Beyond the Bilateral Context

De-alerting and the British Nuclear Deterrent

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With its Trident submarine-based nuclear deterrent, it is appropriate that the United Kingdom should be considering some of the proposed measures of de-alerting. There is, after all, some momentum behind the de-alerting concept, not just from the Canberra Commission but in a succession of reports from the Council on Foreign Relations, the Stimson Center and the National Academy of Sciences to some pointed editorial comment in leading American newspapers.1 It could be argued that the major nuclear powers have already posed a de-alerting challenge to the United Kingdom and France. In 1991, the United States and the Russian Federation both took a series of unilateral, but reciprocated, de-alerting measures that were quickly implemented, some of which affected submarine-based missile forces in both countries. And in June 1997, outlining a Russian programme of de-targeting that arose from President Yeltsin's somewhat surprising remarks at the Paris summit in May, Foreign Minister Primakov offered a negotiated process that would de-target all Russian missiles aimed at NATO countries, and then progress to the removal of all warheads from missiles, *if the United States, France and the United Kingdom did the same*.2 Some significant de-alerting measures are certainly feasible for the Russian Federation and the United States, with their large triad of nuclear forces, and given that the United Kingdom now operates its nuclear deterrent through American Trident D5 missiles on its projected four boat, nuclear-fuelled, ballistic missile submarine (SSBN) force, it could be argued that any de-alerting measures that would apply to American Trident forces (and some that would apply to Russian submarine-based forces) could also be applied to the United Kingdom.

British nuclear force posture and doctrine, however, are not merely miniature versions of those of the United States, and for a smaller power the issues that de-alerting initiatives raise are somewhat different. In the case of a power that operates a small SSBN force, de-alerting initiatives imply a high impact on the force structure and its operation, which goes beyond the confidence-building effect it would have on superpower nuclear forces. For the United Kingdom, therefore, the stakes of any de-alerting measure are higher than for the United States or the Russian Federation; and this, more than anything else, explains the attitude in London to de-alerting proposals.

In its Strategic Defence Review (SDR) published on 8 July, the British Ministry of Defence (MoD) looked extensively at its nuclear force structure and announced a number of interesting changes affecting warhead numbers as a result of its deliberations. These included a declared ceiling of 200 operational warheads and a commitment that no more than forty-eight would be deployed on each Trident submarine.3 Of necessity, some of the MoD's SDR nuclear working groups touched on certain aspects of de-alerting, but a bundle of proposed measures that could be classed as a positive 'de-alerting initiative' of the sort proposed by Blair, Feiveson and von Hippel4 were not considered as such. In the view of the United Kingdom, its strategic nuclear deterrent exists very near the margin of a minimal operational capacity, and measures of de-alerting are viewed as either largely inapplicable or potentially undermining to the whole force. De-alerting is for those powers who have a surplus of available weapons and delivery platforms, such as to offer some measure of first strike capability in extreme conditions. A decade or more ago, a great number of de-alerting measures could have been introduced into the United

Kingdom's more diverse—some would say ramshackle—nuclear inventory that would have made sense simply as the confidence-building measures they are intended to be. Since the scrapping of its last WE177 free-fall bombs from service in March 1998, however, the United Kingdom's nuclear deterrent is now entirely SSBN-based. This makes it compact, relatively cheap and the most efficient way to operate a nuclear deterrent for a country in the financial and geographical position of the United Kingdom.

But it raises a paradox—certainly in the eyes of nuclear planners—that for such a deterrent de-alerting initiatives would go well beyond being sensible confidence-building measures, and raise, instead, important questions of the deterrent's credibility that would tend to denuclearize the United Kingdom. Whether or not this might be regarded as a welcome outcome, it is certainly not what is at stake in the de-alerting debates in the United States and the Russian Federation. Indeed, in the American case the most prominent supporters of de-alerting have gone to some pains specifically to point out that a minimum American retaliatory capacity would not be undermined by a de-alerting package.5 But in the United Kingdom, the argument is that it would be.

Robert Manning has written that "Numbers are less important than removing nuclear weapons from hair-trigger status",6 but for the United Kingdom numbers are crucial. British SSBNs were stated officially to have a maximum declared warhead loading of ninety-six per boat, 'and may carry significantly fewer.'7 Now, their loading is a maximum of forty-eight, so recognizing that there was a fair amount of scope to operate a minimum deterrent at warhead numbers somewhat lower than this previously declared maximum. Insofar as reductions in warhead numbers are a measure of de-alerting (as most of the literature seems to assume), then the United Kingdom can claim to have made a significant contribution already.

There might also be scope, though presently no enthusiasm, in the United Kingdom to imitate the United States and the Russian Federation in reducing platform numbers by retiring one of its SSBNs and operating with three rather than four boats. This would represent a 25% cut in platform numbers—rather more than either of the superpowers has so far offered. In theory, a three boat force would still be capable of maintaining a SSBN on patrol all year round, but there would be no margin of error in such a configuration, and on the basis of known operational problems in the previous four boat force, it would be logical to anticipate that there might be times when the patrol sequence is broken, perhaps for significant periods.

Most significantly, at these platform and warhead numbers, the United Kingdom argues strongly that the force could, in any case, only perform in a second strike capacity, which already puts it under the threshold that most 'de-alerters' are trying to get below. Jonathan Dean puts it well when he says that, "Large-scale de-alerting would provide a practical and self-enforcing basis for no first use commitments by the weapon states."8 The United Kingdom would argue that its own force posture is, in itself, 'a practical and self-enforcing basis' that makes a first strike impossible. The principle described by Ambassador Dean has been specified in some detail by Blair, Feiveson and von Hippel in defining a 'modified alert status' for American SSBNs that would involve a package consisting of:

- the early removal to storage of warheads on those Trident SSBNs that would be retired under a START III agreement;
- the removal of weapons from its two non-operational SSBNs (and two re-designated SSBNs), all counted under START, that provide launch platforms at, or near, dockside; the announced halving of warhead numbers per existing Trident II missile from 8 to 4; the removal of the largest W88 warheads from Trident II missiles and their replacement with lower yield weapons;
- the creation of more technical barriers to the firing sequence within a SSBN so that the whole process would take several hours as opposed to minutes. (In some other de-alerting

formulations, SSBNs could be sent on patrol without their launch codes and would have to acquire them in another way when required); and

- adjustment to the radius of standard patrols so that SSBNs are kept out of firing range of the Russian Federation and would require at least twenty-four hours to get within range to launch (a call has also been made by other writers specifically for France and the United Kingdom to take their nuclear-armed submarines off continuous patrol).9

The purpose of such a package is to build confidence by making American forces clearly incapable of a first strike; subject to delays, further checks and consisting only of secure weapons that are too few to mount a credible aggressive attack, but able to launch a retaliatory strike within twenty-four to forty-eight hours after an enforced pause that would allow time for political reflection.

In the case of each element of this package, the United Kingdom can pose an important counter-argument, based on the assertion that its present Trident system represents a genuinely minimum nuclear deterrent. First, the United Kingdom is not part of the START process and, though this may change in subsequent rounds, it no longer possesses a physical surplus of warheads on platforms that are due to be retired either unilaterally or through the anticipation of a successful arms control negotiation.

Second, both of the superpowers have kept some SSBNs ready to fire from dockside, thereby providing a first strike element of their forces that could be safely retired. But the United Kingdom does not deploy any of its SSBNs in this way. Though it is true that any SSBN 'alongside' will, at some point, have operational launching capacities, this is incidental to the business of rotating patrols. With a small force designed only for a second strike, dockside readiness as part of the overall deterrent posture would breach the principle of invulnerability and would become self-defeating. In the same way, any attempt to move operational SSBNs to stay in, or close to, their dock (as the Russians have partly done for command and control reasons) would compromise the invulnerability of a small three or four boat force.

Third, the United Kingdom is in the process of reducing warhead numbers to a significant extent and after the SDR can claim to have driven the declared number down to a level that leaves no room to doubt that this is a minimum strategic deterrent. The anti-ballistic missile defences around Moscow remain the logical yardstick against which British strategic nuclear weapons are judged, since this represents the only defensive screen they might be required to penetrate in the foreseeable future. Given this yardstick, the number and configuration of weapons announced in 1998 (four boats, fifty-eight missiles, forty-eight warheads per boat, and a maximum of 200 warheads over all) can be regarded as no more than adequate.

Fourth, the United Kingdom's own warhead for its Trident SSBNs is almost certainly a close copy of the American W88 and the United Kingdom is not known to have lower yield alternatives in the strategic warhead category that could be substituted for it. Again, the United Kingdom would argue that its low number of warheads and platforms renders largely irrelevant the question of the size of warhead that it deploys.

Fifth, it would be feasible to erect more technical barriers in the launch procedure of British SSBNs, both as an assurance against accidental launch and to impose a pause in a nuclear scenario that would make a first strike with SSBNs very difficult. But British nuclear planners do not see the value of such measures in a second strike force. The scenario of an accidental launch from a SSBN is not regarded as feasible in the British case. The principle is maintained that only the British Prime Minister can authorize a launch—no one else in the government or the higher military command, under any circumstances—and such authorization is based on a highly classified procedure that, it is claimed, is at once extremely simple and yet impossible to

duplicate, imitate or frustrate. To those outside the nuclear planners in the Ministry of Defence, it is impossible to gauge how 'robust' the authorization procedure really is; but as long as planners remain as confident in the procedure as they are, there is no enthusiasm or rationale for making missile launch procedures artificially complicated as a hedge either against accidental launch, or as a mechanism to 'compel' second strike procedures on a force that is anyway incapable of a reliable first strike. The SDR has gone a little way in this direction by announcing that SSBNs will normally be on "several days notice to fire" and that this will release them for "secondary tasks such as exercises with other vessels, equipment trials and hydrographic work."10 This, however, will be impossible to verify and certainly does not imply that any technical barriers will be erected in the launch sequence. On the question of sending out SSBNs without their launch codes, the natural British response is that any procedure to acquire the codes in time of emergency would make the boat vulnerable and, since this procedure has a higher chance of being monitored, would almost certainly increase international tension and could compromise the integrity of the launch sequence itself.

Lastly, American, and to a lesser extent Russian, SSBNs have the option of patrolling out of firing range of each others' territory, though in the nature of SSBN patrols, this is almost impossible to verify. For the United Kingdom the problem is more stark, since the accident of geography means that British boats could not realistically get far enough away from their bases to make this a reality in relation to the Russian Federation. Given the more limited geographical options available to British SSBNs in their existing patrolling, the Royal Navy places great emphasis on its assessment of every patrol, using external (non-Navy) assessors to look at target sets, targeting plans, the firing chain, the patrol areas of each SSBN patrol and so on, specifically to prevent any pattern emerging that might compromise its invulnerability and to guard against falling into any technical routine that could be tracked by an adversary. For the United Kingdom, such careful 'cat and mouse' procedures are the key to operating with lower warhead numbers and taking measured risks with the availability and serviceability of SSBN hulls. In short, even if 'out of range' patrolling were geographically and operationally feasible, there would, in any case, be little motive for British planners to accept the restrictions this would pose. On the question of ending continuous patrolling, it is difficult to see what this would achieve where SSBN patrols are genuinely undetectable. British SSBNs could not remain continuously at dockside in any case, if only for training purposes, so whether boats not observed at dockside are patrolling or training could never be ascertained. And if, in time of tension, a boat disappeared from dockside, the political effect would be likely to create more tension than to relieve it.

Challenges

The de-alerting measures that have been suggested for SSBNs, therefore, cannot be applied easily in the British case. Insofar as de-alerting involves reducing warhead numbers, the United Kingdom can claim already to have made a significant contribution; insofar as de-targeting is a useful measure, the United Kingdom can point to the de-targeting agreement between the United Kingdom and the Russian Federation in 1994. And other SSBN de-alerting measures are regarded as superfluous in a force that is designed only to be capable of a second strike.

This does not mean, however, that the United Kingdom offers an open and shut case on the de-alerting issue. There are two complicating factors of a more structural nature that will affect both the de-alerting debate and the United Kingdom's presently detached stance from it.

The first is the fact that a British (or French) SSBN force that cannot be significantly de-alerted may emerge as an obstacle in any reciprocal de-alerting in which the two superpowers engage. British and French nuclear forces, by the very proximity of their patrol ranges in relation to the Russian Federation, are believed to offer Moscow a maximum of fifteen minutes reaction time in the event of any attack—barely enough even on the assumption that command and control

procedures are fully maintained and working well. The Russian Federation would be able to claim, quite correctly, that however de-alerted nuclear forces may become, Moscow will still be facing two other Western nuclear powers—albeit with second strike forces—whose warheads together still form a significant proportion of the total that the Russian Federation might anticipate having to face and whose proximity will always be at least a residual worry, whatever the United States did. Certainly, British and French nuclear postures are likely to be politically significant in Russian/American relations where de-alerting initiatives come down to marginal calculations between them. Indeed, for a worst-case-minded Russian nuclear planner, British and French "ready to fire" nuclear forces might be seen as the critical edge that would give the Western allies collectively a first strike capability over de-alerted Russian forces even with American weapons across the board down to modified alert status.

The second complication is that the United Kingdom has now declared its Trident SSBN force to be the platform for a sub-strategic nuclear capability that was previously entrusted to air and ground forces. This is problematical in a number of ways, not least in the specification of scenarios in which a sub-strategic launch would make any political sense. For the purposes of the present discussion, however, it affects de-alerting arguments in a different manner. The requirements of sub-strategic readiness will tend to keep both warhead and platform numbers higher than they would otherwise be in a minimum nuclear strategic deterrent system. Any launch of sub-strategic weapons from a SSBN would make the boat vulnerable, so it is logical to assume that it would be prudent to keep a SSBN carrying the strategic deterrent quite separate and some distance away. If this logic prevails, then a four boat force would be an irreducible minimum for a power with sub-strategic aspirations, and though strategic nuclear warhead numbers could be lowered, a range of smaller tactical warheads will presumably have to remain in existence.

More to the point, sub-strategic weapons are deployed with an eye to their possible use against a range of adversaries in a number of military scenarios—as deterrent to the use of chemical or biological weapons against British forces serving abroad; as a pre-strategic warning shot; as a weapon of major tactical destruction in a developing general war and so on. But these rationales weaken the assertion that the United Kingdom's strategic forces are only for a second strike. In many putative scenarios not including the Russian Federation, the difference between sub-strategic and strategic would be academic and it could appear to a different and smaller adversary that British nuclear forces are capable of a first strike against its own weapons of mass destruction (WMD). Though the essence of the present de-alerting debate is an attempt to get Russian and American strategic nuclear forces off their hair-trigger mechanisms, in non-superpower cases (which have not, so far, received much attention) the effect of the British's high alert mixture of strategic and sub-strategic weapons could be to encourage hair-trigger behaviour in lesser adversaries who possess WMD capacities. It was clear at the beginning of the SDR that a good deal of thinking about the relationship between strategic and sub-strategic deterrence was still to be done.11 As British nuclear planners develop their thinking about sub-strategic weapons deployed on SSBNs in the new post-Cold War context, they might find it difficult not to revisit the de-alerting issue.

Notes

1. Canberra Commission Report, August 1996, http://www.dfat.gov.au/dfat/cc/cchome.html. A round-up of other opinions is provided by Joseph Cirincione, Committee on Nuclear Policy, Reducing the Alert Levels of Nuclear Forces, 18 Dec. 1997, Stimson Center, http://www.stimson.org/ policy/projects/mem-deal.htm.
2. E. Primakov speaking in Geneva, reported by the Russian Embassy, Washington, D.C., 5 June 1997.
3. United Kingdom, Strategic Defence Review, London: HMSO, 1998, CM 3999, para. 64–67.
4. Bruce G. Blair, Harold A. Feiveson and Frank von Hippel, Taking Nuclear Weapons Off Hair-Trigger Alert, *Scientific American*, November 1997, pp. 74–81.
5. "These measures would leave almost 600 United States warheads remaining invulnerable at sea ... the United States would preserve ample capacity to deter any nuclear aggressor." *Ibid.*

6. Robert A. Manning, The Importance of Being Nuclear, *Foreign Policy*, no. 109, 1997–98.
7. First articulated in 1993 by the Defence Minister at the time, Malcolm Rifkind, in The Role of Nuclear Weapons in UK Defence Strategy, *Brassey's Defence Yearbook 1994*, London: Brassey's, 1994, p. 30.
8. Ambassador Jonathan Dean, *Next Steps: Dealerting, No First Use and Confidence-Building Measures*, Submission to the Preparatory Committee for the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, New York, 1997.
9. BASIC Publications, *Removing the Nuclear Hair-Trigger: A Priority for the NATO-Russia Joint Council*, Summit Briefing Paper 97.5, 4 July 1997.
10. *Ibid.*, SDR, para. 68.
11. See the evidence of Richard Hatfield to the House of Commons Defence Committee in Defence Committee, *The Strategic Defence Review: Minutes of Evidence*, HC138-i, 30 July 1997, p. 17, para. 180.

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