COMMUNICATION INSTRUCTIONS GENERAL

ACP 121(G)

Combined Communications-Electronics Board

OCTOBER 2004

FOREWORD

1.   The Combined Communications-Electronics Board (CCEB) is comprised of the five member nations, Australia, Canada, New Zealand, United Kingdom and United States and is the Sponsoring Authority for all Allied Communications Publications (ACPs). ACPs are raised and issued under common agreement between the member nations.

2.   ACP 121 (G), COMMUNICATION INSTRUCTIONS - GENERAL, is an UNCLASSIFIED CCEB publication.

3.   This publication contains Allied military information for official purposes only.

4.   It is permitted to copy or make extracts from this publication.

5.   This ACP is to be maintained and amended in accordance with the provisions of this document.

CCEB LETTER OF PROMULGATION FOR ACP121(G)

1.   The purpose of this Combined Communication Electronics Board (CCEB) Letter of Promulgation is to implement ACP121(G) within the Armed Forces of the CCEB Nations. ACP 121(G), COMMUNICATIONS INSTRUCTIONS - GENERAL, is an UNCLASSIFIED publication developed for Allied use and, under the direction of the CCEB Principals. It is promulgated for guidance, information, and use by the Armed Forces and other users of military communications facilities.

2.   ACP121(G) is effective on receipt for CCEB Nations and when directed by the NATO Military Committee (NAMILCOM) for NATO Nations and Strategic Commands. ACP 121(G) will supersede ACP 121(F), which shall be destroyed in accordance with national regulations.

EFFECTIVE STATUS

Publication	Effective for	Date	Authority
ACP121(G)	CCEB	On Receipt	LOP

3.   All proposed amendments to the publication are to be forwarded to the national coordinating authorities of the CCEB or NAMILCOM.

For the CCEB Principals

[Original Signed]
W. QUENNELL, RNZAF
Squadron Leader
Permanent Secretary to CCEB

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RECORD OF CHANGES AND CORRECTIONS

Identification of Change or Correction and Date		Date Entered	Entered by (Signature ~ Rank, Grade or Rate & Name of Command)
Change	Correction		

ACP 121(G)

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CHAPTER 1

INTRODUCTION AND DEFINITIONS

101.   PURPOSE

a.   This publication provides general information and guidance on communications matters in order to:

(1)   Promote an understanding of the concepts and capabilities of modern military communications systems.

(2)   Facilitate the use of available communications services by commanders, staff officers and other non-communications trained personnel.

(3)   Provide a basis for procedural and operational communications publications by explaining the composition of a signal message, a description of MINIMIZE procedure, call signs and address groups.

102.   SCOPE

a.   Chapters 2 and 3 of this publication are designed to provide a simple explanation of general communications terms and to explain the method of preparing signal messages for transmission.

b.   Chapters 4, 5 and 6 provide a more in-depth explanation and are intended for communications staff.

103.   ALLIED COMMUNICATIONS PUBLICATIONS (ACPs)

a.   ACPs provide communications instructions and procedures, which are essential to the conduct of military operations.

b.   ACPs are prepared in accordance with the format contained in ACP 198.

104.   DEFINITIONS

a.   A useful list of communications-electronic terms and definitions are listed below. Additional information can be found in the ACP 167.

(1)   Intra - (followed by an appropriate word to amplify the meaning). Within, and only within a designated organisation, eg intra-force, intra-Navy, intra-NATO.

(2)   Joint -   Between two or more services of the same nation. (When all services are not involved, the participating services shall be identified, eg Joint Army/Navy.)

(3)   Combined -   Communications between two or more forces or agencies of two or more allies. (When all Allies or Services are not involved, the participating nations and services shall be identified, eg Combined NATO Navies.)

(4)   Authority -   An authority is any person qualified and empowered to make decisions or give orders on behalf of the commander.

(5)   Message -   A message is any thought or idea expressed in plain language that is prepared in a concise form and is suitable for transmission by any means of communication, subject to the classification of the text.

(6)   Reliability -   The measures that are taken to ensure that the message is delivered to each addressee within the time limits specified.

(7)   Security -   The measures taken to ensure that information is not made available to or intercepted by unauthorised personnel.

(8)   Short Title -   The abbreviated form of proper names which together make up a title, eg of a command/formation, document or device.

(9)   Speed -   Specifies the time-frame in which addressees should receive messages from the originator.

(10)   Telecommunications -   Any transmission, emission, or reception of signals in written form, including images and sounds or intelligence of any nature by fixed infrastructure, radio, visual or other electromagnetic systems.

(11)   Text -   The portion or "body" of a message containing the thought or ideas of the originator that are to be conveyed to others.

(12)   MCIS/CIS -   The term Military Communications Information System (CIS) is now widely used in place of Military Communications.

(13)   MHS -   The term Message Handling System (MHS) or Military MHS (MMHS) is used when referring to computer based message handling systems.

CHAPTER 2

COMMUNICATIONS ROLE, HISTORY, CONCEPT, CAPABILITIES AND MEANS

SECTION I

GENERAL

201. ROLE OF MILITARY COMMUNICATIONS

a.   The primary purpose of military communications and information systems (CIS) is to serve the military commander. In this role, CIS allows the commander to exert personal influence by exercising command and control (C2) of a larger force and a widely dispersed area than would otherwise be possible.

b.   The secondary purpose of military communications is to provide a mechanism to expeditiously transfer information between individuals and groups of individuals. Therefore a robust CIS infrastructure is essential to provide communications in support of operations, intelligence, logistics, administration, defensive and offensive Command and Control Warfare (C2W).

SECTION II

HISTORY OF MILITARY COMMUNICATIONS

202. GENERAL

a.   In order to examine modern military CIS, it is necessary to review the progressive development of messaging and the interaction with military science. As the two fields become more complex, the margin of error becomes more critical and the efficiency of a communication system rises to levels that would have been unimaginable to early communications pioneers.

b.   Throughout the history of military communications the requirements of reliability, speed, accuracy and security has never changed. The ultimate goal has never been realised, in spite of the most significant technological advances.

203. PERIODS OF DEVELOPMENT

a.   Progress in the field of military communications can be divided into several overlapping periods. Each of these periods has been followed by a change in military operational concepts and doctrine as a result of new weapons or communications

systems. This has continued to take place within the framework of an increasingly complicated international political scene.

b.   Prior to 1900, communication systems had slowly progressed from local area, sound and visual systems (ie drums, smoke, flags) to more extensive telegraph systems utilising fixed wire circuits. The telegraph system enabled commanders to control events over long distances. However, this only applied to land forces and did not solve the C2 arrangements for ships at sea. Shortly after 1900, the introduction of onboard wireless systems overcame this problem, enabling vessels to maintain inter ship communications and also to communicate with Fleet Commanders via strategically placed shore stations. During and after World War I, radio became widespread, providing strategic and tactical worldwide communications from ships, aircraft, headquarters and vehicles.

c.   The requirements for military communications rapidly expanded throughout World War II. As a consequence, it was considered essential to further develop communications systems in order to achieve successful co-ordination and control of a global war. The requirements for compatible equipment and procedures with Allied Forces were necessary to achieve a more efficient C2 system. It was during this period that the teletypewriter became the backbone of military communications systems, utilising semi-automatic techniques of message transmission and relay to further increase capacity and speed of delivery.

d.   From the end of World War II to the 1960's weapons systems experienced a number of revolutionary changes and developments. However, few changes were made to the military communications structure. The global teletypewriter networks continued to carry the bulk of military traffic with only evolutionary refinements and it became increasingly apparent that these facilities were falling behind the requirements of the user. While on-line cryptography, telegraph automatic relay equipment and multi-channel techniques improved system capabilities, the inherent limitations of long distance HF communications circuits could no longer cope with the demands of the commander's C2 requirements.

e.   Throughout the 1960's, space technology made a quantum leap forward and the era of the communication satellite was born. Satellites have gradually replaced HF strategic links as the primary means of communication by utilising both UHF and SHF line of sight links. Further developments produced a growing requirement for mobile satellite stations suitable for deployment in either a tactical field environment or on a ship. As a consequence, most military units have access to some form of satellite communications.

f.   The next major development took place in the 1970's when the microprocessor was born and enabled computers to be used extensively for message handling. The physical size and cost of computers has constantly reduced while processor capabilities continue to increase at a remarkable pace. Computer controlled communications systems

are now common place, with most strategic and mobile networks routing signal traffic with the minimal of human intervention.

g.   Since the 1980's, computer based MHS has spread to mobile units and ships, enabling strategic links, usually established via satellite, to be maintained between main headquarters and the deployed commander. MMHS is rapidly developing with the constant increase in data speeds enabling more signal traffic, intelligence information and graphical representations to be exchanged.

h.   International events in the early 1990's led to a significant increase in the number of countries contributing to various alliances such as NATO, the European Union and the expanding 'Partnership for Peace' programme. This increase in new member states provides sufficient justification to ensure that all ACP sponsors regularly update and maintain their respective publications.

i.   Future emphasis is likely to be toward direct services between users of computer terminals, in the form of desktop to desktop facilities using e-mail services. Developments in satellite technology and greater use of the frequency spectrum is likely to provide multi-channel/mode of operation to enable voice, data, graphics, facsimile and video or imagery to be fully exploited.

SECTION III

CONCEPT AND CAPABILITIES

204.   TYPES OF COMMUNICATIONS SYSTEMS

a.   Military communications systems are divided into two general classes: Tactical and Strategic.

    (1)   Tactical systems are usually self-contained within a command structure and are designed to allow the commander to conduct his mission at the operational level, eg communications for control of a weapons system, early warning systems, aircraft movement control or land component command nets.

    (2)   Strategic communications systems are generally more global in nature and are operated on either a common-user or special purpose basis. While a strategic system may be confined within a specified area, it may be limited to a particular type of traffic. The configuration is such that interoperability with other strategic systems is possible when desired or required. Equipment and procedural compatibility between strategic systems is essential to ensure the efficient interchange of information. It is considered vital that a worldwide Routing Plan is available to communications staff of Allied Forces. A detailed explanation is contained in Chapter 5 of this publication.

b. Although the previous subparagraphs separate tactical and strategic communications into two groups, modern developments in C2 computer systems are progressively eroding this distinction. While it is inevitable that some Military CIS will remain strategic in nature, the increasing use of modern equipments and systems will result in the appearance of mixed systems, which are both strategic and tactical in nature.

205. <u>USER RESPONSIBILITIES</u>

The effectiveness of any communications system is directly influenced by those it serves and this is particularly true when the user operates the terminal from a desk-top. End-users will only be able to gain maximum benefit from the available services of the system if the individual make the effort to become familiar with the system capabilities and the relevant procedures. Useful information for originators of messages is contained in Chapter 3 of this publication.

SECTION IV

MEANS OF COMMUNICATIONS

206. <u>GENERAL</u>

    a. The various methods used in signal communications are as follows:

        (1) Telecommunications:

            (a) Electrical or electronic.

            (b) Visual.

            (c) Sound or acoustic.

        (2) Physical:

            (a) Mail.

            (b) Messenger or courier.

    b. In modern communications terminology, "telecommunications" is generally associated with fixed CIS infrastructure, which can be extended into the battlespace with high capacity bearers designed to interface with in-theatre systems. While this publication is primarily concerned with the electronic aspects of telecommunications, it should be recognised that the alternative means of communication also play an important role and should not be ignored.

    c. Further information concerning the security of communications is contained in ACP 122.

207.   ELECTRICAL/ELECTRONIC

a.   The electrical or electronic method is used in both tactical and strategic Military CIS and can be sub-divided into fixed infrastructure communications, radio communications or a combination of both. In addition, cryptographic devices may be used throughout the system or can be limited to specific portions of the system to enhance security.

b.   These means employ the following:

(1)   Telephony (Voice). The transmission and reception of speech.

(2)   Wireless Telegraphy. The transmission and reception of messages using the International Morse Code. This system is largely obsolete and is no longer in "mainstream" Military CIS use.

(3)   Facsimile. The transmission of information, such as, pictures, maps, messages and other similar material.

(4)   Television. The transmission and reception of images in either fixed or moving form.

(5)   Data Communications. The transmission and reception of digital information utilising computer based systems.

208.   VISUAL

a.   Visual, include those methods of transmission which can be received by optical means. The following methods are employed:

(1)   Flashing Light. The term applied to the transmission of signals by light. The equipment employed may be directional or non-directional in operation. The use of Directional Flashing Light reduces the possibility of interception, thus providing some degree of security. When security is required at night only highly directional flashing light should be used and its brilliancy should be the minimum necessary to convey the information. Non-directional transmission permits simultaneous delivery to stations in any direction and has little security value.

(2)   Infrared. The transmission of information by light, which is outside of the visible spectrum. This method may be either directional or non-directional and affords greater security than normal visual means. Special equipment is required.

(3)   Hand Flags. Transmission of signals by means of one or two flags held in the operator's hands. The position or movement of the flags represents letters and numerals. Systems include semaphore, and (rarely) Morse flags.

(4)   Pyrotechnics. This method involves the use of flares, rockets and smoke for pre-arranged signals or for recognition purposes.

(5)   Panels. This means involves the use of specially shaped and/or coloured cloth or other material displayed in accordance with the pre-arranged code to convey messages. They are used between ground and air units.

(6)   Flaghoist. The use of flags and pennants displayed from halyards. Although this is a rapid and accurate method of transmission it is limited to daylight use and to comparatively short distances.

(7)   Coloured Lights. Coloured lights may be displayed in accordance with a pre-arranged code to convey information.

209.   SOUND/ACOUSTIC

Communications utilising sound waves can be established with:

a.   Whistles, sirens, bells and similar devices, which can be used to transmit short messages normally consisting of pre-arranged signals. These methods are slow and only suitable for short distances. They are usually confined to warning or alerting signals.

b.   Underwater acoustic devices, which can be used to transmit messages, subject to the limitations of the equipment involved and the characteristics of sound transmission through water.

210.   MAIL

a.   Mail is the method of forwarding messages by an established postal service when speed of delivery is not an issue and security considerations allow.

b.   In some instances, rapid delivery is only required for some addressees, while others can be adequately served by a slower method (paragraph 328 "Dual Precedence"), such as mail. Where possible, message originators should identify which addressees would be suitable for receiving messages via the postal service.

c.   Normal postal services do not offer the degree of security necessary to transport highly classified material.

211.   <u>MESSENGER/COURIER</u>

a.   The messenger or courier method should always be used to deliver bulky material or any messages that could be delivered within the time required for encryption, transmission, decryption and delivery of a message. It is to be considered as a primary means of communication.

b.   Messengers or Couriers can:

(1)   Supplement or replace postal services where these services are inadequate or do not exist.

(2)   Be used to convey all types of highly classified material.

(3)   Be divided into two categories.

(a)   Internal. To provide a means to collect and deliver messages locally, between a communications centre and the addressee or originator.

(b)   External. To provide a service between widely dispersed locations.

c.   A messenger or courier service can be operated on a scheduled or special basis and can use any mode of transportation. Physical security arrangements are dictated by the classification of the material and the threat regarding the area of operation or the potential danger to the individual.

212   SPARE.

SECTION V

LIST OF ASSOCIATED PUBLICATIONS

213.   <u>ALLIED COMMUNICATIONS PUBLICATIONS (ACPs)</u>

<u>Short Title</u>   <u>Long Title</u>

ACP 100   Allied Callsign and Address Group System.

ACP 113   Call Sign Book for Ships.

ACP 117   Allied Routing Indicator Book.

ACP 121   Communications Instructions - General.

ACP 122   Information Assurance for Allied Communications and Information Systems.

ACP 123   Common Message Strategy and Procedures.

ACP 125   Communications Instructions Radio - Telephone Procedures.

ACP 126   Communications Instructions - Teletypewriter (Teleprinter) Instructions. – (Frozen).

ACP 127   Communications Instructions - Tape Relay Procedures. – (Frozen).

ACP 127 Supp-1   Communications Instructions – Procedures for Allied Fleet RATT Operations.

ACP 128   Allied Telecommunications Record System (ALTERS) Operating Procedures

ACP 130   Communications Instructions – Signalling Procedures in the Visual Medium.

ACP 131   Communications Instructions - Operating Signals.

ACP 135   Communications Instructions - Distress and Rescue Procedures.

ACP 142   A Protocol for Reliable Multicast Messaging in Bandwith Constrained and Delayed Acknowledgement (EMCON) Environments.

ACP 145   Gateway-to-Gateway Messaging Protocols. – Draft.

ACP 150   Recognition and Identification Instructions - Air, Land and Sea Forces.

ACP 160   IFF/SIF Operating Procedures.

ACP 165   Operational Brevity Codes.

ACP 167   Glossary of Communications-Electronic Terms.

ACP 176   Allied Naval and Maritime Air Communications Instructions.

ACP 177   Land Forces Electronic Warfare Instructions. - Frozen

ACP 178   Maritime Electronic Warfare Instructions. - Frozen

ACP 179   Electronic Warfare Instructions for Air Forces. – Frozen

ACP 180   Electronic Warfare. - Draft

ACP 190   Guide to Spectrum Management in Military Operations.

ACP 191   Ionospheric Sounder Operations.

ACP 193   A Ground Routing Protocol (GRP) for use with Automatic Link
                 Establishment (ALE) Capable HF Radios.

ACP 194   Policy for the Coordination of Radio Frequency Allocations and
                 Assignments between Cooperating Nations. – Draft.

ACP 198   Instructions for the preparation of Allied Communications Publications.

ACP 200   Allied Maritime Tactical Wide Area Networking.

ACP 220   Multi National Videoconferencing Services.

SECTION VI

ADMINISTRATIVE CONTROL

214.   <u>ADMINISTRATIVE CONTROL</u>

a.   A number of administrative standards must be achieved in order to ensure Military CIS systems provide the user with an efficient and satisfactory service. Therefore supervisory staff are to ensure than the following areas are reviewed on a regular basis:

(1)   Periodic inspections must be carried out within each command or administrative organisation to ensure existing orders or instructions for handling signal traffic are being followed. A continuous review process should be in place at each level to ensure that CIS services are being used efficiently. Any problems that cannot be easily resolved should be directed to the controlling agency for appropriate action.

(2)   Training and educational programmes are essential methods of providing personnel with the knowledge to work in a communications environment in an efficient and an effective manner. It is also important to ensure current rules for the safeguard of documents, signal traffic and COMSEC material are covered during regular training periods.

(3)   Regular monitoring of standards is considered to be a vital element of maintaining and improving standards or efficiency. Local orders are to dictate the frequency of such checks, which could be on a daily or weekly basis, depending on the scope of the CIS task. Checks should include an examination of transmitted messages to ensure that Releasing Officers and communication staff are following correct procedures.

(4)   Where possible, originators should attempt to deliver large, complex, routine reports by mail or courier.

(5)   Messages should be delivered to the communications centre as soon as possible, once signed by the Releasing Officer. Signal messages should not be allowed to accumulate until the end of the working day. This would defeat the correct usage of the precedence system and place an unnecessary burden on communications staff.

(6)   Control procedures and contingency plans are be regularly exercised in order to ensure continuity of communications services.

(7)   Staff officers and communications personnel should be briefed on the requirements for imposing and maintaining MINIMIZE procedure. This is an

important aspect of system management, as a growing number of Releasing Officers will have direct access to modern computer based message handling systems, via desk-top terminals. The briefing should emphasise the need for close liaison with CIS staff to control the origination and transmission of signal messages or telephone calls. Further details regarding the imposition of restrictions are contained at Chapter 3, Section VII.

CHAPTER 3

MESSAGE PREPARATION

SECTION I

INTRODUCTION

301. <u>GENERAL</u>

Communications requiring rapid delivery are normally prepared for transmission as brief and concise messages.

302. <u>ORIGINATOR</u>

    a.   The originator of a message is the command, formation, unit or headquarters on whose authority a message is sent.

    b.   The originator is responsible for the functions of drafting and release:

        (1)   The Drafter is the person who actually composes the message for release by the Releasing Officer.

        (2)   The Releasing Officer is the person who authorises the transmission for, and in the name of, the originator.

303. <u>TEXT</u>

In addition to expressing the originator's thought or idea, the text may also contain such internal instructions as are necessary to indicate the requirement for special handling. (See paragraph 320.)

304. <u>RESPONSIBILITIES OF THE RELEASING OFFICER</u>

    a.   The Releasing Officer is responsible for:

        (1)   Determining whether the message is necessary. A message is not to be used when a letter or other form of communication will suffice.

        (2)   Checking the type of message and addressees.

        (3)   Ensuring the proper use of the prescribed message form.

(4)   Ensuring that the text is drafted in accordance with paragraphs 313 through 321.

(5)   Determining the security classification.

(6)   Determining the precedence for action and information addressees.

(7)   Signing or authorising the message. ie Release.

(8)   Forwarding the message to the appropriate agency for transmission.

SECTION II

TYPES OF MESSAGE

305.   GENERAL

     a.   The types of messages transmitted by communications means are:

          (1)   Single Address

          (2)   Multiple Address

          (3)   Book

          (4)   General

306.   SINGLE ADDRESS

A single address message is one destined for only one addressee.

307.   MULTIPLE ADDRESS

A multiple address message is destined for two or more addressees, each of whom is to be informed of all addressees. Each addressee must be indicated as ACTION or INFORMATION. Multiple address messages must be kept to a minimum as their processing contributes to delays in message handling. In addition, releasing officers should always consider whether all addressees must be informed of the other addressees of each message and, if not, a BOOK message should be used. This is of particular importance when transmission of messages by commercial facilities is involved.

308.   BOOK MESSAGE

A BOOK message is addressed to two or more addressees but the Releasing Officer considers that the addressees do not need to know the identity of the other addressees. Most commonly used when using commercial facilities or when sending to diplomatic authorities. Each addressee must be indicated as ACTION or INFORMATION.

309.   GENERAL MESSAGE

Messages which have a wide standard distribution are termed General Messages. They are assigned an identifying title and usually a sequential serial number. Example: ALCONCEN 25.

SECTION III

ADDRESS OF MESSAGES

310.   COMPONENTS OF THE ADDRESS

   a. The address component of a message may contain:

      (1) Originator - Command by whose authority the message is sent.

      (2) Action Addressee(s) - Authority(ies) required by the originator to take necessary action.

      (3) Information addressee(s) - Authority(ies) considered by the originator to require the message for information.

      (4) Exempted addressees, when the originator desires to exclude one or more authorities from a collective title.

311.   LIMITING THE NUMBERS OF ADDRESSEES

It is essential that the originator of a message limit the number of addressees to those who need to take action thereon and in the case of information addressees, to those for whom the information contained in the text is essential. Over addressing messages can lead to serious overloading of communication facilities.

312.   AUTHORITIES TO BE ADDRESSED

Normally originators should only address messages to units and authorities within their own command organisations, in accordance with the established chain of command and other relevant instructions. The command organisation may be intra-service, combined, joint or allied. Messages requiring promulgation beyond the originator's command organisation should normally be addressed to the appropriate senior authority, who will assume the necessary relay

action.. Where national authorities are established within the geographical boundaries of an allied command organisation:

a. It is the prerogative of the nation concerned to decide whether such national authorities may be addressed by allied commanders. Allied commanders concerned, foreseeing a requirement for addressing national authorities, should seek prior agreement from the respective nation for such addressing.

b. When national approval is given under these circumstances, the nation concerned should assume the responsibility of effecting delivery of the message to the appropriate national addressee(s).

c. In the event a third nation should become involved in the handling of a message to a specific national authority, the agreement of that third nation is also required.

SECTION IV

DRAFTING THE TEXT

313. <u>BREVITY</u>

a. The need for brevity and clarity in message preparation cannot be over emphasised. To avoid misinterpretation and further explanatory messages, the message must state exactly what is meant and must not be vague or ambiguous. Consistent with this, all unnecessary words are to be eliminated. Commonly used conjunctions, prepositions and articles such as AND, BUT, FOR, IN, ON and THE are to be eliminated unless essential to the meaning.

b. Abbreviations and short titles are used in messages in order to shorten the text, thereby saving transmission time. Indiscriminate and injudicious use, however, results in loss of intelligibility and exactness in communications. In general, only those abbreviations and short titles agreed for use between the originator and all addressees of a particular message may be used. In addition, the following guidelines also should be used:

(1) Use only abbreviations and short titles that serve a useful purpose, such as: Points of the compass, map co-ordinates; model designations and symbols for common types of aircraft, ships, vehicles, equipment and weapons; technical terms when communicating between activities or individuals in the same field; communications-electronic terms; titles, ranks and grades; universally known geographical locations.

(2) After initially spelling out a word, term or organisation in conjunction with its abbreviation or short title, the contraction may then be used alone in the same message, eg International Civil Aeronautical Organisation (ICAO).

(3)   Generally, words of five letters or less shall not be abbreviated.

314.   <u>PUNCTUATION</u>

a.   Punctuation is not used unless necessary to the sense of the message. When it is essential to employ punctuation, the following abbreviations or symbols are authorised.

<u>Punctuation</u>	<u>Abbreviation</u>	<u>Symbol</u>
Question Mark	QUES	?
Hyphen		-
Colon	CLN	:
Parenthesis/Left Hand Bracket	PAREN	(
Parenthesis/Right Hand Bracket	UNPAREN	)
Period/Full Stop	PD	.
Comma	CMM	,
Semi-Colon	SMCLN	;
Slant/Oblique Stroke	SLANT	/
Paragraph	PARA	
Quotation Marks	QUOTE - UNQUOTE	

b.   Symbols should always be used in preference to abbreviations. Messages written in freehand, should be always be written in capital letters and periods/full stops and commas should be ringed to make them more conspicuous.

315.   PHONETIC EQUIVALENTS

    a.   Phonetic alphabet:

Letter	Equivalent	Letter	Equivalent
A	ALFA	N	NOVEMBER
B	BRAVO	O	OSCAR
C	CHARLIE	P	PAPA
D	DELTA	Q	QUEBEC
E	ECHO	R	ROMEO
F	FOXTROT	S	SIERRA
G	GOLF	T	TANGO
H	HOTEL	U	UNIFORM
I	INDIA	V	VICTOR
J	JULIETT	W	WHISKEY
K	KILO	X	XRAY
L	LIMA	Y	YANKEE
M	MIKE	Z	ZULU

    b.   When it is necessary to include isolated letters in messages, the phonetic equivalents should be employed. It is inadvisable for message drafters to employ the phonetic equivalents for single letter words.

    c.   Phonetic equivalents are especially desirable when expressing lettered co-ordinates in operational orders or when ordering equipment by letter and number. They are not to be used:

        (1)   When names and initials are to be used. eg JW COOK or JOHN WILLIAM COOK, not JULIETT WHISKEY COOK.

        (2)   When the actual word is better. eg 26 DEGREES WEST, rather than 26 DEGREES WHISKEY.

        (3)   When the abbreviation is readily recognisable and authorised, eg USAF.

    d.   When writing the letters I and Z to avoid confusion with the numbers 1 and 2, they may be written as "i" and "z" respectively.

316.   NUMBERS

a.   Numbers may be written as digits or spelled out. When spelled out, they are expressed in words for each digit except:

(1)   Numbers 10 through 20 are written as one word.
EXAMPLE: Sixteen

(2)   Exact hundreds, thousands or millions are to written the form "FIVE HUNDRED" etc.

EXAMPLES: 123.4 is written as "ONE TWO THREE POINT FOUR".
5000 is written as "FIVE THOUSAND". FIVE FOUR SIX is unmistakable, but FIVE FORTY SIX could be interpreted to mean 5406.

b.   The numbers 1 and 0 are to be written as 1 and Ø respectively to avoid confusion with the letters I and O.

317.   EXPRESSION OF DATE AND TIME IN THE TEXT

a.   Date:

(1)   When a date by itself is needed in a message, it is expressed by one or two figures indicating the day of the month, followed by the first three letters of the month and, if necessary, the last two figures of the year.

EXAMPLE: 9 JUN or 9 JUN 04

(2)   A night is described by the two dates over which it extends.

EXAMPLES: Night 29/30 JUL

Night 30 SEP/1 OCT 03

(3)   The abbreviations for the months of the year are as follows:

January	JAN	July	JUL
February	FEB	August	AUG
March	MAR	September	SEP
April	APR	October	OCT
May	MAY	November	NOV
June	JUN	December	DEC

b.   Time:

(1)   Times in messages are expressed as four figures followed by a time zone letter. The first pair of figures indicates the hour on a 24 hour clock. The second pair indicates the minutes past the hour.

EXAMPLE: 1535Z

(2)   Where practicable the time 2400 should be avoided unless it is necessary to indicate this particular instant of time; instead use 2359 or 0001. 0000 is not to be used unless it is accompanied by numbers to indicate a fraction of a minute past 2400, eg 0000.5 for ½ a minute past 2400. When extra digits are added to indicate fractions of a minute, special care must be taken to avoid any possibility of confusion with a date-time group.

c.   Date and Time Together.

(1)   Date and time together are expressed as six figures followed by the zone letter. The first pair of figures indicates the day of the month, the second pair indicates the hour (24 hour clock) and the third pair indicates the minutes past the hour.

EXAMPLE: 061530Z (or other appropriate zone letter)

(2)   The zone letter may be omitted in texts of messages containing a large number of times and/or date-time groups when a covering expression such as "all times Zulu" may be used instead of appending a zone letter to each. The use of such an expression must not be used when there is any chance of confusion such as a time or date-time group being mistaken for a map reference.

(3)   In certain case, to avoid confusion, it may be necessary to show the month and the year. They are shown in the same way as described in paragraph 317a above, for the indication of the date.

EXAMPLE: 271630Z JUN 03 represents 1630 GMT on 27th June 2003.

d.   Time Zones. See Annex A for: "Table of Time Zones, Zone Descriptions, and Zone Letters"; "Explanation of the Conversion Chart"; "Use of the Conversion Chart"; "Alphabetical List of Cities with Time Zones"; "Time Zones of Frequently Worked Locations" (For Station Use); and Annex B for "Time Conversion Chart"; and "Standard Time Zone Chart of the World".

318.   <u>REPETITION</u>

    a.   A word may be repeated to prevent errors. <u>It is not to be repeated solely for the purpose of emphasis</u>. An example of the legitimate use of repetition is:

        EXAMPLE: MIYAZAKI REPEAT MIYAZAKI (To minimise the possibility of mistaken identity or incorrect spelling)

    b.   Letters and numbers should not be repeated for emphasis, rather they should be spelled out.

319.   <u>REFERENCES</u>

    a.   Within one service of one nation, references to messages will consist of YOUR, MY or the authorised abbreviated title of a third party followed by either:

        (1)   The originators reference number followed by the day and month (and year if not concurrent).

        EXAMPLE: AFOAC 4321 12 DEC 96

Note: Where specified in separate service instructions, the day and month may be omitted when referring to messages originated during the current month, or:

        (2)   The Date-Time Group (DTG) of the message. (See paragraph 325c regarding UNCLASSIFIED replies and references to CLASSIFIED messages.)

        EXAMPLE: YOUR 131412Z JUN 03

    b.   When referring to messages by or sent to other Services, Nations or Allied Commands, the originator's reference number (if any) or the Subject Indicator Code (SIC) (found at the beginning of the text on all NATO originated signals) followed by the DTG shall be used.

        EXAMPLES: CANCOMMCON OPS 3618 131927Z DEC 03
                           SACEUR KBL 231547Z JAN 04

    c.   When references are placed in messages destined for several addressees, care must be taken that such references are available to all addressees. In cases where a reference is not held by all addressees and the originator determines that those addressees do not need it, the indication "NOTAL" (meaning "Not to, nor needed, by all addressees") should be included after the reference.

EXAMPLE: USCINCEUR EC 796 14 JUN 04 NOTAL

d.   References to letters, orders or other comments normally will consist of YOUR, MY or the authorised abbreviated title of a third party followed by the identification of the reference and its date (day, month, and year).

EXAMPLE: CINCLANT 827/1 DATED 12 MAY 03

e.   When more than one reference is quoted, the originator may, if considered necessary, identify each reference separately by a letter.

EXAMPLE: A. YOUR 321/2/3 DATED 10 MAR 03
                     B. CINCFLEET LAB 170759Z MAR 03

f.   In a brief message of one paragraph where there is only one reference, the reference identification may be included in the body of the paragraph. In certain instances, it may be appropriate to include the identification of two references in the body of a brief message.

EXAMPLES:

        UNCLAS
        YOUR 181614Z FEB 04. CONFERENCE WILL CONVENE 22 FEB VICE
        21 FEB.

        UNCLAS
        SCCPO-1A FOR SCCP PO
        YOUR 121515Z JAN 04. MY 111217Z DEC 03 APPLIES

g.   References contained in re-addressed messages become the responsibility of the command originating the re-addressal. Inquiries regarding these references shall be addressed to the re-addressing authority (paragraph 340)

320.   SPECIAL MESSAGE DESIGNATIONS/INTERNAL HANDLING INSTRUCTIONS

a.   Occasions will arise where messages must receive special handling and distribution. A common method of designating such special attention must be employed. Phrases so used should be concise and must be placed at the beginning of the text. The following terms with the meaning indicated are authorised for general use.

        (1)   Special Handling Markings

                (a)   EXCLUSIVE - - Messages so designated are to be delivered only to the person(s) whose name(s) or designation(s) appear(s) immediately following the word "Exclusive" or in the absence of the person(s) so addressed, to his authorised representative. Such messages must be

handled only by specially designated personnel and <u>must be</u> <u>classified</u>. The word "Exclusive" is to be used followed by "FOR.....FROM.....". The use of "FOR.....FROM....." is <u>mandatory</u>.

EXAMPLE: EXCLUSIVE FOR COL FRENCH FROM COL GLENN

(b)   <u>EYES ONLY</u> - Messages so marked contain information that is not releasable outside of the nation(s), activity(ies) or international alliance indicated in front of the term EYES ONLY.

EXAMPLE: AUSCANNZUKUS EYES ONLY

(c)   <u>CRYPTOSECURITY</u> - Messages containing cryptographic information, the knowledge of which needs to be restricted to individuals authorised to receive it, are to be marked "CRYPTOSECURITY". This term, if used, follows immediately the security classification. CRYPTOSECURITY messages must always be classified.

EXAMPLE: NATO CONFIDENTIAL CRYPTOSECURITY

(d)   <u>ATOMAL</u> - Messages containing ATOMAL information, the knowledge of which must always be restricted to the individuals authorised to receive it, are to be marked ATOMAL.

EXAMPLE: TOP SECRET ATOMAL

(2)   <u>Internal Handling Instructions</u>

(a)   <u>FOR.....or PASS TO</u> - This instruction is to be followed by the name or title of a particular individual or particular (sub) division/(sub) section. It indicates that the text of the message is to receive the attention of that individual or (sub) division/(sub) section without necessarily limiting the normal distribution. Messages thus marked may be unclassified or classified. An indication of the originator may be given by the use of the word "FROM" followed by the name or title of a particular individual or particular (sub) division/(sub) section.

(b)   The above does not prohibit the use of other special phraseology for directing message distribution. When other phrases are used all addressees must be familiar with such phrases and their meaning with regard to message distribution.

321.   <u>EXERCISE COMMUNICATIONS</u>

a.   Exercise Messages: Messages sent relating to training exercises, command post exercises, tactical exercises and manoeuvres conducted in the interest of training and readiness are exercise messages but are prepared and handled in the same way as normal traffic.

b.   Identification of Exercise Messages:

(1)   Exercise messages are identified by the word "EXERCISE" followed by the exercise identification, which shall consist of a name or designation assigned by proper authority.

EXAMPLE: EXERCISE BRIGHT HORIZON 96

(2)   The officer conducting the exercise shall include appropriate instructions for identifying exercise messages in the directive for the conduct of the exercise in order to preclude alarming non-participants. Normally these instructions will require that the exercise identification, preceded by the word "EXERCISE" be used at the beginning of the text. For full particulars see ACP 122 and relevant national Supplements.

c.   Drill Messages:

Messages intended for training communications personnel are drill messages. The text of a message intended for the training of communications personnel is to begin and end with the word "DRILL".

322.   <u>SPARE</u>

SECTION V

FILLING OUT THE MESSAGE FORM

323.   <u>GENERAL</u>

Whilst most Nations already have their own message form in an electronic format, the instructions in this section deal with filling out the message form illustrated on page 3-16, which is based on the UK Message form. These generic instructions apply equally to messages prepared on a blank piece of paper or any authorised form. While it is desirable to standardise a universal message form, these instructions are not intended to limit any additional intra-national requirements. The information required to complete the message form, however, should be considered as a minimum standard. It is designed to facilitate processing regardless of the language used by the drafter. The size of the form and spaces are unimportant, but their use and relative positions should remain as indicated. If adopted for national use, the spaces provided on the form "for operators use" may be modified to meet national requirements.

324.   <u>INSTRUCTIONS FOR FILLING OUT THE MESSAGE FORM</u>

    a.   FOR COMMCEN/SIGNALS USE. The message form has a space for use by Communications Centre/Signals personnel. No entries are to be made in this space at the time the message is prepared by the drafter/releasing officer. If blank sheets are used, adequate space must be left for this purpose.

    b.   PRECEDENCE. In order to show the relative order in which the message is to be transmitted, precedences will be indicated as appropriate in the precedence block. See paragraph 327.

        (1)   Action - The precedence assigned to all action addressees will be entered in this block.

        (2)   Information - The precedence assigned to all information addressees will be entered in this block and is normally to be Routine.

    c.   DATE-TIME GROUP. The DTG is placed in the DATE-TIME GROUP block. Depending upon national requirements, the DTG may indicate either the date and time when the message was officially released by the releasing officer, or the date and time when the message was handed into a communications centre for transmission. The DTG is expressed as six digits followed by a zone suffix, and the month expressed by the first three letters and the last two digits of the year of origin. The zone suffix "Z", meaning Greenwich Mean Time, is used except where the theatre or area commander prescribes the use of local time for local tactical situations. Where local time is used, the local zone suffix will be used (paragraph 317).

d.   Time-Group. In tactical messages, when using abbreviated procedure, 'time-group' may be used. For this procedure the characters denoting the date, month and year may be omitted.

e.   MESSAGE INSTRUCTIONS. Normally reserved for Communications Centre/Signals use, but may be used by the releasing officer to give any special instructions to the communications staff to indicate the desired method of delivery of a message; eg radio, land line, visual, mail, by hand; or to convey any other appropriate instructions.

f.   FROM. The originators designation is entered in this block. Authorised message addresses/short titles must be used whenever possible.

g.   TO: and INFO: Addressees may be designated as either ACTION or INFORMATION. Authorised message addresses/short titles must be used whenever possible.

    (1)   TO: - When designated ACTION, the official designation of the addressee(s) will be placed in the "TO" section.

    (2)   INFO: - When designated INFORMATION, the official designation of the addressee(s) will be placed in the "INFO" section.

h.   SECURITY CLASSIFICATION:

    (1)   The security classification assigned to a message will be indicated in the appropriate block. When the message is not classified, this will be indicated by writing the word "UNCLAS" in the security classification block. (Also see paragraphs 325 and 326)

    (2)   As an exception, if a classified message is to be sent in plain language, as described in paragraph 326, the word "CLEAR" shall be written in this block.

i.   SIC Box. This space is to be filled in by the originator. Used as the Subject Indicator Code (SIC) or Delivery Indicator Group (DIG) block by some nations/alliances.

j.   TEXT. Strive for brevity without loss of clarity. To save transmission and circuit time required for indenting, the message text should normally be prepared in block form, ie without paragraph and subparagraph numbering, lettering or indenting. If paragraphing is specifically required or desired, modified letter format should be used:

    (1)   Paragraphs shall be numbered with Arabic numerals in sequence, followed by a fullstop; subparagraphs shall be lettered alphabetically in sequence, followed by a fullstop; sub-subparagraphs shall be numbered with the Arabic numerals in parentheses, commencing with "(1)"; sub-sub-subparagraphs shall be lettered in parentheses, commencing with "(a)".

(2)   Paragraph designations should be transmitted as written and not spelled out.

(3)   Where a message consists of only one paragraph, the paragraph should not be numbered.

m.   DRAFTERS NAME (and signature if required). Data identifying the drafter is entered in this block.

n.   RELEASING OFFICERS SIGNATURE. The written signature of the individual authorised to release the message is to be entered in this block.

ACP 121(G)

Classification		Serial No.	
Descriptor/Special Handling Caveat		Store No.	

Line 1	Routed by
2	Time
3 DE	Prepared by
4	Time

Precedence: Action	**/Info**	For single transmission
DTG: **Z**	**Month** **Year**	Transmitted to

Routing Indicators	**From:**	Channel No/system
	To:	
		Time
		Operator
	Info:	Message Instructions
		Classification
		SIC(s)

Internal Distribution:

Page 1 of ___ pages	Releasing Officer's Signature	
File No. or Reference		
Drafters Rank/Grade and Name		
Branch and Telephone No.	Name (BLOCK capitals)	

for OPR's Use	Filing time/TOR	System	Operator	Final Check Op	Rank/Grade	
					Branch and Telephone No.	

Descriptor/Special Handling Caveat	
Classification	

325.   DETERMINING SECURITY CLASSIFICATION

a.   Responsibility. It is the responsibility of the releasing officer to ensure that the proper classification is indicated on the message before it is forwarded for transmission. A reply or reference to a classified message may be assigned a lower classification when the contents of the text of the message containing the reply or reference permits.

b.   Security Classification:

(1)   Messages are to be classified TOP SECRET, SECRET, CONFIDENTIAL or RESTRICTED whenever their content falls within the definition set forth in appropriate national regulations. Messages bearing no security classification should be marked UNCLASSIFIED (abbreviated to UNCLAS).

(2)   The degree of cryptosecurity afforded a message is governed by its classification. However, the primary crypto systems in general use provide a high degree of security and may be used, subject to message handling restrictions, for the encryption of messages of all classifications within their own classification clearance. The primary purpose of classification is to impose restrictions on the handling of messages and dissemination of the information contained therein

(3)   The higher classifications lose their significance when used excessively, but, although over classification may lead to the overloading of cryptographic facilities, a message should not be marked UNCLAS unless the releasing officer is sure that no aspect of it has any security implications.

c.   Unclassified References to Classified Messages: The rules governing the use of an unclassified message which refers to a classified message are:

(1)   In peace or war, a national, service or command authority may prohibit unclassified messages which refer to a classified message (but see (5) below). Authorities instituting such a prohibition are responsible for notifying other authorities who may be concerned.

(2)   If no such prohibition is in force, unclassified messages which refer to a classified message by its date-time group or other identification are allowed when the classified message under reference:

(a)   Bears a marking indicating that paraphrasing is not required; or

(b)   Does not bear a paraphrase marking.

(3)   An unclassified message which refers to a classified message is never allowed when the classified message under reference bears either:

(a)   A marking indicating that paraphrasing is required; or

(b)   A marking indicating that the message is a paraphrase.

(4)   An unclassified message which refers to a classified message by its date-time group is never allowed when the classified message under reference bears a marking indicating that no unclassified reply or reference is permitted if the date-time group is quoted.

(5)   As an exception to the above rules both in war and peace, the commanding officer is authorised, in tactical situations, to permit unclassified replies or references to any classified message when it is necessary for operational reasons. In such cases each message which would violate the above conditions must be authorised separately by the Commanding officer or his authorised representative. Such messages should be dealt with according to the rules in paragraph 326.

NOTE: Instructions regarding the application of the markings (referred to above) to copies of decrypted messages are given in general or service cryptographic instructions.

326.   <u>CLASSIFIED MESSAGES TRANSMITTED IN PLAIN LANGUAGE</u>

a.   In tactical operations, simulated or actual, when speed of delivery is so essential that time cannot be spared for encryption and the transmitted information cannot be acted upon by the enemy in time to influence current operations, messages of any classification except TOP SECRET may be transmitted in the clear over any circuit. In such cases, transmission in the clear must be authorised separately for each message by the Commanding officer or his authorised representative. Linkage to previously encrypted messages should be avoided.

b.   These messages will not be given a security classification but will be identified by the word CLEAR transmitted at the beginning of the text indicating that the message contains classified information and has been authorised to be sent in the clear. Original copies marked CLEAR shall be handled as CONFIDENTIAL material. The message, when received, shall be marked with the phrase "RECEIVED IN THE CLEAR, TREAT AS CONFIDENTIAL" prior to delivery to the addressee. Messages so marked shall not be re-addressed; should the addressee desire the information to be forwarded to another addressee, a new message shall be originated, appropriately classified, and handled as the situation dictates.

c.   The above rule does not apply to messages which are not normally encrypted, such as enemy contact reports.

327.   <u>DETERMINING PRECEDENCE</u>

a.   Responsibility - The assignment of precedence to a message is the responsibility of the releasing officer. The importance of judicious assignment (avoidance of the use of a higher precedence than necessary) cannot be over emphasised. The precedence assigned to a message by the releasing officer does not necessarily indicate the action to be taken by the addressee or the precedence designation which should be assigned to the reply. Such instructions, if necessary, will be included in the text. Misuse of the precedence system defeats its purpose; ie to ensure rapid handling of message traffic over available facilities with a minimum of backlog and delay resulting from competing priorities. The factors to be considered in each instance are:

(1)   The urgency of the subject matter. Importance does not necessarily imply urgency. The releasing officer should consider the urgency of the subject matter as it relates to the addressee(s).

(2)   Consideration should be given to the time difference between widely separate geographical areas, eg Eastern United States is six hours behind Central Europe. The releasing office should be aware that all but ROUTINE precedence messages are delivered to the addressee immediately upon receipt by the communications centre, regardless of the hour.

b.   Significance - The four precedence categories are used to specify the relative order in which messages are to be handled. These categories indicate:

(1)   To the originator: The required speed of delivery of the message to the addressee (paragraph 327a.(1) and (2)).

(2)   To communication personnel: The relative order of message processing, transmission and delivery.

(3)   To the addressee: The relative order in which to note the message (paragraph 327a.(1)).

c.   Time Objective - Message originators do not normally select the means of communication to be used. This is a function of the communication service throughout the entire route of the message. Nevertheless, message originators should realise that various factors can, singly or collectively, add to the time required to complete the delivery of a message. Among these are:

(1)   The length of the message.

(2)   The overall message traffic load.

(3)   Encryption and decryption requirements.

(4)   The means of communications, ie automatic or manual and delivery arrangements at terminals.

(5)   The number of relays required as opposed to point-to-point communications.

(6)   Poor transmission conditions.

(7)   Communications staffing problems.

Recognising that these factors may affect the speed of service of any given message, the following general time objectives apply:

Precedence Category	Time Objective
FLASH	Not fixed. Handled as fast as humanly possible with a time objective of less than 10 minutes.
IMMEDIATE	30 Minutes to 1 Hour.
PRIORITY	1 to 6 Hours.
ROUTINE	3 Hours to the start of business on the next working day

Note 1: The objectives include the overall handling time from the time accepted by the communications facility at the point of origin to delivery to the addressee at the point of destination.

Note 2: Time objectives for Formal Messages originated or in transit within the X.400 domain are contained within ACP123(A).

328.   DUAL PRECEDENCE

a.   Multiple address messages, including those addressed even to a single address indicating group (AIG) having both action and information addressees, may either be assigned a single precedence in which case it indicates the precedence for all addressees, or they may be assigned two precedences, one for all action addressees and a lower precedence for all information addressees. It is most important that the assignment of dual precedence be carefully considered on all messages with an information addressee(s) when other than the lowest precedence is assigned to the action addressee(s).

b.   In communications channels, sufficient information is to be included in the heading of each DUAL precedence message to permit the communications centres, crypto centres or relay stations, having the capability to segregate messages, to forward the message to the appropriate addressee at the required precedence. Additionally:

(1)   DUAL precedence is indicated in the headings of PLAINDRESS messages by including the two precedence prosigns in the preamble and indicating the status (action or information) of the addressees in the address component.

(2)   In CODRESS and AIG addressed messages the two precedence prosigns are included in the preamble except when a CODRESS message is routed to a crypto guard which serves all the addressees. In CODRESS messages, the address component of the message heading is not used. In AIG messages, there is no indication in the address component of the addressee status (action or information). Handling instructions, when necessary, are included in the transmission instructions by the use of an operating signal to indicate the address designator(s) which is/are to handle the message at the lower precedence.

(3)   For procedural details, see appropriate ACPs listed in paragraph 213.

329.   ASSIGNMENT OF PRECEDENCE

A message must be assigned a precedence equal to or higher than that required to ensure that all addressees receive it within the time objectives indicated in paragraph 327. Appropriate use of the various precedence categories is to be determined by consideration of the following table:

DESIGNATION	PRECEDENCE PROSIGN	DEFINITIONS, USE AND EXAMPLES	HANDLING BY COMMUNICATIONS PERSONNEL
FLASH	Z	FLASH precedence is reserved for initial enemy contact messages or operational combat messages of extreme urgency. Brevity is mandatory. EXAMPLES: (1) Initial enemy contact reports. (2) Messages recalling or diverting friendly aircraft about to bomb targets unexpectedly occupied by friendly forces; or messages taking emergency action to prevent conflict between friendly forces. (3) Warning of imminent large scale attacks. (4) Extremely urgent intelligence messages. (5) Messages containing major strategic decisions of great urgency.	FLASH messages will be hand-carried, processed, transmitted and delivered in the order received and ahead of all other messages. Messages of lower precedence will be interrupted on all circuits involved until handling of the FLASH message is completed. NOTE: In automatic systems where automatic interruption of lower precedence messages is not provided, adequate procedures are to be prescribed to ensure that FLASH messages are not delayed .
IMMEDIATE	O	IMMEDIATE is the precedence re-served for very urgent messages relating to situations which gravely affect the security of national/allied forces or populace. EXAMPLES: (1) Amplifying reports of initial enemy contact. (2) Reports of unusual major movements of military forces of foreign powers in times of peace or strained relations. (3) Messages which report enemy counterattack which request or cancel additional support. (4) Attack orders to commit a force in reserve without delay.	IMMEDIATE messages are processed, transmitted and delivered in the order received and ahead of all messages of lower precedence. If possible, messages of lower precedence will be interrupted on all circuits involved until the handling of the IMMEDIATE messages is completed. NOTE: If automatic interruption of lower precedent messages is not provided, adequate procedures are to be prescribed to ensure that IMMEDIATE messages are not delayed.

DESIGNATION	PRECEDENCE PROSIGN	DEFINITIONS, USE AND EXAMPLES	HANDLING BY COMMUNICATIONS PERSONNEL
Immediate (Cont)	O	(5) Messages concerning logistical support of special weapons when essential to sustain operations. (6) Reports of widespread civil disturbance. (7) Reports of warning of grave natural disaster (earthquake, flood storm, etc) (8) Request for, or directions concerning, distress assistance. (9) Urgent intelligence messages. (10) Aircraft movement reports (eg, messages relating to requests for news of aircraft in flight, flight plans, cancellation messages to prevent unnecessary search/rescue actions).	
PRIORITY	P	PRIORITY is the precedence reserved for messages concerning the conduct of operations in progress and for other important and urgent matters when ROUTINE precedence will not suffice. EXAMPLES: (1) Situation reports on position of front where attack is impending or where fire or air support will soon be placed. (2) Orders to aircraft formations or units to coincide with ground or naval operations. (3) Messages concerning immediate movement of naval, air, and ground forces.	Processed, transmitted, delivered in the order received and ahead of all messages of ROUTINE precedence. (1) ROUTINE messages being transmitted should not be interrupted unless they are very long and a very substantial portion remains to be transmitted. (2) PRIORITY messages should be delivered immediately upon receipt at the addressee destination. (3) When commercial civil refile is required, the commercial precedence that most nearly corresponds with PRIORITY shall be used

national, service or command instructions for the handling of messages such as those designated EXCLUSIVE or classified TOP SECRET.

d.   In the interest of standardisation, the following guide should be used by message originators and communications personnel in organising the above mentioned elements of the message text. Where elements listed do not appear in a message or are not listed, the order of appearance is adjusted accordingly. The elements are:

(1)   Security classification, the abbreviation UNCLAS, or the word CLEAR.

(2)   Special handling designations used to indicate requirements for controlled handling by individuals who have either been specially cleared or have authorised access to the message contents; eg CRYPTOSECURITY, EXCLUSIVE, (....*....) EYES ONLY.

(Note: (....*....) - Indicates the identity of a nation(s), activity(ies) or international alliance. Use of the term (....*....) EYES ONLY indicates that the message contains information that is not releasable outside of the nation(s), activity(ies) or international alliance.)

e.   Subject Indicator Code (SIC) or equivalent systems, eg Subject Indicator Group (SIG) or Delivery Indicator Group (DIG). These are required by some automated message distribution systems.

f.   True Date-Time Group (TDTG), where applicable, and originator's title or reference number if used.

g.   Code word, code name or nickname indicating that special measures must be taken to ensure rapid delivery. May be used with specific operations, projects or exercises.

EXAMPLE: OPERATION MOONSTONE (Meaning - Specific Operation)

PROJECT BLUE JAY   (Meaning - Specific Project)

EXERCISE BILL HOOK   (Meaning - Specific Exercise)

h.   Internal handling instructions, other than the type described in b above; eg FOR/FROM (paragraph 320a(2)).

i.   Subject line, concise and preferably untitled; ie the word SUBJECT is not used. The subject line shall be omitted if its use will cause an otherwise unclassified message to be classified, will noticeably increase the length of a short message or if the subject is readily apparent in the first lines of the text.

j.   References, preferably untitled (ie the word REFERENCE is not used) and, when necessary, separately identified by a letter (paragraph 319).

k.   Remainder of text (paragraph 324j).

331.   SPARE

332.   SPARE

333.   SPARE

334.   SPARE

SECTION VI

SPECIAL CONSIDERATIONS

335.   <u>ACKNOWLEDGEMENTS</u>

a.   An acknowledgement is a communication indicating that the message to which it refers has been received and the purpose is understood by the addressee.

b.   The instruction to ACKNOWLEDGE means "Action addresses are to acknowledge this message (or message indicated), when understood. Electronic silence, if imposed, is not to be broken and the acknowledgement must be sent by any other means which does not violate the communication emission control policy in force"

c.   When the importance of an operational message necessitates an acknowledgement despite electronic silence, the term ACKNOWLEDGE IMMEDIATELY, meaning "Action addressees are to acknowledge this message as soon as it is understood. Electronic silence is to be broken if necessary", is to be used. Authentication is mandatory for plain language messages which require the breaking of communication silence.

d.   Message acknowledgement will be made only:

(1)   When specifically requested by the word(s) ACKNOWLEDGE or ACKNOWLEDGE IMMEDIATELY appearing as the last word(s) of the text.

(2)   When requested by a separate message. A separate message is used when the need for an acknowledgement is determined after release of the original message. Service messages are not to be used for this purpose.

NOTE: On tactical circuits, the operating signal ZEV may be used in the message heading in lieu of either procedure outlined above.

e.   Requests to acknowledge a message shall apply to the action addressee(s) only, unless otherwise stated.

f.   The acknowledgement of a message, when required, shall be composed as follows:

(1)   The word YOUR or the address designator actually used to represent the originator.

(2)   The message reference (Date-Time Group, reference number, etc).

(3)   The word "ACKNOWLEDGED".

EXAMPLE: YOUR 121314Z JAN 04 ACKNOWLEDGED

g.   An acknowledgement should not be confused with a reply, but a prompt reply to a message may save a subsequent request for acknowledgement.

336.   <u>CONFIRMATION OF DELIVERY</u>

a.   Operating signals ZFF and ZDF are for use by communications personnel to obtain confirmation of message delivery only, not acknowledgement. Confirmation of delivery should not normally be requested. Use of ZFF and ZDF by communications personnel should be limited to those occasions when:

(1)   Confirmation of delivery is specifically requested by the releasing officer as a special requirement. In this regard, to preclude overloading of circuits, especially during times of crisis, the operating signal ZFF should be employed only when absolutely essential to operational requirements.

(2)   Relay is requested, and then only when circuit or other conditions indicate that a transmitted message may not reach its destination.

b.   The operating signal ZFF shall not be used:

(1)   On general messages.

(2)   On other messages having a wide distribution, except for specifically identified addressees from whom confirmation of delivery is required under the provisions of paragraph 336a, above.

(3)   As a matter of policy on all messages originated by a command, agency or individual.

337.   CANCELLATIONS

a.   Cancellation of a message which has been receipted for may be accomplished only by the originating authority. This type of cancellation may be in the form of a new message or may be included in a message which supersedes the one cancelled. A classified message may be cancelled only by another classified message or properly authenticated unclassified message.

b.   Cancellations of transmissions may be accomplished by the transmitting station by the use of appropriate operating signals or prosigns. A station cancelling a transmission is responsible for further handling of the contents of the transmission, if such further handling is necessary.

338.   CORRECTIONS

Circumstances sometimes arise in which it becomes necessary for the releasing officer to change the substance or phraseology of a message after it has been transmitted. Small changes can usually be made by means of a new message containing corrections to the original message. When the change is lengthy, it is advisable to cancel the original message and originate a new message. Any message requiring alteration before transmission shall not be changed by the communications centre but must be referred back to the releasing officer.

339.   REPETITIONS, CHECKS AND VERIFICATIONS

a.   There are three methods available for requesting the retransmission of the whole or part of a message, which has been received.

(1)   Repetition - This is for use between operators when a message has been incorrectly or incompletely received.

(2)   Check - This refers the message back to the crypto centre which encrypted the message and requires a check on the encryption.

(3)   Verification - This requires the originator to verify the complete message or portions indicated.

340.   READDRESSING MESSAGES

Circumstances may arise in which it becomes necessary to readdress a message to authorities not originally included in the address. To accomplish this, co-ordination with the local communications centre is required. If a communications centre file copy is available, only reference to the message need be made. If a communications centre file copy is not available,

the individual requesting readdressal must furnish a copy of the message concerned. Unless instructed to do so by the readdressing authority, the communications centre will not inform the original addressees and/or originator of the readdressal. It will always be necessary, on the other hand, to inform the new addressees that the message is being passed to them for action or for information, as appropriate. This can be done by either using plaindress format or operating signal ZFH and appropriate numeral in the supplementary heading of the readdressed message. Where national service or command instructions prohibit use of the above methods, a separate message is to be sent, containing action/information status, to the new addressees.

SECTION VII

REDUCTION OF MESSAGE AND TELEPHONE TRAFFIC IN AN EMERGENCY

341.   <u>REASON FOR REDUCTION AND CONTROL OF TRAFFIC</u>

In an emergency, actual or simulated, when it is apparent that communication capacity will be, or is severely overloaded, it may be necessary to reduce drastically message, telephone and e-mail traffic by manual and computer based military message handling systems to ensure prompt handling and transmission of vital messages.

342.   <u>MEANING AND EFFECTS OF MINIMIZE</u>

    a.   The instructions to reduce traffic will be made by the promulgation of the word MINIMIZE which has the following meaning:

    "It is now mandatory that normal message, telephone and e-mail traffic be reduced drastically in order that vital messages connected with the situation indicated shall not be delayed."

    b.   Because of its drastic nature and widespread effect, MINIMIZE shall not be imposed indiscriminately nor prematurely. The communications officer is normally in the best position to advise on the necessity of imposing MINIMIZE.

343.   <u>AUTHORITY TO IMPOSE MINIMIZE</u>

    a.   Authority to impose MINIMIZE is inherent in command and, therefore, is not limited unless denied by appropriate higher authority.

    b.   MINIMIZE is normally to be confined to the nation, service or command controlled by the imposing authority. If the need for reduction and control of messages originated outside of, but flowing into or through the affected area is apparent or when it becomes apparent, assistance shall be requested through command channels from the national service, ministry or department, of the command, authorised to effect the required reduction and control. Until such assistance has been requested of and directed

by the appropriate authority, communications and communications systems controlled by other than the initial imposing authority shall not be affected.

344.   APPLICATION OF MINIMIZE

a.   MINIMIZE may be imposed on a worldwide, nation-wide, command or area basis, as appropriate. The message ordering MINIMIZE shall consist of the word MINIMIZE followed by the scope and the reason, if required, and by the duration of its imposition when known. It may also include the type of traffic, communication service or circuits to be MINIMIZED or exempted from MINIMIZE when pertinent. MINIMIZE messages will be classified, or unclassified, in accordance with regulations covering security of information.

b.   EXAMPLES:

(1)   SACEUR, wishing to impose MINIMIZE within Allied Command Europe (ACE) due to an impending attack, would transmit the following to all echelons of ACE:

MINIMIZE ACE ATTACK IMMINENT.

(2)   The Joint Chiefs of Staff of the United States, wishing to impose MINIMIZE on all United States forces during a worldwide exercise, would transmit the following message to all United States forces:

MINIMIZE US FORCES WORLDWIDE EXERCISE COLOSSAL.
CANCEL MINIMIZE AT 192359Z JAN 04

(3)   The United Kingdom, wishing to MINIMIZE traffic to RN and RAF units in the Plymouth area, due to a search being conducted in that area for a missing submarine, would transmit the following message to all RN and RAF units:

MINIMIZE RN AND RAF PLYMOUTH SUBMISS.

(4)   Canadian Army Headquarters, wishing to impose MINIMIZE on all Canadian units due to an Army-wide operation, would transmit the following message to all Canadian Army Units:

MINIMIZE CANADIAN ARMY OPERATION HARGREAVES.

(5)   France, wishing to impose MINIMIZE on traffic to French forces in the Indian Ocean area, due to an earthquake occurring in that area, would transmit the following message to all French forces:

MINIMIZE FRENCH FORCES INDIAN OCEAN AREA EARTHQUAKE.

345.   CONTROL OF MESSAGE AND TELEPHONE TRAFFIC DURING MINIMIZE

a.   Instructions to originators/releasing officers:

(1)   Originators/releasing officers affected by the imposition of MINIMIZE shall apply the following criteria before releasing any messages or telephone calls during the MINIMIZE period (and e-mail traffic if ordered in the MINIMIZE signal):

(a)   Will immediate operations be adversely affected if the message or telephone call is not made?

(b)   Is the message or call of vital importance or within a category specifically exempted from MINIMIZE by the imposing authority?

(2)   Only messages or calls which pass this test are authorised when MINIMIZE is in effect and the originator/releasing officer is to add the words "NOT WITHSTANDING MINIMIZE" underneath his signature before forwarding the message to the communications centre for transmission.

(3)   Information which does not satisfy the above criteria but the transmission of which is necessary, shall be forwarded by mail, courier etc. It is not to be forwarded to the communications centre or held back pending the cancellation of MINIMIZE as either of these actions could seriously overload communication networks.

b.   Instructions to Communications Centres:

Authorities controlling communications centres, networks, etc, may issue instructions to cover the action to be taken on receipt of MINIMIZE in order to cause an immediate reduction in the traffic already in the communications system and on hand for transmission. Such instructions may provide for the screening of traffic on hand, referral back to the releasing officer, transmission by mail, etc, as appropriate. In certain circumstances, these instructions may include the screening of messages already in transmission channels. Communications centres are to ensure that any messages handed in for transmission after imposition of MINIMIZE are to bear the words NOT WITHSTANDING MINIMIZE underneath the releasing officers signature before accepting the message for onward relay.

346.   CANCELLATION OR MODIFICATION OF MINIMIZE

a.   MINIMIZE may be cancelled or modified only by the authority that ordered it, or by a higher authority in the form of "CANCEL MINIMIZE" followed by the scope of the cancellation. The effective date-time may also be included. If the duration of the

MINIMIZE is known when it is imposed, the cancellation may be included in the original message.

b. If an additional or new MINIMIZE requirement should arise during any MINIMIZE condition, the authority having knowledge of the new development should refer the issue for resolution to the senior authority concerned.

SECTION VIII

INSTRUCTIONS ON MAIL AND EXTERNAL MESSENGER DELIVERY BY COMMUNICATION CENTRES

347.   <u>INSTRUCTIONS FOR MAIL AND EXTERNAL MESSENGER DELIVERY</u>

a.   All copies of messages forwarded by mail or external messenger will bear the communication centre stamp or the signature of a responsible person.

b.   The envelope containing copies of messages forwarded by mail will be addressed to the command, authority or activity. To meet separate nation, service or command instructions and when appropriate, the envelope will be marked "deliver to communications centre".

c.   All copies of messages forwarded by mail or external messenger will bear the date-time group, and, where applicable, the originators reference number or general message serial number.

d.   When a classified message is to be sent to selected addressees in plain language by mail or external messenger as well as to other addressees in encrypted form, the copies sent by mail shall be processed in accordance with the rules that govern the processing of classified plain language copies at addressee crypto centres and shall bear all appropriate notations before mailing.

1.   TABLE OF TIME ZONES, ZONE DESCRIPTION AND DESIGNATION LETTERS

ZONE DEGREES LONGITUDE				DESCRIPTION	DESIGNATION LETTERS
7 ½	W	to	7 ½ E	0	Z
7 ½	E	to	22 ½ E	-1	A
22 ½	E	to	37 ½ E	-2	B
37 ½	E	to	52 ½ E	-3	C
52 ½	E	to	67 ½ E	-4	D
67 ½	E	to	82 ½ E	-5	E
82 ½	E	to	97 ½ E	-6	F
97 ½	E	to	112 ½ E	-7	G
112 ½	E	to	127 ½ E	-8	H
127 ½	E	to	142 ½ E	-9	I
142 ½	E	to	157 ½ E	-10	K
157 ½	E	to	172 ½ E	-11	L
172 ½	E	to	180	-12	M
7 ½	W	to	22 ½ W	+1	N*
22 ½	W	to	37 ½ W	+2	O
37 ½	W	to	52 ½ W	+3	P
52 ½	W	to	67 ½ W	+4	Q
67 ½	W	to	82 ½ W	+5	R
82 ½	W	to	97 ½ W	+6	S
97 ½	W	to	112 ½ W	+7	T
112 ½	W	to	127 ½ W	+8	U
127 ½	W	to	142 ½ W	+9	V
142 ½	W	to	157 ½ W	+10	W
157 ½	W	to	172 ½ W	+11	X
172 ½	W	to	180	+12	Y

* Letter N is also used to designate zone -13; this is to provide for a ship in zone -12 keeping Daylight Saving Time.

NOTES:

(1)   Reference should be made to the time zone chart on page A-9 in order to learn the exact zone boundaries, since they sometimes deviate slightly to accommodate national boundaries, etc.

(2)   GMT is indicated by the suffix Z.

(3)   For time midway between zones, both letters are used.

(4)   The suffix indicates the correction (for description, see table) which must be applied to the time as expressed in order to convert to GMT.

Example:

Washington, DC, is in longitude zone 67 ½ degrees to 82 ½ degrees west. If that city keeps normal time zone (Zone Description +5) the date-time group suffix will be R. To convert to GMT, add 5 hours to the indicated time. If that city keeps Daylight Saving Time (Zone Description +4), the suffix will be Q. To convert to GMT, add 4 hours to the indicated time.

2.   EXPLANATION OF THE CONVERSION CHART

a.   The chart on page A-9 is composed of 25 vertical columns, 24 of which represent the difference in time around the earth's surface. The 25th column is due to duplication of the extreme left and right columns. Each column head contains four area indicators as follows:

(1)   CO-ORDINATES - 24 equidistant divisions of the earth's surface based on co-ordinates of Longitude East and/or West. Co-ordinates divisions are straight lines from pole to pole and will not, in most cases, conform to time zone delineation's over land areas. They may, however, be used to determine time zones of islands and ocean areas. Each hour of time is thus related to approximately 15 degrees of longitude.

(2)   TIME ZONE NUMBERING SYSTEM - 25 time zone areas numbered from 0 through 24 (0 and 24 being actually the same zone) beginning with zone 0 at the International Date Line and extending East circumscribing the earth's surface to the 24 zone, or 0 zone, again. Certain publications and maps use this system for identifying the 24 time zones. For such publications, the conversion chart may be used for computing time or time differences.

(3)   TIME ZONE LETTERING SYSTEM - 25 time zone areas identified by use of letters. Beginning with the letter "A" at zone 13 (7° 30' E - 22° 30' E), the letters extend eastward through "M" (172^0 30'E - 180^oE-W). Zone number 12 (7° 30' E - 7° 30' W) is designated "Z". The letter system then from "Z", beginning with "N" (7° 30'W - 22° 30'W), extends westward through "Y" (172° 30'W - 180^oE-W) at the 0 zone. The letter "J" is omitted. The conversion chart can thus be used when maps or publications use the lettering system to identify the time zones.

(4)   THE PLUS AND MINUS SYSTEM - the plus and minus system, probably the most commonly used, begins at the zone through which the zero meridian passes (bisecting Greenwich, England, thus "Greenwich Civil Time, Greenwich Mean Time") the boundaries of which are 7° 30' E and 7° 30' W. This zone is designated Zero. Minus zones, beginning with -1, extend eastward through -12. The plus zones, beginning with +1, extend westward through +12. Thus -12 and +12 are the same time zone.

b.   Each of the vertical columns contains 25 blocks, the top and bottom blocks being duplicated in each column. These blocks represent the 24 hours of a complete day in any one time zone. Each block contains two entries of figures as follows:

(1)   The upper figure in each block represents a certain hour of the day (for that particular time zone) in <u>local</u> <u>time</u> or actual time, expressed in AM or PM hours.

(2)   The lower figure in each block represents the comparative time in the 0 zone, or Greenwich Civil Time. This time is sometimes referred to as "GCT" or "GMT", but more frequently, is known as "Z" time.

c.   The upper left and lower right portions of the chart are shaded. It will be noted that the shaded portions are based on the "stair-step" line associated with the 12:00 midnight block in each column. This line, separating the light and shaded portions, is the NEXT DAY - PREVIOUS DAY line. The shaded portions are to draw attention to the fact that this line has been crossed and that hours in the shaded portion are those of a different day. When crossing the NEXT DAY - PREVIOUS DAY line tracing laterally from <u>left</u> to <u>right</u>, all hours after CROSSING are of the next day, or add one day to the time difference. When crossing the NEXT DAY - PREVIOUS DAY line tracing from <u>right</u> to <u>left</u>, all hours after crossing are of the previous day, or subtract one day from the time difference.

3.   <u>USE OF THE CONVERSION CHART</u>

a.   TO DETERMINE THE "Z" TIME - If the time involved is given in AM/PM hours and the corresponding "Z" time is sought, first determine the time zone of the locality using the AM/PM time. In the appropriate zone column, trace downward until the AM/PM hour in question is found. It will be the upper figure in a certain block. The lower figure in that same block will the corresponding "Z" time.

b.   TO DETERMINE AM/PM TIME - If the hour is given in "Z" time and the corresponding AM/PM time is sought, first locate the time zone of the place using "Z" time and follow the same procedure outlined in a., foregoing, finding the "Z" time in question. The upper figure in that block will be the AM/PM hour sought.

c.   TO COMPUTE DIFFERENCE IN "Z" TIME - To compute differences in "Z" times, only the "Z" times need be compared and the difference noted. The time zone is immaterial as any one "Z" time is the same in all time zones.

d.   TO COMPUTE DIFFERENCES IN AM/PM TIME - If two AM/PM hours are given of two different localities, proceed as follows:

(1)   Start with whichever of the two time zones determined is to the left of the other.

(2)   Trace down this column until the first AM/PM hour is located.

(3)   Trace a lateral line (formed by the AM/PM hours) to the right until the time zone column representing the second locality in question is found.

(4)   Note the AM/PM hour at the point of intersection of the lateral line and vertical (time zone) column.

(5)   Trace upward or downward in this column until the second hour in question is reached.

(6)   Determine the difference between the two hours (4) and (5).

e.   TO COMPUTE DIFFERENCES IN AM/PM AND "Z" TIMES - To compare the two times for a result in "Z" time, convert the AM/PM time given to "Z" time as per subparagraph a. and determine the difference. To compare the two times for a result in AM/PM time, convert the "Z" time given to AM/PM time as per subparagraph b. and determining the time difference as per subparagraph d..

f.   GENERAL - Certain cities are listed in alphabetical order for quickly determining the appropriate time zone when not known. It will be noted that some cities are shown in hours and minutes. Such portions of hours should be considered in computing time differences. Those locations in which no legal time has been adopted, or where no legal time is kept, are arbitrarily assigned time zones based on their location in relation to the nearest, or surrounding areas listing a legal time.

g.   CORRECTIONS - Each nation is responsible for maintaining a current list of cities located within its respective borders. The Manuscript Agency will be responsible for the correct listing of those entries when the countries concerned do not hold the publication.

4.   ALPHABETICAL LIST OF CITIES WITH TIME ZONES (P-Plus, M-Minus)

AMSTERDAM	NETHERLANDS	M-1
ANCHORAGE	ALASKA, USA	P-10
ASUNCION	PARAGUAY	P-4
ATHENS	GREECE	M-2
BELFAST	NORTHERN IRELAND	M-1
BERLIN	GERMANY	M-1
BERN	SWITZERLAND	M-1
BOGOTA	COLOMBIA	P-5
BRASILIA	BRAZIL	P-3
BRISBANE	AUSTRALIA	M-10
BUENOS AIRES	ARGENTINA	P-4
CALCUTTA	INDIA	M-6
CHICAGO	ILLINOIS, USA	P-6
COPENHAGEN	DENMARK	M-1
DELHI	INDIA	M-5
DENVER	COLORADO, USA	P-7
DHAKA	BANGLADESH	M-6
DJAKARTA	INDONESIA	M-7
DUBLIN	IRELAND	M-1
GLASGOW	SCOTLAND	M-1
GODTHAAB	GREENLAND	P-3
GOOSE BAY	LABRADOR, CANADA	P-4

THE HAGUE	NETHERLANDS	M-1
HALIFAX	NOVA SCOTIA, CANADA	P-4
HAMBURG	GERMANY	M-1
HONOLULU	HAWAII, USA	P-10
ISTANBUL	TURKEY	M-2
JUNEAU	ALASKA, USA	P-9
LAHORE	PAKISTAN	M-5
LA PAZ	BOLIVIA	P-4
LIMA	PERU	P-5
LISBON	PORTUGAL	M-1
LONDON	ENGLAND	M-1
LOS ANGELES	CALIFORNIA, USA	P-8
MADRID	SPAIN	M-1
MANAGUA	NICARAGUA	P-6
MANILA	PHILIPPINES REPUBLIC	M-8
MARSEILLES	FRANCE	M-1
MELBOURNE	AUSTRALIA	M-10
MEXICO CITY	MEXICO	P-6
MILAN	ITALY	M-1
MONTREAL	QUEBEC, CANADA	P-5
MUNICH	GERMANY	M-1
NEW YORK	NEW YORK, USA	P-5
NOME	ALASKA, USA	P-11
OSAKA	JAPAN	M-9
OSLO	NORWAY	M-1
OTTAWA	ONTARIO, CANADA	P-5
PARIS	FRANCE	M-1
PERTH	AUSTRALIA	M-8
PHILADELPHIA	PENNSYLVANIA, USA	P-5
QUITO	ECUADOR	P-5
REYKJAVIK	ICELAND	P-1
RIO DE JANEIRO	BRAZIL	P-3
ROME	ITALY	M-1

ST. JOHN'S	NEWFOUNDLAND, CANADA	P-3:30
ST. LOUIS	MISSOURI, USA	P-6
SAN FRANCISCO	CALIFORNIA, USA	P-8
SAN JOSE	COSTA RICA	P-6
SAN JUAN	PUERTO RICO	P-4
SANTIAGO	CHILE	P-5
SAO PAULO	BRAZIL	P-3
SEATTLE	WASHINGTON, USA	P-8
SEOUL	KOREA	M-9
STOCKHOLM	SWEDEN	M-1
SYDNEY	AUSTRALIA	M-10
TEHRAN	IRAN	M-3
TOKYO	JAPAN	M-9
TORONTO	ONTARIO, CANADA	P-5
VANCOUVER	BRITISH COLUMBIA, CANADA	P-8
VERACRUZ	MEXICO	P-6
WASHINGTON, DC	USA	P-5
WELLINGTON	NEW ZEALAND	P-12, M-12
WINNIPEG	MANITOBA, CANADA	P-6

<u>For Station Use</u>

<u>TIME ZONES OF FREQUENTLY WORKED LOCATIONS</u>

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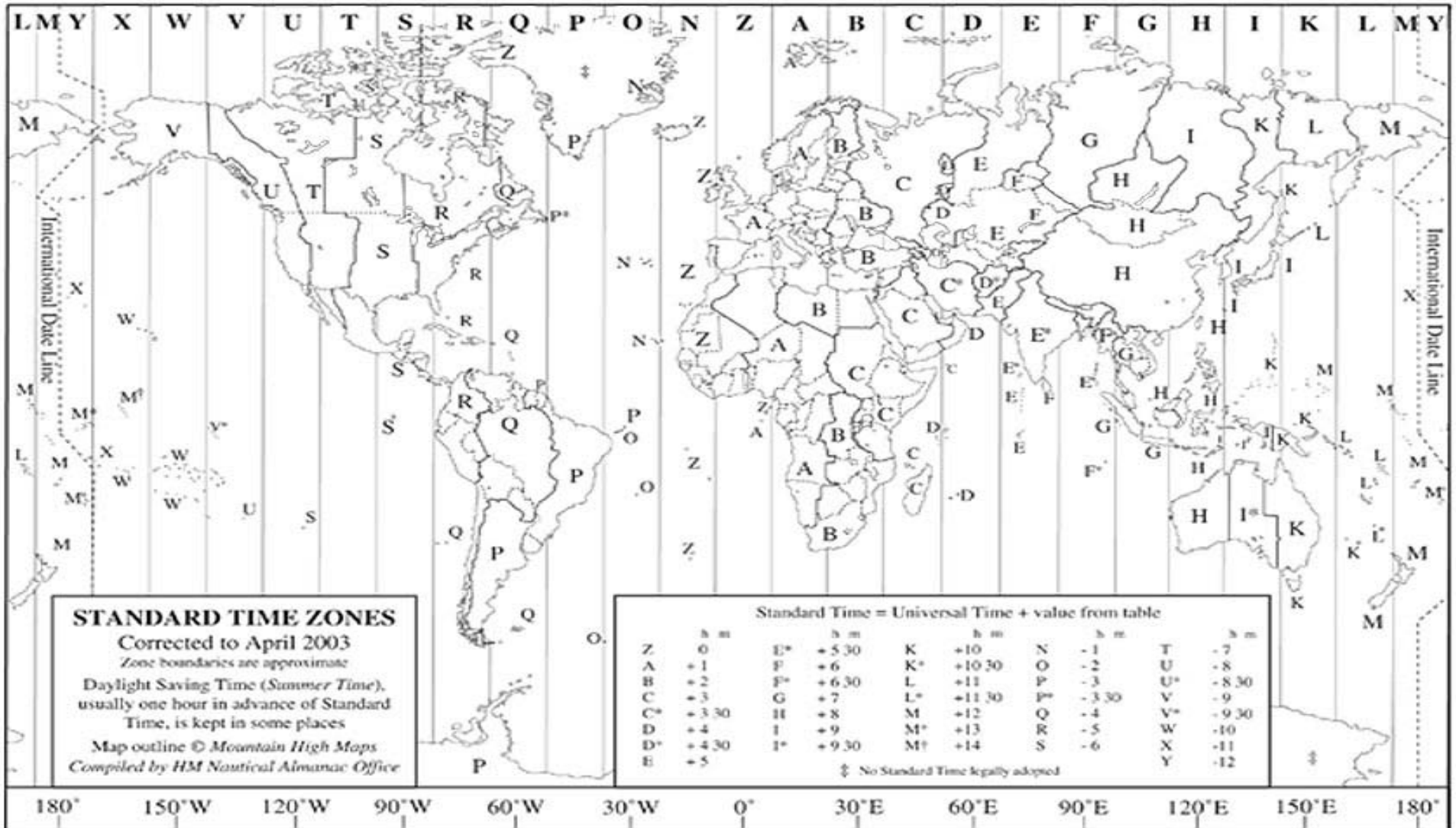..

Y	X	W	V	U	T	S	R	Q	P	O	N	Z	A	B	C	D	E	F	G	H	I	K	L	M
172° 30' W	157° 30' W	142° 30' W	127° 30' W	112° 30' W	97° 30' W	82° 30' W	67° 30' W	52° 30' W	37° 30' W	22° 30' W	7° 30' W	7° 30' E	22° 30' E	37° 30' E	52° 30' E	67° 30' E	82° 30' E	97° 30' E	112° 30' E	127° 30' E	142° 30' E	157° 30' E	172° 30' E	172° 30' E
180° E-W	172° 30' W	157° 30' W	142° 30' W	127° 30' W	112° 30' W	97° 30' W	82° 30' W	67° 30' W	52° 30' W	37° 30' W	22° 30' W	7° 30' E	22° 30' E	37° 30' E	52° 30' E	67° 30' E	82° 30' E	97° 30' E	112° 30' E	127° 30' E	142° 30' E	157° 30' E	172° 30' E	180° E-W
"+ or - 12"	PLUS 11	PLUS 10	PLUS 9	PLUS 8	PLUS 7	PLUS 6	PLUS 5	PLUS 4	PLUS 3	PLUS 2	PLUS 1	ZERO	MINUS 1	MINUS 2	MINUS 3	MINUS 4	MINUS 5	MINUS 6	MINUS 7	MINUS 8	MINUS 9	MINUS 10	MINUS 11	"+ or - 12"
12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	1200
2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z
1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM
0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z	0100Z
2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM
0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z	0200Z
3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM
0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z	0300Z
4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM
0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z	0400Z
5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z	0500Z
6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z	0600Z
7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM
0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z	0700Z
8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
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9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
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10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM
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11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
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1200 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID
1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z	1200Z
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4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM
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6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM
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7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM
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8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM
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9:00 AM	10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM
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10:00 AM	11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM
2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z	2200Z
11:00 AM	12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM
2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z	2300Z
12:00	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 MID	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00
2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z	2400Z

WORLD MAP OF TIME ZONES

CHAPTER 4

FREQUENCIES

401.   <u>PURPOSE</u>

The purpose of this chapter is to give general guidance on radio frequency assignment processes and the associated problem of interference.

402.   <u>GENERAL</u>

    a.   The assignment of radio frequencies is a function of command and, hence, control over radio frequency assignments is vested where possible in theatre commanders in active theatres of operation and in the appropriate departments or ministries in other areas.

    b.   For technical reasons, the greatest practicable degree of co-ordination is necessary in making frequency assignments and the responsibility for ensuring such co-ordination rests upon the authorities stated in subparagraph 402a. above.

    c.   The radio frequency spectrum available for military use is limited. Maximum economy in frequency usage is, therefore, essential and must be constantly exercised by assignment authorities. To prevent harmful interference thorough co-ordination of frequency usage is essential.

403.   <u>FREQUENCY CO-ORDINATION</u>

    a.   Co-ordination of frequency usage, by international agreement, is a responsibility of the appropriate agency of the government concerned. In the case of active theatres of operations, however, when this authority rests with the theatre commander or in other areas where the national authorities consider it expedient, co-ordination of military assignments is normally undertaken by frequency co-ordination committees. Co-ordination of frequency assignments is normally undertaken through national military staff in accordance with established national and local procedures, or through military authorities established to co-ordinate frequencies on behalf of a regional military organisation.

    b.   For those frequency assignments proposed for use within one theatre or area which are considered to be capable of harmful interference to assignments made in another theatre or area, the frequency co-ordination committee concerned is responsible for co-ordinating with the committees of the other affected theatre(s) or area(s).

404.   HARMFUL INTERFERENCE

      a.   Harmful interference is any emission, radiation or induction which endangers the functioning of a radio navigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radio communication service operating in accordance with international regulations.

      b.   Within the congested portions of the frequency spectrum, interference is to be expected and often must be tolerated. Assignment of replacement frequencies should be considered when other efforts at interference reduction are impracticable.

      c.   When harmful interference occurs, action should be taken in the following order:

      (1)   Determine the source, if possible.

      (2)   If the source is local, endeavour to reduce the interference or eliminate by direct action.

      (3)   If local action is impractical or unsuccessful, report the circumstances to higher authority, in accordance with instructions issued by the theatre commander. The report should include the following information:

<u>Report of Harmful Interference</u>

Station causing interference:

A.   Callsign or other identification. (If the Station can be identified the possibility of eliminating the interference is greatly increased.)

B.   Measured frequency.

C.   Type of emission and type of traffic being transmitted.

D.   Measured bandwidth of interfering signal. (Provide lowest and highest frequencies. Indicate model of equipment used for measurement.)

E.   Signal strength. (If field strength meter is not available use scale 1 to 5.)

F.   Nature or severity of interference. (Indicate severity as a percentage of copy (or intelligibility) lost due to interference.)

Transmitter station being interfered with:

G.   Callsign or name of command.

H.   Assigned frequency.

J.	Type of emission and type of traffic or signal being transmitted.

K.	Measured bandwidth.

L.	Signal strength.

Receiving station experiencing interference:

M.	Callsign or name of command.

N.	Location. Fixed station - indicate nearest major city and state or country. Mobile station - indicate co-ordinates in degrees of latitude and longitude.

O.	Date and time that interference commenced and duration in minutes.
(Example: 251003Z(22), 261130Z(5).)

P.	DF fix or bearing of station causing interference, if available.

Q.	Requested action to alleviate the interference and any additional remarks considered useful.

NOTE: An "X" will be indicated after any of the above letters if no information on this particular item is reported.

405.	<u>FREQUENCY PLANNING</u>

ACP 190 provides guidance and information on frequency co-ordination and the allocation and assignment of frequencies to ground, naval and air forces of all command levels.

CHAPTER 5

CALL AND ADDRESS COMPONENTS OF MESSAGE HEADINGS

SECTION I

GENERAL

501.   <u>PURPOSE</u>

The purpose of this chapter is to give general guidance on the various call and address components of message headings and the manner in which they are used for station calling and addressing, routing and delivery of messages. Any combination of characters or pronounceable words designated for use in message headings to identify a command, authority, unit or communications facility, or to assist in the transmission and delivery of messages, may be classed as a station or address designator.

502.   <u>STATION AND ADDRESS DESIGNATORS</u>

    a.   Station and address designators encompass four categories, namely: call signs, address groups, routing indicators and plain language.

    b.   Call signs and Address Groups. Call signs and address groups consist of many different types as listed below. To avoid confusion, when using the term call sign or address group in other than a general sense, it should be qualified by referring to the specific type of calls sign or address group involved

        (1)   Call signs (which may be individual or collective):

            (a)   Indefinite.

            (b)   International.

            (c)   Net.

            (d)   Tactical.

            (e)   Visual.

            (f)   Voice.

            (g)   Signal letters of ships and signal letters or identification numbers of aircraft when used as international call signs.

        (2)   Address groups (which may be individual or collective):

(a)   Conjunctive.

(b)   Geographical.

(c)   Address Indicating Groups (AIGs).

(d)   Special Operating Groups (SOGs).

c.   Routing Indicators. Routing indicators consist of two types, ie worldwide and theatre.

d.   Plain Language. Plain language address designators consist of the assigned title, short title or abbreviation of the command, authority or unit originating or being addressed by message. E-mail messages are addressed in this way.

e.   Definitions. Definitions of the above categories and specific types are contained in ACP 167 series.

f.   Associated Publications. The ACPs associated with the use of call signs and address groups are included in the list of publications contained in Chapter 2 Section V.

SECTION II

USE OF STATION AND ADDRESS DESIGNATORS

503.   <u>GENERAL</u>

a.   Call signs and address groups are used in lieu of plain language for brevity purposes. Both call signs and address groups may become part of a plan for obtaining transmission security.

b.   Call signs, address groups and plain language designators may be used in transmission instructions and in the address component of either encrypted or unencrypted messages. Restrictions on the use of plain language station and address designators are given in paragraph 507.

c.   When used for transmission security, call signs and address groups are changed periodically so that an activity is not continuously associated with the same call sign or address group. This may be accomplished through the use of systematic rotations or through the process of encryption (paragraph 516).

d.   When secure call signs/address groups are used, precautions must be taken to prevent:

(1)   Linkage, ie association of the new call sign/address group of an activity with the old call sign/address group or the association of two different call signs/address groups of the same activity.

(2)   Compromise, ie the identification of the activity using a secure call sign/address group.

e.   Secure call signs/address groups may be mixed with insecure call signs/address groups in the same heading of encrypted or unencrypted messages, provided linkage or compromise will not result.

f.   When messages containing secure call signs/address groups are to be readdressed and retransmitted in their original form, the original secure address must not be altered. The secure call signs/address groups used in the supplementary heading will be based on the external date-time group of the original message.

504.   USE OF CALL SIGNS

a.   Call signs are used primarily for establishing and maintaining communications. Call signs may also be used as address designators when the call sign indicates the addressee or originator.

b.   The use of call signs in message texts should be avoided, except in procedure and service messages. (See paragraph 517.b for use when call sign encryption is in effect.)

c.   Indefinite call signs are used by warships and merchant vessels when transmitting codress messages or other messages requiring security of origination to shore radio stations. Indefinite call signs are also used in the call when transmitting via broadcast method to ships at sea.

d.   Tactical call signs, with the exception of task organisation and aircraft tactical call signs, have a limited area of application. They should not be introduced outside of their normal area of application unless the command assigned such call signs has notified all interested commands in advance.

e.   Call signs are not to be used in the routing line of messages introduced into or relayed over tape relay facilities. However, call signs are authorised for use in procedure line four of the message format.

f.   Unless specific exceptions are authorised for intra-nation or service use, communications stations retransmitting messages which were originated employing visual or voice call signs, shall convert the address portion of the messages to the appropriate address designators authorised for use on the circuits over which onward transmission is to be accomplished.

505.   <u>USE OF ADDRESS GROUPS</u>

a.   Address groups are used primarily for addressing communications. However, in military communications, address groups may, when ordered by allied, national or service authorities, be used as call signs for establishing and maintaining communications, for instance, by naval commands afloat. In non-military communications, where the use of address groups is obviously not appropriate, either internationally recognised call signs or appropriate plain language address designators should be used.

b.   The use of address groups in message texts should be avoided, except in procedure and service messages. (See paragraph 517.b for use when call sign encryption is in effect.)

c.   In utilising conjunctive address groups, care must be exercised to ensure that the meaning is completed by the addition of the appropriate address group denoting a specific command or location.

d.   The conjunctive address group for "Headquarters/Administrative office of _____ (at_____) (in_____)" is of particular importance because of its employment.

   (1)   This conjunctive address group is intended for use when a commander is temporarily absent from his headquarters, flagship or office. Although it will indicate to an outside activity that the commander is temporarily absent, the status of that commander's headquarters/office has not changed and messages from it still carry his authority.

   (2)   Accordingly, messages shall continue to be addressed to the commander even when replying to a message from "Headquarters/Administrative Office of _____ (at_____) (in_____)", but shall be routed to his permanent headquarters/office. It is the responsibility of the administrative staff at that headquarters/office to screen the traffic and re-route to the temporary location those messages requiring the personal attention of the commander.

   (3)   The conjunctive address group meaning "Headquarters/Administrative Office of _____ (at_____) (in_____)" will therefore be used only:

      (a)   As the originator's address group in messages originated by the administrative staff during the absence of the commander.

      (b)   As an action or information addressee in a message originated by the commander which he desires his administrative staff to receive.

   (4)   References to messages originated by "Headquarters/Administrative Office of _____ (at_____) (in_____)" shall contain the plain language designator "Headquarters/Administrative of _____ (at_____) (in_____)" in the reference.

(5)　　The conjunctive address group or plain language address designator for "Headquarters/Administrative Office of _____ (at_____) (in_____)" will not be used in any form or combination for calling or answering on a circuit or net.

(6)　　When, in the judgement of the commander, the above arrangements will not suffice, he may prescribe such special arrangements as are necessary to insure the expeditious delivery of traffic. In such a case consideration must be given to the possibility of non-delivery and to the additional load imposed upon communications personnel.

(7)　　It is the responsibility of the commander to inform all who need to know, including the communications activities serving or expected to serve him, of such special arrangements.

e.　　Geographic address groups should be included as part of an address designator only when necessary to complete the titles of addressees or originators, in which case they are used in combination with a conjunctive address group. Geographical address groups should not be used with the names of naval or merchant ships or the titles of commands afloat (except where a geographical address group is required to complete the conjunctive address group, eg SOPA TRINCOMALEE).

f.　　Address Indicating Groups (AIGs):

(1)　　An AIG is a form of military address designator representing a predetermined list of specific and frequently recurring combinations of action and/or information addressees. The identity of the originator may also be included if the AIG is used frequently by any one originator. Each AIG is numbered for ease in identification. An address group is assigned to each AIG for use as an address designator. AIG numbers may also be used as plain language address designators when appropriate.

(2)　　The purpose of AIGs is to increase the speed of traffic handling and to reduce the length of the address component. AIGs may be used whenever suitable, irrespective of whether the message concerned is unclassified or classified, unencrypted or encrypted or in plaindress or codress form. (See paragraph 508 for additional information concerning AIGs).

g.　　Special Operating Groups (SOGs):

Special operating groups comprised of four letters and identical in appearance with address groups, are provided for use in the headings of messages to give special instructions. They are not to be used until a nation or service has promulgated instructions authorising their use. They must always be encrypted. They may be used singly, or with encrypted or unencrypted call signs or address groups.

506. <u>USE OF ROUTING INDICATORS</u>

a.   Routing indicators are primarily station designators and have the fundamental purpose of indicating the communications point of destination to enable correct routing through message relay systems, either manual tape relay, automatic tape relay or computer based systems.

b.   Routing indicators may be used in lieu of address designators in procedure and service messages (except crypto service messages) addressed to communications centres of message relay networks, except when re-filed commercially, in which case the address must be in plain language.

507. <u>USE OF PLAIN LANGUAGE STATION AND ADDRESS DESIGNATORS</u>

a.   Plain language designators are not authorised for use in lieu of call signs, address groups or routing indicators in establishing and maintaining communications. Use of plain language in the address component of encrypted messages should be contingent upon consideration of the security implications involved. Plain language designators may not be used in conjunction with call signs or address groups. Plain language is only authorised for use in addressing communications:

(1)   With encrypted messages when call signs or address groups are not available.

(2)   With encrypted messages which must be filed by non-military means.

(3)   When so directed by national, service or allied authority.

b.   The use of plain language address designators in the heading of codress messages is prohibited, except when non military refile is required. If necessary to refile a codress message to one or more of its addressees by non military means, the plain language designator(s) of only such addressee(s) which the non-military agency serves shall appear in the message heading. The plain language designator of the station filing the message may be shown as the message signature, if this is required by the commercial company's rules.

c.   Unless required by appropriate directives, plain language geographical place names shall be used only when necessary to complete the plain language titles of addressees or originators. Plain language geographical place names shall never be used in connection with names of naval or merchant ships or the titles of commands afloat.

508.   ADDRESS COMPOSITION AND USE OF ADDRESS INDICATING GROUPS (AIGs)

a.   AIGs are divided into two major categories; those for use and with national military commands or authorities and those for use by and with allied military commands or authorities. AIGs are allocated by block to allied nations and commands (paragraph 510.b). From the block of AIG numbers allocated, each nation or command should provide AIGs of permanent composition and list them in national publications or ACPs. AIGs of temporary composition requiring only local promulgation should also be provided from the allocated block.

(1)   National AIGs should be composed of national military command titles.

(2)   Permanent allied AIGs which must be recorded in ACPs may be composed of allied military command titles within the allied military command structure, command titles of national military forces under the operational control of allied commanders, and certain national military command titles not part of the allied command structure. The latter may be included only after agreement between the allied authority and the nation concerned. Note that the AIGs described may be used for any purpose

(3)   Allied temporary AIGs for local promulgation may include the categories shown in subparagraph (2) above. Subordinate national military command titles may be included if there has been prior agreement by the allied commander and the senior national area commander of the nation concerned. Note that the AIGs described within this paragraph should be used only for the purpose designated.

b.   AIGs should be confined to address compositions of a permanent nature. They are normally composed of five or more addressees, one of which may be the originator. Mobile addressees, such as certain commands afloat, individual ships or aircraft units, which may move from area to area and are thus subject to a change of operational control, should not be included in AIGs primarily assigned for addressing a permanent combination of addressees. The addressing of mobile commands is accomplished as follows:

(1)   When these mobile addressees require infrequent receipt of a particular AIG addressed message, the provisions of subparagraph 508.g. below apply.

(2)   If a large number of commands afloat require frequent or constant receipt of a specific AIG addressed message, the phrase "All (*) commands afloat (in area**) copying this broadcast, concerned with (or interested in) the type of message described in column 5 of the AIG" may be included in either the action or information column, as appropriate. The communications centre serving the authority using the AIG designates the appropriate broadcast by operating signals.

Notes:

1.   *   Insert nationality, service or allied organisation, as appropriate.

2.   **   Insert national, service or allied area designation, if required.

c.   Messages may be addressed to all addressees of a collective type, such as all air squadrons, or naval control of shipping officers, provided all addressees are listed individually below the collective title in the action or information columns, as appropriate.

d.   A concise AIG descriptive title may be included. Descriptive titles assigned to AIGs do not preclude the use of a particular AIG for other types of message, provided the text sufficiently identifies the message as other than that shown in the descriptive title.

e.   Responsible commanders and authorities may request assignment of an AIG to a fixed combination of addressees to which messages are frequently addressed. The command or authority requesting assignment of an AIG will be the responsible authority for that AIG and will be listed in parentheses below the AIG number in column 1 of the AIG format.

f.   The responsible authority is responsible for forwarding modifications to AIGs as they occur and reviewing the AIG at least quarterly for continued requirement and necessary modification. Requests for permanent modification by other than the responsible authority shall be forwarded to the responsible authority to insure that the requested modifications do not detract from the intended use of the AIG.

g.   If all addressees of a particular message are not contained in any AIG, the most appropriate AIG may be selected and action and/or information addressee(s) may be added to or exempted from the address using the appropriate address designators, or, if appropriate, included in the text. There is no limitation on the number of addressees that may be added to or exempted from the address of an AIG. However, care must be taken not to create a longer address than if single address designators were used for all addressees. If the same list of addressees is to be added to or exempted from the composition of an AIG regularly, the AIG should be modified as explained in paragraph 508.f above. When call sign encryption is in effect and call signs and address groups, which normally would be encrypted, are added to or exempted from the address of an AIG, these call signs and address groups must always be encrypted, using the proper call sign encryption method. Express approval of the responsible authority must be obtained before addressees may be exempted from AIGs designed for a special purpose, as designated in the descriptive title of the AIG.

h.   AIGs may be used in conjunction with other AIGs to form the "TO" address (format line 7). However, if a particular addressee is listed in more than one AIG used, precaution must be taken to prevent duplicate delivery.

i.   In the interest of standardisation, AIG listings in appropriate publications are arranged as follows:

Column 1   An AIG number for identification purposes. The responsible authority for that AIG number is also inserted in this column in parentheses.

Column 2   The originator's title in cases where specific combinations of addressees are invariably addressed by a predetermined originator. in certain instances, an AIG may be compiled for the purpose of permitting more than one command to utilise the AIG when originating messages to the same combination of addressees. In this case, Column 2 is left blank.

Columns 3&4 Military action and/or information addressees, or their authorised short titles, as appropriate. Addressees should be limited to those for whom delivery can be accomplished through normal military communications channels.

Column 5   A concise descriptive title, if required.

Column 6   The assigned address group.

j.   The appropriate format lines in the message address component shall be used. In the case of plaindress messages, the AIG number or its address group will always appear in the "TO" line. Additional action and information addressees will appear in the "TO" line or "INFO" line as appropriate. When necessary and when not already provided, the originator's title will appear in the "FM" line.

SECTION III

COMPOSITION AND ALLOCATION

509.   COMPOSITION AND ALLOCATION OF CALLSIGNS

a.   The Call Sign Allocation Plan is as follows:

(1)   The International Call Signs allocated to individual nations are reflected in the Table of Allocation of International Call Sign Series contained in the effective edition of the International Telecommunications Union (ITU) Radio Regulations. The first two characters of each call sign, whether two letters or one number and one letter in that order, identify the nationality of the station. In certain instances where the complete alphabetical block is allocated to a single nation, the first letter is sufficient for national identity. Individual assignments are made by appropriate national assignment authorities from national allocations. Future expansion of the table of allocations may require introduction of a new series for allocation to individual nations. This new series would have for its first three characters a letter, a number and a letter in that order. Allocations having as an

initial character the letters B, F, G, I, K, M, N, Q, R, U or W would be excluded from this new series.

b.   International call signs consisting of three or more characters generally identify stations as follows:

Land and Fixed Stations -   Three characters (the third character must always be a letter). These call signs may be expanded by one to three numerals.

Ship Stations -   Four characters (the third and fourth characters must always be letters). Numerical expansion is permitted for ships' survival craft stations.

Aircraft Stations -   Five characters (the third, fourth and fifth characters must always be letters). Numerical expansion is permitted for aircraft survival craft stations.

c.   Military call signs consist of the following letter-numeral combinations:

(1)   Letter letter   letter   number - ACP 100 Series

(2)   Letter letter   letter   letter -   ACP 113 Series

d.   Certain other combinations of words or numerals, letters or characters, are allocated as call signs to be used for visual and voice identification of ships, aircraft, tactical organisations and task forces, are listed in the appropriate publications. For voice communication, characters when used are normally phoneticized.

510.   COMPOSITION AND ALLOCATION OF ADDRESS GROUPS AND ADDRESS INDICATING GROUPS

a.   Address Groups - Address groups are derived from the following blocks of four letter combinations:

AMAA - AOZZ,	BAAA - BZZZ,	DRAA - DTZZ,	EKAA - EZZZ,
HAAA - HDZZ,	HEAA - HGZZ,	HNAA - HNZZ,	HSAA - HSZZ,
HVAA - HVZZ,	HZAA - HZZZ,	JTAA - JVZZ,	JYAA - JZZZ,
LYAA - LYZZ,	ODAA - OMZZ,	SNAA - SUZZ,	XYAA - XZZZ,
YAAA - YAZZ,	YIAA - YLZZ,	YOAA - YRZZ,	YTAA - YUZZ,
YZAA - YZZZ			

(Note: See ACP 100 series for specific allocations)

511.   COMPOSITION OF ROUTING INDICATORS

a.   General - The Combined Routing Indicator Plan has been developed to satisfy the requirement of both strategic/worldwide networks and tactical/theatre type networks. Routing indicators are used in tape relay networks both manual and automatic, many computer based message handling systems and in teleprinter point to point or switchboard operations. This flexibility and compatibility lends itself to network and transmission mode integration.

b.   Combined Routing Indicator Plan (Strategic/Worldwide) - The plan is designed to meet the requirement of both intra-network and inter-network operation of military communications systems. It provides for expansion, both in intra-network facilities and in the number of inter-related networks. Strategic/worldwide routing indicators should not be used within tactical/theatre networks for routing purposes or to indicate delivery responsibility. To facilitate refile of messages, however, it is permissible to transfer messages into tactical theatre networks without deleting strategic worldwide routing indicators from the message heading.

(1)   The following factors are reflected in routing indicator assignments:

(a)   National or international affiliation and service (when required) of the station.

(b)   The geographical area in which the station is located or area from which it is served.

(c)   Network status of the station, ie major or minor relay, or tributary stations.

(2)   Routing indicators will consist of not less than four and not more than seven letters, including suffixes. (This does not restrict the use of letters in excess of seven for intra-network purposes; routing indicators consisting of more than seven letters will not be transferred between networks except by specific bilateral agreement of the network authorities concerned.)

(3)   The first two letters are pre-allocated as shown in the Routing Indicator Delineation Table on page 5-15. The third letter is initially pre-allocated, but may also be assigned by the responsible national or international authority, in accordance with the provisions of subparagraph (4)(c) 2 and 3 below. The fourth and subsequent letters are assigned by the responsible national or international authority, in accordance with the provisions of subparagraphs (4)(d) and (e), below.

(4)   The meaning of allocated letters and of letter positions is as follows:

(a)   First Letter - The letter "R" or the letter "Q" appears as the first letter and distinguishes strategic/worldwide routing indicators from callsigns, address groups and theatre routing indicators. (But see paragraph 511(4)(b) below.)

(b)   Second Letter - This letter, in conjunction with the first letter, identifies the nation or international alliance to which allotted. The letter "Q" will be used as a first letter when the identification capabilities of "R" have been exhausted, ie when twenty-six nations and international alliances have been allotted second letters in conjunction with "R". The letter "J" is reserved for national reallocation in conjunction with a third letter (subparagraph (4)(c) 3 below). (The assigned routing indicator will not, in all cases, identify the national or international affiliation of a station since some stations may be served by, or be tributary stations of, the network facilities of another nation or international alliance.)

(c)   Third Letter - This letter position serves the following purposes:

    i.   Normally identifies the geographical area in which a station is located or from which it is served.

    ii.   Exceptionally, may be used by nations or international alliances, irrespective of geographical area, for specific alternative purposes, such as when the capacity of assigned second letters is insufficient to meet the requirement, or when more than one geographical area is involved as in the case of a tributary actively connected to two different major relay stations.

    iii.   In conjunction with the second letter "J", may be reallocated, on a national basis, to a country not listed in the table. Such reallocations will not be published in the basic ACP 121, but may be listed in the supplements of the sponsoring nation.

(d)   Fourth Letter - This letter position serves a dual purpose as follows:

    i.   Indicates major relay stations, as generated by assignment requirements.

    ii.   Identifies the service or other national/international entity, as shown in the delineation table.

(e)   Fifth and Following letters - These letters and positions, when added to the four letters of a major relay routing indicator, designate the minor or tributary stations of that major relay station.

(f)   The letter "C" and all two-letter combinations "CA" through "CZ" are reserved for suffixes to relay station routing indicators. Suffixes are intended to aid the routing of messages for processing purposes or localised action by the relay station or any of its supplementary sections and facilities. The use of these suffixes for intra-network messages is optional but they are not authorised for use on joint or combined messages unless shown in the routing columns of the encode sections of the ACP 117 Series, Allied Routing Indicator Book. The meanings of authorised suffixes are as follows:

C   -   Local delivery or refile in page form is required.
              (Used to designate the entire terminal section or the
              principal tributary station of a relay station.)

CA   -   National use, optional.

CF   -   Section which accomplishes delivery of traffic by
               broadcast methods.

CI   -   Section which co-ordinates routing information.

CM   -   Section which prepares tape copies for retransmission.

CN   -   Electrical conference facility or section.

CP   -   Circuit/facility control point.

CR   -   Crypto Centre.

CS   -   Section dealing with service messages.

CT   -   Section which accomplishes delivery of traffic by
               telephone.

CU   -   Section with accomplishes delivery of traffic to
               commercial carriers.

CW   -   Section which relays traffic by radio telegraph (CW).

CY   -   National use, optional.

CZ - National use, optional.

(5) Major and minor relay stations are designated in accordance with the following criteria:

 (a) Major Relay Station - A relay station is normally designated as a major relay station under either of the following conditions:

  i. When connected to two or more trunk routes thereby providing an alternative route.

  ii. To meet command requirements.

 (b) Minor Relay Station - A relay station is designated as a minor relay station when it has relay responsibilities, but does not provide an alternate route.

(6) Major and minor relay stations are identified by the number of letters in their routing indicators as follows:

 (a) Major Relay Station - Four letters.

 (b) Minor Relay Station - Five or more letters.

c. Combined Routing Indicator Plan (Tactical/Theatre) - The plan is designed to meet requirements of military communications systems self-contained within a command/theatre. Except for the differences outlined below, this plan is identical with the strategic/worldwide plan.

(1) Tactical/theatre routing indicators are restricted to use within the individual system. These routing indicators shall not be used in the heading of messages transmitted over the networks of strategic/worldwide communications systems.

(Note: In case of readdressal, since the theatre routing indicators are contained in the original message heading and therefore have no bearing on the supplementary heading, it is not considered essential that they be substituted by the operating signal ZEN.)

(2) The letter "U" always appears as the first letter and distinguishes tactical/theatre routing indicators from call signs, address groups and strategic/worldwide routing indicators.

(3) Each nation and international alliance shall be allotted the same letter in the second position as in the strategic/worldwide plan. As a result, two nations or

alliances in some instances will share the same letter in this position. In such cases, care must be exercised in the allocation to avoid confusion in the operation of allied networks, eg allocation of the same second letter in the strategic/worldwide plan to two NATO nations should be avoided.

ROUTING INDICATOR DELINEATION TABLE

LTR	First Position	Second Position		Third Position	Forth Position
		Nation or International Alliance with:		Geographic area (see Note 7)	Service
		R in 1st Position	Q in 1st Position		
A		Australia		Eastern Asia	Army
B		United Kingdom			Army
C		Canada		Central North America	Army
D		Denmark		United Kingdom Iceland	Army
E				Eastern North America	Army
F		France		Continental Europe	Army
G		Germany		Continental Europe	Army
H		United States		Central and Southern Pacific	Army
I		Italy			Navy
J		Reserved for National reallocation (see Note 7)			Navy
K		Greece		Alaska-Aleutians	Navy
L		Luxembourg		Caribbean and South America	Navy
M		SEATO		Philippines and Thailand	Navy
N		Netherlands			Navy
O					Navy
P		Portugal			Air Force
Q	Reserve Worldwide Routing Indication (see Note 5)	Belgium		Middle East	Air Force
R	Worldwide Routing Indicator				Air Force
S		South Africa		Western Asia	Air Force
T		Turkey		North Western Africa	Air Force
U	Theatre Routing Indicator (see Note 6)	United States			Air Force
V					Air Force
W		NATO		Western North America	As Required
X		NATO			As Required
Y		Norway		Australia and New Zealand	As Required
Z		New Zealand			As Required

Table 5-1

NOTES:

1.	Geographical areas listed in the third column are shown in the Routing Indicator Delineation Map.

2.	Automatic equipment having the capability of recognising letters indicated in the second position are expected to be set to recognise and act on those letters assigned to nations and international alliances with which there is the greatest requirement for traffic exchange. Traffic addressed to other nations/international alliances for which automatic equipment does <u>not</u> have

the capability to recognise and act upon letters in the second position will require manual handling.

3.　　　Service, or other entity (eg special or joint networks) identification is designated by the fourth letter position. The allocations shown above should be used. They will be reflected in the ACP 117 series or appropriate supplement(s). Any deviation from the standard allocation will also be reflected in the appropriate routing documents.

4.　　　Where required, the letters A, I, P and W may be used to indicate major relay stations of primary status. The purpose of this indication is to facilitate the identification of relay stations having primary influence within a network over traffic routing in designated geographical areas. When this is the case, the station will be listed as a "Primary Relay Station".

5.　　　See subparagraphs 511.b.(4).(a) and (b).

6.　　　See subparagraph 511.c.

7.　　　See subparagraph 511.b.(4).(c).

SECTION IV

ASSIGNMENTS AND REQUESTS

512.   <u>ASSIGNMENTS</u>

a.   International call signs are assigned by each nation in accordance with the International Allocation Table. Assignments which require promulgation in ACPs are to be reported to the preparing agency.

b.   Call signs and address groups are assigned by national, service or command authorities from allocations in relevant publications. Assignments which require promulgation in ACPs are to be reported to the preparing agency.

c.   Address groups are assigned to facilitate addressing of messages as follows:

(1)   When a nation, service or command normally prescribes the use of plaindress procedure for encrypted and unencrypted messages and the frequency and volume of traffic to and from an activity is considered sufficiently large, an address group may be assigned to the activity.

(2)   When a nation, service or command normally prescribes the use of codress procedure for encrypted messages and:

(a)   The activity operates its own crypto centre but cannot be called directly, an address group may be assigned to permit the called stations to determine refile or delivery responsibility without decrypting the message.

(b)   If the activity in question does not operate its own crypto centre and its encrypted traffic must be routed to an activity previously designated as guard, an address group is not normally assigned.

d.   Routing indicators are normally assigned only to tape relay communications facilities. Each such facility may serve any number of commands or activities. Routing indicators are assigned by the appropriate national authority in accordance with the combined Routing Indicator Plan described in paragraph 511. Those worldwide indicators to be promulgated in the ACP 117 series are to be reported to the appropriate authority.

e.   Address indicating groups (AIGs) are assigned as necessary to fulfil the requirements of paragraph 505.f.

513.   <u>REQUESTS</u>

a.   Requests for call signs, address groups and routing indicators shall be forwarded through the command channels to the national or allied assignment authority.

b.   Requests by the national or allied assignment authorities for new or increased allocations of call signs and address groups shall be forwarded to the preparing agency.

c.   All requests for call signs and address groups shall be submitted in accordance with the instructions contained in this chapter and shall include the type required as specified in paragraph 502.

514.   <u>FORMAT FOR SUBMITTING REQUESTS FOR CORRECTIONS</u>

To aid the preparing agency in maintaining the call sign, address group and routing indicator publications it is essential that requests for amendments be forwarded in the correct format, as outlined in the publication which it is desired to amend.

SECTION V

SECURITY OF CALL SIGNS AND ADDRESS GROUPS

515.   <u>GENERAL</u>

a.   Secure call signs and address groups are used on insecure nets and links to conceal the identities of stations or messages originators and addressees and so make interception and traffic analysis more difficult.

b.   When call sign/address group assignments are changed frequently, traffic analysis is impeded because:

(1)   Stations must be re-identified or linkage established before target information can be provided to intercept stations.

(2)   Assumptions and inferences concerning the order of battle implied by previously reconstructed nets and networks must be re-evaluated.

(3)   Originators and addressees of messages are unknown until the new assignments can be determined.

516.   METHODS FOR CHANGING CALL SIGN/ADDRESS GROUPS

a.   The following methods may be used to obtain call signs/address groups; the degree of security attained is dependent upon the rate of change:

(1)   Centralised random scrambles are most easily obtained by using machine processes to re-order a population of call signs/address groups, which are then distributed to activities for use.

(2)   Systematic rotations are used to change call signs/address groups without re-ordering the allocated call sign/address group population. References (which may be block-row-column designators, page-line designators, etc) are assigned in lieu of call signs/address groups. Rotation of call sign/address group assignments is accomplished by changing references by means of conversion tables

(3)   Encryption is used to change assigned groups by substituting new characters through use of changing key lists. Groups to be encrypted shall be designated by the appropriate authority.

b.   Nations, services or allied commands, in selecting which of the above methods shall be used, must consider the operational requirements and capabilities of not only their own forces, but also those of any nation, service or allied command with whom they may be exchanging message traffic.

517.   IMPLEMENTATION OF SECURE CALL SIGNS/ADDRESS GROUPS

a.   Scrambled and Rotation methods. As a means of providing call signs/address groups security, nations, services or allied commands may direct that a periodic change of certain call sign/address groups to be accomplished through use of either of the methods described in paragraphs 516.a.(1) and (2) above.

b.   Encryption Method. Nations, services or allied commands may direct that a periodic change of certain call signs and address groups be accomplished by encryption by those forces equipped to employ this method. Instructions for the call signs and address groups to be encrypted and appropriate distribution of the cryptographic devices must be confirmed prior to implementation.

(1)   Protection of Encrypted Call Signs/Address Groups:

(a)   When call sign encryption is directed, forces under the operational control of the implementing authority not so equipped, will be required by the implementing directive to provide protection for the call sign encryption system. This is achieved by including the address within the encrypted text (ie CODRESS) and employing unencrypted call signs or address groups in the transmission instructions only as may be necessary to

achieve delivery of a particular transmission, or safeguarding the security of the system by use of passing instructions within the encrypted text.

(b) When call sign encryption is in force for both encrypted and unencrypted messages, the text of unencrypted messages must not contain information which will reveal the identity of the originator and/or addressees and thus compromise their own headings. This may be overcome by substitution of encrypted call signs or address groups for ships, organisations etc or by encryption of the message.

(2)   Identification of Encrypted Call Signs/Address Groups Encrypted call signs and address groups will be identified by an unencrypted character appended as the fifth element, after encryption of the assigned call sign or address group. The unencrypted character also identifies the cryptographic keying material being employed.

c.   Co-ordination. Prior to implementation of secure call sign and address group plans, co-ordination with the appropriate communication security agency is required to assure the availability of necessary materials. To minimise confusion and reduce the possibility of compromise, all implementing authorities are to ensure that all appropriate service, national or allied commanders are advised immediately. This information is required as it is essential that other services protect the secure call signs or address groups of the implementing service.

d.   Training. Training in the appropriate methods, materials and procedures for obtaining and using secure call signs/address groups is the responsibility of national, service and allied commanders. Exercise commanders may be authorised to place changing call sign/address group plans in effect for exercise purposes. Precautions must be taken to ensure that co-ordination has been effected with commands in adjacent areas Arrangements for the materials required for training or exercises should be made with the appropriate command security agency.

518.   SECURITY CLASSIFICATION OF CALL SIGN/ADDRESS GROUP INFORMATION

a.   General. The following guidance is provided to assist authorities in determining the correct security classification to be assigned to individual call signs/address groups, block allocations of call signs/address groups, publications containing call sign/address group allocations and/or assignments, or extracts of call sign/address group ACPs or supplements. The application of a security classification to call sign and address group information is made for the purpose of denying to an enemy an important basis for communications intercept. Knowledge of the call sign and/or address group population in use by an organisation may be of value to an enemy intelligence unit desiring to intercept the communications of that organisation.

b.   Call Sign/Address Group ACPs and Supplements. Those publications classified CONFIDENTIAL have been assigned that classification primarily for the purpose of restricting the accessibility of unauthorised persons to the overall system. Basic assignments contained in these publications do not provide security of address in their own right, but must become part of a system for obtaining changing call signs/address groups if security of address is required (paragraph 516).

c.   Individual Call Sign/Address Group Assignments. These assignments must be classified on their own merit depending upon the degree of sensitivity of the command, activity or purpose for which assigned and the amount of sensitive information associated with the assignment. Normally, individual unencrypted or non-changing call sign/address group assignments are considered unclassified. However, a compilation of call signs/address groups and associated assignment information may provide sensitive information, in which instance, the listing should be classified accordingly. Call signs assigned to fixed stations are considered unclassified. It may be desirable to classify information pertaining to a fixed station during planning and development stages, however, once that fixed station becomes operational, the location and call sign can no longer be disguised.

d.   Block Allocations of Call Signs/Address Groups. Block allocations of call signs used in tactical communications are normally classified CONFIDENTIAL to restrict access to this information.

e.   Service, Agency or Command Publications. Call sign/address group allocations and/or assignments included in documents such as OPLANs, OPORDs, CEOIs, SOIs and similar type documents, should be assigned security classifications determined in accordance with subparagraphs 518.c and d above.

f.   Extracts of Call Sign/Address Group ACPs or Supplements should normally be assigned security classifications determined in accordance with subparagraphs 518.c and d above.

g.   Exceptions. In any situation not specifically covered by the foregoing, the security classification assigned to the basic publication from which the allocation(s) and/or assignment(s) are obtained should be used.

CHAPTER 6

SPECIAL INSTRUCTIONS AND PROCEDURES

SECTION I

RECORDS

601.   <u>TYPE AND IMPORTANCE</u>

    a.   The maintenance of an adequate and carefully prepared communications log is important. Daily communication office/centre logs shall be maintained by supervisory personnel to afford a comprehensive report of all circuit interruptions, delays to traffic movement and any other irregularities of operation. This record should be maintained in sufficient detail to explain adequately all traffic handling delays and circuit interruptions.

    b.   Number sheets and circuit logs, as appropriate, are to be maintained when practicable by all transmitting, receiving and relaying stations and are to record every transmission sent or received.

SECTION II

GENERAL CALLING PROCEDURES

602.   <u>DOUBLE CALL SIGN CALLING PROCEDURE</u>

The standard Allied method of establishing and conducting combined communications is the call sign of the station called, followed by the call sign of the calling station and separated by the prosign "DE" or the Proword "THIS IS". Details of this procedure are contained in the appropriate ACPs as listed in paragraph 213.

EXAMPLE;   C6M DE D4T

603.   <u>SINGLE CALL SIGN CALLING PROCEDURE</u>

The single call sign calling procedure is a method of establishing and conducting radiotelephone communications in which subordinate station call signs are used exclusively. This procedure may be sanctioned for Allied use in combined operations only when all participating military services have previously subscribed nationally to its use on an intra basis. Details of this procedure are not contained in basic ACPs but will appear in ACP supplements of the nations and/or services subscribing to its use.

SECTION III

CODRESS

604.   <u>GENERAL</u>

a.   Codress is a procedure whereby the entire address of a message is contained within the encrypted text. The heading of any transmission of the message contains only the information necessary to enable communications personnel to handle it correctly. Codress procedure provides a means of denying information that may be revealed by the inclusion of the full address in the heading of a message.

b.   Codress may be implemented by a nation, service or appropriate allied authority for use with high-grade off-line crypto systems. These authorities may prescribe the general use of Codress or may delegate authority to implement the procedure to a subordinate commander within his area of responsibility, unless Codress has been declared mandatory by a higher authority. To minimise confusion and reduce the possibility of compromise, all implementing authorities shall ensure that appropriate national services or command authorities are advised immediately of implementation.

c.   To provide maximum transmission security, Codress should be used when making a classified reply or reference to a Codress message.

605.   <u>RULES FOR USE</u>

a.   The address in the text of a Codress message is to be written in the order: Originator, Action addressee(s), Information addressee(s) and Exempt addressee(s), preceded by the appropriate prosigns.

b.   Additional passing instructions which can be encrypted should also be placed in the text as part of the address or elsewhere.

c.   Plain language addressees only may be used in the text. (See also para 605.e)

d.   On each transmission of a message, the message heading shall include only such station or address designations as are necessary to enable relaying or receiving stations to handle the message correctly and expeditiously. External transmission and message instructions shall be kept to a minimum for each transmission, ie those necessary to enable the station called to determine its responsibility without decrypting the message. If the station called is to decrypt the message as well as relay it, the station designations of both the station called and the station to which the message must be relayed will be included in the transmission instructions.

e.   Plain language addressees in the headings of Codress messages are prohibited on military circuits. It is permissible to use plain language addresses when necessary for

commercial filing or refiling. Plain language addresses, including cable or telegraphic addresses of either the actual addressee(s) or the communications centre(s) serving the addressee(s), may be used. In the case of multiple address messages, only the addresses of those addressees reached by commercial means will appear in the heading. The address in the heading is not to be an exact duplicate of that in the encrypted text. Should a commercial station or office require the message to bear a signature, the plain language designator of the filing communication centre or authority may be used.

SECTION IV

ENEMY CONTACT REPORTS

606.   GENERAL

The purpose of this section is to present the basic communications information required for the reporting of enemy contacts in time of emergency. The ACP 176 series should be consulted for complete details of maritime enemy contact reporting.

607.   COMMAND RESPONSIBILITY

It is the responsibility of each commander to promulgate detailed instructions for reporting contact with the enemy, covering what to report, to whom to report it and the format of the report.

608.   RESPONSIBILITIES OF THE COMMUNICATIONS ORGANISATION

Reporting enemy contacts and forwarding vital information, while a function of command, depend to a great degree on the ability of communications personnel to handle the reports correctly and rapidly. Accordingly, the basic principles involved in preparing and transmitting enemy contact reports are set forth below in order that communications personnel may at all times be aware of their importance and well acquainted with such special handling practices as are required.

609.   TYPE AND COMPOSITION OF REPORTS

a.   The standard form for reporting enemy contacts consists of four components transmitted in the following sequence:

(1)   WHAT - The number and description of the enemy (using raid or locating prefix as appropriate).

(2)   WHERE - The position of the enemy.

(3)   WHITHER - The course and speed of the enemy.

(4)   WHEN - Normally the date-time group of the message; however, the observation or detection time may be signalled if wished as a time group forming part of the text of the message.

b.   When contact has first been made with the enemy, the fact should normally be reported immediately by means of an initial report, using the standard form given in subparagraph a. above.

c.   There may be occasions when the originator of an initial report is unable to observe and report the details of all the components of the standard form. Nevertheless, some form of report must be made to alert other friendly forces. This is done by using an abbreviated form, signalling the "WHAT" component, plus other components for which there are time. A report of this kind is, however, of value only to ships and aircraft that are in company with the originator, unless the "WHERE" component can be included and expressed geographically.

d.   The initial report should be followed by amplifying reports. These should make reference to the initial report and contain such additional information as may have been gleaned after the initial report was filed. The first amplifying report must contain the latest position of the enemy (ie the "WHERE" component).

610.   <u>RAPIDITY AND SECURITY IN TRANSMITTING ENEMY CONTACT REPORTS</u>

a.   The relative importance between speed and security in reporting enemy contacts depends upon the circumstances at the time.

b.   If it is obvious that the enemy is aware that he has been contacted, or is in a position to inflict early damage, speed is more important than security.

c.   It is important that security restrictions are not imposed unnecessarily. Their imposition will delay transmission, especially from aircraft and particularly from those which carry a crew of less than three.

d.   Security precautions should be observed whenever practicable in order to deny the enemy valuable information which, if transmitted in plain language and intercepted by the enemy, gives time to counter attack.

611.   <u>TRANSMISSION</u>

The procedure to be used for the transmission of enemy contact reports by radiotelephony are given in ACP 125 series.

612.   <u>PRECEDENCE</u>

The degree of precedence which should be used with the different types of enemy contact reports is given in paragraph 329. However, air combat reports do not require any indication of precedence, nor do raid reports within a force, since these are made on special nets.

613.   <u>AUTHENTICATION</u>

Authentication, when in force, should be used when making initial, amplifying and negative reports in plain language or a brevity code. Lack of such authentication should not, however, prevent retransmission or relay of the message to higher authority.