

DEPARTMENT OF NATIONAL DEFENCE

COMMUNICATIONS

CONTROL OF NUCLEAR WARHEADS

CANADIAN MILITARY FORCES - EUROPE

FOR CROSS REFERENCES SEE INSIDE COVER DO NOT P.A.

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D SIGS	NEW FILE CR SEP 19 1961	94/79	JML						
DGPO	Memo Bu 53/6	6/9/63	oe						
DND of	Mem 2	9/9/63	D						
D Sep	mem 2	11 Sep	165	13 Sep 63	161			SEP 13 1963	✓
D Sig	yours	13/9/63	165						
CR	RA	13/12/65	165					JAN 13 1965	✓

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1250-9/13-1

SECRET FILE No. S-

24



SECRET

MEMORANDUM

HQS 1250-9/13-1 (D Sigs)

6 Sep 63

DGPO

Control of Nuclear Weapons  
Provision of Communications

(1)

RECEIVED
8/9 SEP 1963
DMO & P
Director X H.I.
MO 1
MO 2
MO 3 X <i>[initials]</i>

1. You will recall that at the VCGS's weekly meeting of 5 Sep, the question of communications for control of nuclear weapons was discussed briefly.

2. There has been considerable correspondence on this subject and several briefs have been written. The last reference to the matter was in the Chiefs of Staff's Committee meeting of the 18th of Jan 62. I have flagged the most important papers referring to the matter on this file.

SEP 12 1963

*[Signature]*  
(PD Smith)

Col  
D Sigs

D Sigs (thru DMO & P)

Noted. Thank you.

This 61-62 (former govt) situation assumes the worst. It would be best to keep the plan under wraps for the moment, and until/or unless we find the present govt. also wants a separate Cde control on the triquet.

SECRET

H. W. LOVE  
BRIG  
DGPO

000003

SEP 6 1963

s.13(1)(b)

Address reply to:

The Chairman,  
Chiefs of Staff,  
OTTAWA.

FILE: CSC 1196-4 (SO/LOG)

DOCUMENT  
CLASSIFICATION: NATO  
CONFIDENTIAL

DATE: 15 Jan 63



JOINT STAFF MEMORANDUM

SUBJECT: [REDACTED]

DESCRIPTION: [REDACTED]

RECEIVED

17 JAN 1963

DMD & P

Director

MO 1

MO 2

MO 3

② vcs

*Frings*

The attached document is referred to:

- CGS - 2 *one destroyed*
- DM/DND - 1
- DM/FIN - 1
- USSEA - 1

JACKI  
LT-COL  
GSO 1 ACS

③ D Sep  
*NAF*

*is this of interest to you?*

16 JAN 1963

2. It is requested that action be taken by: For information, please  
Our memo of 6 Apr 62 refers

*7/0 memo  
17 Jan 63.*

③ DLCO

*copy to vcs  
JAN 16 1963*

Copies distributed by: ACNMR TO CJS (L), 4 CIBG and NATO DEL

④ D.O.P  
*for QMG?*

*(R.L. Purves)*  
Brigadier  
for Chairman, Chiefs of Staff

FSL/2-0465/mjm

JAN 16

**Page 5**

**is withheld pursuant to section  
est retenue en vertu de l'article**

**13(1)(b)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

MAIN FILE No. S- ~~461-2~~

1250-9/13-1

T.D. No. 1361

DEPARTMENT OF NATIONAL DEFENCE

**SECRET**

**TEMPORARY DOCKET**

ARMY

~~1250-9/13-1-771317~~

T.D. No. 1361  
MAIN FILE NUMBER S- ~~461-2~~

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REFERRED	REMARKS	DATE OF PASS	INITIALS	DATE OF P.A.	INITIALS	DATE OF B.F.	CANCEL B.F.	DATE RECEIVED	INSPECTED
AC3	WITH PAPERS OR	DEC 27 1951	11/11/						
DMOP	Memo pls	28/Dec	MB						
DMPO	Brief 24/7	24/7	AM/2 OW						
ACS	Brief								
DSIGS	With extract	23 Jan 62	ad	24.62	7			JAN 30 1962	
ACS	Memo pls	27/3/62	Ro						
AC3	Minute 3 pls	29/3/62							
DCR	Minute 3 pls	30/3	Ma	2/4/62	Ro				

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5. Action should be taken as soon as possible in order that main file may be kept up to date. If action cannot be taken within 48 hrs. B.F. Docket.
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MEMORANDUM

FILE NO: S8401-2  
TD1361  
DATE: 27.3.62

D

TO: ...A.C.S. ....

RECLASSIFICATION OF FILES

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THE FILE HERewith IS FORWARDED FOR YOUR ATTENTION IN ORDER THAT IT MAY BE DOWNGRADED TO ITS LOWEST POSSIBLE CLASSIFICATION. PLEASE INDICATE CORRECTED CLASSIFICATION BELOW AND RETURN TO C.R.

MAID FILE UNCLASSIFIED

Bonnie Marenjere  
for (J. CARDILLO)  
DCR  
L.2-4371

REMARKS:

CLASSIFICATION OF THIS FILE SHOULD BE

- (A) TOPSECRET
- (B) SECRET
- (C) CONFIDENTIAL
- (D) RESTRICTED
- (E) UNCLASSIFIED

(3) DCR  
to note classification  
please  
W.M. HATH  
SECRETARY  
CHIEFS OF STAFF  
COMMITTEE  
MAR 30 1962

SIGNATURE W.M. HATH  
SECRETARY  
CHIEFS OF STAFF  
COMMITTEE  
BRANCH .....

DATE: .....

MAR 30 1962

CR-21

(2) Secretary of the CSC,  
For your consideration please  
and reply to DCR.

(4) Noted in cl.

MAJOR GSO 2  
ARMY COUNCIL  
SECRETARIAT  
W.M. HATH  
MAR 28 1962

SECRET

EXTRACT FROM MINUTES OF THE 708th MEETING OF  
THE CHIEFS OF STAFF COMMITTEE HELD 18 Jan 62

IV. CONTROL OF NUCLEAR WEAPONS - PROVISION OF NECESSARY  
COMMUNICATIONS

(CSC:2404.1 dated 22 Dec 61) (SECRET)

Document considered: Submission from the Chief of the  
Air Staff - TS1929-206-1 of 24  
Nov 61.

6. The Chief of the Air Staff briefed the Committee on the requirement which he foresaw for adequate control communications in North America and to Europe if and when nuclear weapons are acquired for use by the Canadian Armed Forces.

7. The Committee agreed that on the basis of the policy guidelines expressed to date by the Government a communications system such as that proposed by the Chief of the Air Staff would be required in the event that nuclear weapons are obtained. It was recognized however that no action to implement this requirement could be taken at this time.

SECRET

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**SECRET**

Prepared by: D Sigs

HQS 8401-2

Recommended by: DGPO

OTTAWA, 29 Dec 61

*Rmk*  
R. M. BISHOP  
BRIGADIER  
DGPO

JAN 4

Chiefs of Staff Committee  
Brief for the COS

SUBJECT: Communications for Control of Nuclear Weapons

BACKGROUND

1. To provide Canadian forces with authority to use nuclear weapons, communications are needed for direct (voice) discussion between NDRHQ and the allied commanders and senior Canadian officers concerned, and for authenticated (teleprinter) notification that authority has been granted.

SUMMARY OF RCAF PROPOSAL

2. Direct Discussion (voice) between NDRHQ and SACEUR and/or Canadian National Military Representative at SHAPE would be provided:

- a. by a leased voice (submarine cable) circuit from NDRHQ to SHAPE (annual rental \$250,000.00) until April 63 when USAF tropospheric scatter system could be used (annual rental for connecting circuits \$85,000.00);
- b. as an alternative means, by existing USAF trans-Atlantic communications via USA.

3. Authenticated Notification (teleprinter) from NDRHQ to SACEUR and the Canadian National Military Representative at SHAPE of authority for the Brigade to use nuclear weapons would be provided:

- a. by the aforementioned leased voice circuit only, until Apr 63 when a teleprinter circuit would be provided in the USAF tropospheric scatter system (cost of connecting circuits included in quotation of \$85,000.00 above);
- b. as an alternative, by existing USAF trans-Atlantic communications via USA.

4. For informing the Brigade Commander:

- a. Canadian National Military Representative at SHAPE would use existing internal SHAPE communications;
- b. this would be backed up by a "drop" connection to Brigade HQ from the NDRHQ-SHAPE voice circuit.

COMMENTS

5. RCAF proposes that costs be shared between RCAF and Army. Noting that the RCAF proposal includes communications for forces under NORAD and SACLANT and for the Canadian Air Division, this cost sharing should be proportional.

...../ 2

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- 2 -

6. The RCAF memorandum points out that the circuits would be useful for normal communications as well as for their primary function. The costs would therefore bring some peacetime benefit.

7. The voice and teleprinter circuits would not be secure; to provide speech secrecy equipment at NDHQ, at SHAPE, and at Brigade HQ would cost \$36,000.00; to provide on-line (teleprinter) cipher equipment at NDHQ and SHAPE would cost \$20,000.00.

8. If direct communications between the Brigade Logistics HQ and Canada (now under consideration at AHQ) are provided, they would be an additional alternative means of communications for control of nuclear weapons.

9. Previous studies have indicated a possible commitment for Canada to supply a telephone system and rear link teleprinter for the US Custodial and Support Unit at the storage site, at an estimated cost of \$20,000.00.

10. CGS has informed CAS that he agrees with the concept (HQS 1250-9/13-1 TD 1352 dated 20 Dec 61).

RECOMMENDATIONS

11. It is recommended:

- a. that the RCAF plan be supported;
- b. that a decision be made as to whether the Canadian terminal should be at the National Emergency HQ or at DND Emergency HQ;
- c. that preparation of the detailed communications plan be made the responsibility of the Joint Telecommunications Committee.

**SECRET**

HQS 8401-2  
HQS 1250-9/13-1

M E M O R A N D U M

29 Dec 61

DMO&P

Chiefs of Staff Committee  
Brief for the CGS

Subject: Communications for Control of Nuclear Weapons

1. As requested, herewith brief for CGS in the form required by ACS for approval and transmission to ACS.
2. Previous brief to DGPO on this subject, and CGS memo to CAS stating CGS agreement are in HQS 1250-9/13-1 TD 1352, also attached.

  
(P D Smith)  
Col  
D Sigs *al.*

*2*  
ACS  
*as requested*  
*col*  
R. M. BISHOP  
BRIGADIER  
DGPO

JAN 4 1962

MAJOR GSO &  
ARMY COUNCIL  
SECRETARIAT

JAN 4 1962

  
(M MACK)  
LT - COL  
GSO I ACS

4 JAN 1962

000011

DEPARTMENT OF NATIONAL DEFENCE

MINUTE SHEET

Referred to

REMARKS

To be signed in full showing Appointment, Telephone Number & Date

DSigs.

May this brief be submitted  
through DMOP not later than  
5 Jan 62 (1200 hrs) please

28 Dec/61

*[Signature]*  
DMOP.

SECRET



HQS 8401-2 TD 1361 (ACS)

UNCLASSIFIED when separated from attachment  
ARMY COUNCIL SECRETARIAT

OTTAWA, 28 Dec 61

Chiefs of Staff Committee  
Brief for the CGS

SUBJECT: CONTROL OF NUCLEAR WEAPONS  
PROVISION OF NECESSARY COMMUNICATIONS

1. I am directed to request that you prepare a brief, in conjunction with other interested directorates, if applicable, on the attached paper.
2. The brief is requested for use by the CGS at a future meeting of the Chiefs of Staff Committee.
3. Brief will be prepared in accordance with CAMSP (1958) Vol 1, Chap 5, Sec 2. Particular attention is drawn to para 512 and Plate 9.
4. If possible, the brief should be complete in itself. The use of flagged reference or attachments should be avoided except where the brief will be too lengthy.
5. Please submit four copies to ACS by 0900 hours 9 Jan 62 through the Head, Vice Head or Deputy Head of the Branch, in accordance with Branch procedure. One of the four copies will be placed on this Temporary Docket. The original, duplicate and triplicate are to be in manilla folders and at least the original and duplicate must be complete with any reference documents.
6. Upon completion, the ACS will circulate a copy of the original paper and the brief to the Branch Heads.

28 DEC 1961
DMO & P
Director
MO 1 X
MO 2
MO 3

*M. Jack*  
(M Jack)  
Lieutenant-Colonel  
Army Council Secretariat

DISTRIBUTION

→ DMO&P

For Information  
(less attachments)

- CGS
- AG
- QMG
- MCS
- SA/CGS
- D Budget
- ACS (5)

SECRET

9/27



# Department of National Defence

## CHIEFS OF STAFF COMMITTEE

IN REPLY PLEASE QUOTE  
NO. CSC:2404.1  
SECRET

ADDRESS REPLY TO.  
SECRETARY  
CHIEFS OF STAFF COMMITTEE,  
OTTAWA.

22 December 1961

①

- Chairman, Chiefs of Staff ( No. 4
- CAS ( 5-6-7
- CNS ( 8 & 9
- ✓ CGS ( 10-11-12
- CDRB ( 13

### Control of Nuclear Weapons Provision of Necessary Communications

②  
ACS  
B

1. Attached for consideration is a submission from the Chief of the Air Staff concerning the above subject - TS1929-206-1 dated 24 Nov 61, forwarded under cover of memorandum dated 21 Dec 61.

2. This matter will be discussed at a future meeting of the Chiefs of Staff Committee, at which time a briefing, arranged by the CAS, will be given.

*[Handwritten Signature]*  
(D. W. Blyth)  
Lieut-Colonel  
Secretary

c.c. DM (No. 14  
CJS ( 15

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**SECRET**

COPY NO. 10

MEMORANDUM FOR THE CHIEFS OF STAFF COMMITTEE

Control of Nuclear Weapons

Provision of Necessary Communications

1. On 6 Dec 60 the Cabinet agreed on a nuclear weapons policy and directed, inter alia, that "preparations should continue to enable the Canadian forces to have the vehicles, missiles, bases, training and other requirements to enable them to be ready to use nuclear weapons to be acquired from the United States under joint control arrangements if and when adoption of these weapons is considered necessary".

Concept

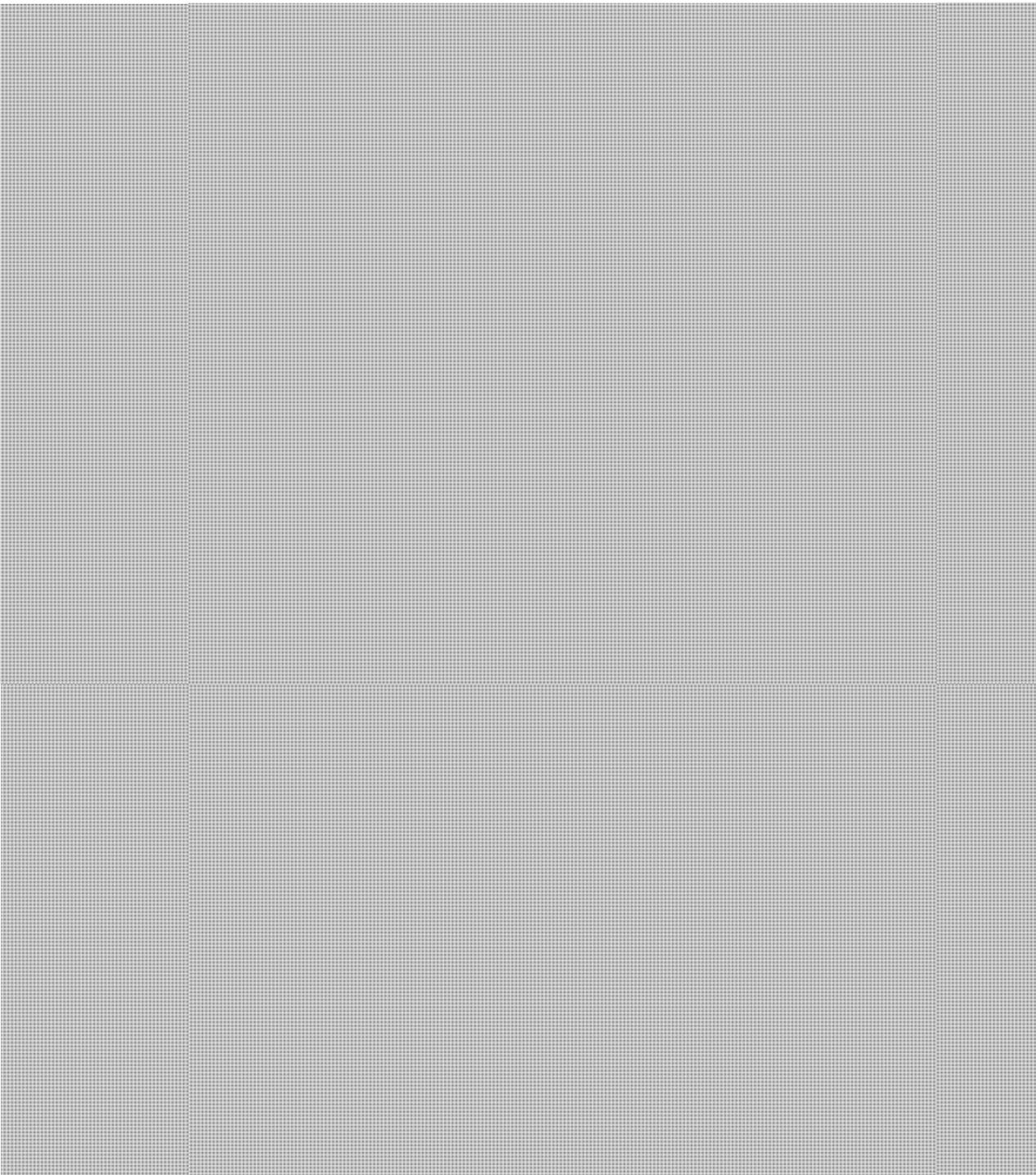
2 In order to provide for authorization by the Government of Canada for the use of nuclear weapons by Canadian forces at the time required, communications must be provided to appropriate allied commanders and senior Canadian officers concerned. The necessary communications system must provide a capability for direct discussion between NDHQ and any one of the commanders concerned, prior to, and for the purpose of, obtaining the necessary Governmental authority. The system must also provide a capability for rapid, positive and authenticated notification to all commanders and senior Canadian officers concerned as soon as authority has been granted. For the former purpose, voice communications are essential; for the latter, either voice or teletype would be suitable.

3 The senior Canadian officer at each integrated Headquarters could be given a national responsibility in the joint control chain in the same way that CINCNORAD, SACEUR and SACLANT have national responsibilities as CINCONAD, CINCEUR and CINCLANT respectively. Upon receipt of direct advice that the Canadian Government has authorized release of nuclear weapons, it would be their responsibility to notify the Canadian forces under the control of their HQs. As a safeguard, there should be alternate means whereby appropriate subordinate HQs, Commands or Units, which include Canadian forces, could be advised directly of the Canadian Government decision.

TOP SECRET

- 2 -

- 4 The required communications system could be achieved by:
- (a) A primary voice circuit from NDHQ to each required point. These circuits must be instantaneously available and virtually 100 percent reliable; and
  - (b) An alternate voice or teletype circuit, not necessarily direct, from NDHQ to each required point as a back-up to the primary circuit. A lesser degree of availability and reliability than for primary circuits could be accepted.

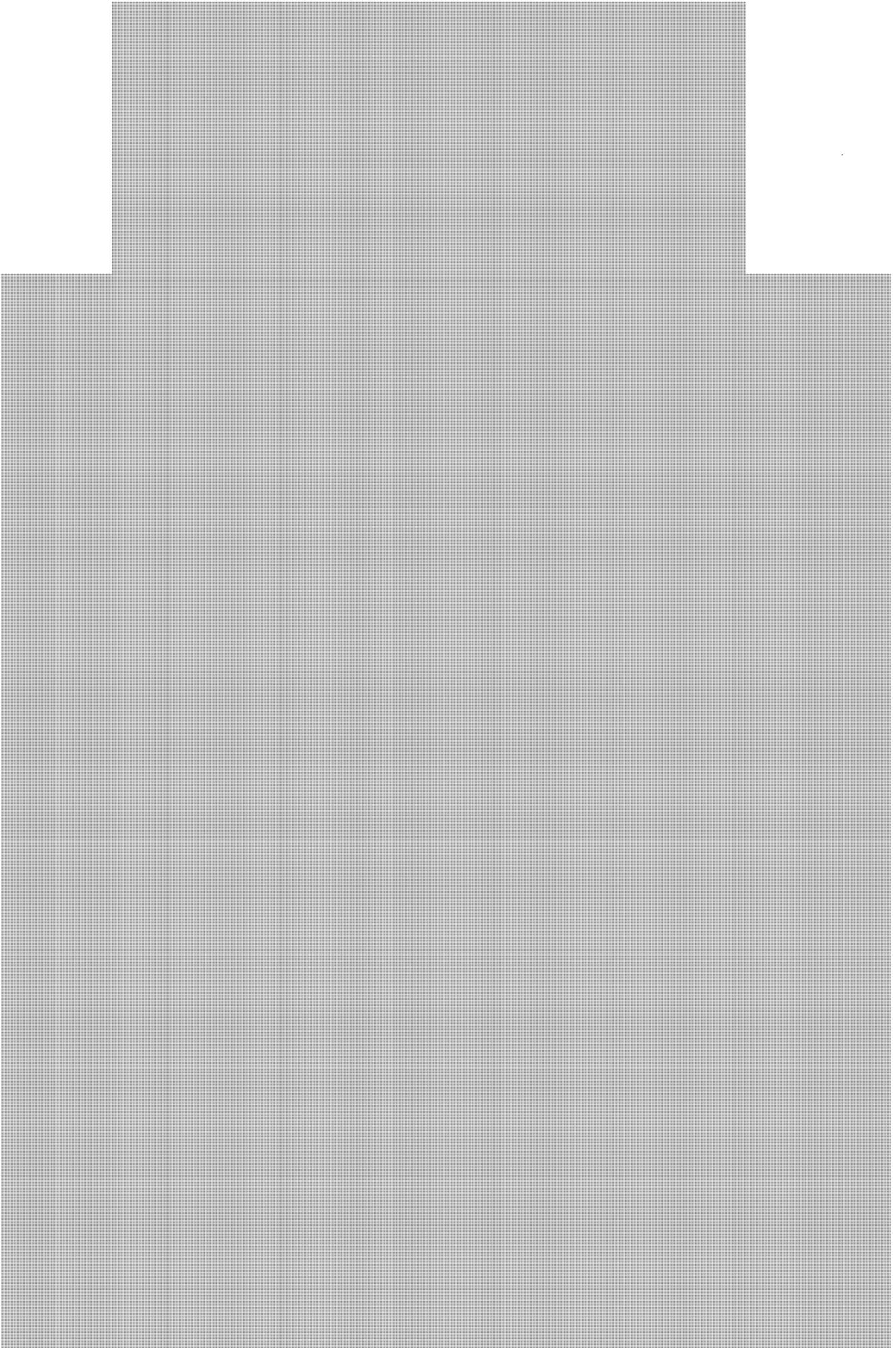
TOP SECRET

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TOP SECRET

- 3 -



TOP SECRET

... 4

TOP SECRET

- 4 -

8 Charts showing the required communications system in regard to North American Air Defence, Maritime and NATO Europe are attached.

Costs

9 The annual costs of the additional circuits are estimated to be:

One direct voice circuit NDHQ to CANCOMARPAC with a drop to HQ Seattle NORAD Sector	- \$110,000
One direct voice circuit NDHQ to CANCOMARLANT	- \$ 28,400
One direct voice circuit NDHQ to SACLANT	- \$ 24,000
Commercial voice circuit to satisfy ACE requirements	- <u>\$250,000</u>
TOTAL	<u>\$412,400</u>

10 After 1963, when the USAF tropospheric scatter system between Goose Bay and Fylingsdale is completed, the annual recurring cost to Canada for the NDHQ/Goose Bay and Fylingsdale/ACE links would be approximately \$85,000. Therefore the total annual recurring costs of the additional circuits would be reduced to approximately \$247,400.

11 The above costs should be shared between the RCAF and RCN - RCAF and Canadian Army as applicable.

12 While these circuits must be instantaneously available for their primary purpose should the need arise, there is a present and continuing need for communications of this type for normal intercommunication between all the points involved. Consequently, the rather substantial costs should not be entirely attributed to a one-time need.

Procurement

13 Because of the long lead time normally associated with procurement of such communication services, procurement action should be initiated now. Even if this is done, it may not be possible to obtain all of the circuits in phase with the completion of other arrangements for the use of nuclear weapons.

TOP SECRET

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~~TOP SECRET~~

- 5 -

RECOMMENDATION

- 14 It is therefore recommended that the COSC approve:
- (a) the concept as set out in paras 2, 3 and 4 above.
  - (b) the requirement for circuits as described.
  - (c) the sharing of costs as indicated.

CHIEF OF THE AIR STAFF

TS1929-206-1(CAS)

24 Nov 61

~~TOP SECRET~~

**Pages 20 to / à 22  
are withheld pursuant to sections  
sont retenues en vertu des articles**

**13(1)(a), 15(1)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

1A on

NQS 1250-9/13-1

I believe we commented on an earlier  
draft of this paper - though I don't  
know whether we did so on the ref. file.

Just, per X-refers



TRANSIT SLIP  
JOINT TELECOMMUNICATIONS COMMITTEE

DATE..... **FEB - 6 1962** .....

CSC File No..... **2207** .....

**NATO SECRET**

TOP SECRET ( ) SECRET ( ) CONFIDENTIAL ( ) RESTRICTED ( ) UNCLASSIFIED ( )

Col P.D. Smith,  
DSigs, (ARMY)  
Room 3050 "C" Bldg.

- ( ) Herewith copy(ies) No(s)
- ( ) For your recommended reply
- ( ) For your action
- (  ) For your information/circulation/retention
- ( ) For your information and return to JTC please.

Note:

*mc*



cc:

*W.C. Maclean*

(W.C. Maclean) W/C  
Secretary

Joint Telecommunications Committee  
2-5130

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**NATO—SECRET**

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NATO SECRET

COPY NO.

NORTH ATLANTIC MILITARY COMMITTEE  
COMITE MILITAIRE DE L'ATLANTIQUE NORD

MC 61/1 (Military Decision)

26 January 1962

MILITARY DECISION ON MC 61/1

A Report by the Military Committee

on

RELIABLE COMMUNICATIONS FOR EARLY  
WARNING AND ATOMIC STRIKE PLANS

1. At its 87th Meeting on 25th January 1962, the Military Committee in Permanent Session approved MC 61/1.

2. The North Atlantic Council is requested to take note of this report.

FOR THE MILITARY COMMITTEE:

*Maurice E Kaiser*

MAURICE E. KAISER  
Colonel, U.S. Army  
Secretary

1 ENCLOSURE  
1. MC 61/1

DISTRIBUTION: A, B1, 4, 9, D, E1, 10, F, J1, K1, L

NATO SECRET  
MC 61/1 (Military Decision)

- 1 -

This document consists  
of six pages.

**NATO—SECRET**

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NATO SECRET

MC 61/1

25 January 1962

A REPORT BY THE STANDING GROUP

to the

MILITARY COMMITTEE

on

RELIABLE COMMUNICATIONS FOR EARLY  
WARNING AND ATOMIC STRIKE PLANS

Reference: SHAPE 3130.13/23-15, 22 October 1960

INTRODUCTION

1           1. In reference a SHAPE states its belief that its vital  
2 circuits for early warning and atomic strike plans must exist in  
3 at least two separate communications systems if there is to be  
4 any assurance that vital Allied Command Europe communications are  
5 to be instantly and continuously available in all circumstances.

6           2. As an enclosure to reference a, SHAPE submitted a  
7 proposed policy directive on this matter, and in view of the  
8 financial effect of the implementation of this proposed policy  
9 requested Standing Group approval prior to its issue. Because  
10 all member nations will be concerned with the implementation of  
11 this policy directive, the Standing Group considers that the  
12 principle of establishing circuits in two separate communi-  
13 cations systems should be considered by the Military Committee.

DISCUSSION

14           3. The NATO strategic concept envisages that a general  
15 war remains the greatest threat to the survival of the

1 ENCLOSURE

1. Memo to SACEUR

DISTRIBUTION: A, B1, 4, 9, D, E1, 10, F, J1, K1, L

NATO SECRET  
MC 61/1

NATO SECRET

1 member nations and that NATO defense in general war depends  
2 upon an immediate exploitation of the nuclear capability  
3 available to the Alliance.

4 4. In MC 59 (Revised)(Final), 21 February 1956, it was  
5 recognized that vital early warning, alert and atomic strike  
6 circuits must be in being if there was to be any assurance  
7 that these vital circuits would be instantly available if  
8 and when an attack came, and steps were taken to provide the  
9 ACE Tropospheric Forward Scatter System. At that time it  
10 was visualized that SHAPE could establish its vital circuits  
11 in this military forward scatter system and would cease  
12 leasing landlines from commercial sources for these purposes.

13 5. Since that time, reaction times have been reduced  
14 to a minimum, critical communication complexes are considered  
15 to have become potential atomic targets in the initial  
16 stages of an attack, and more has been learned about the  
17 disruptive effects of nuclear explosions and of jamming on  
18 radio communications.

19 6. Since no single communications system can provide  
20 adequate reliability, the Standing Group concurs with  
21 SACEUR's belief that his vital circuits must exist in at  
22 least two separate communications systems if there is to be  
23 any assurance that these vital communications are to be  
24 instantly and continuously available.

25 7. SACEUR estimates that the full implementation  
26 of this proposed policy will require a continued yearly  
27 expenditure of approximately 25 million new francs.

NATO SECRET  
MC 61/1

NATO SECRET

1           8.    The proposed directive of SACEUR requires that  
2 each alternative circuit must be submitted to SHAPE for  
3 approval and must be completely justified. It also  
4 requires that military facilities must be utilized to  
5 the maximum to obtain the alternative routings for  
6 security and monetary reasons. In addition, the Standing  
7 Group considers that, before use is made of civil facilities,  
8 the possibility of using national military facilities  
9 should be investigated whenever NATO military facilities  
10 are not adequate.

11           9.    To facilitate the establishment of reliable  
12 communications for vital circuits in ACE, the United States  
13 authorities have advised that circuits or circuit time, as  
14 can be allocated by the United States authorities in the  
15 US communications facilities linking the US European Command  
16 with US custodial officers at special ammunition storage  
17 sites and loaded delivery vehicles throughout Allied  
18 Command Europe, are available to SACEUR for alternative  
19 routing of his command communications.

CONCLUSIONS

20           10. The Standing Group concludes that:-

21           a.    There is a requirement for SHAPE's vital  
22 early warning and atomic strike communication circuits  
23 to exist in two separate communication channels if there  
24 is to be any assurance that these vital circuits will  
25 be instantly and continuously available under all  
26 circumstances.

27           b.    Each request for a Tropospheric Forward Scatter  
28 circuit to be duplicated in peacetime in an alternative  
29 system should be judged individually on its own particular

NATO SECRET  
MC 61/1

NATO SECRET

1 merit.

2 c. The maximum use should be made of all  
3 existing facilities.

4 d. Only when military facilities, including  
5 national military facilities, are not available,  
6 should civil facilities be used.

RECOMMENDATIONS

7 11. The Standing Group recommends that the Military  
8 Committee concur in the above conclusions, approve the  
9 dispatch to SACEUR of the memorandum at Enclosure 1 and  
10 forward this report to the North Atlantic Council to note.

NATO SECRET  
MC 61/1

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ENCLOSURE 1

SGM-74-62

MEMORANDUM FOR THE SUPREME ALLIED COMMANDER EUROPE

SUBJECT: Reliable Communications for Early  
Warning and Atomic Strike Plans

Reference: SHAPE 3130.13/23-15, 22 October 1960 and  
Proposed Directive at Enclosure

1           1. The Military Committee has considered reference a  
2 and approves the principle of establishing circuits in two  
3 separate communications systems for early warning and atomic  
4 strike plans.

5           2. The Military Committee considers that:

6           a. The maximum use should be made of all existing  
7 facilities.

8           b. Each request for a Tropospheric Forward Scatter  
9 circuit to be duplicated in peacetime in an alternative  
10 system must be judged individually on its own particular  
11 merit.

12           c. Only when military facilities, including  
13 national military facilities, are not available, should  
14 civil facilities be used. In this connection, the United  
15 States has advised that circuits or circuit time, as can  
16 be allocated by the United States authorities in the US  
17 communications facilities linking the US European Command  
18 with US custodial officers at the special ammunition  
19 storage sites and loaded delivery vehicles throughout  
20 Allied Command Europe, are available to SACEUR for  
21 alternate routing of his command communications.

NATO SECRET  
MC 61/1

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Enclosure 1

MAIN FILE No. S-1250-9/13-1

T.D. No. 1352

DEPARTMENT OF NATIONAL DEFENCE

# SECRET

## TEMPORARY DOCKET

ARMY

T.D.No.

MAIN FILE NUMBER S-

ROUTING				P.A. & B.F. ENTRIES				REGISTRY ONLY	
REFERRED	REMARKS	DATE OF PASS	INITIALS	DATE OF P.A.	INITIALS	DATE OF B.F.	CANCEL B.F.	DATE RECEIVED	INSPECTED
D/31 G	WITH PAPERS CR	DEC 18 1957	43/11/11						
DG-PO	Memo	18 Dec 57							
DSIGS	Retd	11/6/57							
DM+P	W/ 8401-2 TO 1361	29 Dec 57	DL						
DG-PO		24/1	UW						
CS									
DSIGS	WITH EXTRACT	23 JAN 62	AW	29/6/62					

### INSTRUCTIONS

1. Temporary Dockets are to deal WITH ONE CASE ONLY.
2. T.D.'s NOT to be placed on main file UNLESS Central Registry informed by means of a File Control Form.
3. T.D. No. together with main file number to be quoted on all correspondence originated.
4. T.D.'s not to be passed from one service to another.
5. Action should be taken as soon as possible in order that main file may be kept up to date. If action cannot be taken within 48 hrs. B.F. Docket.
6. T.D.'s to be requisitioned, passed, P.A.'d, B.F.'d, etc., in the same manner as main files by means of a File Control Form.

*no letter enclosed m.c.*

SECRET

EXTRACT FROM MINUTES OF THE 708th MEETING OF  
THE CHIEFS OF STAFF COMMITTEE HELD 18 Jan 62

IV. CONTROL OF NUCLEAR WEAPONS - PROVISION OF NECESSARY  
COMMUNICATIONS

(CSC:2404.1 dated 22 Dec 61) (SECRET)

Document considered: Submission from the Chief of the  
Air Staff - TS1929-206-1 of 24  
Nov 61.

6. The Chief of the Air Staff briefed the Committee  
on the requirement which he foresaw for adequate con-  
trol communications in North America and to Europe if  
and when nuclear weapons are acquired for use by the  
Canadian Armed Forces.

7. The Committee agreed that on the basis of the  
policy guidelines expressed to date by the Government  
a communications system such as that proposed by the  
Chief of the Air Staff would be required in the event  
that nuclear weapons are obtained. It was recognized  
however that no action to implement this requirement  
could be taken at this time.

★ noted  
J. J. J.  
24 Jan 62

SECRET

HQS 8401-2  
HQS 1250-9/13-1

MEMORANDUM

29 Dec 61

DMO&P

Chiefs of Staff Committee  
Brief for the CGS

Subject: Communications for Control of Nuclear Weapons

1. As requested, herewith brief for CGS in the form required by ACS for approval and transmission to ACS.
2. Previous brief to DGPO on this subject, and CGS memo to CAS stating CGS agreement are in HQS 1250-9/13-1 TD 1352, also attached.

  
(P.D. Smith)  
Col  
D Sigs

WHF/dc

**SECRET**

Prepared by: D Sigs

HQS 8401-2

OTTAWA, 29 Dec 61

Chiefs of Staff Committee  
Brief for the CDS

SUBJECT: Communications for Control of Nuclear Weapons

BACKGROUND

1. To provide Canadian forces with authority to use nuclear weapons, communications are needed for direct (voice) discussion between NDMQ and the allied commanders and senior Canadian officers concerned, and for authenticated (teleprinter) notification that authority has been granted.

SUMMARY OF RCAF PROPOSAL

2. Direct Discussion (voice) between NDMQ and SACBUR and/or Canadian National Military Representative at SHAPE would be provided:

- a. by a leased voice (submarine cable) circuit from NDMQ to SHAPE (annual rental \$250,000.00) until April 63 when USAF tropospheric scatter system could be used (annual rental for connecting circuits \$85,000.00);
- b. as an alternative means, by existing USAF trans-Atlantic communications via USA.

3. Authenticated Notification (teleprinter) from NDMQ to SACBUR and the Canadian National Military Representative at SHAPE of authority for the Brigade to use nuclear weapons would be provided:

- a. by the aforementioned leased voice circuit only, until Apr 63 when a teleprinter circuit would be provided in the USAF tropospheric scatter system (cost of connecting circuits included in quotation of \$85,000.00 above);
- b. as an alternative, by existing USAF trans-Atlantic communications via USA.

4. For informing the Brigade Commander:

- a. Canadian National Military Representative at SHAPE would use existing internal SHAPE communications;
- b. this would be backed up by a "drop" connection to Brigade HQ from the NDMQ-SHAPE voice circuit.

COMMENTS

5. RCAF proposes that costs be shared between RCAF and Army. Noting that the RCAF proposal includes communications for forces under NORAD and SACLANC and for the Canadian Air Division, this cost sharing should be proportional.

...../ 2

**SECRET**

**SECRET**

- 2 -

6. The RCAF memorandum points out that the circuits would be useful for normal communications as well as for their primary function. The costs would therefore bring some pecetime benefit.

7. The voice and teleprinter circuits would not be secure; to provide speech secrecy equipment at NDHQ, at SHAPE, and at Brigade HQ would cost \$36,000.00; to provide on-line (teleprinter) cipher equipment at NDHQ and SHAPE would cost \$20,000.00.

8. If direct communications between the Brigade Logistics HQ and Canada (now under consideration at AHQ) are provided, they would be an additional alternative means of communications for control of nuclear weapons.

9. Previous studies have indicated a possible commitment for Canada to supply a telephone system and rear link teleprinter for the US Custodial and Support Unit at the storage site, at an estimated cost of \$20,000.00.

10. CDS has informed CAS that he agrees with the concept (HQS 1250-9/13-1 TD 1352 dated 20 Dec 61).

RECOMMENDATIONS

11. It is recommended:

- a. that the RCAF plan be supported;
- b. that a decision be made as to whether the Canadian terminal should be at the National Emergency HQ or at DND Emergency HQ;
- c. that preparation of the detailed communications plan be made the responsibility of the Joint Telecommunications Committee.

**SECRET**

SECRET

HQS 1250-9/13-1 TD 1352  
(D Sigs)

20 Dec 61

Chief of the Air Staff

Control of Nuclear Weapons  
Communications

1. I refer to your minute of 15 Dec 61 with attached memorandum for the CSC concerning Control of Nuclear Weapons - Provision of Necessary Communications.

2. I agree with the concept as outlined in your memorandum. Also, I am informed that, from the technical point of view, the communication plan is satisfactory to meet the requirements of the concept and that the costs are realistic. The proposed approach probably represents as precise a plan as is possible at this time, in view of the present status of Canadian - US negotiations.

Original Signed by

G G S  
(G Walsh)

Lieutenant-General  
Chief of the General Staff

SECRET

*Noted  
21 Dec 61*

# SECRET

## MEMORANDUM

HQS 1250-9/13-1 TD 1352 (D Sigs)

18 Dec 61

DGPO

Control of Nuclear Weapons  
Communications

1. Reference request for comments on RCAF proposal for provision of communications for control of nuclear weapons.

2. The RCAF proposal can be summarized as follows (see diagram at Annex A):

a. for direct discussion between NDHQ and SACEUR and/or Canadian National Military Representative at SHAPE:

- (1) until Apr 63, a leased voice circuit from NDHQ to SHAPE at an annual rental of \$250,000;
- (2) after Apr 63, a voice circuit via USAF tropospheric scatter system at an annual rental for extension circuits of \$85,000 (permitting cancellation of the leased direct circuit);
- (3) alternative means via existing USAF trans-Atlantic communications.

b. for authenticated notification from NDHQ to SACEUR and the Canadian National Military Representative at SHAPE of authority for the Brigade to use nuclear weapons:

- (1) until Apr 63, use the leased voice circuit only;
- (2) after Apr 63, a teleprinter circuit via the USAF tropospheric scatter system (cost included in the quotation of \$85,000 above);
- (3) alternative means via existing USAF trans-Atlantic communications.

c. for informing Brigade Commander

- (1) Canadian National Military Representative would use existing internal SHAPE communications;
- (2) this would be backed up by a drop at Brigade HQ from the NDHQ - SHAPE voice circuit.

d. costs to be shared between RCAF and Army as applicable; as part substantiation for providing these circuits now, the need for such circuits for normal activity is noted.

3. I consider that this plan is satisfactory and recommend it be supported. The costs quoted are realistic.

4. The following additional points should be noted:

②  
CGS  
I recommend  
signature of memo  
at fly-leaf.  
Read  
C. BISHOP  
B. VIGORIER  
DGPO

DEC 19 1961  
VCS  
To note

W  
C. GEN  
SH  
CGS  
DEC 20 1961

SECRET

- 2 -

- a. the voice circuits would not be secure; if security is required, speech secrecy equipment should be provided; this would cost a total of \$36,000 to provide a terminal at NDHQ, at SHAPE, and at Bde HQ; likewise on-line cipher would appear to be necessary to protect the teleprinter circuit at a total cost of \$20,000 for two terminals.
- b. it will be necessary to decide whether the Canadian terminal for these circuits should be at the National Emergency HQ or at DND Emergency HQ;
- c. consideration is being given separately to provision of communications from Bde Logistics HQ to Canada; these communications would be an additional alternative, if provided.
- d. US custodial and support communications in the storage area were described in para 9 of my memo HQTS 8433-2 TD 1163 (D Sigs) dated 12 Sep 61.



(PD Smith)

Col

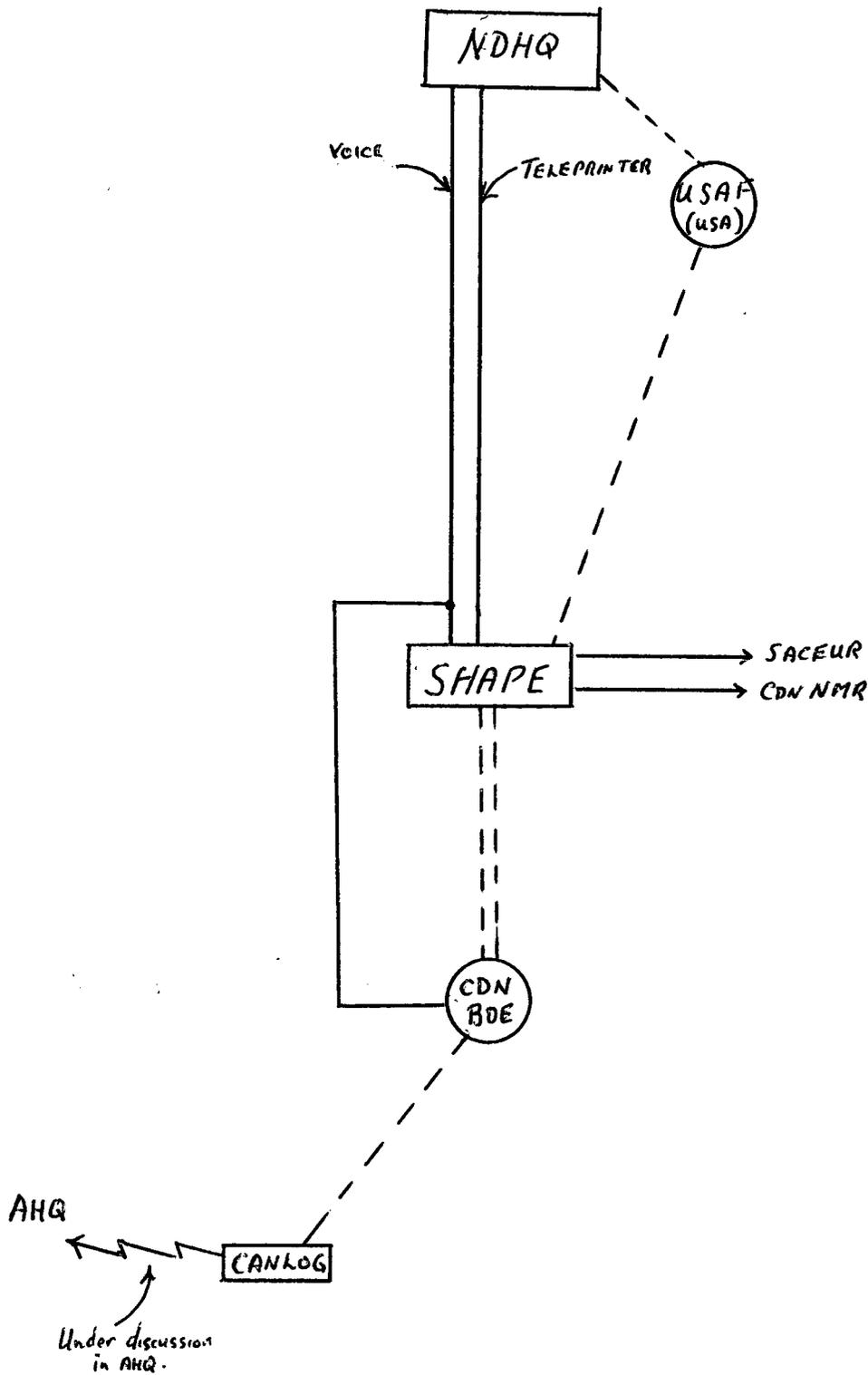
D Sigs

SECRET

SECRET

RCAF PROPOSAL FOR  
COMMUNICATIONS  
FOR  
CONTROL OF NUCLEAR WEAPONS

ANNEX A  
to HQS 1250-9/13-1  
TD 1352 dated 18 Dec 61



Legend  
Solid lines - circuits to be provided.  
Dotted lines - existing circuits.



DEPO

The CIGS would appreciate comments  
on CAS's paper so that he may  
make an early reply pls.

OFFICE OF  
THE CHIEF OF THE GENERAL STAFF  
OTTAWA

~~K. A. TOMS  
Lt Col  
MA 1000CS~~

DEC 15 1961

67  
15

DEPARTMENT OF NATIONAL DEFENCE  
OFFICE OF CHIEF OF THE AIR STAFF

✓ C62 - we agree  
would you have  
a look at this  
& see if it is  
generally ok from  
your point of view  
[Signature]

15 DEC 71

36  
15

CBS

MP

~~SECRET~~ SECRET

COPY NO. 2

MEMORANDUM FOR THE CHIEFS OF STAFF COMMITTEE

Control of Nuclear Weapons

Provision of Necessary Communications

1 On 6 Dec 60 the Cabinet agreed on a nuclear weapons policy and directed, inter alia, that "preparations should continue to enable the Canadian forces to have the vehicles, missiles, bases, training and other requirements to enable them to be ready to use nuclear weapons to be acquired from the United States under joint control arrangements if and when adoption of these weapons is considered necessary".

Concept

2 In order to provide for authorization by the Government of Canada for the use of nuclear weapons by Canadian forces at the time required, communications must be provided to appropriate allied commanders and senior Canadian officers concerned. The necessary communications system must provide a capability for direct discussion between NDHQ and any one of the commanders concerned, prior to, and for the purpose of, obtaining the necessary Governmental authority. The system must also provide a capability for rapid, positive and authenticated notification to all commanders and senior Canadian officers concerned as soon as authority has been granted. For the former purpose, voice communications are essential; for the latter, either voice or teletype would be suitable.

3 The senior Canadian officer at each integrated Headquarters could be given a national responsibility in the joint control chain in the same way that CINCNORAD, SACEUR and SACLANT have national responsibilities as CINCONAD, CINCEUR and CINCLANT respectively. Upon receipt of direct advice that the Canadian Government has authorized release of nuclear weapons, it would be their responsibility to notify the Canadian forces under the control of their HQs. As a safeguard, there should be alternate means whereby appropriate subordinate HQs, Commands or Units, which include Canadian forces, could be advised directly of the Canadian Government decision.

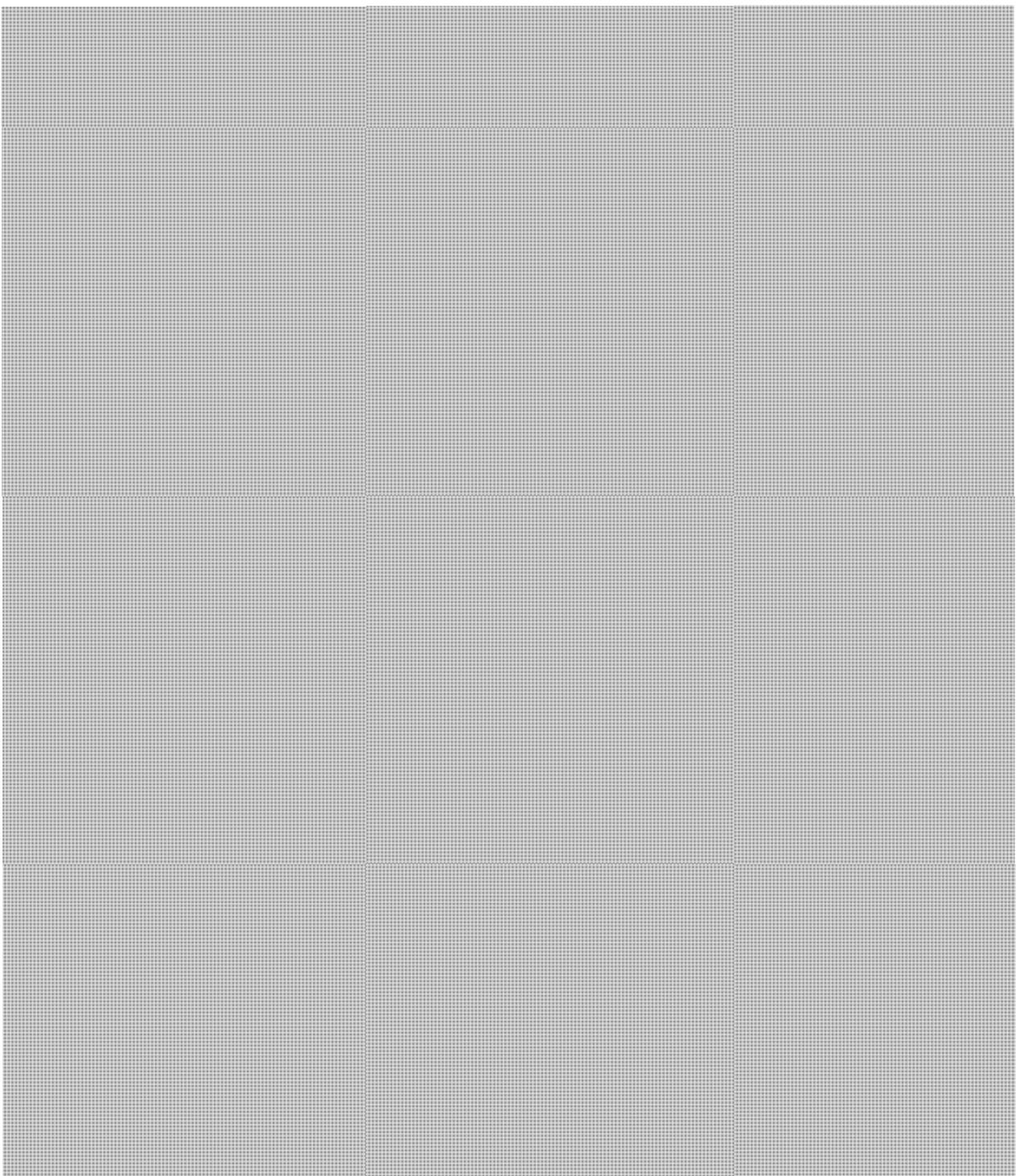
MP

~~SECRET~~ SECRET

~~TOP SECRET~~

- 2 -

- 4 The required communications system could be achieved by:
- (a) A primary voice circuit from NDHQ to each required point.  
These circuits must be instantaneously available and virtually 100 percent reliable; and
  - (b) An alternate voice or teletype circuit, not necessarily direct, from NDHQ to each required point as a back-up to the primary circuit. A lesser degree of availability and reliability than for primary circuits could be accepted.



... 3

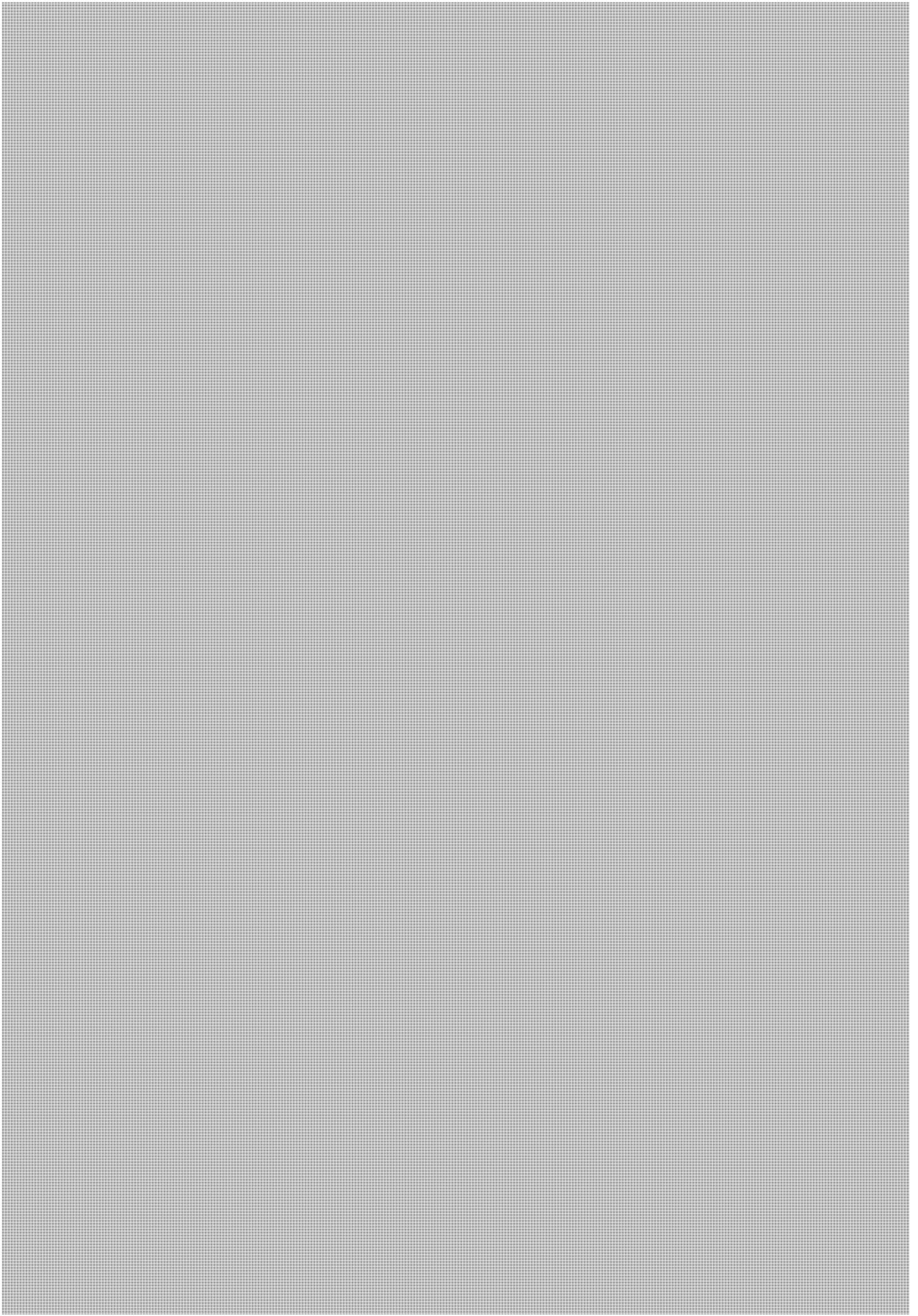
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s.15(1)

TOP SECRET

- 3 -



TOP SECRET

... 4

000045

~~TOP SECRET~~

- 4 -

8 Charts showing the required communications system in regard to North American Air Defence, Maritime and NATO Europe are attached.

Costs

9 The annual costs of the additional circuits are estimated to be:

One direct voice circuit NDHQ to CANCOMARPAC with a drop to HQ Seattle NORAD Sector	- \$110,000
One direct voice circuit NDHQ to CANCOMARLANT	- \$ 28,400
One direct voice circuit NDHQ to SACLANT	- \$ 24,000
Commercial voice circuit to satisfy ACE requirements	- <u>\$250,000</u>
TOTAL	<u>\$412,400</u>

10 After 1963, when the USAF tropospheric scatter system between Goose Bay and Fylingsdale is completed, the annual recurring cost to Canada for the NDHQ/Goose Bay and Fylingsdale/ACE links would be approximately \$85,000. Therefore the total annual recurring costs of the additional circuits would be reduced to approximately \$247,400.

11 The above costs should be shared between the RCAF and RCN - RCAF and Canadian Army as applicable.

12 While these circuits must be instantaneously available for their primary purpose should the need arise, there is a present and continuing need for communications of this type for normal intercommunication between all the points involved. Consequently, the rather substantial costs should not be entirely attributed to a one-time need.

Procurement

13 Because of the long lead time normally associated with procurement of such communication services, procurement action should be initiated now. Even if this is done, it may not be possible to obtain all of the circuits in phase with the completion of other arrangements for the use of nuclear weapons.

TOP SECRET

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~~TOP~~ SECRET

- 5 -

RECOMMENDATION

- 14 It is therefore recommended that the COSC approve:
- (a) the concept as set out in paras 2, 3 and 4 above.
  - (b) the requirement for circuits as described.
  - (c) the sharing of costs as indicated.

CHIEF OF THE AIR STAFF

TS1929-206-1(CAS)

24 Nov 61

~~TOP~~ SECRET

000047

**Pages 48 to / à 50  
are withheld pursuant to section  
sont retenues en vertu de l'article**

**15(1)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

HQS 8401-2  
HQS 1250-9/13-1

TD1361

**MEMORANDUM**

29 Dec 61

DMO&P

**Chiefs of Staff Committee**  
**Brief for the CGS**

**Subject:** Communications for Control of Nuclear Weapons

1. As requested, herewith brief for CGS in the form required by ACS for approval and transmission to ACS.
2. Previous brief to DGPO on this subject, and CGS memo to CAS stating CGS agreement are in HQS 1250-9/13-1 TD 1352, also attached.

  
(P D Smith)  
Col  
D Sigs

WHF/Go

SECRET

Prepared by: D Sigo

HC9 8401-2

OTTAWA, 29 Dec 61

Chiefs of Staff Committee  
Brief for the COS

SUBJECT: Communications for Control of Nuclear Weapons

BACKGROUND

1. To provide Canadian forces with authority to use nuclear weapons, communications are needed for direct (voice) discussion between NINIC and the allied commanders and senior Canadian officers concerned, and for authenticated (teleprinter) notification that authority has been granted.

SUMMARY OF RCAF PROPOSAL

2. Direct Discussion (voice) between NINIC and SACRUR and/or Canadian National Military Representative at SHAPE would be provided:

- a. by a leased voice (submarine cable) circuit from NINIC to SHAPE (annual rental \$250,000.00) until April 63 when USAF tropospheric scatter system could be used (annual rental for connecting circuits \$85,000.00);
- b. as an alternative means, by existing USAF trans-Atlantic communications via USA.

3. Authenticated Notification (teleprinter) from NINIC to SACRUR and the Canadian National Military Representative at SHAPE of authority for the Brigade to use nuclear weapons would be provided:

- a. by the aforementioned leased voice circuit only, until Apr 63 when a teleprinter circuit would be provided in the USAF tropospheric scatter system (cost of connecting circuits included in quotation of \$85,000.00 above);
- b. as an alternative, by existing USAF trans-Atlantic communications via USA.

4. For informing the Brigade Commander:

- a. Canadian National Military Representative at SHAPE would use existing internal SHAPE communications;
- b. this would be backed up by a "drop" connection to Brigade HQ from the NINIC-SHAPE voice circuit.

COMMENTS

5. RCAF proposes that costs be shared between RCAF and Army. Noting that the RCAF proposal includes communications for forces under NORAD and SACLANF and for the Canadian Air Division, this cost sharing should be proportional.

...../ 2

SECRET

*Prepared by Syp 3  
and examined on TD 8401-2 TD 1361  
to Dros P. F*

**SECRET**

- 2 -

6. The RCAF memorandum points out that the circuits would be useful for normal communications as well as for their primary function. The costs would therefore bring some pecuniary benefit.
7. The voice and teleprinter circuits would not be secure; to provide speech secrecy equipment at HNBQ, at SHAPE, and at Brigade HQ would cost \$36,000.00; to provide on-line (teleprinter) cipher equipment at HNBQ and SHAPE would cost \$20,000.00.
8. If direct communications between the Brigade Logistics HQ and Canada (now under consideration at ABQ) are provided, they would be an additional alternative means of communications for control of nuclear weapons.
9. Previous studies have indicated a possible commitment for Canada to supply a telephone system and rear link teleprinter for the US Custodial and Support Unit at the storage site, at an estimated cost of \$20,000.00.
10. CCG has informed CAS that he agrees with the concept (HQS 1250-9/13-1 TD 1352 dated 20 Dec 61).

RECOMMENDATIONS

11. It is recommended:
  - a. that the RCAF plan be supported;
  - b. that a decision be made as to whether the Canadian terminal should be at the National Emergency HQ or at HND Emergency HQ;
  - c. that preparation of the detailed communications plan be made the responsibility of the Joint Telecommunications Committee.

**SECRET**

SECRET

MEMORANDUM

→ HQS 1250-9/13-1 TD 1352 (D Sigs)

18 Dec 61

DGPO

Control of Nuclear Weapons  
Communications

1. Reference request for comments on RCAF proposal for provision of communications for control of nuclear weapons.
2. The RCAF proposal can be summarized as follows (see diagram at Annex A):
  - a. for direct discussion between NDHQ and SACEUR and/or Canadian National Military Representative at SHAPE:
    - (1) until Apr 63, a leased voice circuit from NDHQ to SHAPE at an annual rental of \$250,000;
    - (2) after Apr 63, a voice circuit via USAF tropospheric scatter system at an annual rental for extension circuits of \$85,000 (permitting cancellation of the leased direct circuit);
    - (3) alternative means via existing USAF trans-Atlantic communications.
  - b. for authenticated notification from NDHQ to SACEUR and the Canadian National Military Representative at SHAPE of authority for the Brigade to use nuclear weapons:
    - (1) until Apr 63, use the leased voice circuit only;
    - (2) after Apr 63, a teleprinter circuit via the USAF tropospheric scatter system (cost included in the quotation of \$85,000 above);
    - (3) alternative means via existing USAF trans-Atlantic communications.
  - c. for informing Brigade Commander
    - (1) Canadian National Military Representative would use existing internal SHAPE communications;
    - (2) this would be backed up by a drop at Brigade HQ from the NDHQ - SHAPE voice circuit.
  - d. costs to be shared between RCAF and Army as applicable; as part substantiation for providing these circuits now, the need for such circuits for normal activity is noted.
3. I consider that this plan is satisfactory and recommend it be supported. The costs quoted are realistic.
4. The following additional points should be noted:

*Taken in TD by lead of DSG  
x DGPO document on 18 Dec 61.*

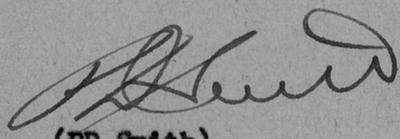
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SECRET

**SECRET**

- 2 -

- a. the voice circuits would not be secure; if security is required, speech secrecy equipment should be provided; this would cost a total of \$36,000 to provide a terminal at NDHQ, at SHAPE, and at Bde HQ; likewise on-line cipher would appear to be necessary to protect the teleprinter circuit at a total cost of \$20,000 for two terminals.
- b. it will be necessary to decide whether the Canadian terminal for these circuits should be at the National Emergency HQ or at DND Emergency HQ;
- c. consideration is being given separately to provision of communications from Bde Logistics HQ to Canada; these communications would be an additional alternative, if provided.
- d. US custodial and support communications in the storage area were described in para 9 of my memo HQTS 8433-2 TD 1163 (D Sigs) dated 12 Sep 61.

  
(PD Smith)  
Col  
D Sigs

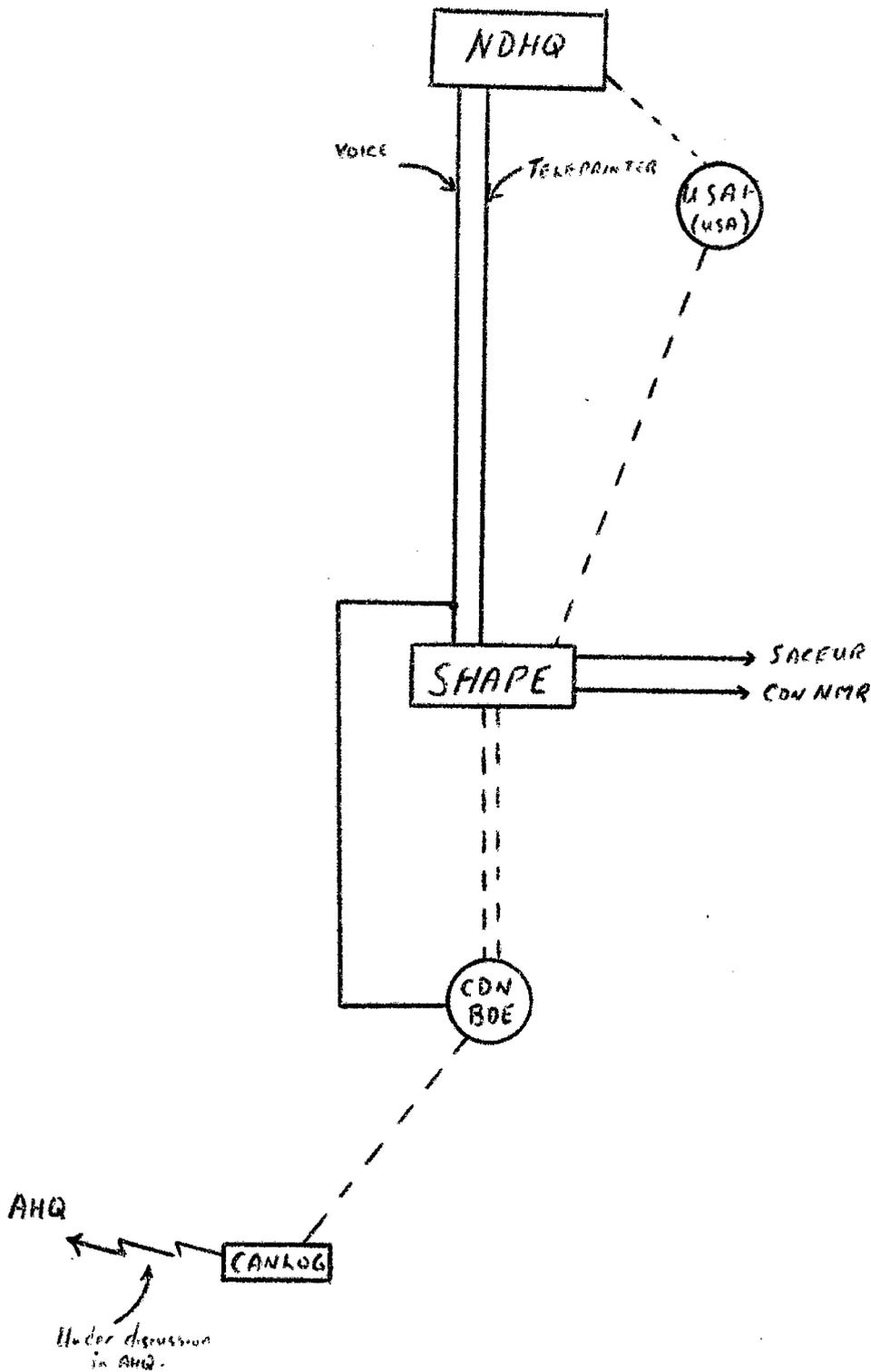
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**SECRET**

SECRET

RCAF PROPOSAL FOR  
COMMUNICATIONS  
FOR  
CONTROL OF NUCLEAR WEAPONS

ANNEX A  
E HQS 1250-9/13-1  
TD 1352 dated 18 Dec 61



Legend

Solid lines - circuits to be provided.  
Dotted lines - existing circuits.

Spave.

**MEMORANDUM**

HQS 1250-9/13-1 TD 1352 (D Sigs)

18 Dec. 61

DGPO

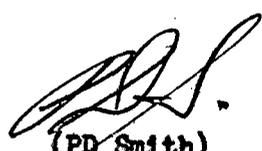
Control of Nuclear Weapons  
Communications

1. Reference request for comments on RCAF proposal for provision of communications for control of nuclear weapons.
2. The RCAF proposal can be summarized as follows (see diagram at Annex A):
  - a. for direct discussion between NDHQ and SACEUR and/or Canadian National Military Representative at SHAPE:
    - (1) until Apr 63, a leased voice circuit from NDHQ to SHAPE at an annual rental of \$250,000;
    - (2) after Apr 63, a voice circuit via USAF tropospheric scatter system at an annual rental for extension circuits of \$85,000 (permitting cancellation of the leased direct circuit);
    - (3) alternative means via existing USAF trans-Atlantic communications.
  - b. for authenticated notification from NDHQ to SACEUR and the Canadian National Military Representative at SHAPE of authority for the Brigade to use nuclear weapons:
    - (1) until Apr 63, use the leased voice circuit only;
    - (2) after Apr 63, a teleprinter circuit via the USAF tropospheric scatter system (cost included in the quotation of \$85,000 above);
    - (3) alternative means via existing USAF trans-Atlantic communications.
  - c. for informing Brigade Commander
    - (1) Canadian National Military Representative would use existing internal SHAPE communications;
    - (2) this would be backed up by a drop at Brigade HQ from the NDHQ - SHAPE voice circuit.
  - d. costs to be shared between RCAF and Army as applicable; as part substantiation for providing these circuits now, the need for such circuits for normal activity is noted.
3. I consider that this plan is satisfactory and recommend it be supported. The costs quoted are realistic.
4. The following additional points should be noted:

.../2

- 2 -

- a. the voice circuits would not be secure; if security is required, speech secrecy equipment should be provided; this would cost a total of \$36,000 to provide a terminal at NDHQ, at SHAPE, and at Bde HQ; likewise on-line cipher would appear to be necessary to protect the teleprinter circuit at a total cost of \$20,000 for two terminals.
- b. it will be necessary to decide whether the Canadian terminal for these circuits should be at the National Emergency HQ or at DND Emergency HQ;
- c. consideration is being given separately to provision of communications from Bde Logistics HQ to Canada; these communications would be an additional alternative, if provided.
- d. US custodial and support communications in the storage area were described in para 9 of my memo HQTS 8433-2 TD 1163 (D Sigs) dated 12 Sep 61.

  
(PD Smith)

Col/  
D Sigs

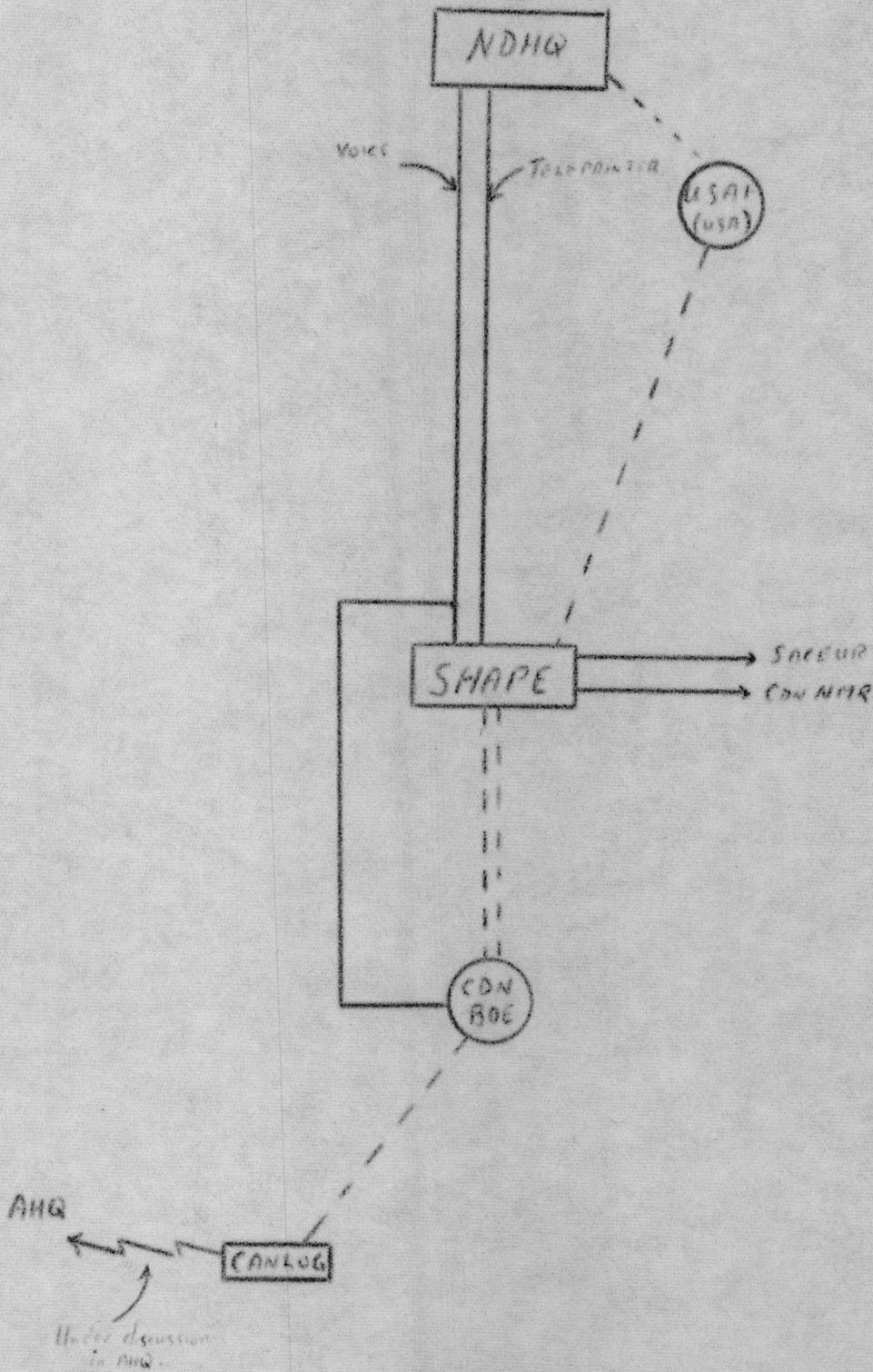
WHF/26878/ow

SECRET

REAF PROPOSAL FOR  
COMMUNICATIONS  
FOR

ANNEX A  
to HQS 1250-9/13-11  
TD 1352 dated 18 Dec 61

CONTROL OF NUCLEAR WEAPONS



Legend

Solid lines - circuit to be provided.  
Dotted lines - existing circuits.

DEPARTMENT OF NATIONAL DEFENCE

MINUTE SHEET

Referred to

REMARKS

To be signed in full showing Appointment, Telephone Number & Date

Sigs 3

1. For the present, it is not considered desirable to extend the number of people involved in this problem, for political reasons.

2. Please BF after my return from UK.

(2)

DSigs

Per BF  
29 Nov 61 Sigs 3

P. D. SMITH  
Colonel  
Sigs  
NOV 7 1961

P. D. SMITH  
Colonel  
D. Sigs  
DEC 1961

DEPARTMENT OF NATIONAL DEFENCE

MINUTE SHEET

Referred to

REMARKS

To be signed in full showing Appointment, Telephone Number & Date

D Sigs

1. You said External Affairs felt that the costs we gave for nuclear control courses were too high.
2. Our existing courses are Ottawa - Boddyton (TRC) - BROR (TRC) - 4 Bde. RCAF have a routing via METZ and have part-time use of a MET/DOT cable. This might not be fully or reliable enough.
3. In studies of CANLOG near-link courses we have been favouring a direct CANLOG RTT cut to Canada (Nfld). Even over the Europe - Nfld path availability is not likely to exceed 80%. Anyway, this will take 18 months after it is approved - if it is approved!
4. The RCAF have a similar problem over nuclear warheads for the Au Div. I feel we should get this problem into STC for a joint solution. A purely Army proposal will certainly be referred to STC by DM anyway.
5. Can you get US agreement to putting this to STC if you agree that this is the right course?

SECRET

MEMORANDUM

HQTS 8433-2 TD 1163 (D Sigs)

72 Sep 61

DGPO

Acquisition of Nuclear Weapons  
Communication

1. Reference CGS minute 3 on EQTS 8433-2 TD 1163 (DEP 3) dated 12 Jun 61 directing D Sigs to prepare a plan and cost estimate of communications for control of nuclear warheads for Honest John for Cdn bde in Europe.

2. It is noted that para 16 of Schedule D of reference states that a combined Canada-United States plan will be developed for communications. The plan and estimate in this memo must be in general terms as to detailed equipment and locations until the combined plan is prepared.

RELEASE/RECALL COMMUNICATIONS

3. The need is apparently for voice communications from the Cdn government (in Ottawa and at NEHQ) to SACEUR, and to a Cdn senior release officer in Europe, backed up by a direct teleprinter circuit to provide the confirmation of release authority called for in Schedule C, para 10 d.

4. If one set of circuits can cover both the Cdn bde weapons and the air-to-ground weapons of RCAF First Air Division, costs might be reduced. This depends on a GS decision with the RCAF as to nomination of the Senior Cdn releasing officer in Europe. In this memo separate communications from Canada to one storage site for the bde only are covered.

- a. Direct voice circuit from Ottawa to SACEUR      \$15,000 per month
- b. Direct teleprinter circuit from Ottawa to SACEUR      7,000 per month
- c. Direct voice circuit from Ottawa to Cdn Senior Releasing officer at storage site      15,000 per month
- d. Direct teleprinter circuit from Ottawa to Cdn Senior Releasing officer at storage site      7,000 per month

5. An alternative arrangement which should be considered, would be to provide a direct circuit from Ottawa to the Canadian National Military Representative at SHAPE, and direct circuits from there to the Senior Releasing officer at the storage site. Such an arrangement would follow the normal chain of command more closely, and in addition, would be cheaper, as follows:

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- a. Direct voice circuit from Ottawa to Canadian National Military Representative, SHAPE \$15,000 per month
- b. Direct teleprinter circuit from Ottawa to Canadian National Military Representative, SHAPE 7,500 per month
- c. Direct voice circuit from Canadian National Military Representative, SHAPE to Senior Releasing officer at storage site 2,500 per month
- d. Direct teleprinter circuit from Canadian National Military Representative, SHAPE to Senior Releasing officer at storage site 1,250 per month

6. It is assumed that existing communications will provide for consultation between the Canadian and US Governments.

ATOMIC LOGISTICS CONTROL AND REPORTING COSTS

7. It would seem that this involves connection of the storage site to the SHAPE communications or US Army communications system in Europe. There is no information on which an estimate for this item can be based. If the storage site is close to the bde logistics area the cost would be small.

US CUSTODIAL AND SUPPORT COSTS

8. This involves a telephone system in the storage area (both compounds), an intercomm system, and rear link teleprinter service.

9. Cost Estimate

- a. Adm area telephones (10 @ \$50 plus cable plan \$1500) \$ 2,000
- b. Intercomm system 8,000
- c. Telephone exchange and plant 10,000  
\$20,000

CONVOY COMMUNICATIONS

10. It is assumed that bde comms will be adequate. No cost.

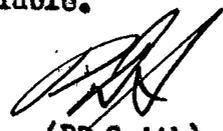
SUMMARY

11. Circuit rentals: \$44,000 per month recurring. If the alternative arrangement proposed in para 5 is accepted, this would be reduced to \$26,250 per month recurring.

12. Local comms eqpt: \$20,000.

REMARKS

13. These estimates should be treated with reserve until more adequate planning information is available.

  
 (PD Smith)  
 Col  
 D Sigs

~~SECRET~~  
DEPARTMENT OF NATIONAL DEFENCE

MINUTE SHEET

Referred to	REMARKS To be signed in full showing Appointment, Telephone Number & Date
S SIGS	<p>1. Herewith <u>rough cost estimate</u> for following circuits:</p> <p>a. <u>Voice - PARIS to SOEST</u> \$30,000 per annum or \$2,500 per month.</p> <p>b. <u>Teletype PARIS to SOEST</u> \$15,000 per annum or \$1,250 per month.</p> <p style="text-align: right;"><u>L. Louis M.</u> 12 Sep 3</p>

Sigs 3 }  
3 sig 4 } sun  
28 Jun 61.

SECRET

28 Jun 61

CDA- US Comms Plan

1. Based on SHAPE criteria and plans.
2. Costs in accordance current NATO infrastructure funding, or by Canada.
3. Circuits:
  - a. atomic release/recall comms from the designated US commander and to the custodial detachment
  - b. Atomic logistics control and reporting comms
  - c. US custodial and support unit admin comms, incl internal and external security comms.
  - d. Army comms for the security of movement of warhead sections.
4. In addition:
  - a. Such other comms as are required to ensure that necessary authorization to employ the weapons may be obtained in time to meet operational requirements. Each government will establish direct-line comm facilities, maintained on an instant-use basis, between the representatives or representatives of each government authorized to approve the use of the weapons, the Chairman of the National Chiefs of Staff, SNCBR and the US and Canadian release officers at each storage site. The manner in which this system will be established, protected and maintained as well as the cost sharing aspects will be the subject of consultation and agreement between the appropriate authorities of the two governments. Use will be made of existing facilities where appropriate.
  - b. All necessary <sup>Common</sup> electronics eqpt and power eqpt to be provided will be in accordance with SHAPE criteria unless otherwise mutually agreed.
  - c. Personnel to support the above mentioned comms and the maint- of these comms will be provided as may be mutually agreed.

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**is withheld pursuant to sections  
est retenue en vertu des articles**

**13(1)(b), 15(1)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

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