Tactical Air-to-Surface Missiles

- **9. Mr. Doran:** To ask the Secretary of State for Defence what discussions he has had with the United States Secretary of State for Defence on the development and deployment of the tactical air-to-surface missile.
- Mr. Archie Hamilton: We are continuing to study a number of options for the replacement of the United Kingdom's free-fall nuclear bomb. A collaborative approach to the development of a successor system remains highly attractive. In this context, we are keeping in very close touch with the United States Government.
- Mr. Doran: The Government announced earlier that they were interested in the tactical air-to-surface missile. Will the Minister confirm that they are also interested in the nuclear tactical air-to-surface missile which is being developed by the United States Government? Can he also confirm that if the missile is developed, it falls within the same category as the cruise missiles, which appear to be being abolished under the INF agreement?
- **Mr. Hamilton:** The answer to the second part of the question is no. The system will be shorter range than anything that comes under the INF agreement. We are interested in this development, but the warhead would be developed by this country.
- **Mr. Mans:** Does my hon. Friend agree that it is very important to provide a stand-off capability for the Tornado aircraft as soon as possible, because its ability to bomb with conventional or, indeed, nuclear free-fall bombs is being degraded progressively by the increased effectiveness of <u>Russian</u> defences?
- **Mr. Hamilton:** My hon. Friend is absolutely right. We do not think that the free-fall bomb will be effective after the end of the century, and we must look for a successor if we are to maintain our policy of flexible response.
- **Mr.** Cartwright: Has the Minister seen recent press reports suggesting that Britain is likely to replace the WE177--a free-fall nuclear bomb--with the United States SRAM T system? Can he say whether there is any truth in those statements, and whether discussions are still continuing about the possibility of an Anglo-French tactical air-to-surface missile?
- Mr. Hamilton: We are very interested in the successor to the ASMP French missile rather than the existing one, which will, I think, be getting very old by the time we are talking about bringing the new missile into service. As for our discussions with the Americans, we are looking at two United States systems, one of which is the SRAM-T--the short-range attack missile. I do not know what the "T" stands for. We are also looking at the SLAT--supersonic low-altitude target--drone. No decision has yet been made, however.
- Mr. Thurnham: When my hon. Friend meets the United States Secretary of State for Defence will he remind him how necessary it is for American forces to be stationed in Europe, despite the remarks of the West German Admiral Schma"ling at the weekend?
- **Mr. Hamilton:** Yes, indeed. We are constantly reminding our friends in the United States how essential it is that they remain in Europe, and hoping that there will be no withdrawals by United States frontline troops until agreement has been reached under the conventional stability talks.
- Mr. Cohen: Although the nuclear-capable TASM--the tactical air-to-surface missile--is classified as a shorter-range bomb, when the bombs are flown from aircraft can they not be lobbed into the

range where the INF agreement applies? In that case, would not the forces be cheating on the agreement?

Mr. Hamilton: It is not our intention to breach the INF agreement with the replacement of the free-fall bomb.

Hansard 5 Feb 91 -

Mr. Martin O'Neill (Clackmannan): I thank the right hon. Gentleman for his statement. The withdrawal of Poseidon missile submarines was expected and is welcome. Can he confirm that the closure of the facility is earlier than anticipated? Is there any possibility of its being used in future for the docking of United States hunter-killer submarines with dual capable cruise missiles?

The House notes that the Secretary of State for Scotland will give attention to the economic consequences of the closure. Can the Secretary of State for Defence ensure that public funds, both British and American, will be available for the regeneration of the Dunoon area? Can he say whether the more limited use of Upper Heyford is in response to local concern about aircraft noise? Can he tell the House whether the United States F15E will be fitted with SRAM(T) missiles and, if so, which other European nations in NATO will be offering similar facilities?

Mr. King: I can confirm that the closure is a little earlier than was originally envisaged. It is possible that there will be periodic visits but not the forward support position of United States naval tenders and possibly hunter-killer submarines.

The hon. Gentleman asked about assistance for the area. The United States, which has a number of direct employees at Holy Loch and the other bases, is advising them at the moment about redundancies and about its efforts to assist them to find alternative **employment**. As I have already advised the House, my right hon. Friend the Secretary of State for Scotland is considering the implications of the closure for Dunoon.

As to the weaponry that might be carried by the aircraft, there is no change from the present weaponry. There is no decision yet as to whether the United States will proceed with what is known as SRAM(T) or TASM. That is a matter for the future.

Hansard 22 Nov 91 -

**Philip Goodhart:** I somehow doubt whether a non-proliferation treaty, however improved, would have much impact on Iraq, Libya, Syria and North Korea, without mentioning the other countries on that list. I believe, and I am sure that the majority of people in this country believe, that in a proliferating world, it is essential for us to keep our nuclear defences. It would clearly be lunacy for this country to abandon the Trident system and quite wrong not to build the fourth boat, whatever the terms of the contract may be. There is rather less unanimity about the proposal that we should develop a new tactical air-to-surface missile. On 14 October the Secretary of State argued:

"The key point, however, is that the credibility of strategic nuclear forces depends on the existence of a credible sub-strategic deterrent to provide the link with conventional forces. The fact that ground-launched weapons are now being scrapped puts increased emphasis on the need to ensure that the air-launch element is kept up to date."--[Official Report, 14 October 1991; Vol. 196, c. 58.] He repeated that argument this morning.

Frankly, I doubt whether we need the sort of tactical air-to-surface missile that the Secretary of State is talking about. It will be very expensive. The Americans reckon

that they are saving \$2.3 billion by cancelling their short range attack missile SRAM T and SRAM 2 development programmes. If we go ahead with the joint development of the ASLP French alternative or the other American, Martin Marietta, proposal the cost could be very high indeed. It could well be about £2 billion.

There will also be problems with basing dual-capable aircraft equipped with stand-off nuclear missiles on the continent of Europe. After the collapse of the Soviet Union and the Warsaw pact, a number of our European NATO allies have become increasingly reluctant to have any nuclear weapons on their soil. I am sure that German doubts about accepting aircraft with short-range tactical nuclear missiles were a factor in the Americans' decision to stop developing their short-range attack missile systems.

We must also face the uncomfortable fact that the new nuclear threat comes from countries thousands of miles from our airbases. Libya, for example, is 2,300 kmfrom this country. The range of the Tornado GRI is about 2,000 km--

**Mr. Wilkinson:** That is an invalid point. My hon. Friend will remember the effective raid from this country conducted by the United States air force with conventional weapons against Libya. It had a salutary effect.

**Sir Philip Goodhart :** I supported that raid, but I must point out that it involved a great deal of complex in-flight refuelling to get the aircraft from Upper Heyford base, near where I live, to Libya. That is not to mention the political complexities that were involved.

The new stand-off weapon carrying a nuclear warhead with a yield of between 10 and 300 kilotonnes should add about 20 per cent. to the range of the Tornados. Even so, reaching Libya would be difficult. So the Secretary of State is planning to spend a great deal of money on a weapon of questionable effectiveness. Is there a cheaper, simpler and more effective means of producing a small sub-strategic nuclear force? I accept the argument that there is a need for such a force. Some hon. Members have argued that the new Trident system, with or even without the fourth boat, gives us more nuclear strategic capacity than we need. Against that, it has been argued that anti-ballistic missile systems are being developed and may appear within the next 30 years.

Given the state of Soviet collapse, it is extremely difficult to imagine that that country will be capable of mounting an effective anti-ballistic missile defence within the foreseeable future, and I do not believe that Iran, Iraq, Syria or Vietnam are working on anti-ballistic missile systems.

I note that, because of the extra strategic capacity that we will have, some nuclear theorists have argued that we should build the fourth boat and seal up some of the missile tubes. That seems an odd suggestion. I think that some of our Trident missiles should be single low-yield nuclear missiles with small warheads, in the 10 to 300 kilotonne tactical range. Trident missiles are expensive. We read today that they will cost about £15 million each; but if 20 of the Trident missiles that we are to purchase were converted to a sub-strategic role that would be much cheaper than developing a brand new stand-off weapon.

A new tactical sub-strategic system would be wholly secure, for Trident is the most secure delivery system there

is. There will be no range problems, as their effective range will be between 2,500 and 12,500km-and their accuracy is already proved. We would need a new low-yield warhead, but that would be needed for our new tactical air-to-surface missile in any event. It can be developed within the time available.

Will this relatively cheap and simple sub-strategic option be seriously considered? I doubt it, because it would sharply diminish the nuclear role of the Royal Air Force; and in the battles over "Options for Change", senior Air Force officers and what one might call Air Force civil servants ran rings around their opponents in the Department and even around some of my ministerial friends. I urge the Secretary of State to abandon this extremely expensive project and to deploy a Trident sub-strategic option, using some of the savings that could be obtained to keep some of the infantry battalions that he is proposing scrap. Unlike the TASM, those battalions constitute a force that we are going to need.

Hansard 22 Nov 91 -

**Mr. Campbell:** With the possible exception of the Scottish National party. It will undoubtedly want to tell us why, in its new internationalism, it wishes to withdraw from NATO.

On the assumption that most parties in the House wish to remain in NATO, why is it necessary for the United Kingdom to have a capability of this kind, in addition to the United States capability? If there is to be more defence co-operation in Europe, why is it necessary for Britain to have its own capability, in addition to that of France? It is notable that in recent weeks distinguished former senior military commanders in the United Kingdom have questioned the need for the deployment of TASM. I am thinking of General Sir John MacMillan and my distinguished constituent, General Sir David Young, with whom the Secretary of State has had many contacts in his present and previous responsibilities. It may be argued that they had a particular point to make about regiments and an anxiety to see funds spent not in one direction, but another. Nevertheless, the fact that senior commanders of such stature feel it possible to question something which, until now, has been an unchallenged assumption, should give the Government cause for concern.

Hansard 17 Dec 91 -

**Mr. Brazier:** Does my right hon. Friend agree that the answer that he has just given is further reinforced by the fact that several third- world countries, including some middle eastern countries such as Iraq, Algeria and perhaps Libya, are currently acquiring nuclear weapons? For all those reasons, it is essential that we keep a sub-strategic nuclear system in western Europe.

Mr. King: My hon. Friend makes a powerful point. Not only do we need a strategic deterrent, but there is a strong argument that a sub- strategic deterrent continues to be relevant at a time when there is a real risk of several new nations appearing which have some form of nuclear capability and when we risk the proliferation of not merely equipment but perhaps technology from some of the scientific bases in the former Soviet Union. My hon. Friend's point is very important.

Hansard 27 Oct 92 -

Air-to-Surface Missile

11. Mr. Bennett: To ask the Secretary of State for Defence if he will make a statement about the future of the tactical air-to-surface missile.

**Mr. Rifkind :** The position remains unchanged : we are continuing to consider a range of options for Britain's future sub-strategic nuclear capability.

Mr. Bennett: Given that the tactical air-to-surface missile could cost more than £3 billion, given the very welcome American moratorium on nuclear tests which will make development of the warhead difficult, and given that the Germans are unlikely to allow it on their soil, would not it be

better to abandon the programme now, use some of the money to make sure that we have sufficient conventional troops to meet the Government's increasing commitments and some of the money on the diversification of the defence industry?

Mr. Rifkind: The TASM is only one of the options that we are considering in order to continue with Britain's sub-strategic nuclear capability. The hon. Gentleman should realise that, in terms of our national interests and our commitment to the NATO alliance, the doctrine of flexible response requires there to be a sub-strategic capability if deterrence is to achieve its full responsibility.

**Mr. Mans:** Bearing in mind the experience of Tornado aircraft in the Gulf, does my right hon. and learned Friend agree that if that aircraft is to remain viable into the new century it will need a stand-off weapon, or it will be obsolete?

Mr. Rifkind: There are certainly plans to consider the upgrading of Tornado. The precise question whether TASM is the answer to that requirement is being actively considered at the moment. There are a number of ways in which the United Kingdom's sub-strategic requirements can be met. It is desirable to deal with those in a full and comprehensive manner. We would expect to come to a decision some time early in the new year.

Hansard 18 Oct 93 -

The White Paper has also confirmed our commitment to maintaining an effective long-term substrategic nuclear capability. I told the House some months ago that we were considering how best to provide this once the WE177 free-fall bomb is withdrawn from service. Our considerations were completed during the recess, and I am able to announce our conclusions today.

A sub-strategic capability remains necessary, because a potential adversary might gamble, under certain circumstances, on our reluctance to launch an all-out strategic nuclear strike in response to his aggression. It is vital, therefore, that we possess the ability to undertake more limited nuclear action, to be able to deliver an unequivocal message to an aggressor that he must cease his aggression and withdraw or face the risk of even greater damage. A sub-strategic capability forms an essential link between conventional and strategic forces, as part of our clear demonstration that aggression of any kind is not a rational option.

The United Kingdom's sub-strategic capability is currently provided by the WE177 bomb carried on Tornado dual-capable aircraft. In the mid to late 1980s, we saw the need to enter into the early development of a sophisticated stand-off weapon which would be able to penetrate the increasingly effective Warsaw pact defences, and which would replace the current bomb. The type of system we began to examine is known as a tactical air-to-surface missile, or TASM. The security circumstances have changed fundamentally since then. As a consequence, we have concluded that our previous requirement for a new stand-off nuclear weapon capability is not a sufficiently high priority to justify the procurement of a new nuclear system in the current circumstances. Instead, we will plan, after the WE177 eventually leaves service in the long term, on exploiting the flexibility and capability of the Trident system to provide the vehicle for the delivery of our sub-strategic deterrent.

The Trident system is undetectable, reliable, and accurate in its delivery and can carry our substrategic as well as strategic capacity at little additional cost. That is set against what would be the high cost of developing a new system. We have no doubt that it will be admirably suited to the additional role.

Hansard 9 Feb 93 -

Mr. Martlew: Yesterday the Chief Secretary to the Treasury said that we needed to review the welfare state because public expenditure was out of control. Today we have a damning indictment of the Government by the Select Committee on Defence, which says that we must spend more money on the Army. The answer must be for the Government to abandon their plans for a new nuclear bomb. We would save £3 billion if we scrapped the tactical air-to-surface missile. The Labour party would scrap TASM tomorrow. It is an embarrassment internationally and it has no military capability for the future. I predict that the Conservative Government will scrap TASM. Why does not the Secretary of State tell the House now that he will cancel it?

Air-to-surface missile. IOC: 1993. Year: 1993. Country: USA. Department of Defence Designation: AGM-131A. ASCC Reporting Name: SRAM T. Article Number: M-131. Popular Name: SRAM II. Manufacturer: Boeing.

Short Range Attack Missile *Total Mass*: 877 kg. *Core Diameter*: 0.40 m. *Total Length*: 4.27 m. *Span*: 0.61 m. *Maximum range*: 390 km. *Number Standard Warheads*: 1. *Boost Propulsion*: Solid rocket. *Guidance*: Inertial.

Historical Essay © Andreas Parsch

## Boeing AGM-131 SRAM II

The SRAM II (Short-Range Attack Missile) was intended as a replacement for the AGM-69 SRAM, but it was not produced in quantity.

In 1977, the USAF planned to develop an upgrade of the SRAM for the forthcoming B-1A bomber as **AGM-69B** *SRAM B*. When the B-1A was cancelled in 1978, the AGM-69B was dropped, too. After the resurrection of the B-1 program (as B-1B) in 1981, it was decided to develop an entirely new weapon, the *SRAM II*. In 1986, Boeing was finally awarded a development contract for the **AGM-131A** *SRAM II*. The AGM-131A was planned to have only about 2/3 the size of an **AGM-69A**, so that 36 missiles could be carried by the B-1B, as compared to 24 AGM-69As. One new feature of *SRAM II* was a lighter, simpler, and more reliable rocket motor by Thiokol for increased range. The *SRAM II* also used a new W-89 thermonuclear warhead, which was much safer to operate than the W-69 of the AGM-69. Initial Operational Capability for the AGM-131A was planned for 1993, but after flight tests in the late 1980s, the program was cancelled in 1991. Stated reasons include technical (difficulties with the rocket motor) and political (nuclear arms reduction) ones.

The **AGM-131B** *SRAM-T* (SRAM-Tactical) was a version intended for use by the F-15E *Eagle* tactical strike aircraft. The *SRAM-T* reached the flight-test stage, but was eventually cancelled, too.

## **Specifications**

Note: Data given by several sources show slight variations. Figures given below may therefore be inaccurate!

Data for AGM-131A (except where noted):

Length	3.18 m (10 ft 5 in)
Diameter	39 cm (15.3 in)
Weight	900 kg (2000 lb)
Speed	Mach 2+
Range	400 km (250 miles)
Propulsion	Thiokol solid-fueled rocket
Warhead	W-89 thermonuclear (200 kT) AGM-131B: W-91 thermonuclear (10 kT, 100 kT)

## **Main Sources**

- [1] James N. Gibson: "Nuclear Weapons of the United States", Schiffer Publishing Ltd, 1996
- [2] Christopher Chant: "World Encyclopaedia of Modern Air Weapons", Patrick Stephens Ltd., 1988
  - www.astronautix.com

W91/SRAM-T ------Yes ------Yes ------Yes

- BAS Oct 91