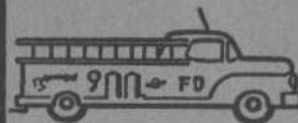
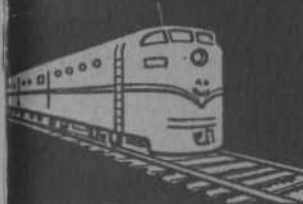


RADIOTELEPHONE (LAND SERVICES) HANDBOOK



DEPARTMENT
OF
TRANSPORT

TELECOMMUNICATIONS
AND
ELECTRONICS
BRANCH



CANADA

RADIOTELEPHONE

(LAND SERVICES)

Handbook

DEPARTMENT OF TRANSPORT

TELECOMMUNICATIONS AND ELECTRONICS BRANCH

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FOREWORD

This handbook is intended as a guide to those in the land service who operate fixed, base and mobile radiotelephone stations. It will also be useful as a textbook for candidates preparing for examinations leading to Restricted Radiotelephone Operators' Certificates.

Correct procedure on the part of operators of radiotelephone equipment is necessary for the efficient exchange of communications and particularly important where lives and property are at stake. It is also essential for a fair sharing of "On-the-Air" time in the crowded radio spectrum.

The procedures are based upon those formulated by the International Telecommunications Union (ITU) and are used by all Department of Transport fixed stations. Numerous examples are included.

This publication also sets forth the regulations governing radiotelephone stations in the land service. All the regulations are based upon the Radio Act and the General Radio Regulations made under it.

This handbook is divided into three main chapters: (1) Regulations, (2) Procedures, (3) Distress, Urgency and Safety Communications. Paragraphs are all numbered. Prime or main paragraphs are indicated by a single number, while secondary or sub-paragraphs carry the number of the prime paragraph followed by one or more numbers which indicate its relationship to the prime paragraph. This system of paragraph numbering has been found by experience to permit easy cross-reference within the text and a simple means of reference in correspondence. Paragraph numbers when used for reference purposes include all subdivisions of that paragraph.

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RADIOTELEPHONE LAND SERVICES

1. REGULATIONS

1.1 **Operators' Certificates.** Radiotelephone equipment installed in any vehicle in Canada or at any fixed or base station in Canada may only be operated by persons holding an appropriate Certificate of Proficiency in Radio. In most instances a Restricted Radiotelephone Operator's Certificate will suffice.

1.1.1 A Convention between Canada and the United States of America relating to the operation by citizens of either country of certain radio equipment or stations in the other country, commonly referred to as "The Reciprocal Agreement," provides that an American citizen may operate the radio equipment in an American vehicle in Canada if:

- (1) it is installed in (a) public safety vehicles (police, fire, etc.),
- (b) vehicles employed in the operation of a pipe line or other industrial facility extending across the border,
- (c) vehicles regularly engaged in the public carriage of persons or goods between the two countries (taxis, buses, trains, etc.),
- (d) other vehicles limited to communicating through common carrier radio communication facilities,

- (2) it is used in the course of providing normal service,
- (3) the station is licensed by the U.S. Federal Communications Commission,
- (4) there is on board the vehicle a valid permit (form 2190) issued by the Department of Transport authorizing such operation.

1.2 **Station Licences.** All radio stations installed in vehicles registered in Canada or established on the ground in Canada are required to be licensed.

1.2.1 The licence must be posted in a conspicuous place near the equipment so that it may be readily available for inspection.

1.2.2 The radio licence specifies the call sign assigned to the station, the frequencies which may be used for transmitting and any special conditions under which the station shall be operated.

1.2.2.1 To ensure that safety of life aspects of the radiotelephone services are protected and to ensure fair sharing of the radio spectrum, stations will only be licensed when the equipment has been found to be acceptable for licensing by the Department of Transport. In order to avoid unnecessary financial difficulties it is recommended that before purchasing radio equipment the prospective buyer consult with the nearest Department of Transport radio inspection office to determine that the equipment it is proposed to use is of a type for which a licence can be obtained.

1.2.2.2 No radio station may be established or radio equipment installed or operated without a radio licence issued by the Minister of Transport for Canada. No change may be made in an installation without authority of the Minister of Transport.

1.2.3 Licence fees are due April 1st and the licence year ends on March 31st the following year. The full licence fee for the current fiscal year must be paid regardless of when the licence is granted. Licence fees for stations depend upon the class of service provided by the station and are set forth in the following tables:

Licence fee for a land (fixed or base) station performing:

| | |
|--|-----------------|
| (a) Public Commercial Service..... | \$100.00 |
| (b) Restricted Public Commercial Service..... | 50.00 |
| (c) Private Commercial Service..... | 10.00 |
| (d) | |
| (e) Provincial Government Service..... | no fee required |
| (f) Municipal Service..... | 1.00 |
| (g) Experimental Service..... | 5.00 |
| (h) | |
| (i) Public Commercial Receiving Service..... | 10.00 |
| (j) Private Commercial Receiving Service..... | 2.00 |
| (k) Public Commercial Automatic Repeater Service..... | 25.00 |
| (l) Private Commercial Automatic Repeater Service..... | 5.00 |
| (m) Remote Control Service..... | 1.00 |
| (n) Commercial Broadcasting Receiving Service.... | 25.00 |

Licence fee for a mobile station performing:

| | |
|---|-----------------|
| (a) Public Commercial Service..... | 25.00 |
| (b) Private Commercial Service..... | 2.00 |
| (c) | |
| (d) Provincial Government Service..... | no fee required |
| (e) Municipal Service..... | 1.00 |
| (f) Experimental Service..... | 5.00 |
| (g) Public Commercial Receiving Service..... | 10.00 |
| (h) Private Commercial Receiving Service..... | 2.00 |
| (i) Remote Control Service..... | 1.00 |

1.3 **Secrecy of Communications.** Radio operators and all persons who become acquainted with radiocommunications are bound to preserve the secrecy of correspondence. No person shall divulge the contents, or even the existence, of correspondence transmitted, received or intercepted by radio, except to the addressee of the message or his accredited agent, or to properly

authorized officials of the Government of Canada or a competent legal tribunal, or an operator of a tele-communications system as is necessary for the furtherance or delivery of the communications. The foregoing restrictions do not apply to messages of distress, urgency or safety or to messages addressed to "ALL STATIONS;" i.e., weather reports, storm warnings, etc., or to transmissions from a broadcasting station.

1.3.1 Any person who violates the secrecy regulations is liable, on summary conviction to a penalty not exceeding one hundred dollars (\$100.00), or to imprisonment for a term not exceeding six months or to both fine and imprisonment.

1.4 Control of Communications.

1.4.1 **Controlling Station.** In communications between base stations and mobile stations the mobile station shall comply with the instructions given by the base station in all matters relating to the order and time of transmission, the choice of frequency and to the duration and suspension of work. In communications between mobile stations the station called shall be the controlling station subject to intervention by a base station. In communications between base or fixed stations the station called shall be the controlling station except in net operation when the net control station shall control the communications. These provisions do not apply in cases of distress.

1.4.2 **Mobile Station.** The operation of a mobile station is under the control of the person in charge of the vehicle.

1.4.3 **Communication With Base Stations.** As a general rule mobile stations should pass their traffic to the radio station appropriate to the area in which they are

operating, except that they may communicate with other base stations when traffic can be handled more efficiently.

1.5 **Unauthorized Communications.** Radio operators are not permitted to transmit unnecessary signals of any kind. Communications must be restricted to those necessary for the transmission of authorized messages. (See 2.2.9 and 2.3.8 for instructions relating to test transmissions).

1.5.1 **Profane Language.** Profane and offensive language is strictly prohibited.

1.5.2 **Penalty.** Any person who violates the regulations relative to unauthorized communications or profane language is liable, upon summary conviction to a penalty not exceeding fifty dollars (\$50.00) and costs or to imprisonment for a term not exceeding three months.

1.5.3 **False Distress Signals.** Any person who knowingly transmits or causes to be transmitted any false or fraudulent distress signal, call or message, or who without lawful excuse interferes with or obstructs any radio communication, is guilty of an offence and is liable, on summary conviction to a penalty not exceeding five hundred dollars (\$500.00) and costs or to imprisonment for a term not exceeding six months or to both fine and imprisonment.

1.6 **Hours of Service (Watchkeeping).** The hours of service for any given station are usually dictated by the type of service provided by the station. Normally mobile stations should maintain watch at all times that the vehicle is in operation, and base stations should not cease watch until all mobiles for which it is responsible have returned to base or otherwise indicated that they

have ceased operation. Fixed stations, unless operating on established schedules should not normally cease watch until all traffic on hand has been cleared.

1.7 **Time.** The twenty-four hour system should be used in expressing time. It should be expressed and transmitted by means of four figures, the first two denoting the hour past midnight and the last two the minutes past the hour. When no possibility of confusion is likely to exist the figures denoting the hour may be omitted.

Examples:

- 12:45 AM expressed0045
- 12:00 noon expressed1200
- 12:45 PM expressed1245
- 11:45 PM expressed2345
- 12:00 midnight expressed2400 or 0000
- 1:30 AM expressed0130
- 1:45 PM expressed1345
- 4:30 PM expressed1630

1.7.1 Normally Greenwich Mean Time (GMT) should be used. When written G.M.T. is usually indicated by letter Z. Where operations are conducted solely within one time zone standard zone time may be used, care shall be taken however that the time zone is clearly indicated. Daylight Saving Time should not be used. Standard time zones should be indicated when written by the following letters.

- NewfoundlandN
- AtlanticA
- EasternE
- CentralC
- MountainM
- PacificP
- YukonY

Examples:

- 6:30 PM E.S.T. is expressed1830E
- 10:30 AM P.S.T. is expressed1030P
- 2:30 AM G.M.T. is expressed0230Z

1.7.2 **Date.** Where the date as well as the time of day is required to be shown, a six figure group should be used. The first two figures indicate the day of the month and the following four figures indicate the time.

Examples:

| Information | Expressed |
|--|-----------|
| Noon on the 16th day of the month (GMT) | 161200Z |
| 8:29 PM (GMT) on the 2nd day of the month | 022029Z |
| 2:45 AM (EST) on the 24th day of the month | 240245E |

1.8 **Record of Communications (Radio Log).** All radio stations are required to keep a log or diary either written or automatic, e.g. tape recording, in which is recorded in chronological order the activities of the station, including the nature of messages and signals transmitted, received or intercepted by the station. (See 1.8.2 for exceptions relative to mobile stations.)

1.8.1 **Fixed and Base Stations.** Fixed and base stations are required to keep a radio log in which shall be recorded the following particulars:

- (1) the name or location of the station and its call sign;
- (2) the times of opening and closing of the station, where continuous service is not provided;
- (3) the name(s) of the radio operator(s) on watch and the time of going on and off watch;
- (4) the frequency(ies) guarded;
- (5) a summary of all communications transmitted, received or intercepted relating to distress, urgency and safety traffic;

(6) brief summaries of communications exchanged with other stations, with the frequency(ies) used for both transmission and reception; and

(7) a reference to important service incidents.

1.8.1.1 In the case of base stations with more than one control point, e.g. Restricted Common Carrier stations, each control point shall maintain a separate log, except where provision has been made for automatic log keeping, such as by the use of a tape recorder. In the case of automatically recorded logs provision shall be made for the insertion of time announcements approximately every fifteen minutes, if the time is not indicated in actual transmissions.

1.8.2 **Mobile Stations.** Except for communications relating to distress and urgency communications and for communications passed directly between vehicles, a mobile station need not maintain a radio log. However if prior arrangements have been made for such information to be recorded by a base station the requirement for a record to be kept by the mobile station may be waived. Entries relative to distress and urgency communications, harmful interference or interruption to communications should be associated with information concerning the time and location of the vehicle.

1.8.3 **Retention of Log.** Radio logs shall be retained by the licensee of the station for at least ninety days for written logs or thirty days for automatically recorded (tape recorder) logs except that any portion of the log pertinent to accident inquiries or investigations shall be retained until all action resulting from such incidents are concluded or it is evident that such records will no longer be required.

1.8.3.1 Radio logs shall be available for inspection by Radio Inspectors or other authorized persons either at the station or the office(s) of the licensee at all reasonable times.

1.8.4 **Examples of Log-Keeping.** The following examples are intended to show how various items may be entered in the radio log. It will be noted that the 24-hour time system based on GMT is employed (See 1.7 for further details).

(1) Watch-keeping

0800 A.K. Wilson off duty

R.W. Johnson on duty

1600 R.W. Johnson off duty

B.K. Green on duty

(2) Frequency(ies) guarded

0800 Stand-by on day frequency 5499 Kc

1730 Change to night frequency 2917 Kc

1840 Checked time signals (3 sec. fast) 3330 Kc

41 Returned to night frequency 2917 Kc

(3) Distress, urgency and safety (See 3.)

Distress:

1225 MAYDAY from CF-ZXY, 50 miles S of Seven Islands at 1725E, 4000 ft., Anson 5, icing, attempting crash landing on ice.

1226 MAYDAY acknowledged by Seven Islands radio.

1232 CF-ZXY cancels MAYDAY, maintaining altitude and returning to Seven Islands. Distress traffic ended.

Urgency:

1135 Urgent message from Cessna ABC, undercarriage of Grumman XYZ appears to be damaged.

- 1137 Urgent call to XYZ, advise him re his undercarriage—acknowledged.
- 1150 XYZ advised undercarriage down and locked, will attempt landing.
- 1158 XYZ landed—emergency over.

Safety:

- 1730 CF-CBA encountered heavy icing, 10000 ft., 45 miles NW Black Narrows.
- 1750 Safety message to CF-BCA re icing reported by CBA.

(4) Exchange of Communications:

- 1537 Advised Car 3 proceed to 579b 52nd Avenue West.
- 1539 Sent message No. 7 to XME97
- 1615 Received message No. 2 from XME29

(5) Service Incidents:

- 2140 Receiver went dead. Second detector tube replaced, receiver OK.
- 2315 Power failure due thunder storm.
- 2317 Emergency power supply operating and all equipment OK.
- 2328 Hydro power restored.

1.9 **Frequencies to be Used.** The frequencies assigned to a station and the purposes for which they may be used are detailed on the station licence.

1.9.1 In the land mobile service when more than one frequency is available for any given purpose, the base station shall normally determine which frequency shall be used.

2. **PROCEDURES**

2.1 **General.**

2.1.1 **Transmitting Techniques.** The efficient use of radiotelephony depends very greatly on the method of speaking and articulation of the operator. As the distinctive sounds of consonants are liable to become blurred in the transmission of speech and as words of similar length containing the same vowel sounds are apt therefore to sound alike, special care is necessary in their pronunciation.

2.1.1.1 Speak all words plainly and each word clearly so as to prevent the running together of consecutive words. Avoid any tendency to shout, to accent syllables artificially, or to talk too rapidly. The following points should be kept in mind when using radiotelephony:

SPEED—Keep the rate of utterance constant, neither too fast nor too slow. Remember that the operator receiving your message probably has to write it down.

PITCH—Remember that high pitched voices transmit better than low pitched voices.

RHYTHM—Preserve the rhythm of ordinary conversation. In separating words so that they are not run together, avoid the introduction of sounds that do not belong, such as “er” and “um”.

MICROPHONE POSITION—Maintain at all times the correct position between mouth and microphone for the microphone in use. Usually the lips of the operator should not be more than one inch from the microphone.

2.1.2 **Word Spelling.** The words of the spelling alphabet which follow should be learned thoroughly so that, whenever isolated letters or groups of letters are pronounced separately or when communication is difficult, the alphabet can be easily and fluently used.

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

Examples:

When using the spelling alphabet, the name "EUREKA" would be spoken as Echo Uniform Romeo Echo Kilo Alfa.

2.1.3 **Transmission of Numbers.** All numbers except whole thousands should be transmitted by pronouncing each digit separately. Whole thousands should be transmitted by pronouncing each digit in the number of thousands followed by the word "thousand".

Example:

| Number | Transmitted as |
|--------|----------------------------|
| 10 | One zero |
| 75 | Seven five |
| 100 | One zero zero |
| 583 | Five eight three |
| 5000 | Five thousand |
| 5800 | Five eight zero zero |
| 11000 | One one thousand |
| 25000 | Two five thousand |
| 38143 | Three eight one four three |

2.1.3.1 Numbers containing a decimal point shall be transmitted as prescribed in 2.1.3 with the decimal point in the appropriate sequence being indicated by the word "decimal".

| Number | Transmitted as |
|--------|---------------------------|
| 118.1 | One one eight decimal one |

2.1.3.2 When it is desired to verify the accurate reception of numbers the person transmitting the message shall either:

- (a) repeat all the numbers, or
- (b) request the receiving operator to repeat all the numbers in accordance with the following examples:

Station A wishes to pass the following message to station B "Call Dr. Smith, telephone number Empire 45937 local 286".

Method (a)—

Station A—"Call Doctor Smith telephone number Empire four five nine three seven local two eight six I say again Empire four five nine three seven local two eight six".

Method (b)—

Station A—"Call Doctor Smith telephone number Empire four five nine three seven local two eight six, read back telephone number, over".

Station B—"Wilco, Empire four five nine three seven local two eight six, over."

Station A—"That is correct, out".

2.1.3.3 When communication is difficult numbers should be transmitted using the following pronunciation:

| Number | Pronunciation |
|----------|---------------|
| 0 | ZE-RO |
| 1 | WUN |
| 2 | TOO |
| 3 | TREE |
| 4 | FOW-er |
| 5 | FIFE |
| 6 | SIX |
| 7 | SEV-en |
| 8 | AIT |
| 9 | NIN-er |
| Decimal | DAY-SEE-MAL |
| Thousand | TOU-SAND |

Note:

The syllables printed in capital letters in the above list should be stressed; for example, the two syllables of ZE-RO are given equal emphasis, whereas the first syllable of FOW-er is given primary emphasis.

2.1.3.4 Signs denoting monetary denominations, when transmitted with groups of figures to indicate an amount of money, should be transmitted in the sequence in which they are written.

Examples:

| As written | As spoken |
|------------|------------------------------------|
| \$17.25 | Dollars one seven decimal two five |
| 75c | Seven five cents. |

2.1.4 **Procedure Words and Phrases.** While it is not practical to lay down a precise phraseology for all radiotelephone procedures, the following words and

phrases should be used where applicable. Words and phrases such as "OK", "REPEAT", "HOW IS THAT" etc., or slang expressions should not be used.

| Word or Phrase | Meaning |
|--------------------|--|
| ACKNOWLEDGE..... | Let me know that you have received and understood this message. |
| AFFIRMATIVE..... | Yes, or Permission granted. |
| BREAK..... | I hereby indicate the separation between portions of the message. (To be used where there is no clear distinction between the text and other portions of the message). |
| CONFIRM..... | My version is . . . is that correct? |
| CORRECTION..... | An error has been made in this transmission (or message indicated). The correct version is . . . |
| GO AHEAD..... | Proceed with your message. |
| HOW DO YOU READ... | Self-explanatory. |
| I SAY AGAIN..... | Self-explanatory. |
| NEGATIVE..... | No, or Permission not granted, or That is not correct, or I do not agree. |
| OVER..... | My transmission is ended and I expect a response from you. |
| OUT..... | This conversation is ended and no response is expected. |
| READ BACK..... | Repeat all of this message back to me exactly as received, after I have given OVER (Do not use the word "repeat"). |
| ROGER..... | I have received all of your last transmission. |
| ROGER NUMBER..... | I have received your message number . . . |
| SAY AGAIN..... | Repeat all, or the following part, of your last transmission. (Do not use the word "repeat"). |
| SPEAK SLOWER..... | Self-explanatory. |

| Word or Phrase | Meaning |
|----------------------|--|
| STANDBY..... | Self-explanatory. |
| THAT IS CORRECT..... | Self-explanatory. |
| VERIFY..... | Check coding, check text with originator and send correct version. |
| WILCO..... | Your instructions received, understood, and will be complied with. |
| WORDS TWICE..... | (a) As a request: Communication is difficult, please send each word twice. (b) As information: Since communication is difficult, I will send each word twice. |

Note:

Do not make the common error of saying "OVER AND OUT", the terms contradict each other.

- 2.1.5 **Categories of Messages.** The following categories of messages are recognized in the land service.
- 2.1.5.1 **Distress Messages and Distress Traffic.** (See 3.)
- 2.1.5.2 **Urgency Messages.** (see 3.).
- 2.1.5.3 **Safety Messages.** (see 3.).

Note:

In the Land Fixed Service Urgency messages and Safety messages are grouped together as Messages for the Safety of Human Life.

- 2.1.5.4 **Other Messages.**
- 2.2 **Mobile Procedures.**
- 2.2.1 **Priority of Communications.** The order of priority of radiocommunications in the land mobile service is as follows:
 - (a) Distress communications,
 - (b) Urgency communications,

- (c) Safety communications,
- (d) Communications relative to direction finding,
- (e) All other communications.

Note: Specialized services such as railroad dispatch and control, etc., may if considered desirable develop their own priority systems within order (e).

- 2.2.2 **Call Signs.** A distinctive call sign is assigned to each base radio station for identification purposes and should be used at least when initial contact is being established.
- 2.2.2.1 **Base Stations.** Under certain circumstances it is desirable for a base station to identify itself by its location or name of licensee or both as shown in the following examples.

Examples:

| | |
|----------------------|-------------------------------------|
| OTTAWA | —Common carrier, police, fire, etc. |
| BLUE LINE | —Taxi |
| FREIGHT LINE TORONTO | —Interurban trucking |
| TURCOT YARD | —Railroad dispatch |
| EVEREADY CEMENT | —Cement delivery. |

However when such identification procedures are used the station must announce its assigned call sign at least every thirty minutes during its hours of operation.

Examples:

THIS IS XNE SEVEN SIX BLUE LINE TAXI
OTTAWA
THIS IS XJG SIX SEVEN OTTAWA FIRE
DEPARTMENT.

- 2.2.2.1.1 Where two or more licensees share a common frequency it is essential that correct identification is used at all times to ensure positive identification of the licensee.

This can usually be accomplished by use of the licensee's call sign, name or recognized abbreviated name as well as location. An operator, particularly when performing a dispatching service, should not expect mobile operators under his control to recognize him merely by his voice.

2.2.2.1.2 In some types of operations, such as Restricted Common Carrier providing a direct dispatch service, where the base station may be controlled from more than one control point or office, the licensee shall ensure that the station is identified at least every thirty minutes during its hours of operation by the transmission of:

- (1) the words **THIS IS**
- (2) the call sign of the station
- (3) the name of the licensee
- (4) the location of the station
- (5) the word **OUT**.

Example:

**THIS IS CHC THREE THREE CANADIAN
MARCONI COMPANY OTTAWA, OUT.**

2.2.2.2 **Mobile Stations.** Mobile stations may or may not be assigned a specific call sign. When a call sign is not assigned the mobile station shall employ some readily recognizable identifier in lieu thereof, such as a fleet car or truck number in the case of taxis and trucking organizations, train number and/or unit identification in the case of railroad operations, etc.

Examples:

Blue Line Four Two
Expressway One Five Eight
Pumper Two
Car Five One

Train Two Four Three
Engineer Train Six Nine.

2.2.3 **Calling.** Before transmitting, the operator of every station shall listen for a period long enough to satisfy himself that he will not cause harmful interference to transmissions already in progress. If such interference seems likely, he shall await the first break in the transmission with which he might interfere, except that a station having a distress, urgency or safety communication to transmit is entitled to interrupt at any time a transmission of lower priority which is in progress.

2.2.3.1 **Single Station Call.** When station wishes to establish communication with a specific station, it shall transmit the following items in the order indicated:

| Item | Spoken |
|--|--------------------------------------|
| Call sign of station called (not more than three times) | FREIGHTWAY TWO FIVE ZERO |
| The words THIS IS | THIS IS |
| Call sign of the station calling (not more than three times) | FREIGHTWAY MONTREAL XMT FIVE NINE |
| Invitation to reply | OVER |

2.2.3.2 **Multiple Station Call.** If it is desired to call more than one station simultaneously, the call signs of the stations may be transmitted in any convenient sequence preceding the words **THIS IS**

Example:

**RED LINE CABS FIVE TWO, ONE ZERO,
THREE SIX THIS IS REDLINE TAXI OTTAWA OVER**

- 2.2.3.3 **General Call.** When a mobile wishes to establish communication with any station within range, or in a certain area, the call should be in the following form:

| Item | Spoken |
|--|--|
| General Call (not more than three times) | ALL STATIONS (OR ALL STATIONS NEAR ARNPRIOR) |
| The words THIS IS | THIS IS |
| Call sign of the station calling (not more than three times) | XJB SIX TWO OTTAWA |
| Invitation to reply | OVER |

- 2.2.3.3.1 When a station wishes to broadcast information to all stations which may hear it and does not desire an acknowledgement or a reply, it proceeds with the message immediately after the call sign and ends the transmission with its call sign and the word OUT.

2.2.4 **Replying.**

- 2.2.4.1 When a station is ready to receive the proffered communication, it should reply to the call in the following form:

| Item | Spoken |
|---|-------------------------------------|
| Name of the calling station (not more than three times) | FREIGHTWAY MONTREAL |
| The words THIS IS | THIS IS |
| Its own name or call sign (once) | FREIGHTWAY (or TRUCK) TWO FIVE ZERO |
| The words GO AHEAD | GO AHEAD |

- 2.2.4.2 When a station is not ready to receive the proffered communication, it should reply to the call but replace the words GO AHEAD with the word STANDBY. The length of the probable delay, stated in minutes, should be added when possible. If the delay is expected to exceed two minutes the reason for the delay should be given.

- 2.2.4.3 Stations replying to a multiple call (2.2.3.2) should answer, as a general rule, in the order in which they were called.

- 2.2.4.4 When a station hears a call without being certain that the call was intended for it, it should not reply until the call has been repeated and understood.

- 2.2.4.5 When a station is called, but is uncertain of the identity of the calling station, it should reply immediately in the following manner:

“... (station called) SAY AGAIN YOUR CALL SIGN”.

Example:

(Dispatch Service Winnipeg was the station called and is uncertain of the identity of the calling station)

DISPATCH SERVICE WINNIPEG (pause)
SAY AGAIN YOUR CALL SIGN OVER.

- 2.2.4.6 After communication has been established and when no confusion is likely to arise, a shortened form of procedure may be used by omitting the words such as OVER, THIS IS, etc.

2.2.5 **Failure of Communications.**

- 2.2.5.1 When contact with a base station fails on the selected frequency, the mobile should attempt to establish contact on another frequency (if available) appropriate to the area in which it is operating.

- 2.2.5.2 When normal communications from a base station to a mobile cannot be established, the base station should attempt to relay the traffic via any other base station or mobile which may be able to establish communications.

2.2.5.2.1 When a message cannot be delivered to a mobile after applying the procedure in 2.2.5.2, the message may be transmitted by blind transmission on the frequency(ies) on which the mobile is believed to be listening.

2.2.5.3 When a mobile is unable to establish communications due to receiver failure, it may transmit its messages on the frequency last used, or the frequency normally used for communicating with the appropriate base station, preceding the message by the words TRANSMITTING BLIND. Each message transmitted blind should be repeated in full.

2.2.6 Exchange of Communications.

2.2.6.1 **Acknowledgment of Receipt.** An acknowledgment of receipt should not be given until the receiving operator is certain that the transmitted message or information has been completely and correctly received. The acknowledgment of receipt for a message or information should be transmitted in the following manner:

| Item | Spoken |
|---|---------------|
| Name of the station from which the message was received. | CPR CALGARY |
| The words THIS IS | THIS IS |
| Name of the station receiving the message | TRAIN FOUR |
| The word ROGER | ROGER |
| The number or other identification of the message (if applicable) | NUMBER THREE |
| The word OVER or OUT (as applicable) | OVER (or OUT) |

2.2.6.1.1 When no confusion or misunderstanding is likely to occur, the acknowledgment may be shortened by transmitting in the following manner:

| Item | Spoken |
|---|------------|
| Name of the station receiving the message | TRAIN FOUR |
| The word ROGER (if required) | ROGER |

2.2.6.2 **Termination of Contact.** A radiotelephone conversation should always be terminated by the receiving station transmitting its own name or identification followed by the word OUT.

Examples:

CPR CALGARY OUT
TRAIN FOUR OUT.

2.2.7 **Composition of Messages.** In the land mobile service most messages will be in the form of instructions to a mobile station or of requests for instructions from mobile stations and will probably be in form of messages which do not require a specific address (see 2.2.7.2), however there will be times when messages will require specific addresses and in such instances the procedures in 2.2.7.1 should be followed.

2.2.7.1 **Composition of Messages Requiring a Specific Address.**

2.2.7.1.1 **Messages Originated in Mobile Stations.** When a mobile is the place of origin of a message that requires a specific address and/or retransmission or relay over the fixed service, the message should comprise the following parts in the order stated:

- (1) the call,
- (2) the address (preceded by the word FOR),

- (3) the text,
- (4) the signature group (if used).

Example:

- (call) CPR CALGARY THIS IS TRAIN TWO
- (address) FOR DIVISION SUPERINTENDENT VANCOUVER
- (text) PRIVATE CAR FIVE ZERO FOUR TWO SIX TO BE TRANSFERRED GREAT NORTHERN ON ARRIVAL NEW WESTMINSTER.

2.2.7.1.2 Messages Addressed to a Mobile. When a message is transmitted to a mobile it should comprise the following parts in the order stated:

- (1) the call
- (2) the word FROM
- (3) the signature group (if used)
- (4) the name of the place of origin
- (5) the text.

Examples:

- (call) TRAIN TWO THIS IS CPR CALGARY
- (origin) FROM DISPATCHER CALGARY
- (text) MAKE PASS WITH TRAIN THREE AT CUTBANK SIDING

2.2.7.2 Messages Which do Not Require a Specific Address. When messages do not require a specific address, the call will indicate the address and office of origin. This is the type of message most likely to be used in the land mobile service, especially by base stations per-

forming a dispatch service; similarly mobiles under dispatch control will often use this procedure when reporting in to their base station. The majority of communications between mobiles will also be of this type.

Examples:

- (call) CAB ONE THREE THIS IS BLUE LINE
- (text) FIVE ONE FOUR MAIN STREET APARTMENT TWO MRS. JONES, OUT
- (call) BLUE NINE THIS IS CAB FIVE
- (text) VACANT CORNER OF MAIN AND PARK, OUT.
- (call) CAR TWO TWO THIS IS HOMETOWN POLICE
- (text) ONE ZERO TWO ZERO (or TEN TWENTY), OVER.
- (call) HOMETOWN POLICE THIS IS CAR TWO TWO
- (text) PARKWAY AND FIRST AVENUE, OUT

2.2.8 Corrections and Repetitions.

- 2.2.8.1 When an error has been made in transmission, the word CORRECTION should be spoken, and the last correct word or phrase and the correct version transmitted.
- 2.2.8.2 Transmissions or items of transmissions should not be repeated unless requested by the receiving operator.
- 2.2.8.3 Repetitions should be requested if reception is doubtful.
- 2.2.8.4 If the receiving operator desires a repetition of a message he should speak the words SAY AGAIN. If repetition of only a portion of a message is required the

receiving operator should use the appropriate following phraseology:

- (1) SAY AGAIN ALL BEFORE . . . (first word satisfactorily received) or
- (2) SAY AGAIN . . . (word before missing portion) TO . . . (word after missing portion), or
- (3) SAY AGAIN ALL AFTER . . . (last word satisfactorily received.)

2.2.8.4.1 Requests for repetition of specific items of a message should be made by speaking the words SAY AGAIN followed by the identification of the portion of the message desired.

Example:

SAY AGAIN OFFICE OF ORIGIN
SAY AGAIN NAME OF STREET
SAY AGAIN HOUSE NUMBER.

2.2.9 **Tests.** When it is necessary for a mobile to send signals for testing or adjustment of equipment, it shall whenever possible transmit its call sign at frequent intervals during the transmission.

2.2.9.1 Mobiles whose signals are liable to interfere with a neighbouring base station shall first call the station and obtain permission to test before doing so.

2.2.9.2 When it is necessary for a mobile to make test signals, such signals, shall not continue for more than ten seconds and shall comprise spoken numerals (ONE, TWO, THREE, FOUR, etc.) followed by the call sign of the mobile transmitting the test signals.

2.2.9.3 When a mobile requires a report on its signal it shall request a report by first calling the base station (or another mobile) and then preceding the test count by

the words SIGNAL CHECK, and ending its transmission with word OVER.

2.2.9.4 The station which has been requested to provide the signal report shall reply, using the following readability scale

- 1—Unreadable
- 2—Readable now and then
- 3—Readable but with difficulty
- 4—Readable
- 5—Perfectly readable.

2.2.9.5 **Test Procedures.**

2.2.9.5.1 The form of test transmissions should be as follows:

- (1) the name or identification of the station called
- (2) the words THIS IS
- (3) the mobile identification or call sign
- (4) the words SIGNAL CHECK
- (5) the frequency being used (if applicable)
- (6) the word OVER.

Example:

EDMONTON FIRE DEPARTMENT THIS IS
TRUCK ONE SEVEN SIGNAL CHECK, OVER

2.2.9.5.2 The reply to a test transmission should be as follows:

- (1) the identification or call sign of the mobile
- (2) the words THIS IS
- (3) the name or identification of the station replying
- (4) the words SIGNAL CHECK
- (5) information regarding the readability of the test transmission in accordance with the readability scale (see 2.2.9.4).

Example:

TRUCK ONE SEVEN THIS IS EDMONTON
FIRE DEPARTMENT SIGNAL CHECK
READING YOU FOUR, OUT (or OVER).

2.3 **Fixed (Point-to-Point) Procedures.**

2.3.1 **Priority of Communications.** The order of priority of radiocommunications in the fixed service is as follows:

- (1) Distress Communications,
- (2) Communications for the safety of human life (Safety and Urgency messages)
- (3) Other messages.

2.3.1.1 Messages of the same priority should be transmitted in the order in which they are received for transmission.

2.3.2 **Call Signs.** A distinctive call sign, consisting of a group of letters or letters and figures, is assigned to each radio station for identification purposes.

Examples:

CJM70 XMN45

2.3.2.1 Call signs assigned to stations in the fixed service shall not be abbreviated.

2.3.2.2 , When desired the call sign may be followed by the name of the location where the station is established.

Examples:

CJM250 CUMSHEWA
VXX39 UCLUELET
XLR61 GREEN LAKE

2.3.3 **Calling.** Before transmitting, the operator of every station shall listen for a period long enough to satisfy himself that he will not cause harmful interference to transmissions already in progress. If such interference seems likely, he shall await the first break in the transmission with which he is likely to interfere, except that a station having distress communications or communications relative to the safety of human life to transmit, is entitled to interrupt at any time a transmission of lower priority which is in progress.

2.3.3.1 **Single Station Call.** When a station wishes to establish communication with another specific station, it shall transmit the following items in the order indicated:

| Item | Spoken |
|--|-----------------|
| Call sign of the station called (not more than three times) | VYD FIVE SEVEN |
| The words THIS IS | THIS IS |
| Call sign of the station calling (not more than three times) | VXX THREE EIGHT |
| Invitation to reply | OVER |

2.3.3.2 **Multiple Station Call.** If it is desired to call more than one station simultaneously, the call signs of the stations may be transmitted in any convenient sequence preceding the words THIS IS.

Examples:

XLR TWO NINE, XLR THREE ZERO, XMN
THREE EIGHT THIS IS XLN FIVE EIGHT,
OVER.

2.3.3.3 **General Call.** When a station wishes to establish communications with any station within range, or

belonging to a certain organization, the call should be in the following form:

| Item | Spoken |
|--|---|
| General Call (not more than three times) | ALL STATIONS (or ALL ONTARIO FORESTRY STATIONS) |
| The words THIS IS | THIS IS |
| Call sign of the station calling (not more than three times) | XLN ONE EIGHT |
| Invitation to reply | OVER. |

Note: This type of call is seldom needed or used in the fixed service.

- 2.3.3.3.1 When a station wishes to broadcast information to all stations which may hear it or to which the information may be addressed, and does not desire an acknowledgement or a reply, it proceeds with the message immediately after the call and ends the transmission with its call sign and the word OUT.

2.3.4 Repeating.

- 2.3.4.1 When a station is ready to receive the proffered communication, it should reply to the call in the following form:

| Item | Spoken |
|--|-----------------|
| Call sign of calling station (not more than three times) | VXX THREE EIGHT |
| The words THIS IS | THIS IS |
| Its own call sign (once) | VYD ONE SEVEN |
| The words GO AHEAD | GO AHEAD |

- 2.3.4.2 When a called station is not ready to receive the proffered communication, it should reply to the call but replace the words GO AHEAD with the word STANDBY. The length of the probable delay, stated

in minutes, should be added when possible. If the delay is expected to exceed two minutes the reason for the delay should be given.

Example:

VXX THREE EIGHT THIS IS VYD FIVE SEVEN STANDBY THREE MINUTES WORKING MOBILES OUT.

- 2.3.4.3 Stations replying to a multiple call (2.3.3.2) should answer, as a general rule, in the order in which they were called.
- 2.3.4.4 When a station hears a call without being certain that the call is intended for it, it should not reply until the call has been repeated and understood.
- 2.3.4.5 When a station is called, but is uncertain of the identity of the calling station, it should reply immediately in the following manner:

“... (station called) SAY AGAIN YOUR CALL SIGN”.

Example:

(Station XME31 was the station called and is uncertain of the identity of the calling station) XME THREE ONE (pause) SAY AGAIN YOUR CALL SIGN, OVER.

- 2.3.4.6 After communication has been established and when no confusion is likely to arise, a shortened form of procedure may be used by omitting the words such as OVER, THIS IS, etc.
- 2.3.5 Exchange of Communications.
- 2.3.5.1 Acknowledgment of Receipt. Acknowledgment of receipt should not be given until the receiving operator

is certain that the transmitted message has been completely and correctly received. The acknowledgment of receipt for a message should be transmitted in the following manner:

| Item | Spoken |
|---|-----------------|
| Call sign of the station from which the message was received. | XME THREE ONE |
| The words THIS IS | THIS IS |
| Call sign of the station receiving the message. | XME THREE SEVEN |
| The word ROGER | ROGER |
| The number of the message | NUMBER ONE FIVE |
| The word OVER or OUT (as applicable) | OVER (or OUT) |

2.3.5.1.1 When no confusion or misunderstanding is likely to occur, the acknowledgment may be shortened by transmitting in the following manner:

| Item | Spoken |
|--|-----------------|
| Call sign of the station receiving the message | XME THREE SEVEN |
| The word ROGER | ROGER |
| The number of the message (if desired) | ONE FIVE |

2.3.5.2 **Termination of Contact.** A radiotelephone contact should always be terminated by the receiving station transmitting its own call sign followed by the word OUT.

Example:

CJN THREE THREE TWO—OUT.

2.3.6 **Composition of Messages.** In order to ensure accuracy of transmission and to provide a record, it is highly desirable that all information passed between stations be in message form. It also guards against

information being lost, garbled or misunderstood especially when it is necessary to relay such information from station to station or where the information is received from or delivered to a third party or person other than the operator actually transmitting or receiving the message. All messages consist of several parts which should be transmitted in the following order:

- (1) Transmission number of the message
- (2) Office of origin
- (3) Filing number of the message (if used)
- (4) Number of words or groups in the address, text and signature (if used)
- (5) Date and time of filing
- (6) Address
- (7) Text
- (8) Signature (if used)

Items (1) through (5) taken together are known as the preamble.

2.3.6.1 **Transmission Number.** The transmission number is used to provide a check on the continuity of service between stations, so that messages will not become lost. A separate series of numbers is assigned in sequence for each station worked, and a new series is used each day, with the day starting at midnight.

2.3.6.2 **Office of Origin.** The name of the city, town, or other location where the message originated, in the case of messages originating on board a mobile and relayed between fixed stations, the call sign or other identification of the mobile should be used; if desired it may be followed by the word VIA and the name of base station receiving the message from the mobile.

2.3.6.3 Filing Number. The filing number is a number assigned sequentially by the office of origin to all messages originating at the office in order to provide an easy and accurate means of referring to a specific message. The filing number should not exceed three digits, nor should the series be extended for more than one calendar year.

2.3.6.4 Number of Words. When used, the number of words or group count indicates the number of words or groups in the address, text and signature of the message. Each word or group should be counted as one, irrespective of its length or composition. Separate signs other than letters and figures should not be counted. The use of a word count provides assurance against words being left out of, or added to, the message during transmission and relay.

2.3.6.5 Date and Time of Filing. The date and time of filing is that when the message was received by the originating office from the sender. The date is indicated by the day of the month only, expressed as a two figure group; the month and year are not indicated. The time is expressed by a group of figures using the 24-hour system, the first two figures indicating the hour and the second two figures the minutes after the hour. Greenwich Mean Time should be used, although local zone time may be used if all operations of the operating agency are located in the same time zone; daylight saving time should not be used. When Greenwich Mean Time is used the group is followed by the letter Z, if local zone time is used the appropriate letter indicating the zone should be used. (See 1.7.1).

2.3.6.6 Address. The address should provide sufficient information to enable the message to be delivered to the addressee without enquiry or requests for further

information. Usually in the fixed service it is sufficient for the address to consist of

- (1) the name or accepted abbreviation of the organization addressed, and
- (2) the place of destination (in some instances the call sign of the station of destination will suffice).

2.3.6.6.1 When a message is transmitted over the fixed service and is addressed to a mobile, the address should consist of:

- (1) the call sign and/or the identification of the mobile, and
- (2) the name or call sign of the base station required to retransmit the message to the mobile.

2.3.6.7 Text. The text of the message contains the information or instructions which the sender desires to pass to the addressee.

2.3.6.8 Signature. A signature need not be used. If the sender does not desire a signature to be sent the words **NO SIGNATURE** should be spoken when transmitting the message to ensure there is no misunderstanding on the part of the receiving operator.

2.3.6.9 Example. To illustrate the application of the above procedures the following example of a complete message is given as it would be spoken in transmission.

MESSAGE NUMBER ONE FIVE, FROM GREEN LAKE, FILING NUMBER SEVEN TWO, NUMBER OF WORDS TWO FIVE. FILED ZERO EIGHT ONE ZERO FIVE TWO GREENWICH, BREAK, ADDRESS SUPERINTENDENT ONTARIO FORESTRY SAULT STE MARIE, BREAK, TEXT FIRE AT THREE FINGER LAKE UNDER

CONTROL STOP REQUEST TRANSPORTATION FOR TWO ZERO MEN AND EQUIPMENT NOW AT CANOE PORTAGE, BREAK SIGNED JONES OVER.

2.3.7 Corrections and Repetitions.

2.3.7.1 **During Transmissions.** When an error has been made the word **CORRECTION** should be spoken, the last correct word group or phrase repeated and then the correct version transmitted.

Example:

REQUEST TRANSPORTATION FOR THREE ZERO CORRECTION TRANSPORTATION FOR TWO ZERO MEN.

2.3.7.2 **After Transmission but Before Acknowledgment of Receipt.** If after a message has been transmitted, but before acknowledgment of receipt has been obtained the transmitting operator requires to correct any portion of the message, the word **CORRECTION** should be spoken, followed by the identification of the word, group or phrase to be corrected and the correct version.

Examples:

CORRECTION—ADDRESS—NICHOLSEN
SUDBURY

CORRECTION—WORD AFTER NOW AT—
CANOE PORTAGE

CORRECTION—SIGNATURE—JONES

2.3.7.3 **Corrections after Acknowledgment of Receipt.** Corrections to messages after acknowledgment of receipt has been received, especially if the exchange of communications has been terminated should be made by service message.

2.3.7.4 **Repetitions.** Repetitions should be requested if reception is doubtful. Transmissions should not be repeated unless requested by the receiving operator.

2.3.7.4.1 If the receiving operator desires a repetition of a message he should speak the words **SAY AGAIN**. If repetition of only a portion of a message is required the receiving operator should use the appropriate following phraseology:

- (1) **SAY AGAIN ALL BEFORE . . .** (first word satisfactorily received), or
- (2) **SAY AGAIN . . .** (word before missing portion) **TO . . .** (word after missing portion), or
- (3) **SAY AGAIN ALL AFTER . . .** (last word satisfactorily received).

2.3.7.4.2 Requests for repetitions of specific items of a message should be made by speaking the words **SAY AGAIN** followed by the identification of the portion of the message desired.

Example:

SAY AGAIN OFFICE OF ORIGIN
SAY AGAIN ADDRESS
SAY AGAIN SIGNATURE

2.3.8 **Tests.** Any station sending signals for testing or adjustment of equipment shall, whenever possible, transmit its call sign at frequent intervals during such transmissions.

2.3.8.1 When it is necessary for a station to make test signals, such signals shall not continue for more than ten seconds and shall be composed of spoken numerals (**ONE, TWO, THREE, FOUR**, etc) followed by the call sign of the station transmitting the test signals.

2.3.8.2 When a station requires a report on its signal it shall request a report by first calling another station and then preceding the test count by the words SIGNAL CHECK, and ending its transmission with the word OVER.

Example:

VXY FIVE ONE THIS IS VXX NINE ZERO—
SIGNAL CHECK—ONE TWO THREE FOUR
FIVE FOUR THREE TWO ONE—OVER.

2.3.8.3 The station which has been requested to provide the signal report shall reply, using the following readability scale.

- 1—Unreadable
- 2—Readable now and then
- 3—Readable but with difficulty
- 4—Readable
- 5—Perfectly readable

Example:

VXX NINE ZERO THIS IS VXY FIVE ONE—
SIGNAL CHECK, READING YOU FOUR,
OUT (or OVER).

3. **DISTRESS, URGENCY AND SAFETY COMMUNICATIONS.** Distress, urgency and safety procedures which are laid down by international regulation have been designed primarily for use in the two safety services—marine and aviation. Circumstances under which these types of communications would be used in the land mobile service are extremely few and in fact probably only of an academic nature. Since detailed procedures relating to distress, urgency and safety communications have not been developed for use in the land mobile service a brief outline of the procedures

as used in the safety service is shown in the following paragraphs so that radiotelephone operators in the land mobile service may recognize the signals should they ever be heard, and to gain sufficient knowledge of them for examination purposes.

3.1 **Distress.**

3.1.1 In radiotelephony, the distress signal consists of the word MAYDAY. The distress signal indicates that the ship, aircraft or other vehicle sending the distress signal is threatened by grave and imminent danger and requests immediate assistance.

3.1.2 The distress call has absolute priority over all other transmissions. All stations which hear it must immediately cease any transmission capable of interfering with the distress traffic and must listen on the frequency used for the emission of the distress call.

3.1.3 The distress call shall only be sent on the authority of the master or person responsible for or in command of the ship, aircraft or other vehicle carrying the mobile station.

3.1.4 The distress call shall comprise

- (1) the distress signal MAYDAY spoken three times
- (2) the words THIS IS
- (3) the call sign of the ship, aircraft or vehicle in distress spoken three times.

The distress call shall not be addressed to a particular station and acknowledgment of receipt shall not be given before the distress message is sent.

3.1.5 The distress message shall follow as soon as possible after the distress call and shall comprise:

- (1) the distress call

- (2) the call sign, name or other identification of the ship, aircraft or vehicle in distress
 - (3) particulars of its position, nature of the distress and the kind of assistance desired
 - (4) any other information which might facilitate the rescue.
- 3.1.5.1 When a distress message is repeated by a station other than the station in distress it shall be preceded by a call comprising:
- (1) the signal MAYDAY RELAY (three times),
 - (2) the words THIS IS,
 - (3) the name and call sign of the station repeating the message (three times).
- 3.1.6 The acknowledgment of receipt of a distress message shall be given in the following form:
- (1) the call sign of the ship, aircraft or vehicle in distress (three times)
 - (2) the words THIS IS
 - (3) the call sign of the station acknowledging the receipt (three times)
 - (4) the word RECEIVED
 - (5) the word MAYDAY
 - (6) the word OUT.
- 3.1.7 The ship, aircraft or vehicle in distress shall be permitted to impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. It shall address these instructions to ALL STATIONS or to specific stations only, according to circumstances, in either case it shall use the expression SEELONCE MAYDAY.
- 3.1.7.1 If it believes it to be essential, any station of the mobile service near the ship, aircraft or vehicle in distress shall also impose silence. For this purpose it shall use

- the words SEELONCE DISTRESS followed by its own call sign.
- 3.1.8 Distress traffic consists of all messages relative to the immediate assistance required by the ship, aircraft or vehicle in distress.
- 3.1.8.1 In distress traffic, the distress signal shall be sent before the call and at the beginning of the preamble of any message.
- 3.1.8.2 The control of distress traffic is the responsibility of the ship, aircraft or vehicle in distress or of the station which sent the distress message. These stations may, however, delegate the control of distress traffic to another station.
- 3.1.8.3 Any station in the mobile service which has knowledge of distress traffic shall follow the progress of such traffic, even though it does not take part in it.
- 3.1.8.4 For the entire duration of distress traffic, stations which are aware of this traffic and which are not taking part in it shall not transmit on the frequencies on which the traffic is taking place.
- 3.1.8.4.1 A station of the mobile service, which while following the progress of distress traffic is able to continue its normal service, may do so when distress traffic is well established, on condition that it does not transmit on frequencies used for the distress traffic or otherwise interfere with such traffic.
- 3.1.9 When a ship, aircraft or vehicle is no longer in distress, it or the station which transmitted the distress message shall transmit, on the same frequency(ies) on which the distress message was sent, a message cancelling the state of distress.
- 3.1.9.1 When it is no longer necessary to observe silence, or when the distress traffic is ended, the station which has

controlled the distress traffic shall send on the frequency(ies) used for such traffic, a message addressed to ALL STATIONS, indicating that the distress traffic has ended.

3.1.9.2 The cancellation of distress messages shall take the following form:

- (1) the word MAYDAY
- (2) the words ALL STATIONS
- (3) the words THIS IS
- (4) the call sign of station transmitting the message
- (5) the filing time of the message
- (6) the call sign of the aircraft, ship or vehicle in distress
- (7) the words SEELONCE FEENEE
- (8) the word OUT.

3.1.10 Examples of Distress Traffic.

3.1.10.1 Distress Message From an Aircraft in Distress.

MAYDAY MAYDAY MAYDAY THIS IS CFZXY CFZXY FIVE ZERO MILES SOUTH OF SEVEN ISLANDS AT ONE SEVEN TWO FIVE EASTERN, FOUR THOUSAND, ANSON FIVE, ICING WILL ATTEMPT CRASH LANDING ON ICE—CFZXY—OVER.

3.1.10.2 Acknowledgment of Distress.

CFZXY CFZXY CFZXY THIS IS SEVEN ISLANDS RADIO SEVEN ISLANDS RADIO SEVEN ISLANDS RADIO—RECEIVED MAYDAY—OUT.

3.1.10.3 Imposition of Silence on a Specific Station by Aircraft in Distress.

MAYDAY CFMNO CFMNO CFMNO THIS IS CFZXY CFZXY CFZXY—SEELONCE MAYDAY CFZXY—OUT.

3.1.10.3.1 Imposition of Silence on all Stations by a Station Other Than the Aircraft in Distress.

MAYDAY ALL STATIONS ALL STATIONS ALL STATIONS THIS IS SEVEN ISLANDS RADIO—SEELONCE DISTRESS—SEVEN ISLANDS RADIO—OUT.

3.1.10.4 Cancellation of Distress.

MAYDAY ALL STATIONS ALL STATIONS ALL STATIONS THIS IS CFZXY CFZXY CFZXY—ONE SEVEN FOUR ZERO EASTERN—CFZXY SEELONCE FEENEE—ICE CLEARED RETURNING SEVEN ISLANDS—OUT.

MAYDAY ALL STATIONS ALL STATIONS ALL STATIONS THIS IS SEVEN ISLANDS RADIO—ONE SEVEN FOUR FOUR EASTERN—CFZXY SEELONCE FEENEE—OUT.

3.2 Urgency.

3.2.1 In radiotelephony, the urgency signal is the word PAN spoken three times. It is sent before the call. The urgency signal indicates that the station calling has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle or of some person on board or within sight.

3.2.2 The urgency signal has priority over all other communications except distress.

3.2.2.1 Stations which hear the urgency signal shall continue to listen for at least three minutes on the frequency on which the signal is heard, after which, if no urgency message has been heard, they may resume normal service. All stations which hear the urgency signal must take care not to interfere with the urgency message which follows it.

3.2.2.2 Stations which are in communication on frequencies other than that used for the transmission of the urgency message, may continue normal work without interruption, provided that the urgency message is not addressed to ALL STATIONS.

3.2.3 The urgency signal shall be followed by a message giving further information of the incident which necessitated the use of the urgency signal. The message shall be in plain language.

3.2.4 When the urgency signal has been used before a message addressed to ALL STATIONS and which calls for action by stations receiving the message, the station responsible for its transmission shall cancel it as soon as it knows that action is no longer necessary. The cancellation message shall be addressed to ALL STATIONS.

3.2.5 Examples of Urgency Messages.

3.2.5.1 Message Addressed to ALL STATIONS.

PAN PAN PAN ALL STATIONS ALL STATIONS ALL STATIONS THIS IS OTTAWA RADIO OTTAWA RADIO OTTAWA RADIO—EMERGENCY DESCENT AT OTTAWA AIRPORT, OTTAWA TOWER INSTRUCTS ALL AIRCRAFT BELOW SIX THOUSAND FEET WITHIN RADIUS OF ONE ZERO MILES OF OTTAWA RADIO RANGE TO LEAVE EAST AND SOUTH COURSES IMMEDIATELY—THIS IS OTTAWA RADIO, OUT.

3.2.5.2 Message Addressed to a Specific Station.

PAN PAN PAN OTTAWA TOWER THIS IS CES-SNA ABC—ADVISE GRUMMAN XYZ THAT HIS UNDERCARRIAGE IS DAMAGED—OVER.

3.2.5.3 Cancellation of Urgency Message.

ALL STATIONS ALL STATIONS ALL STATIONS THIS IS OTTAWA RADIO OTTAWA RADIO OTTAWA RADIO—EMERGENCY DESCENT AT OTTAWA AIRPORT COMPLETED, URGENCY ENDED—THIS IS OTTAWA RADIO, OUT.

3.3 Safety.

3.3.1 In radiotelephony, the safety signal is the word SECURITY spoken three times. It is sent before the call. The safety signal indicates that the station calling is about to transmit a message concerning the safety of navigation or giving important meteorological warnings.

3.3.2 The safety signal has priority over all other communications except distress and urgency.

3.3.2.1 All stations hearing the safety signal shall continue to listen on the frequency on which the signal has been transmitted, until they are satisfied that the message is of no interest to them.

3.3.2.2 All stations which hear the safety signal must take care not to interfere with the message which follows it.

3.3.3 The safety message may be addressed to one or more specific stations or to ALL STATIONS.

3.3.4 Example of Safety Message.

SECURITY SECURITY SECURITY ALL STATIONS ALL STATIONS ALL STATIONS THIS IS OTTAWA RADIO, NOTICE TO AIRMEN, OTTAWA TOWER ALL VOICE COMMUNICATIONS OUT OF SERVICE TWO ONE FIVE THREE EASTERN—THIS IS OTTAWA RADIO, OUT.