

10 March 1993]

REAR ADMIRAL RICHARD IRWIN, DR JOHN CATCHPOLE,
MR GEOFFREY BEAVEN, MR JOHN COLSTON,
and MR NICK WITNEY

[Continued

[Mr Campbell contd]

(Rear Admiral Irwin) Yes, technically that is absolutely correct.

1544. I take it therefore that in time of low threat or risk a political decision could be taken to put submarines on station with a lower number than perhaps might be thought appropriate at a time when the risk was conceived to be more acute?

(Rear Admiral Irwin) Again technically that is absolutely correct.

1545. Are you in a position to tell us whether any decisions have yet been taken as to the normal complement of warheads to be deployed on one of these submarines on station?

(Rear Admiral Irwin) The only decision that has been taken is what to buy, which bounds the choice that can be made closer to the time. There is no need to take a decision today, nor will there be until much closer to the time, as to what each submarine will deploy with when she goes out.

1546. I think it is self-evident really from our previous questions and answers that the determination of this is something which will lie entirely within the political arena based on an assessment of the risk which is thought to be prevalent at the time?

(Rear Admiral Irwin) Yes, absolutely correct.

1547. Let me take you on to another matter. It has been suggested on a number of occasions that the Trident system could be used to provide a sub-strategic deterrent. I think Lord Lewin first gave that a fair wind approximately 12 months ago, and as recently as Jane's "Defence Weekly" of 6 March in discussing analyses about the United Kingdom's tactical nuclear weapons it says, "Perhaps the most logical, and among the cheapest, options is a tactical warhead Trident or a Tomahawk cruise missile bought or leased from the United States." Perhaps I could concentrate on the tactical warhead Trident. Is it technically possible—I think you may already have answered this—to put one warhead on one missile and for that to be capable of being used if circumstances required it?

(Rear Admiral Irwin) Yes, that is technically possible.

1548. Would one warhead on one missile be capable of fulfilling the expectations of a tactical air to surface missile?

(Rear Admiral Irwin) Yes.

1549. Do I take it then that in terms of accuracy and in terms of range there is no, as it were, prejudice in using one warhead on one missile on the Trident system as compared to using a tactical air to surface missile with no optimum range for Trident, which would not, as it were, permit the use of Trident for sub-strategic purposes?

(Rear Admiral Irwin) There is no range constraint that would seriously affect Trident. It has a maximum range, it does not go the whole way round the world, but there is little constraint on range.

1550. The CEP remains the same, whatever the range, from zero to maximum?

(Rear Admiral Irwin) Not absolutely exactly, but within small bounds that is correct. There is a minimum range but not one that gives a problem operationally.

1551. Are you able to tell us what that minimum range is?

(Rear Admiral Irwin) I regret not.

1552. If you will not tell the world, will you tell the Committee by way of note?

(Rear Admiral Irwin) Certainly.

(Mr Colston) Perhaps we could make the point that it is always possible to move the submarine.

Mr Home Robertson: Are you sure?

Mr Cook: That is not a secret.

Mr Campbell

1553. Is it also feasible then that the submarine could go on station with the capacity to deliver both a strategic deterrent and a sub-strategic deterrent?

(Rear Admiral Irwin) Yes. You do not have to have different weapons; it is just the different use of the same weapon.

1554. I am not particularly well versed in the technicalities of these matters, but would that loading, as it were, have to be made before the submarine left port or is that a flexibility which the commander would have, depending on the instructions he was given by his political masters? Could he do it, as it were, within the ship?

(Rear Admiral Irwin) There is not a straight yes or no answer to that, because it depends on how far you want to explore flexibility. Once the load has been put on board then that provides a constraint. Within that constraint there is a certain amount of flexibility, but it is pretty well constrained by what has been put on board when the submarine deploys.

1555. So, putting it rather crudely, when you load up the submarine and send it out, you have within certain constraints determined the nature of the deterrence that might be available?

(Rear Admiral Irwin) Not entirely, because again it depends on the use to which it is being put. A weapon that can be put to a strategic use by one form of targeting can be put to a different form of use by a different form of targeting.

1556. So the flexibility then is to be found in the targeting of the weapon, is that what you are saying?

(Rear Admiral Irwin) Part of the flexibility is to be found in the targeting. The load of the weapon in the first place; how many warheads it has on it is of course another factor and that cannot be changed once it is loaded.

1557. So you have load, and then you have targeting as being the two components which give flexibility? Are there any other components in this analysis?

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[Continued

[Mr Campbell contd]

(Rear Admiral Irwin) Well, the number of missiles you have on board would be a factor, and the position of the submarine within its remaining constraints.

1558. Of course.

(Rear Admiral Irwin) I cannot immediately think of any others.

1559. So load, targeting, range, and the number of missiles. These may all contribute to flexibility, is that right?

(Rear Admiral Irwin) Can I just make sure I have not missed any, because this is an important question.

(Mr Witney) No, I think not.

(Rear Admiral Irwin) I think that is a comprehensive answer.

Chairman

1560. Before we move off this, can I just clarify one point? Presumably the balance of the submarine is a fairly delicate matter. Is it possible to fire, say, one tube and not fire the others?

(Rear Admiral Irwin) Yes, that is perfectly possible. There is a compensation system on board, so when the weight of a missile leaves the submarine, the compensating weight of water goes into the submarine.

1561. And the other point I did not quite understand is this: having loaded the submarine, is it then possible to change the warhead structure so that you can fire one missile strategically and the others be strategically loaded with multiple warheads?

(Rear Admiral Irwin) One missile could be fired to achieve a sub-strategic aim, and another missile in the same submarine could be fired to achieve a strategic aim, but you would not wish to fire one missile to achieve both.

1562. I absolutely understand that, but when you load your submarine, let us say for the sake of argument that you have loaded all but one with strategic multiple warheads, but you have also loaded another single warhead not attached to a missile, would it be possible in, as it were, mid-stream to change the warhead so you had two sub-strategic?

(Rear Admiral Irwin) No. Once you have put the warheads on the missile and the submarine has gone to sea, you cannot change that.

1563. So what I was really getting at was whether you could change the warhead when the submarine was at sea?

(Rear Admiral Irwin) No.

Mr Campbell

1564. The set is determined before the boat leaves the pen, is that right?

(Rear Admiral Irwin) That is correct.

Mr Churchill

1565. On that point, is it possible in any way to vary the yield once the submarine is on patrol?

(Rear Admiral Irwin) No.

Mr Campbell

1566. Could I ask a question or two about the Moscow criterion, because as I understand the position, the proposals for the D5 system are predicated on the assumption that it would be necessary or it might be necessary to provide sufficient capability to overcome the ABM defences round Moscow. How rational is that criterion at a time when we have adopted a doctrine of nuclear defence of minimum deterrence which is generally defined as being "the ability to inflict upon a potential aggressor a level of damage greater than he is willing to sustain?" Is it necessary to maintain the Moscow criterion at a time when minimum deterrence is the accepted nuclear doctrine not only of the United Kingdom but indeed of the North Atlantic Alliance?

(Rear Admiral Irwin) You are going beyond my procurement function and in a moment I will ask Mr Witney from the Defence Staff to answer that specific question, but can I just say that when we set out to procure Trident, the Moscow ABM defences were certainly in the minds of those who sized the system.

(Mr Witney) In amplification, I am not aware that we have ever said that even in the depths of the Cold War there was such a thing as the Moscow criterion.

1567. It is generally accepted, though, is it not?

(Mr Witney) I think the nearest we have ever come to that was perhaps ten years ago in talking about feeling the need to have "the ability to hold out a threat to key aspects of Soviet States' power"—well, that phrase is clearly no longer operative. I think we would wish to rest our case at the moment, simply on the point you have made. We feel the need to be able to hold out to the potential aggressor a scale of damage which would manifestly outweigh any gain he could hope to make from aggression. In making that calculation obviously we have regard to the possible attrition of a strategic strike by ABM defences. Now, today, currently, there is only one operational ABM system in the world, and that is around Moscow, but that is not to say that we are necessarily operating to a Moscow criterion nor is it to say that ABM defences in the future are going to be restricted to Moscow.

1568. If I were to ask you the question whether Polaris was deploying an effective deterrent with the number of warheads which it provides, you would undoubtedly tell me "Yes".

(Mr Witney) Yes, I would!

1569. And that would include, necessarily, if the Moscow criterion is a relevant factor, that in your calculation and in your answer. What I find a little difficult to understand is why we have to have the enhancement of warhead numbers which the D5,

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with 128 warheads per boat, would undoubtedly bring, if conditions vis-a-vis ABM round Moscow are predicted as they must reasonably be at least at this stage to remain the same as they are at a time when Polaris is effective?

(Rear Admiral Irwin) That takes me back to the point of when we procured Trident we procured it under somewhat different circumstances, and we did not procure Trident for the large number of warheads it could carry. We procured it because it was the most economical system we could buy and would be supported by an ally for the length of time we expected to operate in.

1570. I quite understand all of that, and I have got some sympathy with most of it, but I thought the most interesting thing you said was "the changed circumstances". Most people perceive that the threat of a nuclear exchange between Moscow and London has diminished in recent years rather than increased. Is that not of itself a pretty compelling argument for a deployment of warheads significantly below 128 and no greater than those which are presently deployed on Polaris?

(Rear Admiral Irwin) Ministers have always made clear that 128 was the maximum number. They have not said it was a specification.

1571. Yes, I know, but I am asking a question designed to test whether or not that figure of 128 is necessary.

(Mr Witney) That decision has not been taken. The decision on how many warheads are actually to be deployed is to be taken nearer to the time of Trident coming into service, with a maximum derived from, as I am sure you know, the load that could have been carried on the C4 missile which was our original intention to purchase, and the self-denying ordinance was proclaimed in relation to D5 that we would not use more warheads in the boat than would have been the case with the C4 missile.

1572. So there is all to play for for those of us who wish to persuade the Government that 128 is unnecessary?

(Mr Witney) The number to be deployed has yet to be decided.

Chairman

1573. Can I come back to the question of targeting? I am not quite clear whether it is still the case that the targeting of our Trident fleet, once it is in operation, will be in liaison with Omaha, and whether it is therefore, if you like, pre-set by NATO decision-making?

(Rear Admiral Irwin) We have declared the strategic system to NATO and we plan and deconflict our NATO target plans with the targeting centre at Omaha.

1574. Have any changes been made recently to those plans?

(Rear Admiral Irwin) I know that a lot of changes have been made but I do not have that visibility of

what they are. I can answer "yes" but I cannot go any further than that.

1575. I would not have asked in public session what they were.

(Rear Admiral Irwin) I know Ministers have always made it plain that we retain the right to use Trident away from that should there ever be an overriding national need.

1576. My next question is concerned with the degree of flexibility available in targeting. Is it possible for, let us say, a decision-maker in London to instruct a submarine commander to re-target the missiles on his vessel?

(Rear Admiral Irwin) Yes.

1577. That can be done without any problem?

(Rear Admiral Irwin) It requires communication, of course.

1578. Is there any problem to the captain in carrying out that command in his vessel?

(Rear Admiral Irwin) No trouble at all.

Mr Cook: On the point of communication, how dependent is our effective targeting on, let us say, American satellite control?

Chairman

1579. I do not think you want to answer that in public.

(Rear Admiral Irwin) I would be prepared to answer that: Operationally there is no dependence. Operationally and at the time ———

1580. We could target Omaha then!

(Rear Admiral Irwin) We could target Omaha.

Chairman: And they could target us. (Laughter)

Mr Campbell: It would cause a bit of a riot in Northwood if we did.

Chairman: I think you can take it that is a hypothetical question. Can we move on to arms control and I will ask Bruce George to come in.

Mr George

1581. This is not strictly a matter of arms control but is it technically possible for you to purchase this large supply of US-surplus Trident 1 missiles? I can certainly see the cost and arms control arguments, but I am wondering whether it is technically feasible, obviously not in the SSBNO8 or 09 but for later ones?

(Rear Admiral Irwin) For us to build a submarine to take the Trident 1 missile?

1582. Yes, which we would not have to construct ourselves but could buy off the shelf from the United States—because of their enormous reduction in missiles these are surplus and will not be required. I am just exploring the possibility as to whether there would be any insuperable technical difficulties.

(Rear Admiral Irwin) Technically it is possible,