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PRIME MINISTEROD (D)

As background to our forthcoming discussion on arms control and disarmament, I asked my people to prepare some statistical information on the nuclear balance, the balance of conventional forces and on comparative defence expenditure. I asked that the figure work should embrace nuclear systems not covered by START and INF, and the forces and expenditure of significant military powers outside NATO and the Warsaw Pact.

2. Comparisons of this sort are very difficult to make and the data produced thus far is provisional. The way in which different systems are counted may also differ in some respects from the papers circulated by the Foreign and Commonwealth Secretary. I thought, however, that you and the others involved in the OD(D) discussion might find the information prepared of background interest and a copy is therefore attached.

3. I am copying this minute and the attachments to the Foreign and Commonwealth Secretary, Richard Luce, John Stanley and Sir Robert Armstrong and also to the Secretary of State for Energy.

Ministry of Defence
13th December 1983

THE NUCLEAR BALANCE – NOVEMBER 1983⁽¹⁾⁽²⁾

STRATEGIC SYSTEMS	LONGER RANGE INF IN EUROPE ⁽³⁾ Range 1000 – 5500 km	SHORTER RANGE INF IN EUROPE ⁽³⁾ Range 150 – 1000 km		SHORT RANGE FORCES IN EUROPE ⁽³⁾ Range below 150 km
USSR ICBMs: SS11, 13, 17, 18, 19 SLBMs: SS-N-5, 6, 8, 17, 18, 20 Bombers: Bear, Bison, Bäckfire USA ICBMs: Titan II, Minuteman 2 & 3 SLBMs: Poseidon, Trident Bombers: B52, FB111 UK: 64 Polaris SLBMs FR: 64 M20 SLBMs China: 15 ICBMs	W.P. Aircraft: Badger, Blinder Missiles: SS4, SS5, SS20 NATO Aircraft: F111 (36 Fr. Mirage IV) Missiles: (18 Fr S3s)	W.P. Aircraft: Fitter, Fishbed, Flogger Fencer, Foxbat Missiles: Scaleboard/SS22 Scud/SS23 NATO Aircraft: F16, F4, F104, Jaguar, Buccaneer Tornado (150 Fr Mirage IIIe, Super E and Jaguar Missiles: Pershing I	W.P. Missiles: Frog/SS 21 Artillery: 203/105/240mm NATO Missiles: Lance, Honest John (30 Fr Plutons) Artillery: 155mm, 8in.	
		3162 ⁽⁴⁾ Aircraft		
 A bar chart for the USSR showing four stacked categories: 347 Bombers (top), 942 SLBMs, 1398 ICBMs, and a shaded area at the bottom representing MIRVs.	 A bar chart for USA/UK/FR showing four stacked categories: 328 Bombers (top), 672 SLBMs, 1045 ICBMs, and a shaded area at the bottom representing MIRVs.	 A bar chart for WP showing three stacked categories: 325 Aircraft (top), 483 Missiles, and a shaded area at the bottom representing MIRVs.	 A bar chart for NATO (inc FR) showing three stacked categories: 18 Fr S3 MRBMs (top, with arrow), 180 Aircraft, and a shaded area at the bottom representing MIRVs.	 A bar chart for WP showing two stacked categories: 766 Artillery (top) and 700 Missiles.
		659 Missiles	730 Aircraft	1576 Artillery
			180 Missiles	700 Missiles
				142 Missiles
USSR	USA/UK/FR	WP	NATO (inc FR)	WP
				NATO (inc FR)

– MIRV

USSR
 SLBMs – 2566 warheads
 ICBMs – 6420 warheads
 SS20 – 729 warheads

US
 SLBMs – 4960 warheads
 ICBMs – 3145 warheads

- (1) Maritime systems included in Annex 2
- (2) Defensive systems not included
- (3) Systems other than those in Europe covered in Annex 2
- (4) Includes all Soviet Aircraft with nuclear association – proportion which would be used in nuclear role not known.

**SUB-STRATEGIC
NON-EUROPEAN NUCLEAR CAPABLE LAND-BASED SYSTEMS**

USSR

Aircraft⁽¹⁾: Badger, Fencer, Flogger, Fitter, Fishbed, Foxbat
 Missiles: SS-20, Scaleboard/SS22, Scud/SS23, Frog
 Artillery: 152, 203, 240mm

USA

Aircraft⁽¹⁾: F111, F4, F16, A6, A7, A10, A4, F15, F105
 Missiles/Artillery⁽²⁾ ?

CHINA

Aircraft: Badger
 Missiles: CSS-1, CSS-2

**SUB-STRATEGIC
NUCLEAR CAPABLE NAVAL SYSTEMS – WORLDWIDE**

USSR

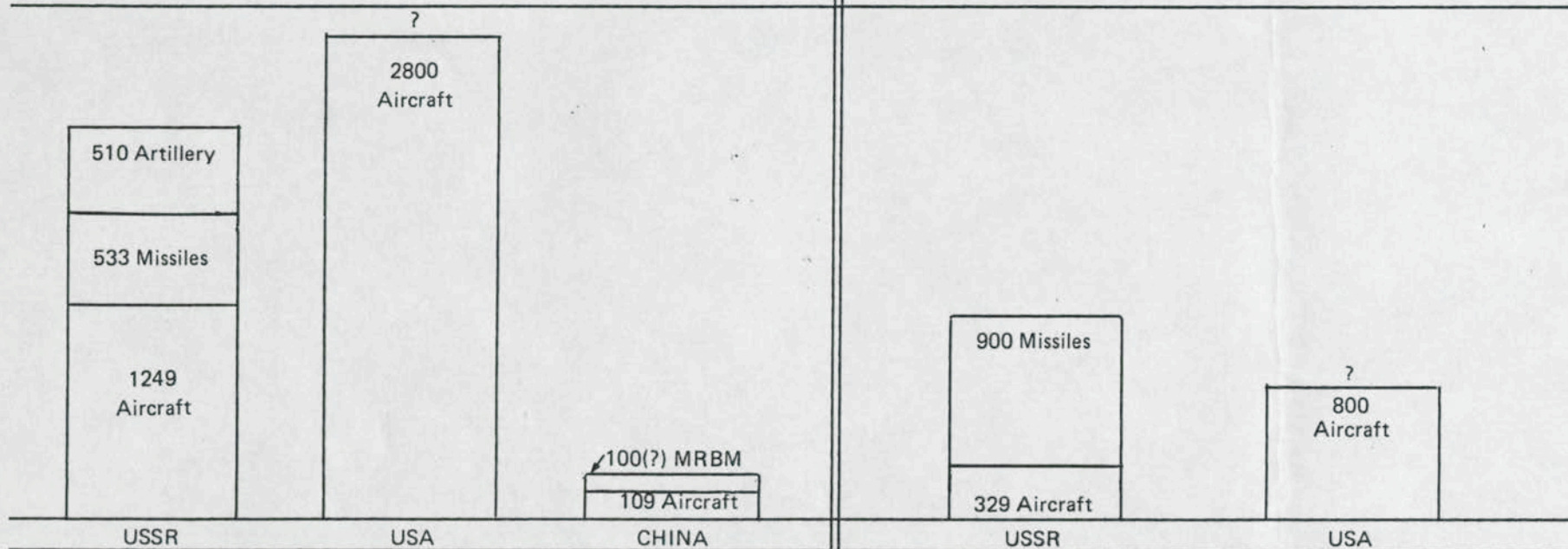
Aircraft: Badger, Fitter
 Missiles: SS-N-2, 3, 7, 9, 12, 19, 22
 and SS-N-5 on GOLF II

USA

Aircraft: F4, A6, A7
 Missiles⁽¹⁾ ?

UK

Aircraft: 18 Buccaneer



(1) Includes all aircraft with nuclear association – proportion which would be used in nuclear role not known.
 (2) Numbers of nuclear capable missiles and artillery in USA not known.

(1) Numbers of nuclear capable tactical missiles with US Navy not known

NATO DEFENCE EXPENDITURE - 1982

	<u>Total Defence Expenditure</u> <u>(US \$ million)</u>	<u>Defence Expenditure as a</u> <u>proportion of GDP</u>
BELGIUM	2892	3.4%
CANADA	6205	2.1
DENMARK	1400	2.5
FRANCE	22522	4.2
GERMANY (WEST)	22350	3.4
GREECE	2639	7.0
ITALY	9090	2.6
LUXEMBOURG	41	1.3
NETHERLANDS	4464	3.2
NORWAY	1698	3.0
PORTUGAL	803	3.4
TURKEY	2755	5.2
UK	24243	5.1
USA	196345	6.5
NATO EUROPE	94897	3.8
NATO TOTAL	297447	5.1

Note: Figures for calendar year 1982, using NATO definition of defence expenditure. 1982 average market exchange rates.

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WARSAW PACT DEFENCE EXPENDITURE

<u>Country</u>	<u>Defence Budget</u> (as published)	<u>Estimated Expend.</u> (1)	<u>% GNP</u>	<u>Expenditure in dollars (million)</u> (2)
Soviet Union (1981) (bn Roubles) (3)	17.1	86-95	14-16	222,000
GDR (1982) (bn GDR Marks)	10.8	13.3	5-6	4,300
Czech (1980) (bn Crowns)	22.9	23.1	about 3½	6,100
Poland (1980) (bn Zlotys)	70.4	82.0	3-4	2,500
Hungary (1982) (bn Forints)	20.2	24.9	about 3	8,400
Romania (1981) (bn Lei)	10.4	22.6	about 3½	3,400
Bulgaria	NA	NA	NA	

(1) Based on DIS and NATO estimates

(2) All figures are from US sources. Most recent estimates we have are 1981 for USSR and 1980 for NSWP. Figures are converted to dollars by estimating what it would cost in the US to reproduce the defence activity of the WP countries. Figures are therefore not directly comparable to NATO figures.

(3) Burden for 1982 cannot yet be provided because of the price reform.

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DEFENCE EXPENDITURE OF OTHER SELECTED COUNTRIES

<u>Country</u>	<u>Defence Budget</u> (as published)	<u>% GNP/GDP</u>	<u>Estimated in dollars</u> (million)
China (1981) (bn yuan)	20,170	5% GNP (UK estimate 8%)	11,870
Japan (1982) (bn yen)	2,586.1	0.98% GNP	10,361
India (1982) (bn Rs)	53.500	3.7% GDP	5,556
North Korea (1983) (bn Won)	3.602	10.2% GNP	1,916
South Korea (1982) (bn Won)	3,782	7.5% GDP	5,173
Pakistan (1982) (bn Rs)	22.878	6% GDP	1,801
Iran (1982) (bn Rial)	576.80 - 1,111.90	6 - 11% GDP	6,900 - 13,300
Yugoslavia (1982) (bn Dinar)	119.0	5% GMP *	2,319

* GMP = Gross Material Product