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Virginia Defense Force
Department of Military Affairs
Commonwealth of Virginia
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DIVISION SIGNAL OPERATING INSTRUCTION (SOI) 24-1

PREFACE

THIS REGULATION SUPERCEDES PREVIOUS ISSUES AND IS EFFECTIVE
UPON RECEIPT

1. **PURPOSE:** This SOI establishes and regulates communications procedures for the Virginia Defense Force (VaDF) in support of Military Operations and in operations involving Military Support to Civilian Authorities (MSCA).
2. **SCOPE:** This SOI has the force of orders and applies to all personnel of the Virginia Defense Force.
3. **PROPONENT:** The AC of S, G-6 is the proponent of this regulation.

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CHAPTER 1

GENERAL

- 1-1 Background: This SOI contains extracts from ALLIED COMMUNICATIONS PUBLICATION: COMMUNICATION INSTRUCTIONS RADIOTELEPHONE PROCEDURES ACP 125(F) with permission. *“The aim of ACP125 is to prescribe the voice procedure for use by the armed forces of Allied nations on secure and insecure tactical voice nets. Its purpose is to provide a standardized way of passing speech and data traffic as securely as possible consistent with accuracy, speed and the needs of command and control.”* That goal is consistent with the mission of the Virginia Defense Force to provide support for the VARNG and other agencies of the Commonwealth as directed by the Governor or his authorized representative.
- 1-2 Applicability: When operating in a non military environment, (i.e. in support of the Virginia Department of Health) the protocol (normally NIMS) of the supported agency will be followed. Otherwise, adherence to the procedures prescribed in this SOI is mandatory on all VaDF tactical and training voice nets. Departure from, or variations in these procedures is prohibited. Such action can reduce accuracy and speed as well as create confusion. Common sense and training experience should be used as a guide in the event of a specific situation not covered by this SOI,. Standard procedure must never be substituted with individually preferred methods or the latter used as an excuse for lack of procedural expertise.
- 1-3 Changes: The SOI is frequently reviewed and changed as necessary. Suggestions for change are welcome and should be forwarded to the attention of AC of S, G-6:

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CHAPTER 2

ACCURACY

- 2-1 **REAL VS NON-EXERCISE TRAFFIC:** In training, there is a need to differentiate between exercise play and events which require action outside the context of the exercise; conventionally this is known as “real” activity. In order to highlight the differences between real and exercise messages, the prowords “NO PLAY” are used. Ongoing exercise traffic that depicts catastrophic or emergency situations will periodically contain the phrase “THIS IS A TRAINING EXERCISE”.
- 2-2 **VOICE PROCEDURE:** Voice procedure is designed to provide the fastest and most accurate method of speech transmission. All messages should be pre-planned, brief and straightforward. Ideally, messages should be written down since even brief notes reduce the risk of error. Messages should be constructed clearly and logically in order not to confuse the recipient. Formal messages will be recorded on the VaDF FIELD MESSAGE FORM.
- a. Voice procedure is necessary because:
 - 1) Speech on a congested voice net in emergencies must be clear, concise and unambiguous. To avoid interference, and when possible, data will be assigned to admin nets rather than to those directly associated with command and control.
 - 2) It must be assumed that all transmissions will be intercepted by a portion of the civilian population. The use of a standard procedure will help reduce the threat of spreading rumors or creating panic among those uninvolved in an emergency response.
 - 3) Some form of discipline is needed to ensure that transmissions do not overlap, if two people send traffic at the same time, the result is chaos.
 - b. Method of Speech. The key words to remember are Rhythm, Speed, Volume and Pitch (RSVP).
 - 1) Rhythm. Use short sentences divided into sensible phrases which maintain a natural rhythm; they should not be spoken word by word. Where pauses occur, the Push-to-talk switch (PTT) should be released to minimize transmission time and permit stations to break in when necessary.
 - 2) Speed. Speak slightly slower than for normal conversation. Where a message is to be written down by the recipients, or in

difficult conditions, extra time should be allowed to compensate for the receiving station experiencing the worst conditions. Speed of transmission is easily adjusted by increasing or decreasing the length of pauses between phrases, as opposed to altering the gaps between words which creates an unnatural, halted style of speech and is difficult to understand.

- 3) Volume. The speech volume level should be that which is used for normal conversation. Shouting causes distortion.
- 4) Pitch. The voice should be pitched slightly higher than for normal conversation to improve clarity.

2-3 AIDS TO ACCURACY

- a. Pronunciation of Letters. The International Phonetic Alphabet is used to help identify spoken letters of the alphabet. Each letter of the alphabet is represented by a uniquely pronounced word to enable consistent and accurate pronunciation. The following alphabet table shows the phonetic word equivalent of each Letter as it is written and then as it is spoken. The underlined portion of the spoken words indicates the syllables that require emphasis. Substitution of words is not authorized, i.e. Mary, Zebra, etc.

<u>Letter</u>	<u>Phonetic</u>	<u>Spoken as</u>	<u>Letter</u>	<u>Phonetic</u>	<u>Spoken as</u>
A	ALFA	<u>AL</u> -FAH	N	NOVEMBER	NO- <u>VEM</u> -BER
B	BRAVO	<u>BRAH</u> -VO	O	OSCAR	<u>OSS</u> -CAH
C	CHARLIE	<u>CHAR</u> -LEE	P	PAPA	PAH- <u>PAH</u>
D	DELTA	<u>DELL</u> -TAH	Q	QUEBEC	KEH- <u>BECK</u>
E	ECHO	<u>ECK</u> -OH	R	ROMEO	<u>ROW</u> -ME-OH
F	FOXTROT	<u>FOKS</u> -TROT	S	SIERRA	SEE- <u>AIR</u> -RAH
G	GOLF	GOLF	T	TANGO	<u>TANG</u> -GO
H	HOTEL	HOH- <u>TELL</u>	U	UNIFORM	<u>YOU</u> -NEE-FORM
I	INDIA	<u>IN</u> -DEE-AH	V	VICTOR	<u>VIK</u> -TAH
J	JULIETT	<u>JEW</u> -LEE- <u>ETT</u>	W	WHISKEY	<u>WISS</u> -KEY
K	KILO	<u>KEY</u> -LOH	X	XRAY	<u>ECKS</u> -RAY
L	LIMA	<u>LEE</u> -MAH	Y	YANKEE	<u>YANG</u> -KEY
M	MIKE	MIKE	Z	ZULU	<u>ZOO</u> -LOO

- b. Pronunciation of Figures. Whenever figures are spoken as single digits over radio they are pronounced as shown in the following table. The underlined portion of the spoken words indicates the letter or syllables requiring emphasis.

<u>Figure</u>	<u>Spoken as</u>	<u>Figure</u>	<u>Spoken as</u>
1	WUN	6	SIX
2	TOO	7	<u>SEV</u> -EN
3	TREE	8	AIT
4	<u>FOW</u> -ER	9	NINE-ER
5	FIFE	0	<u>ZE</u> -RO

2-4 RULES FOR SPELLING

- a. Plain Text. Spelling is necessary when difficult radio conditions prevent the reception of an obscure word, or of a word or group, which is unpronounceable. Such words or groups within the text of plain language messages may be spelled using the phonetic alphabet; they are preceded by the proword "I SPELL". If the word is pronounceable and it is advantageous to do so, then it should be spoken before and after the spelling to help identify the word.

Example: Pronounceable word – UNNA: ..."UNNA- I spell, Uniform November November Alfa... UNNA"

Example: Unpronounceable word or group – UTFX: ..."I spell, Uniform Tango Foxtrot Xray".

- b. Exceptions to this rule: Letters are always spoken phonetically and without the prowords "I SPELL" when they are:
- 1) Callsigns and Net Identification Signs
 - 2) Grid references (UTMs).
 - 3) DTG zone suffix/SICs. i.e. Romeo or Quebec
 - 4) Address groups.

2-5 RULES FOR FIGURES

- a. Figures are sent digit by digit preceded by the proword "FIGURES". This proword warns that figures follow immediately to help distinguish them from other similarly pronounced words. Exceptions apply when pronouncing whole hundreds, whole thousands, or combinations of both.

Examples:

FigureSpoken As

23	FIGURES two three
50	FIGURES five zero
146	FIGURES one four six
200	FIGURES two zero zero OR FIGURES two hundred
1009	FIGURES one zero zero nine
1630 hours	FIGURES one six three zero hours
2800	FIGURES two eight zero zero OR FIGURES two eight hundred
12000	FIGURES one two zero zero zero OR FIGURES one two thousand

- b. Exceptions to this rule: Figures are always spoken digit by digit and without the proword "FIGURES" when they are used in:

- 1) Callsigns and Net Identification Signs
- 2) Grid references (UTMs)
- 3) Formal message date time groups (DTGs).
- 4) Address groups.

- 2-6 RULES FOR MIXED GROUPS: The rules for sending mixed letter/figure groups incorporate the same principles that apply to sending letters and figures separately. The same information may be sent in two different ways depending on the circumstances.

Example 1. Satisfactory conditions: Mixed group ACP 125 spoken as ACP one two five

Example 2. Difficult conditions: Mixed group ACP 125 spoken as I SPELL ALFA CHARLIE PAPA FIGURES one two five

2-7 AIDS TO BREVITY

- a. Abbreviations. Although originally designed to save time in writing, abbreviations will often save time in speech. Many abbreviations are so commonly used in normal speech they are more familiar than their original unabbreviated form. The use of such abbreviations in radio transmissions is to be encouraged provided that:

- 1) They are quicker and easier to use than the full word.

- 2) They are sufficiently well known to avoid any confusion and will not cause subsequent confirmatory transmissions.
 - 3) Where an abbreviation has more than one meaning, the intended meaning is obvious to the addressee from its context or frequent usage.
- b. Whether abbreviations are spoken as such, their phonetic spelling or expansion to their unabbreviated form will depend upon prevailing radio conditions and the circumstances in which they are used. The following common sense rules should be applied to take account of conditions:
- 1) Satisfactory Conditions. To ensure the advantage of brevity that abbreviations provide is not lost, they will be spoken as in normal speech.

Examples:

RV as RV instead of "I spell Romeo Victor".

ETA as ETA instead of "I spell Echo Tango Alfa".

- 2) Difficult Conditions. In conditions which require amplification of common abbreviations normally spoken as such, it is usually quicker and easier to use the full word than to waste time and effort in spelling.

Example:

Mobile Command Post is better than "I spell Mike Charlie Papa".

- c. Abbreviations should only be spelled phonetically when it is either quicker or easier to do so, or the spelling will be more readily received and understood than the full word or phrase. Examples where spelling is more appropriate than the full words are:

"I spell November Bravo Charlie" instead of "Nuclear Biological and Chemical".

"I spell Papa Oscar Lima" instead of Petrol, Oil and Lubricants.

"I spell Uniform Tango Mike" instead of Universal Transverse Mercator.

- d. Where necessary, the sender of a message may, on behalf of the drafter, expand common abbreviations during difficult conditions or when a transmission can be simplified. Where any doubt exists as to the drafter's intentions, abbreviations should never be expanded but spelled phonetically leaving the addressee to interpret the meaning. The abbreviation WO can mean "warrant officer" or "warning order"; if the intended meaning is not obvious then WO should be spelled phonetically.

- e. Punctuation. Punctuation is not to be used unless it is necessary to the sense of a message, and should rarely be required in radio messages where the originator makes his own transmission. Punctuation can occur more often in written informal or formal messages. When the use of punctuation is essential, it should be written and spoken as follows:

<u>Punctuation</u>	<u>Spoken as</u>	Symbol	Abbreviation
Full stop/period	Full stop	.	PD
Comma	Comma	,	CMM
Slant/Oblique	Slant	/	
Hyphen	Hyphen	-	
Left-hand bracket	Brackets on	(Paren
Right-hand bracket	Brackets off)	Unparen
Colon	Colon	:	CLN
Semi-colon	Semi-colon	;	SMCLN
Question Mark	Question mark	?	Ques
Decimal point	Day-See-Mal	.	Point

- f. Writing Abbreviations and Symbols: When writing, symbols should always be used in preference to abbreviations, with the symbols for full stops and commas ringed to make them more conspicuous. If punctuation marks other than those described are vital to the sense of the text, they are to be written in full, i.e. APOSTROPHE, QUOTE, UNQUOTE and spoken as such.

2-8 LEGIBILITY OF CHARACTERS

Legible writing is essential if handwritten messages are to be transmitted and received accurately. All handwritten messages drafted for transmission are to be written in capital letters, The following conventions for written characters and symbols are to be observed when drafting and receiving messages:

- The figure ZERO is written with a slant through it to distinguish it from the letter OSCAR.
- The figure ONE is written with a line underneath to distinguish it from the letter LIMA.
- The letter ZULU is written with a hyphen through it to distinguish it from the figure TWO.

- 2-9 PROCEDURAL WORDS (PROWORDS): Procedure Words (Prowords). To keep voice transmissions as brief and clear as possible standard prowords are used in place of whole sentences. Prowords are easily pronounced and recognized words or phrases used to convey a specific predetermined meaning, for example:

<u>Proword</u>	<u>Meaning</u>
OUT	This is the end of my transmission to you and no answer is required or expected
A full list of prowords is listed below. Ten (10) codes or Prowords not listed are not authorized.	
ACKNOWLEDGE	An instruction to the addressee that the message must be acknowledged.
ADDRESS GROUP	The group that follows is an address group
ALL AFTER	I refer to the part of the message, which follows the specified word or number.
ANSWER AFTER	The station called is to answer after call sign when answering transmissions.
ALL BEFORE	I refer to the part of the message, which is before the specified word or number.
ASSUME CONTROL	You will assume control of this net until further notice.
AUTHENTICATE	The station called is to reply to the challenge which Follows
AUTHENTICATION IS	The transmission authentication of this message is
BREAK	I hereby indicate the separation of the text from other portions of the message.
CALL SIGN	The group that follows is a call sign
CLOSE DOWN	Close station.
CORRECT	You are correct or what you have transmitted is correct.

CORRECTION	An error has been made in this (or the indicated) transmission. The correct version follows.
DISREGARD THIS TRANSMISSION - OUT	This transmission is in error, disregard it. Stations called are not to acknowledge the call. (This proword shall not be used to cancel any message that has been completely transmitted and receipted.)
DO NOT ANSWER	Stations called are not to answer this call, receipt for this message, or otherwise transmit in connection with this transmission. When this proword is employed, the transmission shall be ended with the proword OUT.
EMERGENCY	Amateur radio precedence EMERGENCY.
EXEMPT	The station(s) immediately following is (are) exempted from the collective call or from collective address
FIGURES	Numbers follow.
FLASH	Precedence FLASH.
FROM	The originator of this message is indicated by the address designator immediately following
GRID	The portion following is a grid reference
I AM ASSUMING CONTROL	I am assuming control of this net until further notice
I AUTHENTICATE	The group that follows is the reply to your challenge to authenticate
IMMEDIATE	Precedence IMMEDIATE
INFO	The addressees immediately following are addressed for information
INITIALS	The following letters are individual letters (as in abbreviation, initials, or acronym).
I READ BACK	The following is my response to your instructions to read back.

I SAY AGAIN	I am repeating transmission or portion indicated.
I SPELL	I shall spell the next word phonetically.
I VERIFY	That which follows has been verified at your request and is repeated. (To be used only as a reply to VERIFY.)
MAYDAY, MAYDAY, MAYDAY	The following message requests immediate assistance. My station is in grave or imminent danger of loss of life.
MESSAGE	A message which requires recording is about to follow. (Transmitted immediately after the call. This proword is not used on nets primarily employed for conveying messages. It is intended for use when messages are passed on tactical or reporting nets.)
MORE TO FOLLOW	Transmitting station has additional traffic for the receiving station.
NO PLAY	During exercises the words NO PLAY are used to distinguish real activity from messages concerned with exercise play i.e. a real emergency or real casualty. The first words of any message are to contain the exercise nickname i.e. Nottoway Evac NO PLAY
NEGATIVE	No.
NOTHING HEARD	To be used when no reply is received from a called station.
NO TRAFFIC	This station has no traffic, formal or tactical, for a net or circuit.
OUT	This is the end of my transmission to you and no answer is required or expected.
OVER	This is the end of my transmission to you and a response is necessary. Go ahead, transmit.
PAN, PAN, PAN	My station requires assistance. There is a possible or developing hazard to life and/or property.

PRIORITY	Precedence PRIORITY.
READ BACK	Repeat this entire transmission back to me exactly as received.
RELAY (TO)	Transmit this message to the addressee indicated.
ROGER	I have received and understand your last transmission. (This is a method of receipt).
ROUTINE	Precedence ROUTINE.
SAY AGAIN	Repeat your last transmission.
SECURITE, SECURITE SECURITE	The following message includes safety information.
SEND YOUR	I am ready to receive your message, report, etc. (Used only in reply to the offer of a message, etc., on tactical or reporting nets.)
SILENCE, SILENCE SILENCE	All stations (or station indicated) stop transmitting until told to resume operation.
SILENCE LIFTED	Silence is lifted.
SPEAK SLOWER	Your transmission is at too fast a speed. Slow down.
THIS IS	This transmission is from the station whose designator immediately follows.
THIS IS A DIRECTED NET	From now until further notice this net is directed.
THIS IS A FREE NET	From now until further notice, this net is a free net. Direct calls are authorized between stations.
TIME	That which immediately follows is the time or date-time group of the message.
TO	The addressees immediately following are addressed for action.

UNKNOWN STATION	The identity of the station with whom I am attempting to establish communication is unknown.
USE ABBREVIATED CALL SIGNS	Call signs are to be abbreviated until further notice.
USE ABBREVIATED PROCEDURE	As conditions are normal, all stations are to use abbreviated procedure until further notice.
USE FULL CALL SIGNS	Call signs are to be sent in full until further notice
USE FULL PROCEDURE	As conditions are not normal, all stations are to use full procedure until further notice.
VERIFY	Verify entire message (or portion indicated) with the originator and send correct version. (To be used only at the discretion of, or by, the addressee to which the questioned message was directed.)
WAIT	I must pause for a few seconds.
WAIT OUT	I must pause for longer than a few seconds.
WELFARE	Amateur radio precedence WELFARE.
WILCO	I HAVE RECEIVED YOUR SIGNAL, UNDERSTAND IT, AND WILL COMPLY. To be used only by the addressee. Since the meaning of ROGER is included in that of WILCO, the two prowords are never used together.
WORD AFTER	The word of the message to which I am referring follows (word).
WORD BEFORE	The word of the message to which I am referring is before (word).
WORDS TWICE	Transmit each word or group twice.
WRONG	Your last transmission was incorrect.

CHAPTER 3

DISCIPLINE

3-1 GENERAL

- a. Radio discipline is a fundamental ingredient of voice procedure without which a radio net cannot function efficiently. In addition to reducing communications efficiency and accuracy, inadequate radio discipline can result in serious degradation of standards.
- b. It is the commander's responsibility to impose and maintain discipline on a radio net. A commander may choose to exercise that responsibility through the control station. All radio nets or links must have a designated control station. In the absence of instructions to the contrary, the control station is that station serving the senior headquarters or location.
- c. During difficult conditions, net efficiency can deteriorate even more rapidly if the control station permits poor operating standards.
- d. To use circuit time more efficiently, all messages or their substance should be written down prior to transmission. Those messages which must be delivered by the receiving operator to another person, or which are preceded by the proword MESSAGE, shall be written down.
- e. Transmissions by radiotelephone shall be as short and concise as practicable, consistent with clarity. The use of standard phraseology enhances brevity.
- f. Radiotelephone transmissions should be clear, with natural emphasis on each word except the prescribed pronunciation of a numeral, and should be spoken in natural phrases, not word by word.
- g. If it is technically practical, the operator shall, during the transmission of a message, pause after each natural phrase and interrupt his transmission (carrier) momentarily, to allow another station to break in if necessary.
- h. To avoid interfering with other traffic, an operator shall listen to make certain that a circuit is clear before making any transmission.
- i. When it is necessary for a station to initiate test signals, either for the adjustment of a transmitter before making a call or for the adjustment

of a receiver, such signals will not continue for more than 10 seconds and will be composed of spoken numerals (1, 2, 3 etc.) followed by the call sign of the station transmitting the signals.

3-2 RULES FOR RADIO DISCIPLINE: The following rules for radio discipline are mandatory on all radio nets. Every station must adhere to the following.

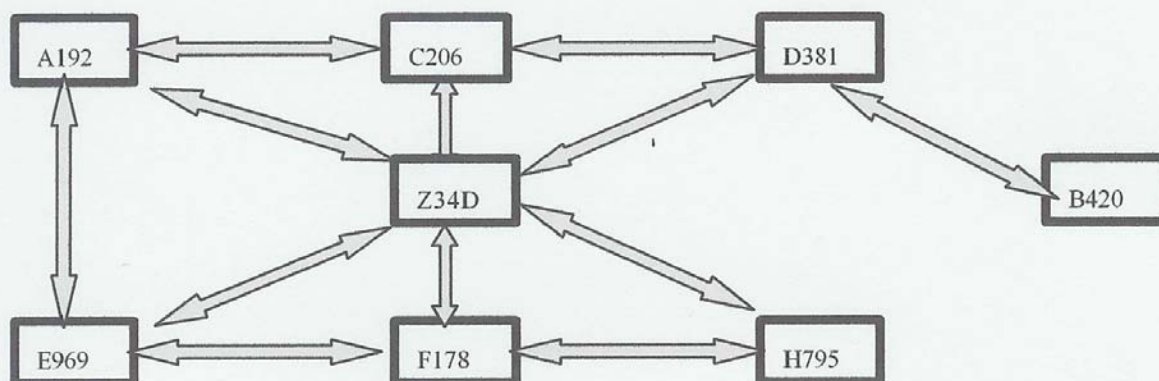
- a. Always:
 - 1) Use correct voice procedure.
 - 2) Maintain a constant listening radio watch unless specific instructions or permission has been received to the contrary. This requires that at least one person be directed to monitor the radio regardless of the circumstances. All aspects of voice procedure are based on the assumption that stations will respond to the call immediately.
 - 3) Ensure that the correct frequency is in use.
 - 4) Answer calls in the correct order and without delay.
 - 5) Listen carefully before transmitting to ensure that the frequency is clear.
 - 6) Release the push-to-talk (PTT) switch promptly.
 - 7) On releasing the PTT switch, ensure that the radio returns to the receive condition.
- b. Never:
 - 1) Violate radio silence.
 - 2) Compromise sensitive information by unauthorized disclosure.
 - 3) Make unnecessary or unduly long transmissions.
 - 4) Engage in unofficial conversation or operator's chat.
 - 5) Identify an individual or any other personal information.
 - 6) Speak faster than the station experiencing the worst reception conditions can be expected to receive, thus avoiding needless repetition.
 - 7) Show loss of temper or use profane language.

CHAPTER 4

EXAMPLE NET DIAGRAM AND INITIAL CALL PROCEDURES

NET DIAGRAMS

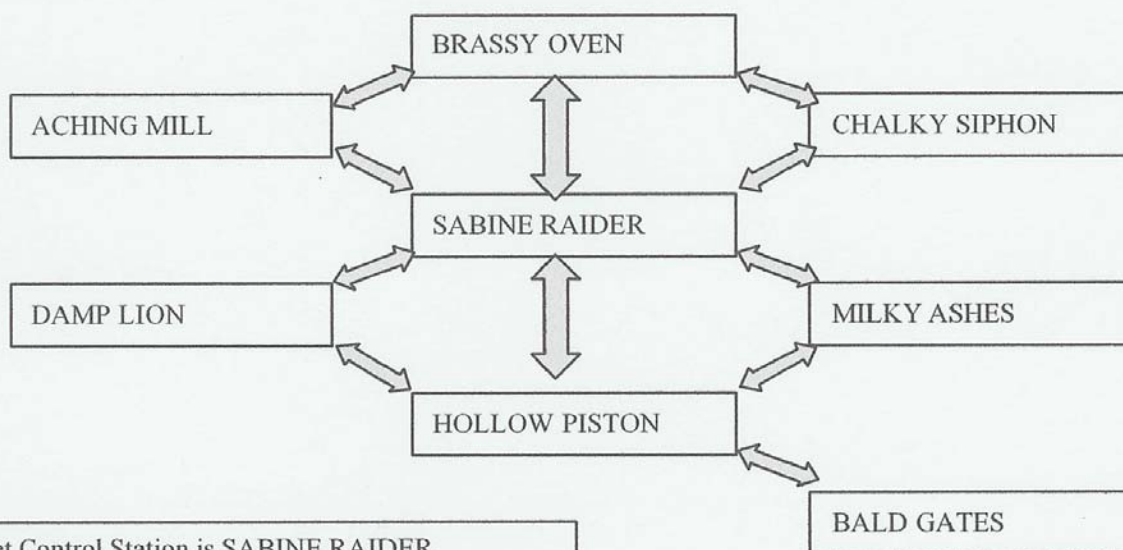
The following net diagrams illustrate the net organisation used in the examples in this publication. The call signs are of types derived from ACP 135 and are used solely to standardise examples.



Net Control Station is Z34D

Net Call Sign is Y13C

Off-Net station used in examples is B420



Net Control Station is SABINE RAIDER
 Net Call Sign is RESORT PRIZE
 Off-net station used in examples is BALD GATES

4-1 ESTABLISHING COMMUNICATIONS

- a. Full call signs must be used when establishing communications.
- b. Before passing traffic it may be necessary to establish the reception conditions for all stations.

Example A (Good conditions): Z34D transmits:

Alfa One Nine Two – THIS IS Zulu Three Four Delta – OVER

A192 answers the initial call:

Zulu Three Four Delta THIS IS Alfa one Nine Two – OVER

Z34D having nothing for A192, transmits:

Alfa One Nine Two – THIS IS Zulu Three Four Delta – OUT.

Example B (Difficult conditions); Z34D transmits:

Alfa One Nine Two – Alfa One Nine Two – THIS IS Zulu Three Four Delta – Zulu Three Four Delta – RADIO CHECK – OVER

A192 transmits:

Zulu Three Four Delta – Zulu Three Four Delta – THIS IS Alfa One Nine Two – Alfa One Nine Two – WEAK BUT READABLE – OVER

Z34D, having nothing for A192, transmits:

Alfa One Nine Two – THIS IS - Zulu Three Four Delta – ROGER – OUT

CHAPTER 5

NET OPERATIONS**5-1 ESTABLISHING A NET**

The use of procedure as prescribed herein shall be followed either when opening a net for the first time or when reopening a net. Proper control by the net control station (NCS) and adherence to operating rules by all stations within the net enable the net to begin and maintain an exchange of traffic with minimum delay. The NCS is also responsible for maintaining security on its net. Appropriate security guidance will be furnished by the NCS to all stations prior to establishing a net.

Example A: At a designated time or when ready to establish the net, Z34D transmits:

Yankee One Three Charlie – THIS IS – Zulu Three Four Delta –
OVER

Each subordinate station then answers the call in alphanumeric order:

THIS IS - Alfa One Nine Two – OVER
THIS IS - Charlie Two Zero Six – OVER
THIS IS - Delta Three Eight One – OVER
THIS IS - Echo Nine Six Nine – OVER
THIS IS - Foxtrot One Seven Eight – OVER
THIS IS - Hotel Seven Nine Five – OVER

The NCS now calls the net to inform all stations that their transmissions have been heard and that he has no traffic for them

THIS IS - Zulu Three Four Delta – OUT

Example B: In this example, the subordinate station E969 is unable to answer the collective call. Z34D transmits:

Yankee One Three Charlie – THIS IS Zulu Three Four Delta –
OVER

The first three stations then answer;

THIS IS - Alfa One Nine Two – OVER
THIS IS – Charlie Two Zero Six – OVER

THIS IS – Delta Three Eight One – OVER

F178, hearing no answer from E969, waits approximately 5 seconds and then transmits:

THIS IS – Foxtrot One Seven Eight – OVER

H795 follows on:

THIS IS – Hotel Seven Nine Five – OVER

After receiving answers from all stations except E969, Z34D transmits:

THIS IS Zulu Three Four Delta – ROGER – Echo Nine Six Nine – NOTHING HEARD – OUT

E969, when able to transmit, calls the NCS to report into the net:

Zulu Three Four Delta – THIS IS – Echo Nine Six Nine – Reporting into net – OVER

Z34D transmits:

Echo Nine Six Nine – THIS IS – Zulu Three Four Delta – AUTHENTICATE..... - OVER

E969 transmits:

THIS IS – Echo Nine Six Nine – I AUTHENTICATE..... - OVER

Z34D transmits:

THIS IS – Zulu Three Four Delta – ROGER – OUT

NOTE: See Paragraph 5-3 a. and Chapter 6 for Authentication Codes

5-2 ESTABLISHING COMMUNICATIONS

- a. Once the net has been established, it will normally work using abbreviated procedures and call signs as follows. The NCS may, however, order the net to revert to full procedures and call signs as dictated by the prevailing conditions.

- 1) The proword THIS IS will normally be omitted from all calls

- 2) Call signs will be abbreviated
 - 3) Initial calls are optional IAW Para 5-8.
- b. Full Procedure. With full procedure, the use of prowords and call signs that were previously optional becomes mandatory.
- 1) If, when establishing the net, the NCS judges that conditions are such that the use of abbreviated procedure will cause unnecessary repetitions, the NCS orders the use of full procedure.

Example: Once the net has been established, the NCS transmits:

Yankee One Three Charlie – THIS IS – Zulu Three Four Delta –
USE FULL PROCEDURE – OUT

- 2) If the net is working using abbreviated procedure and conditions deteriorate to such a degree that excessive repetitions are required, the NCS will order the use of full procedure.

Example: The NCS orders the use of full procedure (assuming full call signs are in use);

Yankee One Three Charlie – THIS IS – Zulu Three Four Delta –
USEFULL PROCEDURE – OVER

Each station answers in turn using full procedure:

Zulu Three Four Delta – THIS IS – Alfa One Nine Two – ROGER
– OUT
Zulu Three Four Delta – THIS IS – Charlie Two Zero Six –
ROGER –
OUT

(The other stations on the net acknowledge in turn).

- c. Reverting to Abbreviated Procedure. When conditions return to normal, the NCS is to order that the net return to abbreviated procedure.

Example: The NCS orders the use of abbreviated procedure (assuming abbreviated call signs are in use):

Three Charlie – THIS IS – Four Delta – USE ABBREVIATED
PROCEDURE – OVER

Each station answers in turn using abbreviated procedure

THIS IS – Nine Two – ROGER – OUT

THIS IS – Zero Six – ROGER – OUT

- d. Full Call Signs. On establishing a net or at any other time when conditions require it, the NCS may order the use of full call signs in the same manner as for full procedure by using the proword USE FULL CALL SIGNS.
- e. Abbreviated Call Signs. When conditions have returned to normal, the NCS will order the net to revert to the use of abbreviated call signs in the same manner as for abbreviated procedure by using the proword USE ABBREVIATED CALL SIGNS. When ordered to use abbreviated call signs, the net must continue to use either full or abbreviated procedure, whichever is in force.

Example: The NCS orders the use of abbreviated call signs when full procedure is in force:

Three Charlie – THIS IS – Four Delta – USE ABBREVIATED
CALL SIGNS – OVER

Each station answers in turn using abbreviated call signs but continuing to use full procedure:

Four Delta – THIS IS – Nine Two – ROGER – OUT

Four Delta – THIS IS – Zero Six – ROGER – OUT

- f. Full Procedure and Full Call Signs:
 - 1) Conditions may be such that the NCS considers the use of both full procedure and full call signs necessary for the efficiency of the net. In this case, it will direct the net as follows:

USE FULL CALL SIGNS AND FULL PROCEDURE – OVER
 - 2) When conditions warrant it, the NCS may subsequently order the net to use abbreviated call signs as shown in the above example or may order the net to abbreviate completely using the prowords USE ABBREVIATED CALL SIGNS and ABBREVIATED PROCEDURE.

5-3 ESTABLISHING A NET ON A NEW FREQUENCY

- a. If the change is not planned or if there is no agreed nickname, the change is to be directed using a frequency designator. In such cases,

authentication must be used. Frequency designators are listed in CHAPTER 6 along with their corresponding authentication.

Example A: The NCS directs the net to change to a new frequency using the listed designator, where a transmission authentication system is in use:

Three Charlie – THIS IS – Four Delta – Change to Frequency
WISKEY – TIME 1816 – AUTHENTICATION IS BLUE JAY –
OVER

Having verified the authentication, the subordinate stations answer in turn:

THIS IS – Nine Two – ROGER – OUT
THIS IS – Zero Six – ROGER – OUT, etc.

Example B: The NCS changes the net to a new frequency using the designator WISKEY where a transmission authentication system is not in use:

Three Charlie – THIS IS – Four Delta – Change to Frequency
WISKEY – OVER

The first station to reply seeks authentication:

THIS IS – Nine Two – AUTHENTICATE WISKEY – TIME One
Eight One Six - OVER

The NCS Authenticates:

THIS IS – Four Delta – I AUTHENTICATE BLUE JAY – OVER

The first station acknowledges both the authentication and the order to change frequency:

THIS IS – Zero Six – ROGER – OUT
THIS IS – Eight One – ROGER – OUT, etc.

- c. When the shift has been executed, the NCS will decide whether it is necessary under the conditions to check that the net has been reestablished on the new frequency. This should only be done if the NCS considers that the net may not be fully working for some reason. If the NCS does decide to reestablish the net, it will be done as described in paragraph 5-1.

5-4 DIRECTED AND FREE NETS

- a. The type of net and method of operation is determined from consideration of operational factors involved.
 - 1) Free Net – In this type of net, the net control station (NCS) authorizes member stations to transmit traffic to other stations in the net without obtaining prior permission from the NCS. Free net operation does not relieve the control station of the responsibility for maintaining circuit discipline.
 - 2) Directed Net – In this type of net, stations obtain permission from the NCS prior to communicating with other stations in the net. Permission is not required for the transmission of FLASH messages, which shall be sent direct. Transmissions on a directed net may also be accomplished in accordance with predetermined schedules.
- b. A net is deemed to be a free net unless otherwise ordered. When it is required to change a free net to a directed net, or vice versa, one of the prowords THIS IS A FREE NET or THIS IS A DIRECTED NET shall be used by the NCS.
- c. Directed Nets:
 - 1) The following example illustrates the manner in which the NCS announces that the net is directed and requests the amount and precedence of traffic to be transmitted (assuming abbreviated call signs are in use).

Example: Z34D transmits:

Three Charlie – THIS IS – Four Delta – THIS IS A DIRECTED NET – of what precedence and for whom are your messages – OVER

Each subordinate station then answers in the alphanumeric order of his full call sign, indicating traffic on hand:

THIS IS – Nine Two – One IMMEDIATE and one ROUTINE for you – OVER
THIS IS - Zero Six – No Traffic – OVER
THIS IS – Eight One – ROUTINE for Nine Two – OVER
THIS IS – Six Nine – PRIORITY for Nine Five – OVER
THIS IS – Seven Eight – No Traffic – OVER
THIS IS – Nine Five – No Traffic – OVER

Z34D then informs the stations that their transmissions have been heard and commences to clear traffic in order of precedence:

Three Charlie – THIS IS – Four Delta – ROGER – Nine Two –
Send your IMMEDIATE – OVER

After A192 completes his IMMEDIATE to Z34D, the NCS orders the station with the next highest precedence message to transmit his message:

Six Nine – THIS IS – Four Delta – Send your PRIORITY – OUT

H795, hearing this authorization, tells E969 to go ahead:
THIS IS – Nine Five – OVER

(Failure of H795 to answer immediately would necessitate E969 making a preliminary call to H795.)

Nine Five – THIS IS – Six Nine – PRIORITY – TIME, etc.

After H795 receipts for the message and transmits the proword OUT, the NCS continues to authorize stations to transmit their messages in order of precedence until his traffic list is cleared.

- 2) When the traffic list is cleared, stations having messages to transmit should call the NCS and request permission to transmit.

Example:

H795, having one ROUTINE message for C206, transmits:

Four Delta – THIS IS – Nine Five – ROUTINE for Zero Six –
OVER

Z34D transmits:

THIS IS Four Delta – send your message – OUT

or, if higher precedence traffic is awaiting transmission,

THIS IS Four Delta – WAIT – OUT

When circuit conditions permit, Z34D informs H795 that they may transmit their message:

Nine Five – THIS IS – Four Delta – Send your message – OUT

C206, hearing the authorization, should then transmit:

THIS IS Zero Six – OVER

This is in order to avoid requiring H795 to make a preliminary call. H795 then proceeds with the transmission of their ROUTINE message.

5.-5 DELEGATING AND ASSUMING NET CONTROL

- a. It may be necessary for net control to be delegated to a subordinate station when effective net control cannot be maintained by the NCS or when the NCS has to leave the net for any reason. In such cases, the proword ASSUME CONTROL is to be used.

Example: The NCS is closing down for 30 minutes and decides that D381 is in the best position to assume net control. He transmits:

Three Charlie – THIS IS – Four Delta – Am closing down for three zero minutes – Eight One – ASSUME CONTROL – TIME One Eight Three Zero Zulu – AUTHENTICATION IS..... – OVER

The subordinate stations answer in turn:

THIS IS - Nine Two ROGER – OUT
THIS IS – Zero Six – ROGER – OUT
THIS IS – Eight One – WILCO – OUT
THIS IS – Six Nine – ROGER – OUT
THIS IS – Seven Eight – ROGER – OUT
THIS IS – Nine Five – ROGER – OUT

- b. Other occasions may arise where the NCS is not in a position to give warning that he is leaving the net. In such cases, the senior subordinate station will normally assume net control but, before he does so, he must confirm that other stations on the net cannot hear the NCS

Example: Nothing has been heard from the NCS. E969, as the senior subordinate station, transmits:

Three Charlie – THIS IS – Six Nine – Have you heard anything from Four Delta

There is no reply from the NCS, and the other stations transmit:

THIS IS – Nine Two – NOTHING HEARD – OVER
THIS IS – Zero Six – NOTHING HEARD – OVER

E969 then transmits:

THIS IS – Six Nine – NOTHING HEARD from Four Delta – I AM
ASSUMING CONTROL – OVER

Subordinate station reply in order:

THIS IS – Nine Two – ROGER – OUT
THIS IS – Zero Six – ROGER – OUT, etc.

- c. When the NCS re-joins the net, he does so using the proword I AM ASSUMING CONTROL and must give authentication:

Example: The NCS wishes to resume control of the net and transmits:
Three Charlie – THIS IS – Four Delta – I AM ASSUMING
CONTROL –TIME One Eight Three Zero Zulu –
AUTHENTICATION IS..... –OVER

The subordinate stations reply in order:

THIS IS – Nine Two – ROGER – OUT
THIS IS – Zero Six – ROGER – OUT, etc.

5-6 RADIO CHECKS, SIGNAL STRENGTH AND READABILITY

- a. A station is understood to have good signal strength and readability unless otherwise notified. Strength of signals and readability will not be exchanged unless one station cannot clearly hear another station.
- b. A station that wishes to inform another of his signal strength and readability will do so by means of a short and concise report of actual reception such as, WEAK BUT READABLE, LOUD BUT DISTORTED, WEAK WITH INTERFERENCE, etc. Reports such as “five by five,” “four by four,” etc., will not be used to indicate strength and quality of reception.
- c. The prowords listed below are for use when initiating and answering queries concerning signal strength and readability:

1) General:

<u>RADIO CHECK</u>	What is my signal strength and readability; how do you hear me?
--------------------	---

ROGER I have received your last transmission satisfactorily. The omission of comment on signal strength and readability is understood to mean that reception is loud and clear. If reception is other than loud and clear, it must be described with the prowords for (2) and (3) below.

NOTHING HEARD To be used when no reply is received from a called station.

2) Report of Signal Strength

LOUD Your signal is very strong.
GOOD Your signal strength is good.
WEAK Your signal strength is weak.
VERY WEAK Your signal strength is very weak.
FADING At times your signal strength fades to such an extent that continuous reception cannot be relied upon.

3) Report of Readability:

CLEAR The quality of your transmission is excellent.
READABLE The quality of your transmission is satisfactory.
UNREADABLE The quality of your transmission is so bad that I cannot read you.
DISTORTED Having trouble reading you due to interference.
WITH INTERFERENCE Having trouble reading you due to interference.
INTERMITTENT Having trouble reading you because your signal is intermittent.

- d. Example (Assuming Abbreviated Call Signs Are in Use): Z34D desires a radio check with Y13C and transmits:

Three Charlie – THIS IS – Four Delta – RADIO CHECK – OVER

All stations of the collective call hear Z34D loud and clear except C206 and D381. The replies of each station, in order, are:

THIS IS – Nine Two – ROGER – OVER
THIS IS – Zero Six – READABLE – OVER
THIS IS – Eight One – WEAK WITH INTERFERENCE – OVER
THIS IS – Six Nine – ROGER – OVER
THIS IS – Seven Eight – ROGER – OVER
THIS IS – Nine Five – ROGER – OVER

Z34D indicates his reception of each of the called stations was loud and clear except for C206, who was distorted, and D381, who was not heard, by replying:

THIS IS – Four Delta – ROGER – Zero Six DISTORTED – Eight One – NOTHING HEARD – OVER

In the event Z34D hear all stations loud and clear, the reply would have been:

THIS IS – Four Delta – ROGER – OUT

5-7 PRELIMINARY CALLS

When communication is difficult or when the calling station wishes to ascertain whether the station called is ready to receive a message, a preliminary call will be sent before transmitting a message.

Example A: C206 wishes to transmit a message to E969 and desires to know if E969 is ready to accept it. C206 transmits:

Six Nine – THIS IS – Zero Six – MESSAGE – OVER

E969, ready to accept the message, transmits:

THIS IS – Six Nine – SEND YOUR MESSAGE – OVER

C206 transmits:

THIS IS – Zero Six – ROUTINE, etc.

Example B: D381 wishes to transmit a message to H795 and desires to know that H795 is ready to accept it. D381 transmits:

Nine Five – THIS IS – Eight One – PRIORITY – OVER

H795, not prepared to accept the traffic immediately transmits:

THIS IS – Nine Five – WAIT

After a short pause, H795 is ready and transmits:

THIS IS – Nine Five – SEND YOUR PRIORITY – OVER

Note: If H795's delay had been longer than a few seconds, H795 would have transmitted:

THIS IS – Nine Five – WAIT – OUT

When ready to accept the message, H795 would transmit:

Eight One – THIS IS – Nine Five – SEND YOUR PRIORITY –
OVER

5-8 TRANSMITTING A MESSAGE

- a. Communications Good. When communication reception is satisfactory, message parts need to be transmitted only once and preliminary calls are optional.

Example A: Z34D transmits:

Seven Eight – THIS IS Four Delta – PRIORITY – Convoy has
arrived – TIME One Six Three Zero Zulu – OVER

F178, having received the transmission satisfactorily, transmits:

THIS IS – Seven Eight – ROGER – OUT

Example B: F178, having missed the transmission, transmits:

THIS IS – Seven Eight – SAY AGAIN – OVER

Z34D transmits:

THIS IS – Four Delta – I SAY AGAIN – (Seven Eight – THIS IS
Four Delta) – PRIORITY – Convoy has arrived – TIME One Six
Three Zero Zulu – OVER

F178 transmits:

THIS IS – Seven Eight – SAY AGAIN ALL AFTER Convoy –
OVER

Z34D transmits:

THIS IS – Four Delta – I SAY AGAIN ALL AFTER Convoy –
Convoy has arrived – TIME One Six Three Zero Zulu – OVER

F178 transmits:

THIS IS – Seven Eight – ROGER – OUT

- b. Communications Difficult. When communication is difficult, call signs should be transmitted twice. Phrases, words may be transmitted twice and indicated by use of the proword WORDS TWICE. Reception may be verified by use of the proword READ BACK.

Example: E969 transmits:

Alfa One Nine Two – Alfa One Nine Two – THIS IS – Echo Nine
Six Nine – Echo Nine Six Nine – PRIORITY PRIORITY – OVER

A192 transmits:

Echo Nine Six Nine – Echo Nine Six Nine – THIS IS Alfa One
Nine Two – Alfa One Nine Two – SEND YOUR PRIORITY –
OVER

E969 transmits:

Alfa One Nine Two – Alfa One Nine Two – THIS IS – Echo Nine
Six Nine – Echo Nine Six Nine – WORDS TWICE – WORDS
TWICE – PRIORITY – PRIORITY – Convoy has arrived –
Convoy has arrived – TIME One Six Three Zero Zulu – TIME
One Six Three Zero Zulu – OVER

A192 transmits:

Echo Nine Six Nine – Echo Nine Six Nine – THIS IS Alfa One
Nine Two – Alfa One Nine Two – SAY AGAIN – SAY AGAIN –
WORD BEFORE has – WORD BEFORE has – OVER

E969 transmits:

Alfa One Nine Two – Alfa One Nine Two – THIS IS Echo Nine
Six Nine – Echo Nine Six Nine – I SAY AGAIN – I SAY AGAIN –
WORD BEFORE has – WORD BEFORE has – Convoy –
Convoy – OVER

A192 transmits:

Echo Nine Six Nine – Echo Nine Six Nine – THIS IS – Alfa One
Nine Two – Alfa One Nine Two – ROGER – ROGER – OUT

5-9 RELAY

- a. The proword RELAY used alone indicates that the station called is to relay the message to all addressees.

Example: Z34D transmits:

Nine Two – THIS IS Four Delta – RELAY – PRIORITY – TIME
One One One Three Two Two Zulu – FROM Four Delta – TO
Nine Five – Proceed on mission assigned – OVER

A192 transmits:

THIS IS Nine Two - ROGER – OUT

A192 relays the message:

Nine Five – THIS IS Nine Two – PRIORITY – TIME One One
One Three Two Two Zulu – FROM Four Delta – TO Nine Five –
Proceed on mission assigned – OVER

H795 transmits:

THIS IS Nine Five – ROGER – OUT

- b. The proword RELAY TO followed by an address designator indicates that the station called is to relay the message to the stations indicated. When more than one station is called, the call sign of the station designated to perform the relay will precede the proword RELAY TO.

Example A: Z34D transmits:

Nine Two – THIS IS – Four Delta – RELAY TO Nine Five –
PRIORITY – TIME One One One Three Two Two Zulu –
Proceed on mission assigned – OVER

A192 transmits:

THIS IS Nine Two – Roger – OUT

A192 relays the message:

Nine Five – THIS IS – Nine Two – FROM Four Delta –
PRIORITY – TIME One One One Three Two Two Zulu –
Proceed on mission assigned – OVER

H795 transmits:

THIS IS – Nine Five – ROGER – OUT

Example B: C206 transmits:

Eight One – Seven Eight – THIS IS Zero Six – Eight One –
RELAY TO Bravo Four Two Zero – ROUTINE –TIME Two One
Zero Eight One Four Zulu – FROM Charlie Two Zero Six – TO
Bravo Four Two Zero – INFO Delta Three Eight One – Foxtrot
One Seven Eight – BREAK – Text – OVER

D381 transmits:

THIS IS Eight One – ROGER – OUT

F178 transmits:

THIS IS Seven Eight – ROGER – OUT

D381 relays the message to B420

Note: In this case, D381 has relayed the message to B420, who is an off-net station, using radiotelephone procedure. At times, it is necessary to relay a message originated on a radiotelephone circuit by some other means of communications. When such relay is necessary, it is the responsibility of the station relaying the message to use the proper format for the means of communications employed for relay.

- c. The proword RELAY THROUGH allows the NCS or another station to indicate a station that can relay a message.

Example: F178 attempts to transmit a message to E969 but cannot contact him. The NCS directs F178 to relay through A192 who he knows to be in contact with E969:

Seven Eight – THIS IS – Four Delta – RELAY THROUGH Nine
Two –OUT

F178 transmits:

Nine Two – THIS IS – Seven Eight – RELAY TO Six Nine –
Move now – OVER, etc.

- d. The proword THROUGH ME allows a third station who knows that he is in contact with the required station to indicate that he is able to relay the message:

Example: In the previous example, if the NCS had known that he was in contact with E969 he could have transmitted:

Seven Eight – THIS IS – Four Delta – THROUGH ME – OVER

- e. In all cases, whether the originating station can or cannot hear the relaying station, the relaying station must inform the originating station (station from whom the message was received for relay) that he has not been able to relay the message.

Example: C206 requests D381 to relay a message to B420. D381 accepts but is unable to relay. D381 informs C206 and transmits:

Zero Six THIS IS Eight One UNABLE TO RELAY YOUR MESSAGE (DTG OR TEXT) TO Two Zero.

C206 replies:

Eight One THIS IS Zero Six ROGER OUT

Upon being informed that the message has not been passed and acknowledging the responsibility for clearing the message rests with C206 D381 transmits:

Zero Six – THIS IS – Eight One – NOTHING HEARD from Two Zero –OVER

C206 replies:

THIS IS Zero Six – ROGER – OUT, or as appropriate.

5-10 REPETITIONS

- a. When words are missed or are doubtful, repetitions are to be requested by stations before receipting for the message. The proword SAY AGAIN, used alone or in conjunction with ALL BEFORE, ALL AFTER, FROM, TO, WORD BEFORE, WORD AFTER, will be used for this purpose. In complying with requests for repetitions, the transmitting station will identify that portion which is being repeated.

Example A: Z34D calls the two stations for which he has traffic:

Zero Six – Eight One – THIS IS Four Delta MESSAGE –
ROUTINE – TIME Zero Eight One Zero Five Two Zulu – FROM

Four Delta – TO Zero Six – INFO Eight One _ BREAK – At One
Eight Zero Zero Zulu – Proceed Hong Kong – To Arrive One Six
May – Load One Thousand Troops – for return Ningpo – I
SPELL – November India November Golf Papa Oscar – Ningpo
– ACKNOWLEDGE – OVER

C206, having missed from “At” to “Proceed,” transmits:

THIS IS Zero Six – SAY AGAIN – FROM At TO Proceed –
OVER

Z34D deals with the request for repetitions by C206 before the
other station requests his repetitions:

THIS IS Four Delta – I SAY AGAIN – FROM At TO Proceed – At
Eight Zero Zero Zulu Proceed – OVER

C206, having now received the message satisfactorily, transmits:

THIS IS Zero Six – ROGER – OUT

Having heard C206 give a receipt for the message, the next station
asks for his repetitions. In this case, D381 missed from “At” to
“Proceed” and the word after “Load.” As C206 had already asked
for the phrase from “At” to “Proceed” and D381 heard it repeated. It
is not now necessary for him to request that part to be repeated.
D381 asks, therefore, for the word after “Load” to be repeated:

THIS IS Eight One – SAY AGAIN – WORD AFTER Load –
OVER

Z34D repeats the word:

THIS IS Four Delta – I SAY AGAIN – WORD AFTER Load – One
– Over

D381, having now received the message satisfactorily, transmits:

THIS IS Eight One – ROGER – OUT

Example B: Alternatively, the second station in the sequence of
answering, not having heard the transmitting station answer the
request for repetition within 5 seconds, transmits:

THIS IS Eight One – SAY AGAIN – WORD AFTER Load –
OVER

Z34D having received a response from all stations concerned transmits:

THIS IS Four Delta – I SAY AGAIN – At TO Proceed – At One Eight Zero Zero Zulu – Proceed – WORD AFTER Load – One – OVER

C206 transmits:

THIS IS Zero Six – ROGER – OUT

D381 transmits:

THIS IS Eight One – ROGER – OUT

- b. In requesting repetitions of the heading of a message, a repetition may be requested of all that portion of the heading preceding or following a proword, or that portion of the heading between any two prowords. Requests for repetitions and replies thereto must include the nearest proword preceding and/or following the portion requested.

Example A: E969 transmits:

Zero Six – Seven Eight – THIS IS Six Nine – PRIORITY – TIME One Eight One Six Two Five Zulu – FROM Six Nine – TO Zero Six – Seven Eight – INFO Bravo Four Two Zero – BREAK – Proceed to rejoin convoy – OVER

C206, having missed all before the address, transmits:

THIS IS Zero Six – SAY AGAIN – ALL BEFORE FROM – OVER

E969 replies to C206:

Zero Six – THIS IS Six Nine – I SAY AGAIN – ALL BEFORE FROM – Zero Six – Seven Eight – THIS IS Six Nine – PRIORITY – TIME One Eight One Six Two Five Zulu – OVER

C206 transmits:

THIS IS Zero Six – ROGER – OUT

F178, having received the message satisfactorily, transmits:

THIS IS Seven Eight – ROGER – OUT

Example B: D381 transmits:

Nine Five – THIS IS Eight One – ROUTINE – TIME Two Four
Zero Nine One Two Zulu – FROM Eight One – TO Nine Five –
INFO – Bravo Four Two Zero – BREAK – Cancel my Two Three
One Four Two Eight Zulu – OVER

H795, having missed the portion between the date-time group and
the information addressees, transmits:

THIS IS Nine Five – SAY AGAIN – FROM TIME TO INFO –
OVER

D381 transmits:

THIS IS Eight One – I SAY AGAIN – FROM TIME TO INFO –
TIME Two Four Zero Nine One Two Zulu – FROM Eight One –
TO Nine Five – INFO – OVER

H795 transmits:

THIS IS Nine Five – ROGER – OUT

- c. When it is necessary to ask for repetitions after a message has been receipted, such requests and replies there to must identify the message being queried as well as the portion required. Where used, the date-time group or time group shall be used for such identification.

Example:

Eight One THIS IS Nine Five – SAY AGAIN your Two Four Zero
Nine One Two Zulu – OVER

Nine Five THIS IS Eight One – I SAY AGAIN – Nine Five – THIS
IS Eight One – ROUTINE – TIME Two Four Zero Nine One Two
Zulu – FROM Eight One – TO Nine Five – INFO – Bravo Four
Two Zero – BREAK – Cancel my Two Three One Four Two Eight
Zulu – OVER

THIS IS Nine Five – ROGER – OUT

5-11 CORRECTIONS

- a. When a transmitting operator makes an error, the proword CORRECTION will be transmitted followed by the last word, group, proword, or phrase correctly transmitted. Transmission then continues.

Example A: F178 transmits:

Nine Five – THIS IS Seven Eight – Convoy Romeo Three –
CORRECTION – Romeo Four should arrive – One Six Three
Zero Lima – TIME One Zero One Two Zulu – OVER

H795 transmits:

THIS IS Nine Five – ROGER – OUT

Example B: C206 transmits:

Four Delta – THIS IS Zero Six – TIME Two Four Zero Seven
One Two Zulu – GROUPS Nine – Zulu Bravo Alfa Xray – Xray
Oscar – CORRECTION – Zulu Bravo Alfa Xray – Xray Quebec
Alfa – Kilo, etc.

Z34D transmits:

THIS IS Four Delta – ROGER – OUT

Example C: C206 transmits:

Seven Eight – THIS IS Zero Six – ROUTINE – TIME One Four
Zero Six Four Two Zulu – FROM Zero Six – TO Four Eight –
CORRECTION – TO Seven Eight – INFO Bravo Four Two Zero
– Join Me – OVER

F178 transmits:

THIS IS Seven Eight – ROGER – OUT

Example D: D381 transmits:

Zero Six – THIS IS Eight One – PRIORITY – TIME Zero Three
One Eight One Four Zulu – Latitude One Six Three Zero –
Longitude One Zero One Five – CORRECTION – Longitude One
Zero Five Five – OVER

C206 transmits:

THIS IS Zero Six – ROGER – OUT

- b. When an error in transmission is made but not discovered immediately, a correction may be made in the final instructions

element provided that the ending sign has not been transmitted. When making such a correction, the word, group proword, or phrase must be properly identified.

Example:

Nine Five - THIS IS Eight One - Tanks Will Arrive - Grid Three
Two One Nine Five Three - at Hotel Hours Minus Six - time One
Four Two Six Zulu - CORRECTION - WORD AFTER Minus -
Five - OVER

D95 transmits:

THIS IS Nine Five – ROGER – OUT

- c. If it is necessary to make corrections after a receipt has been obtained for a message, an abbreviated service message, identifying the message and the portion to be corrected, should be made:

Example: F178 transmits:

Nine Five – THIS IS Seven Eight – CORRECTION – My One
Three One Five One Six Zulu – WORD AFTER Monday –
Morning – OVER

5-12 CANCELLING MESSAGES

- a. During the transmission of a message and up to the transmission of the ending proword OVER or OUT, the message may be cancelled by use of the proword DISREGARD THIS TRANSMISSION – OUT.

Example: During the transmission of a message E969 realizes that the transmission I s being sent in error and therefore cancels it:

Seven Eight – THIS IS – Six Nine – ROUTINE – TIME One Zero
Zero Six Zero Two Zulu – Begin unloading at One One One Two
Three Zero Zulu – Proceed – DISREGARD THIS
TRANSMISSION – OUT

- b. A message that has been completely transmitted can only be cancelled by another message.

Example: E969 transmits:

Seven Eight – THIS IS – Six Nine – Cancel my One Zero Zero
Six Zero Two Zulu – TIME Zero Seven One Two Zulu – OVER

5-13 DO NOT ANSWER TRANSMISSIONS

When it is imperative that the called stations do not answer a transmission, the proword DO NOT ANSWER will be transmitted immediately following the call, and the complete transmission will be sent twice, the full transmission ending with the proword OUT. DO NOT ANSWER transmissions must be authenticated.

Example: Sabine Raider transmits:

Siphon – THIS IS – Raider – DO NOT ANSWER – Act in accordance with Plan Charlie – TIME Two Two One Eight Zulu – AUTHENTICATION IS..... – I SAY AGAIN – Siphon – THIS IS Raider – DO NOT ANSWER – Act in accordance with Plan Charlie – TIME Two Two One Eight Zulu – AUTHENTICATION IS..... - OUT

5-14 READ BACK

- a. If it is desired that a message or portion thereof be read back to ensure accuracy, the proword READ BACK and identifying data; e.g., READ BACK TIME, READ BACK GRID, READ BACK TEXT, etc., will be transmitted immediately following the call:

Example A: Z34D transmits:

Seven Eight – THIS IS – Four Delta – READ BACK – Convoy has arrived – Time One Six Three Zero Zulu – OVER

E178 transmits:

THIS IS Seven Eight – I READ BACK – Seven Eight – THIS IS Four Delta – READ BACK – Convoy has arrived – TIME One Six Three Zero Zulu – OVER

Z34D transmits:

THIS IS Four Delta – CORRECT – OUT

Example B: C206 transmits:

Eight One – THIS IS Zero Six – READ BACK GRID – Meet Me Grid One Three Four Two Six Five – OVER

D381 transmits:

THIS IS Eight One – I READ BACK GRID – One Three Four Two Six Five – OVER

C206 transmits:

THIS IS Zero Six – CORRECT – OUT

Note: When READ BACK procedure is employed, the proword ROGER is not necessary to indicate receipt of the message.

- b. The proword READ BACK, when not preceded by identifying callsigns means that all stations are to read back. If a collective call is used, but only part of the stations represented in the call are required to read back, that station or those stations will be specified by transmitting the appropriate call signs preceding the proword READ BACK. When the order to read back is given, only those stations directed to do so will read back; remaining stations called will keep silent unless directed by the calling station to receipt.

Example: Z34D transmits:

Three Charlie – THIS IS Four Delta – Eight One READ BACK – Convoy has arrived – TIME One Six Three Zero Zulu – OVER

D381 transmits:

THIS IS Eight One – I READ BACK – Three Charlie – THIS IS Four Delta – Eight One READ BACK – Convoy has arrived – TIME One Six Three Zero Zulu – OVER

C206 transmits:

THIS IS Zero Six – ROGER – OUT

- c. If the station reading back does so incorrectly, the originating station will call attention to the error by use of the proword WRONG followed by the correct version.

Example: D381 read back:

THIS IS – Eight One – I READ BACK – Three Charlie – THIS IS – Four Delta – Eight One READ BACK – Convoy has arrived – TIME One Six Two Zero Zulu – OVER

Z34D transmits and directs C206 to receipt:

THIS IS Four Delta – CORRECT – Zero Six – OVER

C206 transmits:

THIS IS Zero Six – ROGER – OUT

- d. If the station reading back does so incorrectly, the originating station will call attention to the error by use of the proword WRONG followed by the correct version:

Example: D381 reads back:

THIS IS – Eight One – I READ BACK – Three Charlie – THIS IS
– Four Delta – Eight One READ BACK – Convoy has arrived –
TIME One Six Two Zero Zulu – OVER

Z34D transmits:

THIS IS – Four Delta – WRONG – TIME – One Six Three Zero
Zulu –OVER

D381 transmits:

THIS IS – Eight One – TIME One Six Three Zero Zulu – OVER

Z34D transmits:

THIS IS – Four Delta – CORRECT – OUT

5-15 RECEIPT

- a. Receipt is employed in direct station-to-station traffic handling. No message is considered delivered until receipt is obtained (but see b below). A receipt may be effected as follows:
- 1) The receiving station transmits a receipt after each message or string of messages by the proword ROGER.
 - 2) Where abbreviated procedure is in force, a return transmission may be considered as a receipt if no confusion is likely to arise.
 - 3) In the case of a message requiring acknowledgment, the use of the proword WILCO constitutes a receipt as the meaning of WILCO includes that of ROGER.

Example: C206 transmits:

Six Nine – THIS IS – Zero Six – Send boat for mail – TIME One
Seven One Four Zulu – OVER

F969 transmits:

THIS IS – Six Nine – ROGER – OUT

- b. When the transmitting station considers speed of handling a primary consideration, one station in the net may be directed to receipt for the message and no other stations may answer until instructed to do so. This does not prohibit any station from requesting repetition. Security is enhanced if the same station is directed to receipt for all transmissions.

Example: Station Z34D sends a message to the collective call Y13C and only desires a receipt from D381.

Z34D transmits:

Three Charlie – THIS IS Four Delta – Send boat for mail – TIME
One Two One Six Zulu – Eight One – OVER

D381 transmits:

THIS IS Eight One – ROGER – OUT

H795, having missed the word “mail,” transmits:

THIS IS Nine Five – SAY AGAIN – WORD AFTER for – OVER

Z34D transmits:

THIS IS Four Delta – I SAY AGAIN – WORD AFTER for – mail –
OVER

H795 transmits:

THIS IS Nine Five – ROGER – OUT

- c. Should either the transmitting or the receiving station wish to indicate that he has further traffic to transmit to the station that he is working, this may be done by using the proword MORE TO FOLLOW in the message ending or receipt.

Example A: C206, in transmitting a message to E969 wishes to indicate that he has further traffic for E969, transmits:

Six Nine THIS IS Zero Six – TEXT – MORE TO FOLLOW –
OVER

THIS IS Six Nine – ROGER – OVER

Example B: Z34D, in transmitting a message to Y13C wishes to indicate that he has further traffic for C206 and H795, transmits:

Three Charlie – THIS IS Four Delta – TEXT – MORE TO
FOLLOW for Zero Six and Nine Five – OVER

THIS IS Nine Two – ROGER – OUT
THIS IS Zero Six – ROGER – OVER
THIS IS Eight One – ROGER – OUT
THIS IS Six Nine – ROGER OUT
THIS IS Seven Eight – ROGER OUT
THIS IS Nine Five – ROGER – OVER
THIS IS Four Delta, etc.

Example C: E969, in receipting for a message from C206 wishes to indicate that he has a message for C206, transmits:

THIS IS Six Nine – ROGER – MORE TO FOLLOW – OVER

THIS IS Zero Six – OVER

5-16 ACKNOWLEDGMENT OF MESSAGES

An acknowledgment should not be confused with a reply or receipt. A prompt reply referring to the message may serve in lieu of an acknowledgment. It is the prerogative of the originator to request an ACKNOWLEDGMENT to a message from any or all addressees of that message. If an acknowledgment is desired for a message, the request for acknowledgment normally is included in the text of that message. If the message has been transmitted, the request for acknowledgment will constitute a new message. Acknowledgments are originated only by the addressee to whom the request for acknowledgment was made. Procedure for acknowledgment of tactical signals is contained in paragraph 705.

Example: Z34D transmits a message to D381 and desires an acknowledgment:

Eight One – THIS IS Four Delta – Search Area Delta –
ACKNOWLEDGE – TIME One One Two Zero Zulu – OVER

D381 transmits a receipt for the message:

THIS IS Eight One – ROGER – OUT

D381 operator, having shown the message to the commanding officer or his duly authorized representative and having been ordered to acknowledge the message, transmits:

Four Delta – THIS IS Eight One – Your One One Two Zero Zulu
Acknowledged – TIME One One Two Five Zulu – OVER

5-17 VERIFICATIONS

- a. When verification of a message or a portion thereof has been requested by an addressee, the originating station will verify with the originator and send the correct version.

Example: H795 transmits:

Four Delta – THIS IS Nine Five – VERIFY Your One Zero Zero
Eight Zero One Zulu – ALL BEFORE BREAK – OVER

Z34D transmits:

THIS IS – Four Delta – ROGER – OUT (or WAIT or WAIT OUT)

Z34D operator checks with the originator, establishes that the heading previously transmitted was correct, transmits:

Nine Five – THIS IS Four Delta – I VERIFY My One Zero Zero
Eight Zero One Zulu – ALL BEFORE BREAK – Nine Five – THIS
IS Four Delta – PRIORITY – TIME One Zero Zero Eight Zero
One Zulu – FROM Four Delta TO Nine Five – INFO Zero Six –
GROUPS One Seven – BREAK – OVER

H795 transmits:

THIS IS Nine Five – ROGER – OUT

- b. When a message to a number of addressees is queried by one station and found to be incorrect, the corrected version must be sent to all addressees.

Example: D381 transmits:

Seven Eight – THIS IS Eight One – VERIFY Your Zero Eight
Four Five Zulu – WORD AFTER Proceed – Haiphong – OVER

F178 transmits:

THIS IS Seven Eight – ROGER – OUT (or WAIT or WAIT OUT)

F178 operator checks the message with the originator and finds that the word after “proceed” should have been “Hong Kong” instead of “Haiphong.” He therefore transmits a correction to all of the original addressees.

Eight One – Six Nine – THIS IS Seven Eight – CORRECTION –
My Zero Eight Four Five Zulu – WORD AFTER Proceed – Hong
Kong – OVER

D381 transmits:

THIS IS Six Nine – ROGER OUT

5-18 BREAK-IN PROCEDURE

- a. A station having a message of higher precedence than the transmission in progress may break in and thus suspend that transmission in the following circumstances:
 - 1) FLASH – Break in at once and transmit the message (b and c below).
 - 2) IMMEDIATE – May break in at once and pass the message. A preliminary call may be made before transmitting the message, if necessary. On a directed net, approval to transmit the message must be obtained.
 - 3) PRIORITY – As for IMMEDIATE except that only long ROUTINE messages should be interrupted.

Note: Break-in procedure will not normally be employed during the transmission of tactical messages.

- b. The precedence spoken three times means, “Cease transmissions immediately. Silence will be maintained until the station breaking in has passed the message.”
- c. Break-in procedure for messages of precedence FLASH on either a free net or a directed net should take the following form:

Example: D381 is transmitting an IMMEDIATE message to Z34D when E969 is handed a FLASH message for transmission to A192. When D381 pauses, E969 transmits:

FLASH FLASH FLASH – Nine Two – THIS IS – Six Nine FLASH
– Text – OVER

A192 transmits:

THIS IS Nine Two – ROGER – OUT

D381 then continues with his transmission:

Four Delta – THIS IS – Eight One – ALL AFTER – etc.

- d. Break-in procedure for messages of IMMEDIATE or PRIORITY precedence is illustrated in the following examples:

1) On Directed Nets:

Example: D381 is transmitting a PRIORITY message to Z34D when E969 is handed an IMMEDIATE message for A192. When D381 pauses, E969 transmits:

IMMEDIATE IMMEDIATE IMMEDIATE – Four Delta – THIS IS – Six Nine – IMMEDIATE for Nine Two – OVER (D381, hearing E969's break-in, ceases transmission.)

NCS transmits:

THIS IS – Four Delta – Send your IMMEDIATE – OVER

On hearing this authorization, A192 transmits:

Six Nine -THIS IS – Nine Two – OVER

E969 transmits:

Nine Two – THIS IS Six Nine – IMMEDIATE – Text – OVER

A192 transmits:

THIS IS – Nine Two ROGER – OUT

As soon as the IMMEDIATE message has been receipted, D381 continues his transmission:

Four Delta – THIS IS – Eight One – ALL AFTER – etc.

2) On Free Nets:

Example A: A192 is transmitting a PRIORITY message to D381 when Z34D is handed an IMMEDIATE message for E969. When A192 pauses, Z34D transmits IMMEDIATE IMMEDIATE IMMEDIATE –

A192 hearing the precedence spoken three times, ceases transmission and Z34D continues:

Six Nine – THIS IS – Four Delta – IMMEDIATE – Text – OVER

E969 transmits:

THIS IS Six Nine – ROGER – OUT

A192 then continues transmission:

Eight One – THIS IS – Nine Two – ALL AFTER – etc.

Example B: A192 is transmitting a long ROUTINE message to D381 when Z34D is handed a PRIORITY message for E969. When A192 pauses, Z34D transmits:

PRIORITY PRIORITY PRIORITY –

A192, hearing the precedence spoken three times, ceases transmission and Z34D continues:

Six Nine – THIS IS Four Delta – PRIORITY – Text – OVER

E969 transmits:

THIS IS – Six Nine - ROGER – OUT

A192 then continues his transmission:

Eight One – THIS IS – Nine Two – ALL AFTER – etc.

5-19 RADIO AND EMERGENCY SILENCE

a. Radio Silence:

- 1) Radio silence may be imposed or lifted by the control station on the net, or nets, for which it is responsible.

- 2) Radio silence may be predetermined or may occur in an emergency. When predetermined, instructions for imposing, lifting, or breaking radio silence are to be passed by any secure means available. Emergency silence is described in sub Para b. below.
- 3) Radio silence is to be imposed in accordance with the instructions given. This will normally be by the use of codewords, nicknames, or other predetermined designator. Lifting or breaking radio silence may be achieved in the same way, or by the use of transmission or self-authentication.

Example A, imposing radio silence by use of a nickname: The NCS transmits to all subordinate stations:

Three Charlie – THIS IS – Four Delta – PAPER DOLL – OVER

Each subordinate station answers in turn:

THIS IS – Nine Two – ROGER – OVER
THIS IS – Zero Six – ROGER – OVER – etc.

The NCS transmits:

THIS IS – Four Delta – PAPER DOLL now – OUT

Note: This procedure cannot be distinguished from the procedure for closing down and changing frequency when using nicknames.

Example B, breaking radio silence by means of transmission authentication: A192 has authority and reason, within the conditions ordered, to break radio silence. He transmits:

Four Delta – THIS IS – Nine Two – Flooding Report – TIME.....-
AUTHENTICATION IS..... – OVER

Z34D transmits:

THIS IS – Four Delta – ROGER – OUT

Note: The remainder of the net maintains radio silence; a break by one station does not lift silence.

Example C, lifting radio silence by means of transmission authentication: The NCS transmits:

Three Charlie – THIS IS – Four Delta – SILENCE LIFTED –
TIME..... - AUTHENTICATION IS – OUT

b. Emergency Silence:

- 1) Emergency (radio) silence may be imposed or lifted only by competent authority.
- 2) When a transmission authentication system is in force, a station must always authenticate a transmission which imposes or lifts emergency silence, or which calls stations during periods of emergency silence.
- 3) Transmissions imposing emergency silence will be made twice through and ended with the proword OUT. Stations do not answer or receipt such transmissions.
- 4) The proword SILENCE spoken three or more times means “Cease transmissions on this net immediately. Silence will be maintained until lifted”
- 5) After a call, use of the proword SILENCE spoken three or more times means “Stations addressed are to cease all transmissions on this net immediately.”

Example: To impose emergency silence on the net, the NCS transmits:

Three Charlie – THIS IS – Four Delta – SILENCE SILENCE
SILENCE –TIME..... – AUTHENTICATION IS – I SAY
AGAIN – Three Charlie – THIS IS – Four Delta – SILENCE
SILENCE SILENCE – TIME – AUTHENTICATION IS
..... OUT.

- 6) SILENCE spoken three or more times followed by a frequency or frequency designator means “Cease all transmissions immediately on frequency (or frequency indicated by the designator).”
- 7) SILENCE spoken three or more times followed by “all nets” means “Cease all transmissions immediately on all nets.”

Example A: To impose emergency silence on all stations on the frequency indicated by the designator C74, the NCS transmits:

Three Charlie – THIS IS – Four Delta – SILENCE SILENCE
SILENCE – Charlie Seven Four – TIME -
AUTHENTICATION IS – I SAY AGAIN – Three Charlie
– THIS IS Four Delta – SILENCE SILENCE SILENCE – Charlie
Seven Four – TIME – AUTHENTICATION IS
.....OUT

Example B: To impose emergency silence on all stations on
134.25MHz only, the NCS transmits:

Three Charlie – THIS IS Four Delta – SILENCE SILENCE
SILENCE – One Three Four Decimal Two Five – TIME –
AUTHENTICATION IS – I SAY AGAIN Three Charlie –
THIS IS Four Delta – SILENCE SILENCE SILENCE – One Three
Four Decimal Two Five – TIME – AUTHENTICATION IS
..... OUT

Example C: To impose emergency silence on all nets including
subordinate nets, using the codeword BODYGUARD, the NCS
transmits:

Three Charlie – THIS IS – Four Delta – SILENCE SILENCE
SILENCE – All nets – BODYGUARD – I SAY AGAIN - Three
Charlie – THIS IS – Four Delta – SILENCE SILENCE SILENCE
– All nets – BODYGUARD – OUT

Note: Subordinate NCS must repeat this message on their own nets
using a different codeword or transmission authentication.

- 8) Emergency silence is lifted by the use of the proword SILENCE
LIFTED, qualified where necessary by a frequency, a frequency
designator, or the phrase “all nets” and followed by transmission
authentication or a codeword, etc.

Example A: Lifting emergency silence for all stations on a net, the
NCS transmits:

Three Charlie – THIS IS – Four Delta – SILENCE LIFTED –
TIME - AUTHENTICATION IS – OUT

Example B: Lifting emergency silence for all stations on a frequency
indicated by the designator C74, using the codeword TOWER, the
NCS transmits:

Three Charlie – THIS IS – Four Delta – SILENCE LIFTED –
Charlie Seven Four – TOWER – OUT

- c. Following a period of electronic or radio silence, the NCS needs to consider the requirement to re-establish communications by means of a radio check.

5-20 CLOSING DOWN

- a. No station is to close down without prior permission from the NCS. The greatest care must be taken by control stations never to close down a net, or an individual subordinate station, without being completely satisfied that the stations know, or will know, the new frequency and time of reopening. The necessary orders are always passed by the most secure means and, wherever possible, not by radio.
- b. When it is essential to order a close-down over radio and the NCS is satisfied regarding the arrangements for reopening, he orders the net or subordinate station to close down. He may do this by means of the proword CLOSE DOWN or by nickname.

Example A: Z34D orders the close-down of the net using the nickname BLIND SPOT:

Three Charlie – THIS IS – Four Delta – BLIND SPOT – OVER

The subordinate stations reply in turn:

THIS IS – Nine Two – ROGER – OVER
THIS IS – Zero Six – ROGER – OVER, etc.

Z34D transmits:

THIS IS – Four Delta – BLIND SPOT now – OUT

Example B: Z34D orders the close down of the net using the proword CLOSE DOWN:

Three Charlie – THIS IS – Four Delta – CLOSE DOWN – OVER

The subordinate stations reply in turn:

THIS IS Nine Two ROGER – OVER
THIS IS Zero Six – ROGER – OVER – etc.

Z34D transmits:

THIS IS Four Delta – CLOSE DOWN now – OUT

CHAPTER 6

FREQUENCIES

FREQUENCIES:

VaDF communications are authorized on the following frequencies subject to the Rules and Regulations of the Federal Communications Commission (FCC) and/or the National Telecommunications and Information Administration (NTIA) in addition to those contained in this publication

6-1 High Frequency (HF):

The following National Telecommunications and information Administration (NTIA) Frequencies are authorized for VaDF use for training and emergency situations for which the TAG is activated. Authorization is by memorandum from the VARNG Frequency Manager dated 09 NOV 2006. Peak Envelope Power (PEP) is limited to 1 kW for fixed base and 150 W for mobile units. Bandwidth is limited to 2.8 kHz. Unless directed in accordance with para. 6-6, VaDF stations are not authorized to operate on other NTIA or FCC HF frequencies without prior permission and an executed Memorandum of Understanding (MOU) with the supported Agency.

CH #	DESIG	FREQUENCY	MODE	AUTHORITY	AUTHENTICATION
1	Sierra	3.2625 MHz	USB	AR056615	Robin
2	TANGO	5.1295 MHz	USB	AR 056639	Sparrow
3	UNIFORM	8.1815 MHz	USB	AR 025649	Cardinal
4	VICTOR	11.6960 MHz	USB	AR 011907	Crow
5	WISKEY	12.1680 MHz	USB	AR 056674	Blue Jay

6-2 Very High Frequency (VHF):

The following National Telecommunications and Information Administration (NTIA) Frequencies are authorized for VaDF use for training and emergency situations for which the TAG is activated. Authorization is by memorandum from the VARNG Frequency Manager dated 09 NOV 2006. Peak Envelope Power (PEP) is limited to 35 W for mobile units and 5 W for portable units. Transmissions will be FM. Narrow band restrictions apply. Unless directed in accordance with Para. 6-6, VaDF stations are not authorized to operate on other NTIA or FCC VHF frequencies without prior permission and an executed Memorandum of Understanding (MOU) with the supported Agency.

CH #	DESIG	FREQUENCY	MODE	AUTHORITY	AUTHENTICATION
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6	CHARLIE	140.1375 MHz	FM	AR041607	Oak
7	DELTA	140.8250 MHz	FM	AR041616	Elm

- 6-3 Citizens Band VaDF stations may operate on any Citizens Band channel subject to Federal Communications Commission rules and on a non-interference basis only. The following is the VaDF channel plan for CB radio operations:

NOTE: VaDF stations will not conduct routine operations on the Citizens Band national emergency channel, Channel 9 AM. Stations wishing to report a highway emergency or request directions may call on channel 9 for any monitor. VaDF Stations monitoring CB Channel 9 will maintain a communications log which specifies the time period monitored and calls handled.

CH #	DESIG	FREQUENCY	MODE	AUTHORITY	AUTHENTICATION
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8	ECHO	27.055 MHz	AM	FCC	Chrysler
14	FOXTROT	37.125 MHz	AM	FCC	Chevrolet
21	GOLF37	215 MHz	AM	FCC	Ford
28	HOTEL	27.285 MHz	AM	FCC	Cadillac
35	INDIA	27.355 MHz	LSB	FCC	Toyota
37	JULIETT	27.375 MHz	LSB	FCC	Subaru
39	KILO	27.395 MHz	USB	FCC	Mazda

NOTE: VaDF Channel Numbers coincide with CB Channels.

- 6-4 Multi Use Radio Service (MURS):

MURS uses narrowband FM (NBFM) with maximum effective radiated power of 2 watts. Expect a communication range of one to three miles, generally line of sight; significantly less if not (LOS). VaDF usage of these frequencies in accordance with FCC Rules and Regulations is authorized on a non-interference basis only.

CH #	DESIG	FREQUENCY	MODE	AUTHORITY	AUTHENTICATION
------	-------	-----------	------	-----------	----------------

9	LIMA	151.820 MHz		FCC	Sheppard
10	MIKE	151.880 MHz		FCC	Collie
11	NOVEMBER	151.940 MHz		FCC	Poodle
12	OSCAR	154.570 MHz		FCC	Boxer
13	PAPA	154.600 MHz		FCC	Beagle

NOTE: VaDF MURS Channel Numbers do NOT coincide with any know manufacturer's channel scheme.

6-5 Family Radio Service (FRS):

FRS uses narrowband FM (NBFM) with maximum effective radiated power of 0.5 watt (500 milliwatt) FCC Regulations prohibit modifications to the self-contained units and no modifications are authorized. VaDF usage of these frequencies in accordance with FCC Rules and Regulations is authorized on a non-interference basis only.

NOTE: Since the FCC does not regulate channel to frequency pairings, radios produced by different manufacturers may vary. Some FRS radios use squelch codes which may also vary by channel and manufacturer. The channel numbers listed below are NOT VaDF channel reference numbers. They are a listing of a typical manufacturer's channel scheme

1	462.5625	8	467.5625
2	462.5875	9	467.5875
3	462.6125	10	467.6125
4	462.6375	11	467.6375
5	462.6625	12	467.6625
6	462.6875	13	467.6875
7	462.7125	14	467.7125

6-6 Emergency Management Frequencies:

Stations are authorized to conduct operations on frequencies not listed as assigned or approved by the VaDF SOI when directed to do so by an authorized representative of an Agency of the Commonwealth of Virginia or U.S. Government during actual emergency operations. The VaDF AC of S G-6 will be notified of such operations as soon as practicable after such operations commence. In Addition:

- a. The individual accepting mission responsibility will request written authorization to operate on the assigned frequency from the directing authority. Reply to such request will not delay commencement of operations.
- b. All records of the operation will be maintained in their original form and forwarded to VaDF GW Division HQ. Attn: AC of S G-6.
 - 1) Staff Duty Journal
 - 2) VaDF Communications Log
 - 3) VaDF Field Message Forms

- 4) NIMS Message Forms or Message Form of the supported Agency.
- 5) Duty Rosters
- 6) All other forms, reports, notes or written information pertinent to the operation.

CHAPTER 7**CALL SIGNS****7.1 GENERAL:**

VaDF call signs may be either Static or Tactical. It is the responsibility of each individual using a VaDF call sign to know and follow the procedures set forth in this publication.

7-2 Radio Telephone Operators (RTO), or others performing that function, are not assigned static call signs, but use the call sign of the station or position they represent.

EXAMPLE: A: The Blackhorse Brigade S-2 would use the call sign:

- 1). 'E3B2' when personally sending or replying to messages addressed from or to him/her ('E3B2'), regardless of the radio used.
- 2). 'E3BM' when operating as RTO the Blackhorse MCP radios for a mobile command post and not sending or replying to messages addressed from or to 'E3B2'.
- 3). 'E3BQ' when operating as RTO a radio supporting Blackhorse Headquarters (normally in garrison or as Blackhorse Rear) and not sending or replying to messages addressed from or to 'E3B2', regardless of the radio used.
- 4). 'E3BT' when operating as RTO a radio supporting a Blackhorse Operations Center (tactical, emergency, joint, etc.) and not sending or replying to messages addressed from or to 'E3B2', regardless of the radio used.

NOTE: High Frequency (HF) Automatic Link Establishment (ALE) traffic can only be initiated by using the call sign (self address) of the MCP radio regardless of the location of the radio.

EXAMPLE B:

- 1) Any Blackhorse billeted RTO would use the station call signs listed in EXAMPLE A: 2), 3), & 4) above when operating in the capacity indicated.
- 2) The RTO assigned to operate the radio for the Blackhorse CMDR would use the call sign E3B6 when handling message traffic for the

Blackhorse CMDR in his immediate presence and transmit the exact wording used by the CMDR.

NOTE A: If not in the presence of the CMDR, the RTO will use the call sign of the HQ element (i.e. E3BQ or E3BT) and use the proword WAIT (OVER/OUT) until he/she is in the immediate present of the CMDR.

NOTE B: If the RTO is unsure of the CMDR's presence, he will not answer calls addressed to the CMDR (E3B6), in which case the transmitting station will redirect the call to the HQ element and use formal message procedures.

- 7.3 Static Call Signs: Positions down to the platoon level and most likely to be directly involved in a Division scale operation requiring message traffic have been assigned a static call sign by the AC of S G-6 and listed in appendix A-1 and A-2.
- a. Static call signs have been designed to identify a station or position within the Defense Force structure. They have also been designed to accomplish six goals.
 - 1) Identify a specific level of command
 - 2) Identify a specific unit.
 - 3) Identify a position within a unit
 - 4) Simplify recording of message forms and logs and avoid confusion
 - 5) Take advantage of developing technology in radio equipment, particularly Automatic Link Establishment (ALE)
 - 6) Provide a logical system that allows for station/position identification with minimal reference to the SOI.
 - b. The first alphanumeric character of the static call sign identifies a VaDF level of command or MCP:
 - 1) 'D' (DELTA) identifies the Division level of command
 - 2) 'E' (ECHO) identifies a brigade level of command.
 - 3) 'B' (Bravo) identifies a battalion level of command
 - 4) A numeral identifies a company level of command

EXCEPTION: Division MP Company (DMP*) and Division Headquarters Company (DHC*).

- c. The second and third alphanumeric character identifies a specific unit.
- d. The last alphanumeric character of the static call sign identifies a station or position.

- 1) Numerals 1-9 identify a position, (i.e. S-3, 1PLT LDR, etc.)
- 2) 'T' identifies an operation center (Tactical, Emergency, Joint, etc.)

NOTE: Due to programming, the station call sign of the MCP must be used whenever the issued MICOM 2ES radio is used to link in the ALE mode, regardless of the location of the radio.

- 3) 'Q' identifies a headquarters (HQ Rear when a forward command is established). Also used in garrison
- 4) 'M' identifies a MCP (mobile command post) [also referred to as mobile communications platform].
- 5) 'F' identifies the senior medical person available to respond.
- 6) 'C' identifies the senior chemical person available to respond.
- 7) 'S' identifies the senior security person available to respond.

7-3 Tactical call signs

- a. Tactical call signs (i.e. FOXFIRE 1) may be approved upon request to the AC of S G-6. Requests must originate at brigade level at least ten days before intended use and listed as an appendix to the OPLAN and/or OPORD.
- b. Commanders are authorized to assign unutilized call signs shown as struck-through in the "call sign matrix" (APPENDIX A-1 and A-2) on communications nets confined to their command. The AC of S G-6 will be notified of such assignments as soon as practicable after the assignment is made.
- c. Changes In Call Signs: Changes in the call signs of operational High Frequency stations will be coordinated with the AC of S G-6 prior to use.

CHAPTER 8

FORMS AND RECORDS

8-1 GENERAL

The use of standardized forms helps eliminate confusion, provides for orderly flow of message traffic, and creates a record of events. All forms, notes, and/or other written material generated during the course of an emergency operation will be preserved in their original form and safeguarded as property of the Commonwealth of Virginia.

8-2 NIMS: Most Military Support to Civilian Authorities (MSCA) operations will require the use of National Incident Management System (NIMS) forms. Copies of NIMS forms are listed as attachments and available online at http://www.nimsonline.com/download_center/index.htm.

8-3 SPECIFIC NIMS FORMS: Communications personnel should become familiar with the following NIMS forms and their use.

	<u>FORM #</u>	<u>FORM NAME</u>	<u>APPENDIX</u>
1)	ICS 213	General Message Form	B
2)	ICS 205	Incident Radio Communications Plan	C
3)	ICS 216	Radio Requirement Worksheet	D
4)	ICS 217	Radio Frequency Assignment Worksheet	E

8-4 VaDF FORMS: VaDF forms will be utilized during training exercises and during operations in support of the Virginia National Guard. Additionally, the forms listed below and marked with an Asterisk (*) will be utilized during MSCA operations.

	<u>USE</u>	<u>VaDF FORM NAME</u>	<u>APPENDIX</u>
1)		Field Message Form	F
2)*		Message Number Record	G
3)*		Communications Log	H
4)*		Communications Center Message Log	I
5)*		Net Control Station Log	J
6)*		Station Activity Report	K
7)*		Net Report	L

Appendix A-1 CALL SIGNS

DIV BDE BN	MCP	HQ	TOC OR EOC	G-1			G-2	G-3	G-4			XO	CMDR	G-6			UNAS- SIGNED	OPS OFF	SGM	MEDI- CAL	CHEMI- CAL	SEC PLT LDR
				1 PLT LDR	2 PLT LDR	S-1	S-2	S-3	S-4	S-6	S-6			RTO								
COMPANY			CP	G-1	G-1	G-1	G-2	G-3	G-4	SUPP SGT								1SGT				
GW DIV	D1VM	D1VQ	D1VT	D1V1	D1V2	D1V3	D1V4	D1V5	D1V6	D1VE	D4V7	D1V8	D1V9	D1VC	D1VS							
HQ CO		DHCQ	DHCT	DHC1	DHC2	DHC3	DHC4	DHC5	DHC6	DHC7	DHC8	DHC9										
MP CO		DMPQ	DMPT	DMP1	DMP2	DMP3	DMP4	DMP5	DMP6	DMP7	DMP8	DMP9										
Blackhorse 23rd BN	E3BM	E3BQ	E3BT	E3B1	E3B2	E3B3	E3B4	E3B5	E3B6	E3BE	E3B7	E3B8	E3B9	E3BF	E3BC	E3BS						
		B23Q	B23T	B231	B232	B233	B234	B235	B236	B23E	B237	B238	B239	B23F	B23C	B23S						
	A CO	23AQ	23AT	23A1	23A2	23A3	23A4	23A5	23A6	23AE	23A7	23A8	23A9									
	B CO	23BQ	23BT	23B1	23B2	23B3	23B4	23B5	23B6	23BE	23B7	23B8	23B9									
C CO		23CQ	23CT	23C1	23C2	23C3	23C4	23C5	23C6	23CE	23C7	23C8	23C9									
D CO		23DQ	23DT	23D1	23D2	23D3	23D4	23D5	23D6	23DE	23D7	23D8	23D9									
33rd BN		B33Q	B33T	B331	B332	B333	B334	B335	B336	B33E	B337	B338	B339	B33F	B33C	B33S						
A CO		33AQ	33AT	33A1	33A2	33A3	33A4	33A5	33A6	33AE	33A7	33A8	33A9									
B CO		33BQ	33BT	33B1	33B2	33B3	33B4	33B5	33B6	33BE	33B7	33B8	33B9									
C CO		33CQ	33CT	33C1	33C2	33C3	33C4	33C5	33C6	33CE	33C7	33C8	33C9									
D CO		33DQ	33DT	33D1	33D2	33D3	33D4	33D5	33D6	33DE	33D7	33D8	33D9									
Lafayette	E2AM	E2AQ	E2AT	E2A1	E2A2	E2A3	E2A4	E2A5	E2A6	E2AE	E2A7	E2A8	E2A9	E2AF	E2AC	E2AS						
21st BN		B21Q	B21T	B211	B212	B213	B214	B215	B216	21CE	B217	B218	B219	B21F	B21S							
A CO		21AQ	21AT	21A1	21A2	21A3	21A4	21A5	21A6	21AE	21A7	21A8	21A9									
B CO		21BQ	21BT	21B1	21B2	21B3	21B4	21B5	21B6	21BE	21B7	21B8	21B9									
C CO		21CQ	21CT	21C1	21C2	21C3	21C4	21C5	21C6	21CE	21C7	21C8	21C9									
D CO		21DQ	21CT	21D1	21D2	21D3	21D4	21D5	21D6	21DE	21D7	21D8	21D9									
22nd BN		B22Q	B22T	B221	B222	B223	B224	B225	B226	B22E	B227	B228	B229	B22F	B22C	B22S						
A CO		22AQ	22AT	22A1	22A2	22A3	22A4	22A5	22A6	22AE	22A7	22A8	22A9									
B CO		22BQ	22BT	22B1	22B2	22B3	22B4	22B5	22B6	22BE	22B7	22B8	22B9									
C CO		22CQ	22CT	22C1	22C2	22C3	22C4	22C5	22C6	22CE	22C7	22C8	22C9									
D CO		22DQ	22DT	22D1	22D2	22D3	22D4	22D5	22D6	22DE	22D7	22D8	22D9									

Appendix A-2 CALL SIGNS CONTINUED

DIV	MCP	HQ	TOC OR EOC	G-1		G-3		G-4		XO	CMDR	G-6			UNAS- SIGNED	OPS OFF	SGM	MED OFF	CHEM OFF	SEC PLT LDR		
				1 PLT LDR	2 PLT LDR	CP	S-1	S-2	S-3			S-4	S-3	S-4							S-6	RTO
COMPANY																						
Highland	E4HM	E4HQ	E4HT	E4H1	E4H2	E4H3	E4H4	E4H5	E4H6	E4HE	E4HT	E4H8	E4H9	E4HF	E4HC	E4HS						
24th BN		B24Q	B24T	B241	B242	B243	B244	B245	B246	B24E	B247	B2418	B249	B24F	B24C	B24S						
A CO		24AQ	24AT	24A1	24A2	24A3	24A4	24A5	24A6	24AE	24A7	24A8	24A9									
B CO		24BQ	24BT	24B1	24B2	24B3	24B4	24B5	24B6	24BE	24B7	24B8	24B9									
C CO		24CQ	24CT	24C1	24C2	24C3	24C4	24C5	24C6	24CE	24C7	24C8	24C9									
31st BN		B34Q	B31T	B311	B312	B313	B314	B315	B316	B31E	B317	B318	B319	B31F	B32C	B31S						
A CO		34AQ	31AT	31A1	31A2	31A3	31A4	31A5	31A6	31AE	31A7	31A8	31A9									
B CO		34BQ	31BT	31B1	31B2	31B3	31B4	31B5	31B6	31BE	31B7	31B8	31B9									
C CO		31CQ	31CT	31C1	31C2	31C3	31C4	31C5	31C6	31CE	31C7	31C8	31C9									
34th BN		B34Q	B34T	B341	B342	B343	B344	B345	B346	B34E	B347	B348	B349	B34F	B34C	B34S						
A CO		34AQ	34AT	34A1	34A2	34A3	34A4	34A5	34A6	34AE	34A7	34A8	34A9									
B CO		34BQ	34BT	34B1	34B2	34B3	34B4	34B5	34B6	34BE	34B7	34B8	34B9									
C CO		34CQ	34CT	34C1	34C2	34C3	34C4	34C5	34C6	34CE	34C7	34C8	34C9									
AVIATION		BAVQ	BAVT	BAV1	BAV2	BAV3	BAV4	BAV5	BAV6	BAVE	BAV7	BAV8	BAV9	BAVF	BAVC	BAVS						
A CO		51AQ	51AT	51A1	51A2	51A3	51A4	51A5	51A6	51AE	51A7	51A8	51A9									
B CO		51BQ	51BT	51B1	51B2	51B3	51B4	51B5	51B6	51BE	51B7	51B8	51B9									
C CO		51CQ	51CT	51C1	51C2	51C3	51C4	51C5	51C6	51CE	51C7	51C8	51C9									

SPECIAL

DIV DEP CMDR 1 DDC1
 DIV DEP CMDR 2 DDC2

Appendix B ICS 213 General Message Form

*U.S. GPO: 1009-793-975

GENERAL MESSAGE

TO:		POSITION	
FROM		POSITION	
SUBJECT	DATE		

MESSAGE:

DATE	TIME	SIGNATURE/POSITION
------	------	--------------------

213 ICS 1/79
NFES 1336

PERSON RECEIVING GENERAL MESSAGE KEEP THIS COPY

SENDER REMOVE THIS COPY FOR YOUR FILES

Appendix C ICS 205 Incident Radio Communications Plan

INCIDENT RADIO COMMUNICATIONS PLAN					1. INCIDENT NAME	2. DATE/TIME PREPARED	3. OPERATIONAL PERIOD DATE/TIME
4. BASE RADIO CHANNEL UTILIZATION							
SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY/TONE	ASSIGNMENT	REMARKS		
5. PREPARED BY (COMMUNICATIONS UNIT)							

Appendix D ICS 216 Radio Requirement Worksheet

[illegible]

Appendix E ICS 217 Radio Frequency Assignment Worksheet

[illegible]

Appendix F VaDF Field Message Form

VaDF FIELD MESSAGE		PRECEDENCE:		NO.	
DTG:		FROM:		DTG:	
<input type="checkbox"/> OUTGOING		TO:		<input type="checkbox"/> INCOMING	
PHONE:		WORD CHECK:			
SENT BY:		VaDF RADIO <input type="checkbox"/>		FAX <input type="checkbox"/>	
		RUNNER <input type="checkbox"/>		OTHER:	
AMATUER RADIO <input type="checkbox"/>		PHONE <input type="checkbox"/>		MAIL <input type="checkbox"/>	
		THRU:			
WRITER - SIGNATURE/RANK/DUTY					
VaDF FIELD MESSAGE FORM REVISED 07 OCT 02		USE OTHER VERSIONS UNTIL DFPI FTED			

Appendix G VaDF Message Number Record

[illegible]

Appendix H Communications Log

Virginia Defence Force Communications Log					Page	of
Date:		Station:		Time Used:		
Location:						
Method, Frequency, Channel:						
A	B		C	D	E	
Line	Time	MFC	Calling	Called	Remarks	Op
Operator Name/Rank:					Signed:	

Communications Center Message Log

[illegible]

Appendix J Net Control Station Log

Virginia Defence Force Net Control Station Log								
Date:	Station:						Page of	
							Time Used:	
NET:						Frequency:		
Station	Check In	Traffic Precedence				Traffic For	Time Cleared	Check Out
		F	I	P	R			
Total Stations:						Msg Totals		
Operator Name/Rank:						Signed:		

Appendix K VaDF Station Activity Report

Virginia Defense Force Radio Station Activity Report									
Station Call Sign:		Month:							
Operator Name:		Exercise:							
		Emergency:							
Type / PRECEDENCE	FLASH	EMERGENCY*	IMMEDIATE	PRIORITY	WELFARE*	ROUTINE			
Joint Message Form									
JINTACCS Voice Msgs									
VADF Field Message									
NTS Amateur Msg*									
Other									
Total									
Total Nets Checked In		Co/Bn:		Bde:		Div:		Total:	
Frequencies Actually Used For VADF Communications								CB AM CH	
								CB SSB CH	
								Other:	

Appendix L VaDF Net Report

Virginia Defense Force Net Report									
Date:		NCS Call Sign:			NCS Operator:				
Time:		Administrative			Exercise				
Frequency:		Traffic			Emergency				
Stations Checked In:		VADF			ARNG			Other	
Total Messages Handled		FLASH			IMMEDIATE			PRIORITY	
								ROUTINE	
Comments									