photography*, 4 August 2012.