



MINISTRY OF DEFENCE  
MAIN BUILDING WHITEHALL LONDON SW1A 2HB  
Telephone 01-~~930 7022~~ 218 2111/3

MO 26/3V

3rd January 1986

Dear Charles,

CDP  
241

TORPEDO ORDERS

I understand that you asked for some briefing on the main production order for Sting Ray advanced lightweight torpedoes that was made today by Mr Lamont.

/ I attach a copy of the press release which we have issued  
/ Answer material prepared in response to questions on the order  
itself, and on the recent Report by the Public Accounts  
Committee which was characterised in the press as being critical  
of our torpedo procurement policy. Please let me know if the  
Prime Minister would like any further background information.

Yours ever,  
Denis

(D BRENNAN)  
Private Secretary

Charles Powell Esq  
No 10 Downing Street



# MINISTRY OF DEFENCE

# ROYAL NAVY NEWS RELEASE

Issued by: Public Relations (Royal Navy), Ministry of Defence, Main Building, Whitehall, London SW1A 2HB. 01-218 3257/8.

1/86

3rd January 1986

## SUBMARINE AND WEAPON ORDERS VALUED AT NEARLY £1,000 MILLION PLACED BY MINISTRY OF DEFENCE

The Minister of State for Defence Procurement, Mr Norman Lamont, today announced three orders for submarine and weapons with a total value approaching £1,000 million.

Commenting on the orders, Mr Lamont said: "These three major orders, together with others to be placed later this year, show the Government's commitment to providing the Armed Forces with the most modern equipment to see service through into the early years of the 21st century."

Three diesel-electric submarines of the Upholder class have been ordered from Cammell Laird Shipbuilders of Birkenhead, a subsidiary of Vickers Shipbuilding & Engineering Ltd. The order follows a competitive tendering exercise. The total value of the contract, including the weapons, will be approximately £300 million.

A seventh Trafalgar class nuclear-powered Fleet submarine, to be called HMS Triumph, has been ordered from Vickers Shipbuilding & Engineering Ltd of Barrow in Furness. The value of this order, including weapons and associated equipment, is in excess of £200 million.

A contract for the manufacture of more than 2,000 Sting Ray advanced lightweight torpedoes has been placed with Marconi Underwater Systems Ltd. This contract is worth around £400 million.

NOTE TO EDITOR Further details on the contracts are attached.

## ORDER FOR THREE DIESEL-ELECTRIC SUBMARINES

Mr Norman Lamont, the Minister of State for Defence Procurement, has announced that orders for three diesel-electric submarines of the Upholder class have been placed with Cammell Laird Shipbuilders of Birkenhead, a subsidiary of Vickers Shipbuilding & Engineering Ltd.

The order, for the second, third and fourth vessels in the class, follows a competitive tendering exercise. Work on the second vessel in the class will begin this month; the third and fourth will follow over the next three years.

The three submarines, including weapons, will cost approximately £300 million.

The Upholder class submarines are intended primarily for operations on the Continental shelf, although they also have a full ocean-going capability. They can undertake tasks such as minelaying and patrols in constricted waters unsuited for the operation of nuclear-powered boats. Like nuclear submarines they have the capability to detect and destroy enemy submarines and surface ships.

HMS Upholder, the first of class, is now under construction at the Vickers yard at Barrow in Furness. Cammell Laird is now a Vickers Group subsidiary and it is likely that the majority of work on the three new submarines will be undertaken at Birkenhead, with the remainder at Barrow.

Commenting on the order Mr Norman Lamont, the Minister of State for Defence Procurement said: "The order has been won by Cammell Laird in the light of strong competition from two other yards. Although we are aware of the importance of the order for local employment of this decision, each of the shipyards that tendered is in high unemployment areas and the winning bid is the most competitive. To have split the order would have resulted in substantial extra cost.

"The overall cost will be some £20 million below the figure which my Department was expecting to have to pay for these submarines - about one half due to competition and one half to batch ordering. It is a clear example of the success we are having

with the Government's new policies for Defence procurement. We have therefore decided to award the contract to Cammell Laird as the cheapest solution from the Defence point of view and to take advantage of the benefits of competition.

"The Government has also decided, subject to the negotiation of satisfactory terms and conditions, to place orders with Scott Lithgow for a range mooring vessel later this year followed by two lighters. Scott Lithgow will also be invited to bid for refit work and to compete for steel work for Trident submarines as a sub-contract from Vickers Shipbuilding and Engineering Ltd."

ORDER FOR SEVENTH TRAFALGAR CLASS  
NUCLEAR-POWERED FLEET SUBMARINE

Mr Norman Lamont, the Minister of State for Defence Procurement, today announced that the order for the seventh nuclear-powered Fleet submarine of the Trafalgar class had been placed with Vickers Shipbuilding & Engineering Ltd.

The value of this order, including weapons and other equipment, is in excess of £200 million.

The submarine, to be called HMS Triumph, will be the 19th Fleet submarine to enter service with the Royal Navy; it is planned that she will join the Fleet in the early 1990s.

Commenting on the order, Mr Lamont said: "Trafalgar class submarines are probably the most potent anti-submarine weapons in service today. Their ability to operate quietly at great depths enables them to hunt, and if necessary destroy, enemy submarines and surface ships."

As with previous nuclear submarines, Messrs Rolls Royce and Associates will have special responsibility for design and manufacture of the nuclear reactor plant equipment.

The first three Trafalgar class vessels - HM submarines Trafalgar, Turbulent and Tireless - are in service with the Royal Navy. HMS Torbay was launched in March 1985 and two more submarines (HMS Trenchant and HMS Talent) are under construction at the Vickers yard at Barrow in Furness.

MAIN PRODUCTION ORDER FOR STING RAY  
ADVANCED LIGHTWEIGHT TORPEDOES

Mr Norman Lamont, the Minister of State for Defence Procurement, today announced that an order had been placed with Marconi Underwater Systems Ltd for the manufacture of more than 2,000 Sting Ray advanced lightweight torpedoes.

The contract is worth approximately £400 million and delivery will extend over several years. Marconi has accepted that payment will be made by the Ministry on delivery of complete and tested torpedoes.

This order was foreseen in the Treasury Minute (Command 9696) replying to the Report of the Public Accounts Committee (28th Report 84/85) on the torpedo programme.

Sting Ray, designed to replace Mk 44 and Mk 46 torpedoes, is the first of a new generation of software-controlled "intelligent" torpedoes.

Mr Lamont said: "Sting Ray is the most advanced torpedo in the world. It has been designed to counter the threat posed by the latest Soviet submarines with the higher speeds and improved capabilities of the 1980s and 1990s."

Sting Ray is extremely robust and is capable of being launched from fixed-wing aircraft, helicopters and surface ships. By virtue of its speed, manoeuvrability and deep-diving capability, as well as its ability to operate in shallow water, the torpedo can engage a wide range of targets.

Sting Ray entered service with the Royal Navy and the Royal Air Force in September 1983; it has already been bought by Egypt and Thailand. Overseas sales prospects are good and negotiations are currently underway with a number of other countries.

1/86  
3rd January 1986

SUBMARINE AND WEAPON ORDERS VALUED AT NEARLY  
£1,000 MILLION PLACED BY MINISTRY OF DEFENCE

The Minister of State for Defence Procurement, Mr Norman Lamont, today announced three orders for submarines and weapons with a total value approaching £1,000 million.

Three diesel-electric submarines of the Upholder class have been ordered from Cammell Laird Shipbuilders of Birkenhead, a subsidiary of Vickers Shipbuilding & Engineering Ltd. The order follows a competitive tendering exercise. The total value of the contract, including the weapons, will be approximately £300 million.

A seventh Trafalgar class nuclear-powered Fleet submarine, to be called HMS Triumph, has been ordered from Vickers Shipbuilding & Engineering Ltd of Barrow in Furness. The value of this order, including weapons and associated equipment, is in excess of £200 million.

A contract for the manufacture of more than 2,000 Sting Ray advanced lightweight torpedoes has been placed with Marconi Underwater Systems Ltd. This contract is worth around £400 million.

Commenting on the orders, Mr Lamont said: "These three major orders, together with others to be placed later this year, show the Government's commitment to providing the Armed Forces with the most modern equipment to see service through into the early years of the 21st century."

NOTE TO EDITOR Further details on the contracts are attached.

## ORDER FOR THREE DIESEL-ELECTRIC SUBMARINES

Mr Norman Lamont, the Minister of State for Defence Procurement, has ~~that~~ announced orders for three diesel-electric submarines of the Upholder class have been placed with Cammell Laird Shipbuilders of Birkenhead, a subsidiary of Vickers Shipbuilding & Engineering Ltd.

The order, for the second, third and fourth vessels in the class, follows a competitive tendering exercise. Work on the second vessel in the class will begin this month; the third and fourth will follow over the next three years.

The three submarines, including weapons, will cost approximately £300 million.

The Upholder class submarines are intended primarily for operations on the Continental shelf, although they also have a full ocean-going capability. They can undertake tasks such as minelaying and patrols in constricted waters unsuited for the operation of nuclear-powered boats. Like nuclear submarines they have the capability to detect and destroy enemy submarines and surface ships.

HMS Upholder, the first of class, is now under construction at the Vickers yard at Barrow in Furness. Cammell Laird is now a Vickers Group subsidiary and it is likely that the majority of work on the three new submarines will be undertaken at Birkenhead, with the remainder at Barrow.

Commenting on the order Mr Norman Lamont, the Minister of State for Defence Procurement said: "The order has been won by Cammell Laird in the light of strong competition from two other yards. Although we are aware of the importance of the order for local employment of this decision, each of the shipyards that tendered is in high unemployment areas and the winning bid is the most competitive. To have split the order would have resulted in substantial extra cost.

"The overall cost will be some £20 million below the figure which my Department was expecting to have to pay for these submarines - about one half due to competition and one half to batch ordering. It is a clear example of the success we are having



with the Government's new policies for Defence procurement. I have therefore decided to award the contract to Cammell Laird as the cheapest solution from the Defence point of view and to take advantage of the benefits of competition.

"The Government has also decided, subject to the negotiation of satisfactory terms and conditions, to place orders with Scott Lithgow ~~in 1986~~ for a range <sup>MOO-119</sup> ~~recovery~~ vessel later this year followed by two lighters. Scott Lithgow will also be invited to bid for refit work and to compete for steel work for Trident submarines as a sub-contract from Vickers Shipbuilding and Engineering Ltd."

ORDER FOR SEVENTH TRAFALGAR CLASS  
NUCLEAR-POWERED FLEET SUBMARINE

Mr Norman Lamont, the Minister of State for Defence Procurement, today announced that the order for the seventh nuclear-powered Fleet submarine of the Trafalgar class had been placed with Vickers Shipbuilding & Engineering Ltd.

The value of this order, including weapons and other equipment, is in excess of £200 million.

The submarine, to be called HMS Triumph, will be the 19th Fleet submarine to enter service with the Royal Navy; it is planned that she will join the Fleet in the early 1990s.

Commenting on the order, Mr Lamont said: "Trafalgar class submarines are probably the most potent anti-submarine weapons in service today. Their ability to operate quietly at great depths enables them to hunt, and if necessary destroy, enemy submarines and surface ships."

As with previous nuclear submarines, Messrs Rolls Royce and Associates will have special responsibility for design and manufacture of the nuclear reactor plant equipment.

The first three Trafalgar class vessels - HM submarines Trafalgar, Turbulent and Tireless --are in service with the Royal Navy. HMS Torbay was launched in March 1985 and two more submarines (HMS Trenchant and HMS Talent) are under construction at the Vickers yard at Barrow in Furness.

MAIN PRODUCTION ORDER FOR STING RAY  
ADVANCED LIGHTWEIGHT TORPEDOES

Mr Norman Lamont, the Minister of State for Defence Procurement, today announced that an order had been placed with Marconi Underwater Systems Ltd for the manufacture of more than 2,000 Sting Ray advanced lightweight torpedoes.

The contract is worth approximately £400 million and delivery will extend over several years. Marconi has accepted that payment will be made by the Ministry on delivery of complete and tested torpedoes.

This order was foreseen in the Treasury Minute (Command 9696) replying to the Report of the Public Accounts Committee (28th Report 84/85) on the torpedo programme.

Sting Ray, designed to replace Mk 44 and Mk 46 torpedoes, is the first of a new generation of software-controlled "intelligent" torpedoes.

Mr Lamont said: "Sting Ray is the most advanced torpedo in the world. It has been designed to counter the threat posed by the latest Soviet submarines with the higher speeds and improved capabilities of the 1980s and 1990s."

Sting Ray is extremely robust and is capable of being launched from fixed-wing aircraft, helicopters and surface ships. By virtue of its speed, manoeuvrability and deep-diving capability, as well as its ability to operate in shallow water, the torpedo can engage a wide range of targets.

Sting Ray entered service with the Royal Navy and the Royal Air Force in September 1983; it has already been bought by Egypt and Thailand. Overseas sales prospects are good and negotiations are currently underway with a number of other countries.

## ORDER FOR THREE DIESEL-ELECTRIC SUBMARINES

Mr Norman Lamont, the Minister of State for Defence Procurement, has announced orders for three diesel-electric submarines of the Upholder class have been placed with Cammell Laird Shipbuilders of Birkenhead, a subsidiary of Vickers Shipbuilding & Engineering Ltd.

The order, for the second, third and fourth vessels in the class, follows a competitive tendering exercise. Work on the second vessel in the class will begin this month; the third and fourth will follow over the next three years.

The three submarines, including weapons, will cost approximately £300 million.

The Upholder class submarines are intended primarily for operations on the Continental shelf, although they also have a full ocean-going capability. They can undertake tasks such as minelaying and patrols in constricted waters unsuited for the operation of nuclear-powered boats. Like nuclear submarines they have the capability to detect and destroy enemy submarines and surface ships.

HMS Upholder, the first of class, is now under construction at the Vickers yard at Barrow in Furness. Cammell Laird is now a Vickers Group subsidiary and it is likely that the majority of work on the three new submarines will be undertaken at Birkenhead, with the remainder at Barrow.

Commenting on the order Mr Norman Lamont, the Minister of State for Defence Procurement said: "The order has been won by Cammell Laird in the light of strong competition from two other yards. Although we are aware of the importance of the order for local employment of this decision, each of the shipyards that tendered is in high unemployment areas and the winning bid is the most competitive. To have split the order would have resulted in substantial extra cost.

"The overall cost will be some £20 million below the figure which my Department was expecting to have to pay for these submarines - about one half due to competition and one half to batch ordering. It is a clear example of the success we are having

with the Government's new policies for Defence procurement. I have therefore decided to award the contract to Cammell Laird as the cheapest solution from the Defence point of view and to take advantage of the benefits of competition.

"The Government has also decided, subject to the negotiation of satisfactory terms and conditions, to place orders with Scott Lithgow in 1986 for a range recovery vessel later this year followed by two lighters. Scott Lithgow will also be invited to bid for refit work and to compete for steel work for Trident submarines as a sub-contract from Vickers Shipbuilding and Engineering Ltd."

CONFIDENTIAL UNTIL RELEASED

SSKs 02-04

Q1. Was the order the result of competition?

A1. Yes. Other yards invited to tender were Scott Lithgow and Yarrow Shipbuilders.

Q2. What was the degree of difference between the bids?

A2. This is commercial in confidence information. Vickers/Cammell Laird were however clear winners.

Q3. Scott Lithgow's possible claim that insufficient data was made available by the MOD as a basis for tendering?

A3. Three rounds of tendering were involved. Scott Lithgow's objections were made at a very late stage and only after the 3rd round. We are content that a reasonable basis for tendering was applied.

Q4. What is the value of the order?

A4. Precise costs are commercial in confidence. A rough estimate of the total value of an SSK is £100m at today's prices.

Q5. How many more SSKs will be ordered?

A5. It is not our practice to reveal the planned size of our classes.

Q6. General characteristics?

A6. The new boats are as yet unnamed. General statistics of the Type 2400 are as follows:

Length: 70 metres  
Pressure hull diameter: 7.5 metres  
Submerged displacement: 2,400 tonnes  
Diving depth: in excess of 200 metres  
Max speed: about 20 knots  
Complement: 44  
Torpedo tubes: 6, with reloads.

Q7. Other MOD work at Cammell Laird?

A7. Type 22-13 frigate (HMS Campbelltown) was ordered from Cammell Laird in January 1985

Q8. Employment considerations?

A8. We are, of course, mindful of employment considerations, but each of the shipyards that tendered are in high unemployment areas. The order has been placed on the basis of price.

CONFIDENTIAL UNTIL RELEASED

CONFIDENTIAL UNTIL RELEASED

Q9. Where will the work be carried out?

A9. Construction of 02 will commence at Birkenhead with some of the work to be carried out at Barrow (such as specialist steel work).

AH1/SSK

CONFIDENTIAL UNTIL RELEASED

SUPPLEMENTARY QUESTIONS AND ANSWERS ON SCOTT LITHGOW ASPECT

Q10. What are the costs involved?  
(Scott Lithgow and Yarrows  
were the other bidders).

A10. Precise costs are commercially  
confidential but as I said  
Cammell Laird was the clear winner  
and we are pleased with this  
example of the success of the  
Government's policy on  
competitive procurement.

Q11. Will this mean that the Scott  
Lithgow yard will have to  
close?

A11. This is a matter for Trafalgar  
House. Scott Lithgow will  
continue to be invited to  
tender for other MOD new  
construction and refit work  
(they are among those firms  
at present invited to tender  
for the refit of RFA REGENT)  
and we very much hope that  
they will be sufficiently  
competitive to be able to win  
future orders. They will also  
have the opportunity to bid for  
submarine steelwork sub-contracted  
from -

Q12. Scott Lithgow has complained  
that the competition was  
unfair?

A12. This is not the case.

The matter was looked into  
in considerable detail and,  
in fact, the information pack  
provided with the invitation  
to tender conformed to the  
typical package used to support  
tenders for early follow-on  
warship orders.

Some 800 drawings were provided  
with the package, sufficient for  
tendering purposes although some  
12,000 working engineering  
drawings were not part of the  
package. Scott Lithgow were,  
however, fully aware of the  
conditions of tendering and only  
made this complaint after the  
third round of tendering and  
after "best and final" offers  
had been submitted.

It could, however, be agreed that  
the lead shipbuilder has an  
advantage over the prospective  
follow-on shipyards due to the  
design expertise it has built  
up in developing the first of  
class vessel.



Q13. Is work being placed with Cammell Laird to assist in their privatisation?

A13. No, Cammell Laird was the clear winner in a competitive exercise.

Q14. What is the value of the work being placed with SL?

A14. This remains to be negotiated, but is likely to be in the region of £10 M (round figures).

OTHER NAVAL ORDERS

DD/FFS

Destroyers / Frigates

During 1985 we have ordered the last two Type 22 Frigates (13 and 14- HMSs CAMPBELTOWN and CHEATHAM) and we have also accepted into service the last three Type 42 Destroyers (HMSs EDINBURGH, GLOUCESTER and YORK). Type 22s 07 to 12 are in various stages of construction (07,08 and 11 at YSL, 09 and 10 at SHS). 07 is due to be accepted towards the end of next month.

C.L.  
S.H.

TYPE 23

The Type 23 is to form the backbone of the programme for the replacement of the Navy's Destroyers and Frigates. We have invited tenders for the first follow-on vessels of this class. Subject to agreement on price and other contract terms, we intend to order 23-02 from Swan Hunters. Competitive tenders have been invited for 23-03 and 23-04 with the option included for a larger batch. No decisions have yet been taken on the timing and number of ships to be ordered.

The first of class, HMS NORFOLK, was ordered from Yarrow Shipbuilders in October 1984. Launch is planned for 1987 with acceptance taking place some two years later.

MCMVs

Following competition orders were placed with Vosper Thornycroft in June this year for MCMVs 12 and 13. We do not expect to order any more MCMVs. (One other MCMV is currently under construction at VT, due to be accepted next month)

BRME

HMS SANDOWN the first of class was ordered from Vosper Thornycroft in August this year. Follow-on orders are not expected for some time. [It is normal to have a gap between the First of Class and follow-on vessels to enable the design to be sufficiently developed].

AOR

Tenders have been received for the design and build of the first two "one-stop" Auxiliary Oiler Replenishment Vessels and are currently being evaluated. Two

shipyards have tendered for the design and build package whilst one has tendered for 02 only, to one of the other shipyard's design. No decisions have yet been made on the size and timing of orders.

SSKs

The order for the first of class, HMS UPHOLDER, was placed with Vickers Shipbuilding at Barrow in November 1983.

SSNs

The order for SSN19, the seventh SSN of the TRAFALGAR Class is the last SSN to be ordered until the TRIDENT build programme is well underway. SSNs 16 to 18 are currently in various stages of construction at Vickers Barrow.

SSBNs

We hope to be able to place the order for SSBN-05, the first TRIDENT boat, in the near future. (Supplementary Qs and As on SSBN 05 contract attached)

OPVIII

I have nothing to add to the statement made by my Rt Hon Friend [the previous Minister DP] on 13 June. OPVIII was considered but did not secure a place in the programme and we have no plans to proceed any further with this proposal.

(Attached)

Why other work for SL?

Subject to satisfactory terms and conditions, the placing of other work with SL will be authorised because of wider and relevant factors.

Floating Docks

Scott Lithgow declined to tender for the refit of Floating Dock 59 (AFD 59) and this contract was let in November. AFD 60 (ie Rosyth) has an annual maintenance each August at a cost of about £350K and Scott Lithgow will be invited to tender for this work. (Scott Lithgow also declined to tender for this work in 1985).

EXTRACTS FROM 'HANSARD'

12 JUNE - 4 of 8

Mr. Beattie: No, that offshore patrol vessel is a subject that the Royal Navy is examining. It has been having conversations with industry. It may or may not wish to make a bid for the work to pay for it. At the moment, no such cash provision has been made available. In any case, the appraisal of such a project would have to go through the capital evaluation processes of the Ministry of Defence. That has not happened, and there is no way in which I have approved that the programme shall proceed. But it is perfectly healthy and reasonable that individual parts of the Ministry of Defence should have dialogue with industry about what possibilities may exist.

13 JUNE - Minister (DP)

My hon. Friend the Member for Aberdeen, South (Mr. Malone) raised the subject of the OPV 3 in yesterday's debate. When firms were invited to submit their ideas for an enhanced OPV-type vessel within a cost bracket of £25 million to £25 million it was made clear that this was without any commitment by the Ministry of Defence to proceed. We have looked at the proposals put forward, and those by two firms — Hill Russell and Vosper Thornycroft — are judged to have the potential for providing a vessel of the type specified which would offer good value for money. We think it right to tell the hon. the results of the evaluation, and this is now being done. It remains the case, however, that the OPV 3 has not secured a place in the forward defence programme when set against competing priorities for the Royal Navy and for the other services.

ORDER FOR SEVENTH TRAFALGAR CLASS  
NUCLEAR-POWERED FLEET SUBMARINE

Mr Norman Lamont, the Minister of State for Defence Procurement, today announced that the order for the seventh nuclear-powered Fleet submarine of the Trafalgar class had been placed with Vickers Shipbuilding & Engineering Ltd.

The value of this order, including weapons and other equipment, is in excess of £200 million.

The submarine, to be called HMS Triumph, will be the 19th Fleet submarine to enter service with the Royal Navy; it is planned that she will join the Fleet in the early 1990s.

Commenting on the order, Mr Lamont said: "Trafalgar class submarines are probably the most potent anti-submarine weapons in service today. Their ability to operate quietly at great depths enables them to hunt, and if necessary destroy, enemy submarines and surface ships."

As with previous nuclear submarines, Messrs Rolls Royce and Associates will have special responsibility for design and manufacture of the nuclear reactor plant equipment.

The first three Trafalgar class vessels - HM submarines Trafalgar, Turbulent and Tireless - are in service with the Royal Navy. HMS Torbay was launched in March 1985 and two more submarines (HMS Trenchant and HMS Talent) are under construction at the Vickers yard at Barrow in Furness.

CONFIDENTIAL UNTIL RELEASED

SSN: HMS TRIUMPH

Q AND A BRIEF

- Q1. Was the order the result of competition?
- A1. No. Vickers is the only UK yard with the current capability of building SSNs. They are also involved with the design of our SSNs and SSBNs. Vickers, however, will be seeking competitive bids for certain equipments and material.
- Q2. Will any other yard be developed to permit SSN construction?
- A2. That is a matter for the shipbuilding industry.
- Q3. What is the value of the order?
- A3. Precise costs are commercially confidential. A rough estimate of the total value of an SSN is of the order of £200m at today's prices.
- Q4. How many more SSNs will be ordered?
- A4. It is not our practice to reveal the planned size of our classes, but further SSN orders are not envisaged until the SSBN programme is well underway.
- Q5. Have VSEL been invited to tender for any more SSNs?
- A5. Not at present, but negotiations are in progress for the contract for the first Trident SSBN.
- Q6. What are SSN 19s' general characteristics?
- A6. Similar to the other submarines of the Trafalgar class. Displacement is over 5,000 tonnes, length is 85 metres and the complement will be around 100. They carry Tigerfish and Sub-Harpoon and will carry Spearfish weapons.

/ Q7. ...

CONFIDENTIAL UNTIL RELEASED

**CONFIDENTIAL UNTIL RELEASED**

Q7.  
Characteristics of particular note (propulsion, sonar, etc.)?

A7.  
Propulsion will be through geared steam turbines powered from a nuclear reactor. The submarine will be equipped with a modern air purification system which will enable her to undertake long patrols without needing to surface.

Q8.  
How long will she be able to stay submerged?

A8.  
It is not our practise to reveal planned endurance. You will be aware, however, of patrols in excess of 100 days having been performed by our SSNs.

Q9.  
Will the building of SSN19 be affected by the TRIDENT programme?

A9.  
No.

Q10.  
Will / Has the TRIDENT programme be / been affected by the build programme of SSN19?

A10.  
The two build programmes are inevitably interrelated, and have been designed to reflect this.

Q11.  
How will the privatisation of VSEL affect the build programme?

A11.  
We are confident that the privatisation of VSEL will have no adverse affect on the MoD's submarine orders.

Q12.  
What about the recent adverse comments by the PAC on productivity at VSEL?

A12.  
Significant improvements in manhours over previous SSN contracts have been negotiated which take account of expected improvements in productivity, experience gained from building earlier "Trafalgar" SSNs and the benefits expected to be derived from the new Submarine Facilities Project (SFP). The MoD continues to insist on improvements wherever this is possible.

**CONFIDENTIAL UNTIL RELEASED**



CONFIDENTIAL UNTIL RELEASED

Q13. Other MOD work at VSEL?

A13. SSN 15 was accepted from the shipbuilder on 30th October 1985. Three other SSNs (16 to 18) are currently under construction. The first of the UPHOLDER class SSK submarine (diesel powered) is also under construction at Barrow. (Cammell Laird became part of the Vickers Group earlier this year). Vickers/Cammell Laird are one of the firms that have been invited to take part in the competition for Type 23 O3 and O4. With MOD assistance, Vickers/Cammell Laird are actively pursuing prospects for the sale of SSKs overseas (eg Canada).

CONFIDENTIAL UNTIL RELEASED

SUPPLEMENTARY Q AND A# ON SSEE 05 CONTRACT

YOU SAID THAT THE ORDER FOR THE FIRST TRIDENT SUBMARINE WOULD BE PLACED BY THE END OF 1985. WHY THE DELAY?

Tender negotiations are still taking place and it is hoped that these will be concluded in the near future. It is not yet possible to be precise about the order date.

WHAT ARE THE DIFFICULTIES?

In line with normal practice, the specific nature of the contract negotiations is confidential between the Department and VSEL.

DOES THIS MEAN THAT THE BUILD WILL BE DELAYED?

No, the submarine detailed design and early production are progressing satisfactorily under long lead funding arrangements.

MAIN PRODUCTION ORDER FOR STING RAY  
ADVANCED LIGHTWEIGHT TORPEDOES

Mr Norman Lamont, the Minister of State for Defence Procurement, today announced that an order had been placed with Marconi Underwater Systems Ltd for the manufacture of more than 2,000 Sting Ray advanced lightweight torpedoes.

The contract is worth approximately £400 million and delivery will extend over several years. Marconi has accepted that payment will be made by the Ministry on delivery of complete and tested torpedoes.

This order was foreseen in the Treasury Minute (Command 9696) replying to the Report of the Public Accounts Committee (28th Report 84/85) on the torpedo programme.

Sting Ray, designed to replace Mk 44 and Mk 46 torpedoes, is the first of a new generation of software-controlled "intelligent" torpedoes.

Mr Lamont said: "Sting Ray is the most advanced torpedo in the world. It has been designed to counter the threat posed by the latest Soviet submarines with the higher speeds and improved capabilities of the 1980s and 1990s."

Sting Ray is extremely robust and is capable of being launched from fixed-wing aircraft, helicopters and surface ships. By virtue of its speed, manoeuvrability and deep-diving capability, as well as its ability to operate in shallow water, the torpedo can engage a wide range of targets.

Sting Ray entered service with the Royal Navy and the Royal Air Force in September 1983; it has already been bought by Egypt and Thailand. Overseas sales prospects are good and negotiations are currently underway with a number of other countries.

RESTRICTED (until Press Release is issued)

COMMERCIAL IN CONFIDENCE

STINGRAY

*1st and 25*

*DLU + 604 torpedoes.*

Q1. Why such a large order?

A1. In order to obtain best value for money and the lowest possible UPC.

Q2. Is this the total MOD requirement for Stingray?

A2. For reasons of security, it is not the practice to reveal the precise numbers of torpedoes planned for the Royal Navy.

Q3. Competition?

a. at prime contractor level?

A3. Marconi Underwater Systems Limited are the Design Authority for Stingray and competition at prime contractor level for this production order proved impracticable because of the high level of design expertise needed to support the prime contractor's tasks of weapon assembly, integration and test. However, these activities represent only 10% of the total contract value.

b. at sub-contractor level?

By far the greater part of the value of the contract is for bought-out components. Most of these components will be purchased as a result of competitions conducted by Marconi. MOD monitor the conduct of the competitions.

Q4. Type of contract?

A4. The contract is fixed price.

Q5. Why the special comment on payment arrangements?

A5. Previous contracts of this type have involved payments on a progress basis, which does not always generate a significant financial incentive to deliver completed weapons of satisfactory quality. The main production element of the Stingray contract does not therefore provide for any payments except for weapons which have been completed and tested.

RESTRICTED (until Press Release is issued)

COMMERCIAL IN CONFIDENCE

LOOSE MINUTE

D/SSC/DRP (WE) /900430

2 January 1986

~~MINISTER (DP)?~~

Copy to:

A/Sec CofN

CPR

DRP (WE)

DRP (W)

DPO(N) (Mr Hill)

STINGRAY MPO ANNOUNCEMENT, MINISTER(DP) PRESS CONFERENCE

3 JANUARY 1986

In response to Minister(DP)'s request this morning I attach supplementary Q&A material on the PAC Report on the Torpedo Programme and the Treasury Minute.

*J. R. Hughes*

J R HUGHES  
DRP (WE) Sec  
BB 406 230 BB

Q1. When was the PAC Report published?

A1. 12 September 1985.

Q2. And the Government's response?

A2. This was published on 18 December in the form of a Treasury Minute - Cmmd 9696.

Q3. PAC complained that poor value for money has been obtained in the past from torpedo programmes?

A3. Position has now improved - Sting Ray entered service in 1983; Spearfish development is subject to the discipline of a fixed price contract; and Tigerfish reliability has improved - the whole system is under control of a single MOD authority and a single contractor, MUSL.

Q4. Resources allocated to Tigerfish and Spearfish being kept under close review?

A4. Yes. The production programme for Spearfish will be subject to adjustment to ensure funding for Tigerfish is curtailed at as early a date as practicable.

Q5. PAC expressed concern that management of the torpedo programme is still not settled; and MOD do not yet have adequate cost information.

A5. Under the Tigerfish Consolidation Programme, MUSL act as prime contractor for the Tigerfish weapon system. This arrangement is being examined to see whether a similar arrangement should be introduced for Spearfish (which is already managed for all systems aspects by a single MOD project team). Decisions have yet to be taken.

It would not be possible to introduce full weapon system management for Sting Ray because there are already prime contractors for the separate aircraft, helicopters and ship launch platforms.

ADP has been introduced within MOD to improve financial management and extensive use is made of ADP in monitoring progress on the projects.

Q6. PAC stated that in the past the contractor appeared not to have suffered any financial penalties. Is value for money now being obtained for torpedo procurement?

A6. The statement by the Committee that in the past the contractors appeared not to have suffered any financial penalties relates to the 1970s.

The joint Sting Ray and Spearfish development contract of 1981 is fixed price and thus provides incentives to the contractor to perform efficiently. The Tigerfish consolidation programme contract of 1984 is also fixed price and provides

for bonuses related to achievement of measured performance improvements. The Sting Ray production contract just placed is similarly fixed price. The main production element of the contract provides for interim payments only on satisfactory inspection of fully tested torpedoes.

Q7. PAC complained about lack of progress on international collaboration and overseas sales?

The Treasury Minute stresses that MOD are making every effort to support MUSL with efforts to secure export orders for torpedoes. Two Sting Ray sales contracts - to Egypt and Thailand - were secured in the first year of the torpedo's in-service life - a significant achievement.

MOD are engaged, in discussions with the UK's European/NATO partners with a view to harmonising future requirements and so paving the way for joint development programmes. We are also working closely alongside MUSL and other UK companies to ensure a consistent approach.

Q8. Was not the timing of the PAC Report - in the middle of the RN Equipment Exhibition - most unfortunate?

A8. Certainly, the report cannot have helped prospects for overseas sales but I am not responsible for the contents or timing of PAC reports - nor the way the Press handle them!

LOOSE MINUTE

D/RP(N) 1/16/2 (1/86)

2 January 1986

DPO(N)

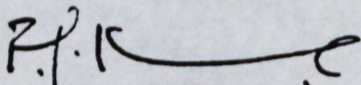
Copy to:

PS/Secretary of State  
PS/Minister(AF)  
PS/Minister(DP) ←  
Sec/CNS  
Sec/CNP  
Sec/ACNS  
PS/2nd PUS  
AUS(Programmes)  
AUS(NP)  
D Programmes  
DGNMT  
DN Plans

DNSD  
DNOT  
Head of RP(P&B)  
Head of Sec(NATO/UK)(P)  
Head of NMT  
Head of Sec(NS)  
Head of RP(Army)  
Head of RP(Air)  
DPR  
DPR(N)

DESMOND WETTERN DAILY TELEGRAPH ARTICLE 2 JANUARY 1986

I attach, as requested, defensive Question and Answer material for use in dealing with enquiries which may be prompted by Desmond Wettern's article in today's Daily Telegraph (copy attached for copy addressees). It has been prepared in conjunction with Head of NMT. We should not, of course, be drawn into any speculative discussion on future policy yet to be considered, let alone decided upon, by Ministers.



F J KENWORTHY  
HEAD OF RP(N)  
MB4391 7818MB



Is it true that considerable reductions in the Navy's operational strength can be expected in 1986?

What about the manpower problems portrayed in Wetter's article?

Current size of DD/FF force?

Are there likely to be some reductions in 1986?

Is money tight?

(Wetter's article refers to need to preserve available funds for new construction)

No. Suggestions that naval manpower shortages or budgetary difficulties will lead to significant reductions in the operational fleet are pure speculation. It remains the Government's policy, as indicated in the Statement on the Defence Estimates 1985, to maintain an escort force level of about 50.

(Draw on material at Annex)

Details of the strength of the Fleet are given annually in Statements on the Defence Estimates as at 1 April each year. The size of the DD/FF force on 1 April 1985 was 53.

The detailed composition of the fleet varies from year to year as will be clear from successive Statements on the Defence Estimates. It is not our practice to give detailed forecasts of future strengths but, as I have indicated, suggestions of major changes in 1986 are speculation.

Obviously the defence programme as a whole has to be tautly managed, but there is no question of investment in future capability being achieved simply at the expense of current capability. Our aim in resource allocation is to preserve a sensible balance between the two.

## ANNEX

Overall the Royal Navy is some 300 officers - or 3% - short of its requirement. There are specific shortages in certain categories of junior seamen officers such as Principal Warfare Officers, Observers and Submariners. These shortages are naturally of concern to the Navy Board but they are not such as to call into question the RN's ability to carry out its operational task. Measures are being taken or are being studied to ease the shortages which stem, as the article states, mainly from reductions in recruiting post Cmnd 8288 and from poor retention in the late 1970s. Recruitment has improved recently but, because of the lengths of training and the subsequent time needed in gaining appropriate experience improvements will take some time to work through. Priority is therefore being given to measures to improve the retention of trained officers.

2. Whilst some shore posts are filled by WRNS or civilians, we fully recognise the need to ensure that adequate opportunities exist for employment ashore of seamen officers and other seagoing personnel. The further erosion of such opportunities is to be avoided wherever possible. However, we must also take into account the need to deploy our resources to meet the requirements of the Service efficiently, consistent with maintaining the requirements of an all volunteer service.

# POLISH EMIGRÉ'S TRIUMPH

By TONY FAIRCHILD

**T**HERE can be few companies in the boating industry more British than Henri-Lloyd, whose chief, Mr Henri Strzelecki, a Polish emigré, was appointed an MBE in the New Year Honours.

The company's motto is: "Export is the lifeline for Britain."

Mr Strzelecki came to Britain in 1946, with barely a word of English, as a Polish soldier after serving with the 8th Army.

He began work as an unskilled labourer in a wire factory in Wakefield and at one stage went to work on a bicycle before founding Henri-Lloyd, world leader in foul-weather clothing for yachtsmen.

The company has four factories employing 300 staff in Lancashire, and had a turnover last year of £4,500,000, 60 per cent of which was for export.

### Boat Show return

With the exception of shoes, every item manufactured by the company is 100 per cent British from the raw materials to the finished products.

Mr Henri, as he is known in the boating trade, and now 60, has returned to the London International Boat Show at Earl's Court for the 25th time.

The show, presented by the Ship and Boat Builders' National Federation and the DAILY EXPRESS, is open from 10 a.m. to 8 p.m. on weekdays and from 10 a.m. to 7 p.m. on Saturdays and Sundays, and continues until Sunday week.



PICTURE: PAUL ARMIGER

offering a helping hand to 14-year-old Christine Parker, after she had ... in his £8,000 mini submarine at the Boat Show, Earl's Court, yesterday. Mr ... years building the craft in the back of his home in Sidbury, Devon.

# Navy's operational strength likely to be reduced

By DESMOND WETTERN *Naval Correspondent*

**C**ONSIDERABLE reductions are expected in the Navy's operational strength during the forthcoming year by officers in the Fleet.

This is because of growing shortage of manpower, particularly junior officers.

Coupled with this is the need to preserve available funds for the Type 23 Frigate and Upholder Class conventional submarine building programme.

The lack of junior officers, mainly of lieutenant rank, in the Seamen Branch is now so acute that the operational effectiveness of probably at least a third of the 51 destroyers and frigates in full commission is being adversely affected.

The most modern destroyers and frigates, and those on the Falklands and Arabian Sea Patrols, in effect the Navy's "First 11," have their full complement of Seaman Officers, and some older ships have only half the number they are supposed to have.

### Financial levels

Among some junior officers there is the feeling that senior officers are reluctant to tell the politicians that the Navy, with its present manpower and financial levels, cannot meet the commitments it now faces.

"Particularly, as the larger ships are not being so hard-hit by the lack of officers, consequently senior officers are less well aware of the problems to be found in smaller and older frigates," one experienced Seaman Lieutenant in a missile destroyer with its full officer complement said.

The officer shortage is due partly to cutbacks in recruiting over the past four years as part of the 10,000 reduction ordered in the Navy's manpower under the 1981 Defence Review, which has brought down the annual officer recruiting average from around 650 to 400.

Consequently, in the 1986-87 financial year starting in April, it is likely that the recruiting target will be raised to 600 officers, although few of these will be fully trained until the 1990s.

But the lack of junior officers, aggravated by the post-Falklands decision to retain eight more

destroyers and frigates in full Commission for watch-keeping duties at sea, has created a vicious circle, as it has meant more duties and more time spent at sea, to a point where the 1985-86 figures, due out in the spring, are expected to show a sharp rise in the number of officers quitting.

The number of officers marrying earlier in their careers is increasing year by year, and some wives inevitably make adverse comparisons between Naval service, which for a seaman officer means 14 years of almost continuous service in sea-going ships on completing his training, and that of his civilian equivalents in more settled occupations.

In an attempt to get more seamen officers to sea, cuts have been made in time spent ashore on courses, to a dangerous level, some senior officers maintain.

Yet many frigates today have only half the numbers of watch-keeping and welfare officers who take charge of a ship's operations room or nerve-centre, that would be required in a war or area of high risk.

### Short supply

What few shore jobs that were available for junior officers have now mostly been taken over by civilians or Wren officers.

"Whilst young watch-keeping officers are in short supply at sea, it must be difficult to persuade a young married man to 'stay put' when he can see perhaps his one-and-only shore job for a number of years filled by a Wren," Lt. Cmdr Michael Crutchley, a former junior seaman officer, points out in the 1986 edition of his "BRITISH WARSHIPS AND AUXILIARIES".

He also points out that increasing time spent in sea-going ships is affecting the retention of ratings as well, and "in peacetime, training for war is vital—but so is a young man's morale—the cries of 'there's no fun left' are again being heard from many an officer and rating. There was a similar situation in the Navy in the 1960s, when it faced heavy commitments in the Middle and Far East.

"British Warships and Auxiliaries 1986-87" by Mike Crutchley, Maritime Books, Littleport (1985).

# rises vich