

SECRET



DRAFT LETTER FROM JS/S OF S TO PPS/PRIME MINISTER

Thank you for your letter of 5 February about Chevaline.

2. As regards the financial implications, the present estimate is that the cost of the continued development effort, and of the changes to the trials programme, will be of the order of £15M. This is well within the present project contingency.

Note: The project contingency, stands at £59M at October 1979 prices, although in addition to the PS continuation programme some £6M of work has already been identified, but not yet approved, which would need to be funded out of contingency. Of the £15M estimated cost of the PS continuation programme, it is estimated that some £5M will fall in 1980-1 and the balance in 1981-2. Chevaline tasks as a whole in 1981-2 are currently being reviewed so that the extra work arising from the PS trials may be contained as far as possible within our 1981-2 Estimate. It is not yet known whether this can be achieved.⁷

3. As I explained in my letter of 30 January, investigations since the failures have shown a number of areas of potential weakness in the ordnance circuit. Modifications are being incorporated to remedy these before the trials in July. We cannot be totally confident about the outcome of the trials because the limited diagnostic information obtained from the two previous unsuccessful trials prevents precise identification of the source of the failures, although it is clear that they cannot be attributed to a single cause; the pattern of failure of the ordnance circuit differed in each case.

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The setback occurred, however, after a series of pad firings which was highly successful overall. No purpose would be served by a postponement of the trials planned for July, since we will in any case need the further diagnostic information, for which additional instrumentation is being fitted, if further work proves in the event to be necessary.

4. I confirm that contingency planning is in hand to deal with a further setback, should this occur. Our plans have as their starting point the need to maintain a continuous deterrent capability.

[Note: HMS RENOWN will be available for a short extension of the trials programme if necessary. If a long extension is needed, HMS RENOWN could deploy in mid 1982 with Polaris A3T rather than Chevaline modified missiles, and further Chevaline trials could be conducted in HMS REVENGE when she becomes available in the later half of 1982 after her present refit. The diversion of submarines from operational tasks for trials would mean that for periods when there would otherwise have been three boats in the operational cycle, giving added flexibility, there would be only two, with at times / ^{a much reduced} margin for accident or major breakdown. But we can and frequently do fulfil our national and NATO tasks with only two in the operational cycle.

5. Our declared commitment to NATO is being and will continue to be met by the existing force until Chevaline enters service.

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It has not as yet been formally declared to NATO, although NATO military staff will be aware informally that the planned deployment date has slipped. As regards our national tasks, our capability will not be improved until Chevaline enters service; but there will be no gap in the continuous deployment of Polaris which has been maintained since it entered service.

[Note: However, the total number of missiles available both for NATO and national tasks will be reduced when a submarine which would otherwise have been in the operational cycle is conducting trials.]

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MO 18/1/1

MINISTRY OF DEFENCE
MAIN BUILDING WHITEHALL LONDON SW1
Telephone 01-230022X 218 2111/3

ES
1141/5

CHIEF OF DEFENCE STAFF
23rd February 1981

CDS	CNS
	CGS
Hd DCDS(A)	CAS
SCDS A 1	SECCOS
	VCDS (P&I)
Hd SCDS(B)	DCDS (I)
SCDS B	DCDS (OR)
SPC	ACDS (OPS)
ADC	ACDE (POL)
SO/CDS	ACDS (P&I)
PA/CDS	ACDS (S)

B1469 FENM FILE: 1141/5

Dear Clive,

CHEVALINE FLIGHT TRIALS

Thank you for your letter of 5th February regarding the Prime Minister's queries on Chevaline. My Secretary of State has asked me to let you have the following information.

As regards the financial implications, the present estimate is that the cost of the continued development effort, and of the changes to the trials programme, will be of the order of £15 million. Of this total, it is estimated that some £5 million will fall in 1980/81 and £10 million in 1981/82. The total sum is well within the overall project contingency, but in phasing terms any extra expenditure in 1981/82 will be difficult to accommodate. The problem should, however, be at least partially offset by the postponement, as a result of the delay to the completion of the trials programme, of certain other Chevaline-related work which was planned for 1981/82, for example, in the field of Post Design Services. Chevaline tasks as a whole in 1981/82 are currently being reviewed and it is too early to predict with confidence what the net effect of the reprogramming will be.

As regards the causes of the failures, I explained in my letter of 30th January that investigations have shown a number of areas of potential weakness in the ordnance circuit but the pattern of failure differed in each case. The set-back occurred, however, after a series of pad firings which was highly successful overall and no purpose would be served by a postponement of the trials planned for July since, if further work proves in the event to be necessary, we will in any case need the further diagnostic information, for which additional instrumentation is being fitted.

C A Whitmore Esq

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On your 4th paragraph, I can confirm that there is contingency planning to deal with a further set-back; our plans have as their starting point the need to maintain a continuous deterrent capability.

Finally, our declared commitment to NATO is being, and will continue to be met by the existing force until Chevaline enters service. It has not yet been formally declared to NATO although NATO military staff will be aware that the planned deployment date has slipped. Our capability on national tasks will not be improved until Chevaline enters service but there will be no gap in Polaris' continuous deployment.

I am sending copies of this letter to George Walden (FCO) and David Wright (Cabinet Office).

*Your int.
Brian*

HIDDEN COPIES

PSO/CDS —

PS/PUS

SEC/CNS

PS/CSA

DUS(D)

DUS(FC)

DFA(SS)

(B M NORBURY)

6

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B2293



+3

18/1/1

10 DOWNING STREET

From the Principal Private Secretary

25 February 1981

Dear Bonnie,

CHEVALINE FLIGHT TRIALS

I have shown the Prime Minister your letter of 23 February 1981 and she was grateful for this further information about the implications of the failure of two of the Chevaline flight trials last November.

I am sending copies of this letter to George Walden (FCO) and David Wright (Cabinet Office).

Yours sincerely,

Ann Whitman.

Brian Norbury Esq.,
Ministry of Defence.

OF DEFENCE STAFF

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CDS	CNS
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SCDS A 1	SECCOS
	VCDS (P&L)
Hd SCDS(B)	DCDS (I)
SCDS B 1	DCDS (OR)
SPC	ACDS (OPS)
ADC	ACDS (POL)
SO/CDS	ACDS (P&L)
PA/CDS	ACDS (S)
FILE: 1141/5	

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crs/cos
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 r/csa
 OUS(r)
 OUS(FB)
 DFA(JJ)

B2341

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→ file

COPY NO 1 of 4
DPS(C)/C12

7

Flag Lieut to GDS

Copy to:

SCDS(B)1

VISIT TO AWRE

TRIDENT ASPECTS

No comment...
should see today (26),
please
of B1 26 Feb.

1. Three areas of critical interest:

CBS
CDS minute on
Trident copy to
of 26 Feb.

a. Facilities and Manpower. Difficulties of skilled staff manning being overcome for CHEVALINE but it would be interesting to know if increased requirements would stem from change C4 to D5 and if these would prejudice WE177 successor timing or digestion.

b. Special Nuclear Materials. What percentage of our anticipated requirements can be provided from UK stocks? Again, would C4 to D5 significantly affect the issue?

c. Technicalities of Manufacture. Changes of technique in RV design and manufacture since POLARIS/CHEV should be of interest.

RETAINED UNDER
SECRET

V M Howard

26 February 1981

CHIEF OF DEFENCE STAFF	
DATE 26-2-81	COPIES
1	CDS
	CNS
	CGS
	Hd SCDS(A)
	CAS
	SCDS A 1
	SECCGS
	VDCS (PEL)
	Hd SCDS(B)
	DCDS (I)
C	SCDS C 1
	DCDS (OR)
	SFC
	ACDS (OPS)
	ADC
	ACDS (POL)
	EO/CDS
	ACDS (PEL)
	PA/CDS
	ACDS (S)
FILE: H/15	
11813	

V M HOWARD
Commodore
D of DP(C)

* Chief of
Strategic Systems
Executive

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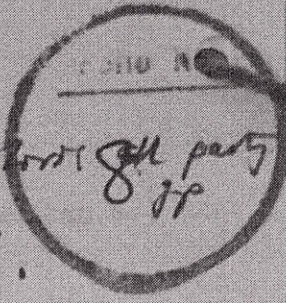
26612

B-2112

Soft b'ys for PPS, MPs, Lords.
MEMORANDUM

from: CHIEF OF THE DEFENCE STAFF

Def. gr. Use of force to:
M.O.S. w. Kimberley et al (Chair Use of Force) all party
- part of more general v'g. P.80.



Date

Running a Polaris.

✓ P.500 Softs, Lord H-N T I discussed the
B_N back problem of convincing some of our
trus supporters in the Strategic Defence
debate (Oss-Ewing, Chalfant etc) of the
insurmountable problems of running a
Polaris. I said that it should be possible
to offer an unclassified briefing on the
subject, & his idea attracted Soft. He
discuss with B.N. how: if he would
like this set up.

TF 2. Oss-Ewing is visiting Lockheed in
VENS hoo

The U.S. next week. They should be
tipped off that what used to be CPE
not to be over enthusiastic about
running on Polaris!

Perhaps T.F. should see me
on how this should be done.

18 MAR Mos by the first of
Sund, GP (incl Chalfont etc)
+ HRS 17 incl here on
of Polaris. Nuclear weapons.

B 3843
ACNS(OR)DUS(P)
DCDS(OR)
ACGS(OR)
ACAS(OR)
ASCA(N)
AUS(D Staff)
CSSE
PSO/CDSNST 7070 - SSBN SUCCESSOR

CHIEF OF DEFENCE STAFF	
DATE	#COPIES
02/01/87	
CDS	CNS
	CGS
Hd SCDS(A)	CAS
SCDS A 1	SECCOS
	VCDS (P&L)
Hd SCDS(B)	DCDS (II)
SCDS B 1	UCDS (OR)
SPC	ACDS (OPS)
ABC	ACDS (POL)
SO/CDS	ACDS (P&L)
PA/CDS	ACDS (S)
FILE: 1141/5	

ACDS(Pol)96/81
(DPS(C)/C12/3)

1. In reading NST 7070, it occurs to me that we should be wary of rejecting the D5 missile option prematurely. If, using D5 missiles we seek to do no more than achieve an initial capability equivalent to that to be derived from an outload of 16 C4 missiles, there may be scope to reduce considerably the apparent capital cost differentials involved. I should make it clear that this thought is not addressing "deterrence" or "criteria" arguments but rather a simple comparison of value for money.
2. Adoption of OHIO centre section/D5 could:
 - a. Probably retain the advantages of US/UK commonality.
 - b. Possibly yield reduced through life costs.
 - c. Give greater confidence of our having a valid deterrent in the 21st century.
 - d. Enable us to phase and smooth capital expenditure so as to render the programme more digestible to the defence budget in the 1980's. (Some 44% of the planned fifteen year spend would otherwise fall on the 3 years 86/87 to 88/89).
3. These considerations give rise to the following questions which are not addressed fully in the NST: