Navy study looks at tactical nuclear role for Trident

By Severin Carrell 8/5/92

DEFENCE ministers may consider giving the Trident missile system more limited military uses after a recent Royal Navy study explored giving Trident a tactical nuclear role with a substantial reduction in the number of warheads.

One naval analyst said yesterday: "That there are papers going around the Ministry of Defence [on this option] goes without saying ... it must be a very strong possibility" within overall reviews of military strategy after the collapse of the Soviet Union.

He added, however, that such a study was at a low level within the defence decision-making process and would not have reached ministerial level. It would be a logical issue to discuss within an over-all assessment of military needs.

According to a report in *Jane's Defence Weekly*, the navy study, which ended late last year, examined arming each Trident missile with only one tactical nuclear warhead instead of a full complement of up to eight independently targetable warheads.

The magazine said the study was driven by a need to broaden Trident's role with the end of the Cold War, which provided the chief rationale for the system; the need to replace WE177, Britain's out-moded free-fall nuclear bomb; and by the increasingly tight spending constraints being imposed on the Government as a whole.

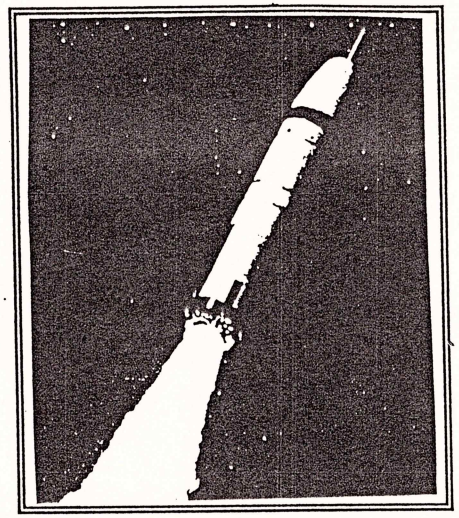
An MoD spokesman would neither confirm nor deny the magazine's report last night. He said: "Trident is a strategic system. As far as our sub-strategic needs are concerned, we're looking at options for the replacement of the WE177. Obviously, we can't prejudge the outcome of these studies."

Naval supporters would argue that Trident, as a tactical weapon used within regional rather than global conflicts, offers extremely precise targeting, and, unlike air-borne attacks, stealth and invulnerability from reprisal.

Any review of the military application of Trident would provoke fierce controversy within Westminster, arms control groups and the Royal Air Force, particularly if it came to replace the tactical nuclear missile (TASM) being sought by the RAF.

Unless accompanied by strides in arms control, giving Trident a tactical role would severely dent attempts to limit the spread of nuclear weapons and, with Trident's life-time cost estimated at more than £33 billion, could undermine the Government's political credibility.

Tactical Trident in Historical Context



A Note on the British Deployment of Nuclear Weapons in Crises - with particular reference to the Falklands and Gulf Wars and the purpose of Trident

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A discussion paper - not for publication in its present form, but comments would be welcome.

Introduction

This note is a preliminary discussion of a topic which may be worthy of more extensive study - the role of the British Trident nuclear system in the post-Cold War world. It is prompted by indications of an increasingly versatile role for Trident, especially with the likelihood of it being fitted with a choice of warheads and eventually forming the primary, and conceivably only, nuclear system deployed by Britain (1). The "all-singing, all-dancing missile" and "a missile for all seasons" are two of the common epithets used by the current generation of anti-nuclear campaigners.

Plans to fit a small warhead to Britain's Trident missile system will substantially improve Trident's potential for a tactical (or "sub-strategic") role. This was apparent recently in an after-dinner conversation with an admiral at a defence studies conference when he discussed in great detail and with enthusiasm the advantages that a suitably-equipped Trident system would have over RAF Tornado nuclear-armed strike aircraft in the event of Britain being involved in a crisis in, for example, the Middle East, with a nuclear-armed state.

He thought it eminently practicable to use Trident to fire a low-yield demonstration shot or, if necessary a pre-emptive strike against an opponent's nuclear facilities. This could be done using a *Vanguard*-class Trident submarine on patrol in the Eastern Atlantic, whereas a similar operation involving Tornado aircraft would have at least two basic difficulties. They would have to fly out of RAF Akrotiri in Cyprus or some other regional base, and this might not appeal greatly to the government of the country concerned. Furthermore the operation would require a number of aircraft and nuclear bombs to ensure completion of the task and there would inevitably be a risk of loss of nuclear-armed aircraft to anti-aircraft fire.

This discussion and other promptings does seem to make it relevant to examine British attitudes to nuclear policy as they apply to the independent deployment and potential use of nuclear weapons in time of crisis. This is particularly interesting in the run-up to the review of the Non-Proliferation Treaty next year and in the context of Britain deploying the Trident system, likely to be the main nuclear system for the next 30 years. It is also relevant to the current debate on post-Cold War nuclear strategy in France.

This area of study has not been the subject of much published research, most of the literature on British nuclear policy concentrating on strategic systems in an East-West context. There is a sparse but occasional coverage of out-of-area strategy and tactics, usually treated as a side-issue in studies concentrating on the strategic context, but there have been some interesting (and copiously referenced) recent studies by activist researchers based outside the academic and military mainstreams. (2)

In assessing the role of British nuclear weapons in non-Cold War crises such as the Indonesian confrontation and the Falklands and Gulf Wars, there is a troublesome methodological problem in that interviews have often to be on a non-attributable basis because of concern over career and/or pension prospects, (3) a problem familiar to researchers on the security and intelligence services. Furthermore, sorting fact from rumour is notoriously difficult, and it is obviously desirable to have a number of independent sources for reference. This is not always possible. Fortunately, this may be less of a problem in the future as the abating of East-West tensions may make it easier for retired participants to discuss their concerns more openly.

Minimal Deterrent or Warfighting Weapon?

There is also a recurring problem of public (and academic) perception in talking about the possibility of Britain using tactical nuclear weapons, whether during the Cold War years against the Warsaw Pact or in a non-Cold War crisis, or in the future. Most people, apart from those professionally involved, tend to believe that nuclear weapons are simply an "ultimate" deterrent and that there is really no possibility of their being deployed for intended use in anything short of World War III. It follows, in this view, that the ending of the Cold War means that small-scale nuclear use must be quite irrelevant.

This is a common but somewhat flawed view. The major nuclear powers have long trained to use a wide variety of nuclear weapons in time of war, there have been many different kinds of targeting plans and Britain has been heavily involved in NATO nuclear war-fighting planning. Moreover, Britain has long deployed nuclear weapons outside the NATO area and specifically in several conflicts involving non-nuclear powers, an indication of the presumed value and possibly useability of nuclear systems in a military confrontation falling far short of global war.

While this has not figured much in the literature in relation to Britain, there has been some interesting work done in the US context, notably a study which lists numerous occasions in which US strategic forces were involved in time of crisis. (4)

Before looking at the Falklands and the Gulf, it is worth digressing into the area of nuclear war-fighting by mentioning NATO's tactical nuclear posture as it existed in the early 1980s. This will be "old hat" to some readers, but not to others, so bear with me. It is worth saying, incidentally, that it now appears that, as might be expected, the Warsaw Pact had a very similar outlook and attitude to the use of tactical nuclear weapons if an East-West war broke out in Europe.

NATO Nuclear Planning

At the height of the Cold War ten years ago, NATO, like the Warsaw Pact, had several thousand nuclear weapons in Europe. In NATO's case, these included Cruise, Pershing II and Lance missiles, bombs, artillery shells and mines. Most were controlled and owned by the United States which allowed allies such as West Germany, Belgium, Holland, Italy and Britain to operate them under a dual control system. Britain also had its own nuclear weapons, and France had quite separate nuclear forces which were not integrated into NATO planning.

Apart from Polaris, Britain's nuclear forces were many and varied (5). They included US-controlled nuclear depth bombs carried by Nimrod anti-submarine aircraft, and US-controlled artillery shells and Lance missile warheads for BAOR units in Germany. In addition, the RAF had well over 100 British-made tactical nuclear warheads known as the WE177. These were carried principally by the Tornado, Jaguar and Buccaneer strike aircraft.

Finally, the Royal Navy had WE177 nuclear weapons for its Sea Harrier jump jets operating from small aircraft carriers, and an anti-submarine nuclear depth bomb variant of the WE177 which could be carried by helicopters deployed on most of the navy's destroyers and frigates. Britain was thus a significant actor in the NATO nuclear scheme of things.

Until the late 1960s, NATO's nuclear policy, codified in a document MC 14/2, was known as the "tripwire" policy. This envisaged a massive nuclear response to any initiation of war by the Soviet bloc. This policy had developed at a time when NATO states had a huge nuclear superiority over the

Soviets, but it became increasingly untenable as they developed their own wide-ranging nuclear forces.

As a result, NATO's doctrine of "flexible response" was introduced, codified in document MC 14/3 of 16 January 1968, the *Overall Strategic Concept for the Defence of the NATO Area.* This covered general conventional and nuclear policy, with the details of the latter developed by the Nuclear Activities Branch of Supreme Headquarters, Allied Powers in Europe (SHAPE), at Mons in Belgium. This group developed the nuclear components of NATO policy, setting out plans for flexible response in a document entitled *Concepts for the Role of Theatre Nuclear Strike Forces in Allied Command Europe,* completed initially in 1970 but subsequently updated.

Flexible response envisaged two levels of nuclear employment, selective use and general response. The former involved the use of a limited number of nuclear weapons, mostly low-yield warheads, against Warsaw Pact troops and their immediate logistic support, in the belief that they could be "stopped dead in their tracks" so to speak. Numbers of weapons might be limited to a handful, little more than demonstration shots, or might number up to one hundred depending on circumstances. (6)

I recall going on one of the British Atlantic Committee briefing visits to NATO in the late 1980s and talking to a German civil servant attached to NATO's Nuclear Planning Group. He spoke with considerable enthusiasm about the feasibility of using very small numbers of air-burst nuclear detonations, perhaps as few as five, which would cause very few casualties but would demonstrate to the Soviets that NATO was serious. He did seem to believe that a limited nuclear war could be fought and won, and would not escalate to an all-out nuclear exchange.

In taking this view, he was reflecting official thinking, expressed in UK Ministry of Defence evidence to a select committee:

> The fundamental objective of maintaining the capability for selective sub-strategic use of theatre weapons is political - to demonstrate in advance that NATO has the capability and will to use nuclear weapons in a deliberate, politically-controlled way with the objective of restoring deterrence by inducing the aggressor to terminate his aggression and withdraw. The role of TNF is not to compensate for any imbalance in conventional forces. The achievement of conventional parity could have very positive consequences for the Alliance's strategy of deterrence. But it would not, of itself, obviate the need for theatre nuclear forces. (7)

Selective use would thus be employed in the belief that Warsaw Pact forces would cease their aggression and withdraw, but in the event of escalation, then NATO's second strand of nuclear policy, a more general nuclear response, would come into use. This would involve hundreds or even thousands of nuclear weapons being used against a wide range of targets in Eastern Europe and the western part of the Soviet Union. Such a scenario would involve co-ordinated action with US strategic nuclear weapons, in other words, general nuclear war.

In the years of heightened Cold War tension in the early 1980s, with the hawkish policies of Reagan and Thatcher very much in the ascendency, two further developments caused concern. One was an indication that NATO's first-use of nuclear weapons would involve immediate demonstration shots, not just against Warsaw Pact forces engaged in conflict against NATO forces, but also against targets in the western Soviet Union itself, using the new and highly accurate Pershing II ballistic missile. This provoked fears that NATO first-use would quickly be seen by Soviet planners to threaten their core interests, with unpredictable effects.

The second development was increasing evidence that NATO was adopting more aggressive tactics, including concepts such as deep strike, follow-on forces attack and AirLand battle, all concerned in different ways with taking a war deep into Warsaw Pact territory at a very early stage in a conflict.

Added to this was an apparent commitment to early first use of nuclear weapons. This was demonstrated by the Supreme Allied Commander, Europe (SACEUR), General Bernard Rogers, describing the nature of his orders in an interview published early in 1986 (8):

> "Before you lose the cohesiveness of the alliance - that is, before you are subject to (conventional Soviet military) penetration on a fairly broad scale - you will request, not you may, but you will request the use of nuclear weapons". (Emphasis in the original)

The nuclear archaeology of the Cold War is a burgeoning industry for historians and we now know what was long presumed, that the Warsaw Pact had broadly similar policies involving the early first use of nuclear weapons in a war with the west. The opposing sides were thus locked into a somewhat unstable nuclear relationship. We also know that in November 1983, the Soviet Union misread a routine NATO nuclear planning exercise, "Able Archer" as a preparation for war, and came close to panicking in a manner which caused NATO to rethink its nuclear exercise process. (9)

Incidentally, nuclear archaeology is also tending to show that a number of other events, including the Quemoy/Matsu crisis with China in the 1950s, the 1962 Cuban missile crisis, and the 1973 Yom Kippur/Ramadan were all rather more serious nuclear crises than appeared at the time. In the Cuban missile crisis, for example, it now appears that the Soviet Union already had some tactical nuclear weapons in Cuban before the crisis erupted, so an attempted US invasion could have resulted in nuclear use. Furthermore, during the crisis, US fighters were airborne from bases in Alaska equipped with Genie air-to-air nuclear-tipped missiles. In nuclear terms, the Cold War was not as cold as it seemed, and many people "in the know" would have learnt to live with the possibility of nuclear use.

Apologies for this long digression, but it is intended as a reminder that nuclear policy has long gone far beyond the notion of ultimate deterrence to embrace planning and training for limited use of nuclear weapons in the belief that a nuclear war with a nuclear-armed opponent could be limited and successful. This is only partly relevant to the present discussion but is also worth taking into account when considering questions of nuclear taboo in relation to the non-use of nuclear weapons since Nagasaki.

Some aspects of British tactical nuclear deployments

It is also worth mentioning that Britain has long deployed nuclear weapons outside of Europe, and has, in particular, a history of forward-basing them in the Middle East and South East Asia and also on Royal Navy warships (10). In the mid-1960s, there were regular detachments of V-bombers to the Far East Air Force base at Tengah in Singapore, including detachments of nuclear-armed planes. From 1961 to 1969, nuclear-capable Canberra bombers and nuclear weapons were based at RAF Akrotiri in Cyprus in support of the Central Treaty Organisation (CENTO). They were replaced by Vulcan bombers which were based there until 1975.

Deployments in the Far East were of particular interest because they followed a period of debate in the 1950s in which a British role in a limited regional nuclear war was considered. According to Navias, the Chiefs of Staff Committee (COSC):

> "...contended that a communist instigated conventional war in the region would most likely break out if China committed an act of aggression against SEATO or Hong Kong, or as a result of conflict between the USA and China over the offshore islands and Formosa, or as a result of UN defensive action in Korea or elsewhere. Significantly, they were adamant that nuclear weapons could be used without the risk of such a conflict escalating to the strategic level with exchanges of nuclear and thermonuclear weapons taking place between the superpowers, China, and Britain. There was therefore concurrence in the COSC that nuclear weapons should be used in limited wars in the Far East." (11)

These 1956 discussions pre-date Chinese acquisition of nuclear weapons a decade later, but formed a context for the later consideration of the deployment of nuclear forces in the Indian Ocean to provide a nuclear guarantee for India against China. The 1965 Defence White Paper did not specifically announce such a deployment but implied the need for reassurance of regional non-nuclear powers and this was widely assumed to involve regional nuclear deployments:

> "Although it is nowhere specifically stated, the plain indication of the White Paper is that Britain intends to keep an independent nuclear force outside the NATO area, composed in the first place of V-bombers plus carrier-based aircraft. The main purpose of this force would be to provide a nuclear guarantee to India and other Commonwealth countries which fear Chinese (and, possibly in the future, Indonesian) nuclear blackmail and which might otherwise, in some cases, want to make their own nuclear bombs." (12)

Mention has already been made of the Royal Navy's nuclear-capable forces, which, in the 1980s, comprised WE-177 nuclear bombs for the Sea Harrier operating from any of three *Invincible*-class carriers, and the nuclear-depth bomb variant of the WE-177 carried on ASW helicopters. In this context, though, it is worth noting that naval nuclear deployments long pre-dated these weapons.

Prior to the deployment of nuclear-armed Sea Harriers from 1980 to 1992, there had been a two-year period when Britain had not had nuclear-capable fixed-wing aircraft regularly operating from aircraft carriers. Prior to 1978, however, there had been a 16-year period from 1962 in which Scimitar and Buccaneer aircraft had operated in a nuclear-capable role on carriers such as *Eagle, Centaur, Victorious, Hermes* and *Ark Royal.* There has been little open literature discussion of the roles of these forces, either within the NATO context or elsewhere.

The history of "out-of-area" deployment of nuclear weapons by Britain is matched by various indications of a willingness to use them in limited conflicts. As Milan Rai writes in his recent paper, *Tactical Trident*, (13):

> "Sir John Slessor, Marshall of the RAF in the 1950s, and one of the most influential military theorists of the period, believed that "In most of the possible theatres of limited war...it must be accepted that it is at least improbable that we would be able to meet a major communist offensive in one of these areas without resorting to tactical nuclear weapons,"... Official statements reflect a similar approach. The 1956 Defence White Paper remarked that while "the consciences of civilised nations must naturally recoil from the prospect of using nuclear weapons...we have to be prepared for the outbreak of localised conflicts short of global war. In such limited wars the possible use of nuclear weapons cannot be excluded." "

Rai goes on to relate the circumstances of nuclear deployments in South East Asia in the early 1960s, arguing that this represented, in part, a low-level nuclear threat to Indonesia. He points to the deployment of strategic nuclear bombers to Singapore in December 1963 as an implicit threat to the Jakarta authorities. There appears to be some support for this in the views of the historian of the Far East Air Force, Air Chief Marshall Sir David Lee regarding the V-bomber deployment to Singapore, "their potential was well-known to Indonesia and their presence did not go unnoticed" (14). He also commented, "It is clear beyond doubt that the knowledge of RAF strength and competence created a wholesome respect among Indonesia's leaders, and the deterrent effect of RAF air defence fighters, light bombers and V-bombers on detachment from Bomber Command was absolute."

In the context of the Indonesian confrontation, it could be argued that Canberra and Victor deployments to Singapore represented a conventional force deterrent, but the dual-capable nature of the planes at least allowed the British to imply a greater potential, and this follows a pattern established by the United States as early as 1946.

It is against this background of out-of-area nuclear deployments by Britain and long-term British involvement in NATO nuclear planning for "flexible response" that it is appropriate to discuss the Falklands and Gulf deployments.

Nuclear Weapons and the Falklands War

At the outbreak of the Falklands War in 1982, Britain's naval tactical nuclear weapons comprised free-fall bombs and depth bombs. The two operational aircraft carriers, *Invincible* and *Hermes*, carried both kinds of weapon, and over 40 destroyers and frigates could carry depth bombs for helicopter-delivery. At that time, it was acceptable for any of the warships to carry nuclear weapons in peace-time. After the Falklands War, only the carriers and Type-22 frigates were certified for peacetime nuclear deployments. The total number of naval tactical weapons involved was small, perhaps 25 nuclear depth-bombs and a similar number of gravity bombs, although the RAF also had over 100 of the latter.

When Argentina invaded the Falklands at the beginning of April 1992, a major naval task force was quickly assembled and some elements of it set sail from Britain within four days of the invasion. Others, including the destroyer *HMS Sheffield*, disengaged from a NATO exercise, *Spring Train*, in the western Mediterranean, and headed for Ascension Island to link with the task force. The then Defence Minister, John Nott, specifically stated that warships were being deployed with their full range of weapons, which implied a nuclear capability. The precise phrase he used in the Falklands debate on 3 April, 1982, was:

> "sailing under wartime orders and with wartime stocks of weapons."

When defence ministers were subsequently questioned on whether nuclear weapons were being deployed, they fell back on traditional Whitehall phraseology which gave the impression that there was no risk of nuclear escalation without actually saying that there were no weapons deployed. Thus, Minister of State Lord Trenchard replied to a question on 19 April:

> "There is no question but that nuclear weapons are not applicable to the current situation in the Falkland Islands area."

Six days after the initial elements of the task force left Britain, *The Observer* reported that nuclear weapons were almost certainly embarked on some ships (15), and that paper's defence correspondent,

Andrew Wilson, later said that he talked personally to one frigate captain who was not prepared to leave his base and head for a war zone without nuclear weapons on board. (16) Other sources indicate that *HMS Sheffield* and other ships from *Spring Train* also went south carrying nuclear weapons. Wilson's write-up in *The Observer*, referred to the Task Force thus:

> "It is almost certainly carrying tactical nuclear naval weapons - atomic depth charges carried by Sea King helicopters and free-fall bombs carried by Harrier jump jets - as part of its NATO equipment.
>
> Although it would be irresponsible at this stage to suggest that there is the remotest intention of using them against the Argentines, some defence experts (and not only Mr Tony Benn) are concerned at what might happen if the conflict were to escalate and bring in more powerful naval forces."

Former Navy Minister, Keith Speed MP, who had resigned the previous year in protest at cuts in the navy budget later said that he:

> "would have been astonished if those ships, from exercise Spring Train, had not been carrying nuclear weapons." (17)

According to the Labour MP, Tam Dalyell, there was consternation in the Ministry of Defence when it was appreciated that a very large proportion of the Royal Navy's entire stock of nuclear weapons was heading for a potential war zone. While there might have been concern over possible escalation to nuclear use, there was certainly concern over the loss of such weapons in a conventional conflict. Senior staff at the Ministry of Defence were reportedly worried about losing any of the navy's relatively small stock of tactical nuclear weapons.

As Dalyell put it,

> "There was a tremendous row about this inside government and Whitehall. As a result, some of the nuclear weapons were lifted back by helicopter and other boats before the Task Force reached the Western Approaches. The rest stayed onboard". (18)

According to a member of the Royal Fleet Auxiliary ,a number of the nuclear weapons which had got as far as Ascension Island on Task Force ships were off-loaded from warships on to the *RFA Regent*. While this ship continued down to the South Atlantic carrying the tactical nuclear weapons on board, it was kept away from the main zone of conflict for most of the war, unlike its sister ship *RFA Resource*, which was forward-based, including a period in San Carlos Bay at the time of the amphibious landings.

As far as tactical nuclear weapons are concerned, it thus appears that a number were deployed on Task Force ships sailing from Britain but these were, at least in part, kept away from the main combat area, although still available for use *in extremis*. It is not known whether this deployment pattern also applied to nuclear weapons on the two carriers, *Invincible* and *Hermes*.

What then of *Sheffield* and the other ships from Spring Train which headed directly south? According to *The Times*:

"Some British ships in the South Atlantic during the Falklands campaign were carrying nuclear anti-submarine weapons.

Whitehall sources said that some of the frigates which went to the Falklands had been involved in exercises in the Mediterranean, and would have been routinely carrying anti-submarine nuclear bombs. Because they were diverted directly to the South Atlantic there would have been no opportunity to offload the weapons." (19)

There were many reports, but really amounting to no more than rumours, that *Sheffield* had a couple of WE-177 nuclear depth bombs on board when hit by the Exocet on 4 May, 1982. Some reports surfaced in the press, and others spoke of *HMS Coventry*, sunk on 25 May, also having nuclear weapons on board. There was further speculation that the extensive salvage operations conducted on the wrecks of *Coventry* and *Sheffield* were concerned with recovering these weapons.

With regard to *Coventry*, it is probably because it sank so quickly after being bombed, a matter of less than 30 minutes, that it was not possible to destroy some advanced equipment, possibly including code systems, and it was these which were retrieved from the sunken ship, which had not been carrying nuclear weapons. The case of *Sheffield*, though, may be different. There is some evidence to indicate that it was carrying nuclear depth bombs (20) but this is largely circumstantial and has been strongly denied in some circles.

One other aspect of British deployments in the Falklands is relevant. One of the earliest actions against Argentine forces was the bombing of the runway at Port Stanley airfield by a single Vulcan bomber operating from Ascencion Island, nearly 4,000 miles away. This very long-range and arduous operation involved multiple air-to-air refuelling of an aircraft carrying conventional HE bombs.

The purpose was to disrupt the runway, but a raid by one plane was highly unlikely to cause sustained damage, as indeed proved to be the case. The Vulcan raid, though, did demonstrate that Britain had the capability to deploy nuclear-capable aircraft over a range which brought almost the whole of Argentina within reach.

Implications

Using the more reliable sources, it would appear that tactical nuclear weapons were deployed on Task Force ships leaving Britain and also on some of those diverted from exercise *Spring Train*. Most, but probably not all, were removed from deployment in the war zone, but primarily because there were fears that too many of the navy's small stock would be lost. Even those kept back from the immediate war zone remained readily available during the conflict.

It should be added, though, that the utility of these particular nuclear weapons was somewhat limited, in a purely military sense, in the context of the Falklands War. Argentina had two small quiet German-built Type 209 submarines which caused the Royal Navy some concern, but the latter's tactical nuclear depth bombs were designed to be used against large and thick-hulled Soviet submarines operating in deep open water, not against small submarines in fairly close proximity to Royal Navy warships, though at least one naval officer still felt they were sufficiently useful to insist on taking them.

Similarly, the Sea Harriers on the aircraft carriers may have been capable of delivering nuclear gravity bombs, but targets on the Falklands were out of the question and targeting anything on the Argentine mainland would involve difficult problems of range and survival for the aircraft. Against that,

Argentina did have two large surface warships, the aircraft carrier *25th May*, and the heavy cruiser, *General Belgrano*. The former took little part in the war and the latter was sunk by conventional torpedoes, but these aspects were not known to planners prior to the actual war.

What the whole affair does show is that elements within the navy were readily prepared to see tactical nuclear weapons deployed directly in a war zone but that, to some extent, wiser counsel prevailed and at least some were kept at a distance. This was not, however, the case with Britain's other naval nuclear system, the strategic Polaris missile.

The Polaris Question

At the time of the Falklands War, Britain had four Polaris submarines, sufficient to keep one on patrol in the North Atlantic at all times, with a second available for possible additional deployment. The regular patrol was aided by one or two nuclear-powered hunter-killer submarines for protection, a policy known as deterrence support. The Polaris submarines themselves carried torpedoes but these were essentially for self-defence.

In the two years after the war, leaks from several highly-placed sources indicated that a Polaris missile submarine had been diverted to a patrol area in the mid-Atlantic several thousand miles north of the Falklands but nevertheless one which allowed it to operate within missile range of Argentina.

Because of the significance of this deployment, it is worth saying a little about the nature of these leaks as the story has been subject to some ridicule by some sectors of the defence establishment. Dalyell's initial source, shortly after the Falklands War, was a senior Conservative MP with an interest in defence matters and close links with the Ministry of Defence. Dalyell later had it confirmed to him by a senior officer in the Polaris fleet who retired after the Falklands War. (21) I was similarly informed by a retired senior Ministry of Defence civil servant and am aware of other sources. (22)

Duncan Campbell of the *New Statesman* was informed of classified signals exchanged between London and the British Embassy in Washington concerning the deployment. He and John Rentoul published this information as part of the "Belgrano Papers" issue of the magazine shortly after Clive Ponting was arrested for a quite different matter - leaking details of the attempt by the government to mislead a House of Commons Select Committee over the *Belgrano* sinking. As they put it (23):

"One well-placed political source has already revealed to Tam Dalyell that a Polaris submarine was sent to the South Atlantic. Dalyell was informed that the submarine went as far south as Ascension; the likely target for a threatened or demonstration nuclear attack was said to be Cordoba, northern Argentina. The nuclear threat might have been used if any of the task force's capital ships - one of the carriers or the troop ship *Canberra* - had been destroyed in a missile attack. The Polaris deployment was said to have been ordered in the wake of the sinking of *HMS Sheffield*, after ministers had to confront the possibility that Argentine air superiority and Exocet missiles could mean the military defeat of the British task force and the rapid political extinction of the Thatcher government.

The *New Statesman* has been able to confirm that a Polaris submarine was indeed deployed to this position. Details of the deployment are given in a series of highly classified telegrams sent to the British Embassy in Washington."

This report of the Polaris deployment formed one part of a much longer article which was primarily

concerned with the *Belgrano* affair and included publication of a classified document by the magazine. It was these aspects of the story which captured most media attention, although the Polaris deployment did figure fairly prominently.

One interesting indication of its veracity came in the response of MoD officials to press enquiries immediately after the magazine's publication. According to MoD sources, there might well have been a Polaris submarine deployed to the South Atlantic, but this was because the navy was short of hunter-killer submarines and a Polaris missile submarine can serve this function (24).

Such an explanation is little short of incredible - while Polaris submarines do have a limited hunter-killer capability, this is for self-defence and they are normally escorted by dedicated hunter-killers. To risk one of Britain's four strategic missile submarines in a war zone in this matter would have been hugely risky. Since Britain needed four Polaris submarines to maintain at least one on patrol at all times, risking a submarine would have meant risking the entire Polaris capability.

There is another piece of supporting evidence which also relates to hunter-killer submariners. Reports from ex-servicemen involved in the Falklands War have made it clear that there was a severe shortage of hunter-killer submarines to form a protective screen around the Task Force. Whereas the MoD gave an impression that five such submarines were available, for much of the Falklands War only two, or at most three, were actually deployed. There are indications from MoD sources that the shortage was due to the use of two hunter-killer submarines to act as protective escort to the Polaris missile submarine deployed in mid-Atlantic to cover Argentina.

Official confirmation of the Polaris deployment will probably have to wait at least for the 30-year rule, but the copious leaks are reasonably conclusive. Campbell and Rentoul are probably right in their comment that this extreme measure, deployment of a substantial nuclear system against a non-nuclear power, was in the context of possible defeat of the Task Force and consequent collapse of the Thatcher government. Extreme circumstances appeared to justify extreme measures.

The Gulf War

The most recent deployment of British tactical nuclear weapons in time of crisis appears to have been during the Gulf crisis and war of 1990-91. Following the Iraqi invasion of Kuwait in August 1990, and in the run-up to the war itself, which commenced on 16 January 1991, there was considerable concern over possible use of chemical weapons by Iraq against coalition forces. A number of western political sources hinted at a nuclear response to any substantial Iraqi CW use, and it was widely assumed that the routine equipping of US warships, especially the nuclear-powered aircraft carriers, at least gave the US a nuclear-weapons capability in the immediate vicinity of Iraq.

In Britain, in the weeks leading up to the war itself, there were a number of indications of a willingness to escalate to nuclear use, although most of these came from non-official sources. Even so, there were some quite clear hints from government sources. The then Minister of Defence, Tom King, was interviewed on LWTV's *Walden Programme* on Sunday 11 November 1990. Questioned on a response to CW use against coalition forces, he replied:

> "Now if that happened, I have made it clear from day one - I've not said what, ere, the United States' position is exactly the same - that it would have very, very grave consequences indeed for Iraq. And I say that quite clearly. I am not going to be specific, and I'm not going to give any indication as to what form that might take, er, we don't give him that comfort of knowing what might or might not happen, but it

> would be the stupidest thing that he could do, and I want to make that absolutely clear.

Junior defence ministers Archie Hamilton also spoke of massive retaliation against Iraq if chemical weapons were used (25). Since Britain did not have chemical weapons, this was assumed to refer to a nuclear response.

The clearest indication of British willingness to use nuclear weapons came in a report in *The Observer* on 30 September, 1990, quoting a senior army officer attached to the 7th Armoured Brigade which had begun to leave for the Gulf the previous day. He confirmed that an Iraqi chemical attack on British forces would be met with a tactical nuclear response.

The deployment of nuclear weapons to the region by Britain presented difficulties. US nuclear weapons were deployed at sea, or at existing bases in the region such as Incirlik in Turkey. Britain had strike aircraft in Bahrein and Oman, but basing nuclear weapons in these states might not have been acceptable, and this could also apply to RAF Akrotiri in Cyprus.

The alternative was on board ships, but it appeared that the only Sea Harrier-capable ship despatched to the area was *HMS Ark Royal*, and this ship did not pass through the Suez canal during the war, being restricted to the Eastern Mediterranean. Its Sea Harriers were not, therefore easily within range of Iraqi territory should Britain have decided to undertake or take part in nuclear operations against Iraq.

It appears, though, that a rather remarkable alternative option was planned and may well have been implemented. In addition to the three Sea Harrier-capable aircraft carriers in the Royal Navy such as *Ark Royal*, there is just one other ship which can deploy these planes, the Royal Fleet Auxiliary *Argus*. *RFA Argus* is a large 28,000-tonne auxiliary vessel which is officially classified as an aviation-support ship, and converted in the mid-1980s from the container ship *Contender Bezant*. It was originally used as an aircraft delivery ship during and after the Falklands War and was purchased by the MoD for conversion at Harland and Wolff, Belfast, in 1984, entering service in 1987. It can carry up to 12 Sea Harrier aircraft and also Sea King helicopters.

RFA Argus was developed to replace a much older and smaller aviation support ship *RFA Engadine*, but it is a very much more substantial ship and, when it entered service it came close to being an additional aircraft carrier for the navy, although only lightly armed and used also for several other purposes.

Argus was deployed to the Gulf during the crisis, officially as an auxiliary ship in the role of forward casualty evacuation point. The impression was actually given to the media that *Argus* was a hospital ship, but it was never designated as such (eg. red cross and white paint) and was militarily operational during the war. Although its prime use was for receiving British casualties, of which there were fortunately very few, it also carried a wide range of stores.

Prior to the actual war, detailed planning was done to make it possible for the ship to be equipped with tactical nuclear weapons, (26) although I have not yet been able to get confirmation that they were actually deployed to the Gulf.

If so, it would have represented a direct British nuclear-armed presence in the war zone. How the weapons would have been deployed, had the decision to do so been taken, is not clear. One option would have been to use Sea Harriers, another would have been to air-lift the nuclear bombs to a Tornado-operating base on the mainland. It is assumed that nuclear use would have been restricted to

a response to large scale Iraqi CW attacks on coalition forces requiring tactical nuclear use against Iraqi artillery and missile concentrations. US or British free-fall nuclear bombs on strike aircraft such as the F-15, F-18, Tornado or Sea Harrier would have been considered the appropriate means of delivery.

Even without *Argus,* Britain would have had a small nuclear capability in the Mediterranean, and could have moved nuclear bombs for Tornado strike aircraft from Britain or Germany short notice. In the event, large-scale use of CW by Iraq did not materialise.

Relevance to Trident

In both the Falklands and Gulf Wars, Britain had the means to escalate to nuclear use, as it apparently had had during the much earlier Indonesian confrontation. This should not come as any great surprise, since it forms part of a continuum in military thinking about nuclear weapons which certainly has parallels in the US and the former Soviet Union, and is clearly represented in NATO's planning for early first use of nuclear weapons.

This continuum has, in a sense, three phases. The first was in the 1950s, especially after the post-Suez Duncan Sandys defence review which placed such heavy reliance on nuclear forces. At this time, there was a fairly open discussion of the use of nuclear weapons in conflicts short of all-out East-West war. By the end of the 1950s, though, the rise of the anti-nuclear movement in Britain made it rather less appropriate to draw attention to such strategy and tactics, and nuclear war-fighting attitudes "went underground" somewhat for a couple of decades. They surfaced prominently in the 1980s as more and more information came out on NATO nuclear planning and its emphasis on early first use of nuclear weapons.

With the ending of the Cold War, and the diminishing of any risk of massive Soviet nuclear retaliation to limited nuclear war-fighting, the utility of nuclear use against third world states is coming to the fore, with a particular emphasis on submarine-launched nuclear weapons such as Trident.

As far as the United States is concerned, the recent review of nuclear strategy gives us some idea of the direction of US nuclear strategy suggesting a long-term commitment to a sizeable (if "downsized") nuclear force and indications of the development of thinking in recent years suggest a readiness to encompass third world targeting.

Early in 1991, a draft of the *Strategic Deterrence Study* undertaken for US Strategic Air Command was leaked in Washington, and this showed that the report paid particular attention to third world threats against US interests. Its terms of reference stated the belief that "the growing wealth of petro-nations and newly hegemonic powers is available to bullies and crazies, if they gain control, to wreak havoc on world tranquillity."

The study itself called for a new nuclear targeting strategy which will include the ability to assemble "a Nuclear Expeditionary Force...primarily for use against China or Third World targets", which is required because "Nations with the wealth and ideological fervour to pursue nuclear programs, no matter what the time or cost, and very different" from traditional nuclear powers such as Britain and France. North Korea, Algeria, Libya, Iran and of course Iraq fit this bill. To quote: "They and their terrorist cousins are more likely driven by...the desire to...terrorise, blackmail, coerce, or destroy" among other motives. (27)

Two years later, the *New York Times* revealed that staff at US Strategic Command (the successor to

Strategic Air Command which includes ballistic missile submarines) were "in the early stages of building and testing computer models that could enable Mr Clinton to aim nuclear weapons at third world nations that threaten the interests of the United States or its allies". (28)

The transition from strategic nuclear targeting in the Cold War, to selective nuclear targeting in the future is neatly summarised in a recent paper by Captain James H. Patton Jr., USN (Ret'd), and warrants an extended quote:

> "During the Cold War, the "normal" operational mission assigned to strategic nuclear forces involved a massive launch of weapons - many carrying multiple, independently targeted re-entry vehicles (MIRVs) - against a large but finite, concentrated and precisely known set of predetermined aim-points in accordance with the Single Integrated Operational Plan (SIOP).
>
> As the Strategic Arms Reduction Treaty (START) and its descendants continue to diminish the magnitude of the ex-Soviet nuclear hazard, the number of such aim-points will similarly decline. There are already indications, however, that these will be replaced by a nearly infinite but "fuzzy" set of worldwide potential targets that virtually defy pre-planned targeting, and which would never all be engaged simultaneously.
>
> Some of these targets may warrant, under specific but undefined circumstances, a rapid response with a single low-yield nuclear warhead. As the SIOP as we have know it becomes smaller, the recently established US Strategic Command (STRATCOM) may find itself required to generate a similar attack plan quickly - using its precise database of all "potentially strategic targets in the world" - matched to a specific scenario on demand from the NCA or a commander-in-chief (CINC). Such a plan might consist of only a few targets, to which the NCA would match the appropriate weapons and delivery systems.
>
> Any future NCA would surely appreciate a "shopping list" of options that might offer delivery by carrier-based attack aircraft in six days, Tomahawks fired from cruisers in four days or from attack submarines in two days, strikes by B-2 bombers based in the continental US in 12 h, or a response by an SSBN-launched D5 in 1 h." (29)

Britain, of course, will have far fewer options, just Trident and Tornado for the next ten years or so, followed by just Trident, and this is the context for the development of Trident as a sub-strategic system. This subject is explored in detail in Rai's paper (see reference 13), who quotes from the many statements in this subject from Malcolm Rifkind and others.

The transformation of Britain's Trident into a multi-purpose nuclear system appears to be moving apace, with specific functions in terms of limited nuclear use against a third world adversary. An indication of targeting potential is given in Miller's recent piece in *International Defence Review*. (30) Having considered the deployment of a British Trident missile submarine with missiles carrying from one to eight warheads, he continues:

> "The main question concerns the use to which these British sub-strategic weapons might be put. At what might be termed the "upper end" of the usage spectrum, they could be used in a conflict involving large-scale forces (including British ground and air forces), such as the 1990-1991 Gulf War, to reply to enemy nuclear strikes. Secondly, they could be used in a similar setting, but to reply to enemy use of weapons

of mass destruction, such as bacteriological or chemical weapons, for which the British possess no like-for-like retaliatory capability. Thirdly, they could be used in a demonstrative role: ie. aimed at a non-critical, possibly uninhabited area, with the message that if the country concerned continued its present course of action, nuclear weapons will be aimed at a high-priority target. Finally, there is the punitive role, where a country has committed an act, despite specific warnings that to do so would incur a nuclear strike."

Miller later concludes his article:

> "Throughout the Cold War, SLBMs were defined as strategic systems, both in fact, because of their range, and also in law, since such status was enshrined in the various arms limitation treaties. The British plan to use Trident in the sub-strategic role, however, renders that definition invalid, since it will be impossible to differentiate between submarines tasked for either role. On the other hand, the use of existing *Vanguard*-class SSBNs and Trident SLBMs means that the UK will obtain a global, nuclear, sub-strategic strike capability at remarkably low cost. It is also a system that is inherently more flexible and much less vulnerable than using aircraft.
>
> Thus, the task of the UK's strategic planners in 1994 is to develop a minimal force that will have strategic - and now sub-strategic - validity in a highly uncertain world through to 2024, and possibly well beyond." (31)

Discussion

Three things are apparent. Firstly, it is clear that Britain is intending to deploy Trident in a multipurpose role, including a capability to use it in a limited nuclear war. Secondly, there is a long history of Britain preparing for limited nuclear war, both independently and within NATO, dating back nearly 40 years. Finally, Britain has a habit of deploying nuclear weapons in out-of-area crises involving non-nuclear powers.

This whole subject is worthy of considerable open discussion and debate, and the present paper is no more than an encouragement to engage in debate. Some of its analysis is certainly open to different interpretations. It could be argued, for example, that the concentration on nuclear weapons in the late 1950s, from the Sandys White Paper onwards, was not so much an embracing of their potential for use, as a means of cutting down the inordinately high spending on conventional forces. It may also have been seen as very much a part of the complex architecture of deterrence.

This is a fair point but tends to be countered by the fairly extensive accounts of planning for nuclear deployments and possible use in the Middle East and Asia, planning which did appear to be based on a belief that a regional nuclear conflict could be contained.

It could also be argued that deployment of British nuclear forces in the Falklands in 1982 and the Middle East in 1990-91 had more to do with Anglo-American relations than any kind of readiness to use the systems. Thus the Falklands deployment might have been to demonstrate to the US just how serious was Britain's intent to regain the islands, hopefully encouraging the US to provide all necessary aid short of direct involvement.

Similarly, Britain's nuclear threats and commitments in 1990-91 may have been devoted principally to ensuring an adequate "piece of the action", at least in relation to decision-making, in the event of Iraqi

use of chemical weapons, thus avoiding playing a decidedly third fiddle to the US in the event of an escalation to coalition use of weapons of mass destruction.

Neither explanation is particularly adequate. The evidence of nuclear deployments in the Falklands suggests a rather wide range of commitments rather than a mere signal to Washington. As to the Gulf, it is worth recalling that while the relatively mild Major government was in power during Desert Storm in 1991, almost all the planning was undertaken by the Thatcher government. Indeed, at the last meeting of Thatcher's cabinet, on the morning of her resignation in November 1990, only one decision was taken, to confirm the doubling of the size of Britain's military commitments to the Gulf.

Another reason for maintaining an interest in the British policy for Trident, and its historical antecedents, is the comparison with the current debate on nuclear policy in France. (32) This involves two reasonably clear-cut views of the future directions in policy and weapons developments. The broadly centrist view leans towards minimal deterrence, an avoidance of limited nuclear options and a concentration on policies to promote non-proliferation. It contrasts with a more Gaullist view which

> "emphasises the defence of French and allied interests through robust and flexible military capabilities - both offensive and defensive. This includes the development of nuclear forces capable of being used, if necessary, with control and discrimination, particularly in confrontation with countries of "the South" that may be armed with nuclear, chemical or biological weapons." (33)

While there is no direct parallel to this debate in Britain, the continuing utility of nuclear weapons is discussed, as, for example, in recent papers by Quinlan and MccGwire (34). MccGwire's contribution relate principally to the possibility of moving towards a nuclear-free world, regarding the immediate post-Cold War period as one of some potential for such a move. This is also reflected in some US contributions (35) but the recent mid-term elections in the US may well herald a period of more hawkish nuclear developments.

In the run-up to the Non-Proliferation Treaty renegotiations next Spring, the United States may well be the most significant actor, but the position of France and Britain is likely to assume some importance. For Britain, the near-coincidence of the initial patrol of the first Trident submarine, *HMS Vanguard*, with the NPT talks makes it appropriate to look ahead to the likely role of Trident over its 30-year life. Seeking the control of proliferation while maintaining a flexible Trident may be acceptable in London, but may not play so well in the majority world.

Notes

(1) "UK yields new Trident warhead", *Jane's Defence Weekly*, 23 March 1994, p. 17.

(2) See for example, Milan Rai and Declan McHugh, *Nuclear Targeting of the Third World*, CND Publications, 1992

(3) A discussion of these issues, including rather more anecdotal information on sources, is in the current issue of the parapolitics magazine *Lobster:* - Paul Rogers, "British Nuclear Weapons, the Falklands, the Gulf and Trident", *Lobster* 28, December 1994, pp. 2-10. *Lobster* specialises in studies of the security and intelligence services and has an interesting

track record which includes the first major study, pre-dating the *Spycatcher* affair, of the involvement of the security services in plans to discredit the Wilson government in the mid-1970s. It is available from 214 Westbourne Avenue, Hull, HU5 3JB

(4) Barry M. Blechman and Stephen S. Kaplan, *Force Without War - U.S. Armed Forces as a Political Instrument*, The Brookings Institution, Washington, 1978.

(5) CND's pamphlet, *A Guide To Britain's Nuclear Weapons*, published in 1986, gives an overall account of British nuclear forces at the time.

(6) A good source on NATO nuclear planning is Desmond Ball's *Targeting for Strategic Deterrence*, Adelphi Papers Number 185, published in 1983 by the International Institute for Strategic Studies in London.

(7) *Third Report of the House of Commons Select Committee on Foreign Affairs 1987-88*, p35, para 6.

(8) Published in *International Defence Review*, February 1986.

(9) As far as I am aware, the first account of this remarkable incident was actually published before the end of the Cold War in an article by Gordon Brook-Shepherd in *The Sunday Telegraph*, 16 October 1988, after he had talked to defector Oleg Gordievsky. It is discussed in some detail by my colleague, Malcolm Dando, in Paul Rogers and Malcolm Dando, *A Violent Peace - Global Security After the Cold War*, Brasseys, London, 1992.

(10) See Volume 5 of the *Nuclear Weapons Databook - British, French and Chinese Nuclear Weapons*, by Robert S. Norris, Andrew S. Burrows and Richard W. Fieldhouse, Westview Press, 1994, for a comprehensive historical account of British nuclear forces. This includes impressive detail of tactical as well as strategic systems and is also the best published source on warhead development.

(11) Martin S. Navias, *Nuclear Weapons and British Strategic Planning, 1955-1958*, Clarendon Press, Oxford, 1991, p. 48.

(12) "Labour's Bomb and the White Man's Burden", *The Observer*, 28 February 1965.

(13) Milan Rai, *Tactical Trident, the Rifkind Doctrine and the Third World*, Drava Papers, London, 1994. Rai references the quotations fully.

(14) David Lee, Eastward - *A History of the Royal Air Force in the Far East, 1945-1972*, p213, HMSO, London, 1984. Lee deals fully with the Indonesian confrontation from an RAF perspective.

(15) Andrew Wilson, "Deadline Midnight", *The Observer*, 11 April 1992

(16) Interview, 1984

(17) Quoted in a paper by William M Arkin and Andrew Burrows, *British Nuclear Weapons in the Falklands*, published by the Institute for Policy Studies, Washington DC, 1992.

(18) Tam Dalyell "Secrets of Davy Jones's Locker", *New Scientist*, 24 March 1983.

(19) *The Times*, 3 November 1982

(20) See Ref (3) for further details.

(21) Interviews with Tam Dalyell, 1982-4

(22) Interview 1985

(23) Duncan Campbell and John Rentoul, "All Out War", *New Statesman*, 24 August 1984.

(24) Interview with BBC journalist, 1984.

(25) Reported, for example in *The Observer*, 6 January 1991.

(26) Interview 1993

(27) Strategic Advisory Group of the Joint Strategic Planning Staff, US Strategic Air Command, "The Role of Nuclear Weapons in the New World Order", quoted in *Navy News and Undersea Technology*, 13 January 1992, Washington.

(28) Eric Schmitt, "Head of Nuclear Forces Plans for a New World", *New York Times*, 25 February 1993, p.B7. Quoted in Mil Rai's paper (see reference (13) above).

(29) James H. Patton Jr., "New Roles on the Horizon for Triad's Last Leg?" *International Defence Review*, September 1994, pp. 38-42.

(30) David Miller, "Britain Ponders Single-warhead Option" *International Defence Review*, September 1994, pp. 45-51.

(31) *Ibid.*

(32) Discussed fully in David S Yost, "Nuclear Debates in France", *Survival*, vol. 36, no. 4, Winter 1994-95, pp. 113-139.

(33) *Op. cit.*, p. 114.

(34) Michael Quinlan, "The Future of Nuclear Weapons: Policy for Western Possessors", *International Affairs*, vol. 69, no. 3, 1993, pp. 485-96, and Michael MccGwire, "Is There a Future for Nuclear Weapons?", *International Affairs*, vol. 70, no. 2, April 1994, pp. 211-28.

(35) See, for example, Barry M. Blechman and Cathleen S. Fisher, "Phase Out the Bomb", *Foreign Policy*, no. 97, Winter 1994-95, pp. 79-95.

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