

Q7. For each of the years 1980-88 how much of the item *Other Research and Development* has been devoted to strategic nuclear forces, and how much of this has been devoted to *Trident*?

A7.	£m	Other R&D	S.N.F.	Trident
	1980/81	227		
	1981/82	248		
	1982/83	267		
	1983/84	308	*	*
	1984/85	363		
	1985/86	409		
	1986/87	374		
	1987/88	485		

Q8. How much (to the latest convenient date) has so far been spent on each of SSBN 05, 06, 07, 08?

A8. Expenditure to December 1987 on:

	£m
SSBN 05	312
SSBN 06	68
SSBN 07	26
SSBN 08	37

Note: The expenditure on SSBN 08 reflects the procurement of construction support spares for the VANGUARD class. The intention is that items procured against this heading will ultimately be absorbed into the class build programme and are thus treated in the project accounts as long lead items for SSBN 08.

Q9. What is the contingency allowance for each of the elements of the programme?

A9. Contingency included within each programme element:

	£m
a. Submarine	208
b. Strategic Weapon System	173
c. Tactical Weapon System	43
d. Shore Construction	150
e. Warhead, Miscellaneous, unallocated contingency	677

Q10. What is the unallocated contingency allowance?

A10. £595m.

Q11. What assurances have been received from the United States with regard to the possible effect on the supply of *Trident* missiles to the UK of any future arms control agreement?

A.11 Close contact is maintained with the US government, both at official and Ministerial level, with regard to the items of equipment which the United States is contracted to supply to us under the terms of the agreement covering the purchase of Trident. The UK government continues to have every confidence and that the United States' obligations under the agreement will be met in full.

Q12. Is the Ministry satisfied that it will be able to produce software for targetting, modelling and effectiveness assessment? What steps have been taken to recruit extra scientific staff to carry out these tasks?

A12. The MoD is confident that software for targetting, modelling and effectiveness assessment will be produced as required to support the programme. There is at present a shortage of non-industrial scientific disciplines within the project and recruitment efforts continue to be made. Contractors are used as necessary to make good any shortfalls and to ensure that the programme is not affected.

A9. (Continued)

DESCRIPTION	COMPANY	VALUE £m
SPM Long Leads procurement	Barr & Stroud	*
ESM Equipment	Barr & Stroud	*
SSC(S) Production	Marconi	*
VLF/CFD Receivers	Plessey	*
ALK 7 Development	Lucas Bradley	*
Design/Development/Production PDM 4	Thorn EMI	*
Development TSNAPS	Smiths	*
Production TSNAPS	Smiths	*
DCC Development	Ferranti	*
SMCS Development	GCAP	*
Datebase Development	VSEL	*
SMCS Production	GCAP	*
Database Production	VSEL	*

3. SUBMARINE

FOC	VSEL	*
05 Build	VSEL	*
06 Build	VSEL	*
05 SSI	VSEL	*
05 NSRP	VSEL	*
06 SSI	VSEL	*
06 NSRP	VSEL	*
07 SSI	VSEL	*
07 NSRP	VSEL	*
CSS SSI	VSEL	*
CSS NSRP	VSEL	*
08 SSI	VSEL	*
Design Agency Services	VSEL	*
06-08 Missile Tubes	VSEL	*
Core G2 (05)	RR&A	*
Core G3 (06)	RR&A	*
Air Bottles	T. I. Chesterfield	*
Safety Work	UKAEA	*
Direct Contract	GDEB	*
Insurance Support Spares	VSEL	*
Configuration Management Supt	VSEL	*
Spare Gear	VSEL	*
UKTTF	Marconi	*
Initial Provision of Spare Gear	RR&A	*
PWR2 Support	RR&A	*
Periscope Shroud	Plessey	*
Hover & Missile Comp	Ferranti	*

4. SUPPORT

Environmental Hazard and Detection		
System at RNAD Coulport	Plessey	*
Sonar 2054	Plessey	*
Submarine Command System	Gresham Capp	*

5. STRATEGIC WEAPON SYSTEM

Procurement & Maintenance INTERIM	<i>data handled</i>	
Software	Digitized Equipment Co Ltd	*
Support to Pre-control Guidance	MSRS	*
Support Navigation	BAe	*
Performance Modelling	BAe	*
Operation of Calibration Laboratory	VSEL	*
Trident Support—Launcher	VSEL	*
Co-ordination Contract for DSS	Computer Sciences Ltd	*
Project definition of Trident	Computer Sciences Ltd	*
System Integration	VITS	*

A9. (Continued)

<i>DESCRIPTION</i>	<i>COMPANY</i>	<i>VALUE £m</i>
Missile	LMSC	*
Missile	LMSC	*
Missile	LMSC	*
Missile	LMSC	*
Training	GEOS	*
Training	GEOS	*
Training	West	*
Training	GEOS	*
Training	Sperry	*
Training	LMSC	*
Training	West	*
Training	West	*
Training	CNSW	*
Training	GEOS	*
Training	LMSC	*
Training	NA	*
Training	Sperry	*
Training	GEOS	*
Training	Sperry	*
Training	West	*
Training	LMSC	*
Navigation	Sperry	*
Navigation	NA	*
Training	NA	*
Training	Sperry	*
Missile	LMSC	*
Launcher	West	*
Fire Control	CNSW	*
Fire Control	NSWC	*
Fire Control	CNSW	*
Test Instrumentation	IEC	*
Ship Installation & Design	BAHI	*
Ship Installation & Design	GDEB	*
Ship Installation & Design	NSEA	*
Ship Installation & Design	VITS	*
Ship Installation & Design	VITS	*
Ship Installation & Design	VITS	*
Ship Installation & Design	VITS	*
Ship Installation & Design	NSEA	*
Ship Installation & Design	GDEB	*
Ship Installation & Design	VITS	*
Ship Installation & Design	VITS	*
Fire Control	RAY	*
Fire Control	SKD	*
Missile	LMSC	*
Fire Control	HI	*
Missile	LMSC	*

KEY:

VITS—Automation Industries Inc.

WEST—Westinghouse Electric Corporation

GEOS—General Electric Co. Ordnance System

LMSC—Lockheed Missile and Space Company

CDC—Control Data Corporation Aerospace

SPERRY—Sperry Corporation

CNSW—Naval Weapons Support Centre

NSWC—Naval Surface Weapons Centre

NA—Rockwell International Corp.

IEC—Interstate Electric Corporation

BAHI—Booz, Allen & Hamilton Inc.

GDEB—General Dynamics Corporation Electric Boat.

NSEA—Naval Sea Systems Command

A9. (Continued)			
	DESCRIPTION	COMPANY	VALUE £m
System Integration	VITS		*
System Integration	VITS		*
System Integration	VITS		*
System Integration	VITS		*
Launcher	West		*
Launcher	West		*
Fire Control	Naval Surface Weapons Centre		*
Fire Control	GEOS		*
Fire Control	GEOS		*
Fire Control	GEOS		*
Fire Control	GEOS		*
Navigation	Naval Weapons Support Centre		*
Navigation	Sperry		*
Navigation	Sperry		*
Missile	LMSC		*
Missile	LMSC		*
Missile	LMSC		*
Missile	LMSC		*
Missile	LMSC		*
Missile	LMSC		*
Missile	LMSC		*
Missile	LMSC		*
Missile	LMSC		*
Missile	LMSC		*
Training	CDC		*
Training	CDC		*
Training	GEOS		*
Training	GEOS		*
Missile	LMSC		*
Missile	LMSC		*
Logistics	CNSW		*
System Integration	VITS		*
Launcher	West		*
Launcher	West		*
Fire Control	GEOS		*
Fire Control	GEOS		*
Navigation	Sperry		*
Navigation	Sperry		*
Missile	LMSC		*
Training	GEOS		*
Training	MTA		*
Training	West		*
System Integration	VITS		*
Launcher	West		*
Launcher	West		*
Launcher	West		*
Fire Control	GEOS		*
Fire Control	NSWC		*
Fire Control	GEOS		*
Navigation	NA		*
Navigation	Sperry		*
Navigation	Sperry		*
Navigation	NA		*
Navigation	Sperry		*
Navigation	NA		*
Navigation	Sperry		*
Navigation	Sperry		*
Navigation	Sperry		*
Test Instrumentation	IEC		*
Test Instrumentation	IEC		*
Missile	LMSC		*
Missile	LMSC		*