CASD50: A view from the other side


Summary

Part 1 of this series of three articles examined the concept of nuclear deterrence and concluded that support for it by the existing nuclear weapon States is more about international power politics than security. Nuclear weapons have not deterred aggressors against nuclear-armed States or prevented major wars, while the biggest danger of a nuclear exchange comes from accidental use through miscalculation, mistake or malfunction.

Part 2 reviews UK nuclear weapon policy applied through the Trident weapon system. It discusses dependence on the US; the costs of sustaining it into the 2050s; Continuous At Sea Deterrence (CASD); and the UK’s record in nuclear disarmament.

Part 3 will review current international and military law relating to the threat or use of nuclear weapons; the UK Government’s approach to their observance, and my consequent concern that current UK nuclear weapon policy could place the Commanding Officers of UK Trident submarines in legal jeopardy.

Is Trident independent?

The justification for an ‘independent deterrent’ is that the UK must be able to use it entirely alone without US approval. The Government makes the following three assurances:

“...decision making and use of the system remains entirely sovereign to the UK; only the Prime Minister can authorise the launch of nuclear weapons, which ensures that political control is maintained at all times.”

“...the instruction to fire would be transmitted to the submarine using only UK codes and UK equipment; making the command and control procedures fully independent.”

“our procurement relationship with the US regarding the Trident missile does not compromise the operational independence of our nuclear deterrent.”

All three beg the question as to whether the US can stop the UK firing. The reality is that UK independence exists only so long as the US permits it. The Trident Commission – an authoritative, independent, cross-party inquiry which examined UK nuclear weapons policy – in its July 2014 Concluding Report stated that if the US withdrew support, UK independence “would have a life expectancy measured in months”.

Dr Dan Plesch describes in considerable detail the extremely high level of UK dependence on the US, and the physical measures that the US could take to prevent a UK missile firing if it disapproved. The missiles are maintained by, and leased from, a joint US-UK pool in Kings Bay, Georgia. The Trident replacement submarine missile tube module and its associated launch system is a joint project to be incorporated into the design of both the Columbia and Dreadnought class SSBNs. The onboard hardware and software systems to target the missiles are US supplied and maintained. Optimally they rely on US satellite-derived
navigation and weather information for warhead guidance, albeit that less accurate fall-back systems can be used. Consequently the availability and use of the **Trident** weapon system is heavily reliant on US support and software skills. The warheads are notionally British, but US companies are deeply embedded in their design, and 70% of the company managing the Atomic Weapons Establishment (AWE) Aldermaston is US owned.\(^4\) In sum, should the US wish to prevent the UK using **Trident**, it has the ability to do so.

Plesch points out that it is not inconceivable that the US, in the last resort, would consider military action to inhibit UK use. While this might seem incredible, the US was quite prepared to do so to stop the 1956 Anglo-French Suez campaign. General Sir Charles Keightley, UK Commander of Middle East Land Forces at the time, wrote afterwards: “It was the (military) action of the US which really defeated us in attaining our object.” He complained that the actions of the US Sixth Fleet “endangered the whole of our relations with that country”.\(^5\)

In May 2019 there was a clear indication that the US is prepared to threaten reprisals on the UK if it does not comply with its wishes. The US Secretary of State, Mike Pompeo, warned that UK-US defence cooperation would be put at risk if the UK gave the Chinese company Huawei a role in operating the UK’s 5G communication infrastructure.\(^6\)

The RN, MoD officials and Ministers all understand that maintaining the UK ‘deterrent’ as an effective weapon system is entirely dependent on US goodwill. PM Tony Blair admitted in his autobiography: “…[I]t is quite inconceivable that we would use our nuclear deterrent alone, without the US.”\(^7\) At the CASD50 Conference in June 2018, hosted by the National Museum of The Royal Navy, numerous RN and MoD speakers emphasised the dependence on the US for the effective operation of the UK **Trident** submarine force.

The illusion of an ‘independent deterrent’ is presented as fundamentally linked to UK permanent membership of the UN Security Council and thus a ‘seat at the top table’ as a major power. However, as one of the victors in World War 2, the UK’s membership was established before acquiring nuclear weapons; so this is irrelevant to its nuclear status. In support of one speaker’s view at the 2019 Annual **UK Project On Nuclear Issues** (PONI) Conference that “…UK possession of nuclear weapons has always been driven by the need for strong strategic links with the US”, she pointed to four recent occasions where the UK exactly shadowed the US position: at conferences addressing the humanitarian impact of nuclear weapon use in Oslo (2013) and Vienna (2014), and the last two Nuclear Non-Proliferation Treaty (NPT) Review Conferences (2015, 2019).\(^8\)

**The Cost**

In 2018 the total financial cost of replacing **Trident** was estimated at over £43Bn.\(^9\) This makes the **Dreadnought** programme the second largest public capital procurement programme in the next decade, comparable only to the High Speed 2 railway line from London to Manchester and Leeds.

However, the full cost extends to the effect it has had on the operational capabilities of the Forces, and especially the RN. To accommodate this, the RN’s conventional capabilities have been cut to the point where it would struggle to fulfil its historic core role of providing graduated conventional maritime deterrence. The current surface escort order of battle comprises six destroyers and 13 frigates – figures which match the six ships sunk in the Falklands War and 13 sufficiently damaged to put them out of action or severely limit their use. To put this in context, Rear Admiral Sir Sandy Woodward, the Operational Commander of all
surface ships, land and air forces, stated: “During that time I lost nearly half of the destroyers and frigates I started with.”¹⁰ This was against a relatively limited enemy, engaging UK forces at long distance. Fortunately he had the numbers to absorb the high attrition rate. Similarly, on any given day only one, or possibly two, nuclear attack submarines are currently available – sometimes none – while the SSBN on CASD is a major liability requiring scarce ships and submarines to protect it as a very high value target. There is little or no provision for an attrition reserve today. Nelson famously said, “Were I to die at this moment, want of frigates would be found stamped on my heart.”¹¹ Nothing has changed.

The financial and operational burdens of sustaining Trident are so great, and increasing, that they prejudice not just Trident renewal but the entire UK submarine-based nuclear weapons programme.¹² Some argue that this could be solved by moving the cost of renewing Trident back to the National Budget where it lay prior to 2010.¹³ This would expose all the factors rehearsed here to the public, such that the political impact on the NHS and other social budgets would not be acceptable; so instead the Government has been putting more pressure on the Navy to find savings elsewhere.

The negative consequences of acquiring Polaris, and subsequently replacing it with Trident, were foreseen by two First Sea Lords. As Cdr Green pointed out in his NR article CASDS0: The Moral Component (NR 8/19), Admiral of the Fleet Sir Caspar John, First Sea Lord in 1964, on learning of the Polaris Sales Agreement, warned of the “millstone of Polaris hung around our necks” and as “potential wreckers of the real Navy.” Admiral of the Fleet Sir Henry Leach echoed his predecessor’s warning by describing the Trident programme as “the cuckoo in the nest.”¹⁴

As mentioned in Part 1, Vice Admiral Sir Jeremy Blackham, in his Foreword to Green’s book Security without Nuclear Deterrence, correctly summed up the current situation: “But the cardinal point is that the nuclear deterrent is not and cannot be a substitute for conventional capabilities. The credibility of flexible response depends upon deferring any decision to use nuclear weapons until the very existence of the nation is at stake. This requirement means that the conventional forces must be of sufficient capability to deal with any lesser threat; and that one’s potential enemy must believe this to be so.” He further emphasised that “…[i]f the conventional means at our disposal are weak, the point of transition to nuclear use may be lowered to levels at which the threat of nuclear obliteration is self-evidently wholly disproportionate… At that point it is likely that deterrence through the threat of nuclear use becomes overtly incredible…”¹⁵

Continuous at Sea Deterrence (CASD)

The Government states that “…invulnerability and security of capability are key components of the credibility of our deterrent and contribute to overall stability.”¹⁶ CASD is a hangover from the Cold War’s perceived need to be able to respond immediately if subjected to a ‘bolt from the blue’ attack from the USSR. This is why the Polaris force was kept at 15 minutes’ notice to fire. No such need has existed since 1994 when UK and Russian strategic nuclear weapons were mutually detargeted;¹⁷ and in 1998 the alert state of UK Trident was relaxed to several days’ notice to fire, and has been ever since.¹⁸

Government studies confirm that a submarine-based missile launching platform is currently the best of a range of options to deliver nuclear weapons.¹⁹ The specific financial cost
of ship, submarine and air assets employed to protect the CASD submarine cannot be obtained from MoD sources. Nonetheless, in defence of CASD it is argued that, in circumstances when an SSBN is not on patrol and an escalating threat requires it, the SSBNs are vulnerable to attack in harbour or in transit to deep water; also, the act of deployment exacerbates political tension. However, it is hard to think of a realistic current scenario in which there is a need to respond to a threat of a ‘bolt from the blue’ nuclear attack on the UK or other NATO State. Long before circumstances reach the point where nuclear retaliation is the only option, there will be time to deploy an SSBN. Indeed, the act of doing so could be deliberately used as a further essential step up a political ladder of escalation. The Minister of State for the Armed Forces made this very point in evidence to a recent Parliamentary Inquiry on authorising the use of military force. He was referring to ‘boots on the ground’, but the same logic applies to deploying naval or air assets.

UK Record on Nuclear Disarmament

The NPT was signed in 1968 and came into force two years later. Article VI states: “Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.” There have been a number of recent five-yearly NPT reviews where the UK, in lock-step with the US and France, have opposed any measures to include reference to prohibiting and/or reducing their nuclear arsenals. At the conclusion of the May 2019 Preparatory Committee for the 2020 NPT Review Conference, four of the P5 (China was the exception) objected to several recommendations put forward by non-nuclear States such as “the need for a legally-binding norm to prohibit nuclear weapons in order to achieve and maintain a world without nuclear weapons.” In consequence they were not adopted.

The Chinese delegation, on the other hand, presented a remarkable and encouraging submission to the Preparatory Committee. It included the following two significant statements:

“Countries possessing the largest nuclear arsenals bear special and primary responsibility for nuclear disarmament and should continue to make drastic and substantive reductions in their nuclear arsenals in a verifiable, irreversible and legally binding manner”; and

“China undertakes not to be the first to use nuclear weapons at any time and under any circumstances.”

The UK, on the other hand, refuses to rule out First Use. The implications of this on Trident submarine COs will be discussed in Part 3.

The lack of any significant progress in good faith towards the stated NPT goal of complete elimination of nuclear weapons drove 122 non-nuclear member States of the UN General Assembly to negotiate a Treaty on the Prohibition of Nuclear Weapons (TPNW), which was adopted on 7 July 2017. The NGO ‘International Campaign to Abolish Nuclear Weapons’ (ICAN) were awarded the 2017 Nobel Peace Prize in recognition of their outstanding work to
help generate the political will to achieve this. The TPNW requires ratification by 50 States to come into force; to date 70 have signed and 26 ratified it. While currently it is most unlikely that any nuclear-armed State will be among them, when the fiftieth State ratifies it, the Treaty’s entry into force will significantly reinforce the growing international stigmatisation of nuclear deterrence. No doubt this is why the UK boycotted the TPNW negotiations and actively opposes the Treaty.

Since the end of the Cold War the UK has taken the following nuclear disarmament steps:

- After the US and Russia mutually withdrew tactical nuclear weapons from surface ships and submarines in 1991, the UK followed suit a year later. By 1998, all WE.177 freefall nuclear bombs had been withdrawn from the RAF.
- In 1994 PM John Major and Russian President Boris Yeltsin agreed to de-target their deployed strategic nuclear weapons. Subsequently, at the 2000 NPT Review Conference, all the P5 States confirmed that they had mutually de-targeted.
- Reduction to a single nuclear weapon system (Trident).
- Reduction to a total of 220 nuclear warheads.
- The deployed SSBN’s missiles reduced to eight, with a maximum of 40 warheads.

The last three actions are taken on trust because they are not contained in any form of verifiable international agreement or Protocol and so could be reversed at will. By contrast, the basis of US/USSR disarmament negotiations has always been ‘trust but verify’.

Not only does the UK’s ‘main gate’ decision to go ahead with the Dreadnought programme and new warhead ignore the disarmament obligation contained in Article VI of the NPT, but also sends a very hypocritical signal to (for example) North Korea: “We can be trusted to own and responsibly self-regulate our nuclear weapons as a deterrent, but you cannot.”

Summary

The concept of an ‘independent nuclear deterrent’ is a political chimera. The US has the means, if it so wishes, to prevent the UK using its Trident weapon system. The financial and operational costs of sustaining Trident and the Dreadnought programme are unacceptably threatening the RN’s historic core role of graduated conventional deterrence. UK Trident missiles have been detargeted since 1994; and since 1998 the deployed SSBN has been at a relaxed notice to fire of several days. With no realistic scenario of a ‘bolt from the blue’ nuclear threat, there is therefore no justification for maintaining CASD.

For over 20 years now, the UK has failed to pursue significant nuclear disarmament in good faith and has opposed the efforts of other States seeking to ban nuclear weapons. On the contrary, it is modernising its nuclear arsenal and delivery system. Unlike China, it keeps open the option to threaten first use of nuclear weapons, with serious implications for the SSBN command teams, which will be discussed in Part 3.


11 Exclaimed in frustration after the battle of the Nile, Aug. 1, 1798, being unable to pursue the enemy for want of frigates.


15 Commander Robert Green, Royal Navy (Ret’d), Security without Nuclear Deterrence (Spokesman Books, Nottingham, 2018) Foreword p.17.


25 http://disarmament.un.org/treaties/t/tpnw