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# COMMUNICATION INSTRUCTIONS OPERATING SIGNALS

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FOREWORD

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2. ACP 131(B) is effective upon receipt and supersedes ACP 131(A) which shall be destroyed by burning.
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COMMUNICATION INSTRUCTIONS  
OPERATING SIGNALS

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CHAPTER 1GENERAL INSTRUCTIONS101. Purpose

The purpose of this publication is to list operating signals and provide instructions for their use.

102. General

This publication includes:

## a. Operating Signals from the following series of international civil Q code:

(1) The series QAA to QNZ inclusive, the meanings of which are assigned by the International Civil Aviation Organization (ICAO). In general, the only civil stations that will have available a copy of this series are those of the Aeronautical Service. Therefore, this series is not to be used with other civil stations unless it is known that the station concerned is familiar with the series. (Note: Stations of the Aeronautical Service are those operated in accordance with ICAO international standards and recommended practices to provide for the safety of air navigation and for the regular, efficient and economical operation of the air services).

(2) The series QOA to QQZ inclusive is reserved for the Maritime Services.

(3) The series QRA to QUZ inclusive, the meanings of which are assigned by the International Telecommunications Union (ITU). In general, all civil stations will have available a copy of this series. Therefore, this series may be used with all civil stations unless the station concerned indicates its unfamiliarity with the series.

(4) The series QVA to QZZ inclusive has not been allocated to date.

b. Operating signals from the series ZAA to ZXZ inclusive of the allied military Z code. The series ZYA to ZZZ inclusive is reserved for the temporary or permanent assignment of meanings on an intra-military basis by any nation, service or command authorized use of this publication. For the convenience of assigning authorities, provision for this series (ZYA-ZZZ) is included in Chapter 5 of this publication.

c. Miscellaneous abbreviations and symbols developed or approved by ICAO for use with the series QAA to QNZ inclusive. These abbreviations and symbols, however, are authorized for use by allied military stations with any Q or Z signal subject to the use limitations, if any, of that Q or Z signal (see paragraph 103).

103. Authorization

a. The series QAA to QUZ of the international civil Q code, and the series ZAA to ZXZ of the allied military Z code, are authorized for use between allied military stations subject to the provisions of paragraph 102. Q and Z signals of these series may be used together between allied military stations.

## 103. (Continued)

b. The series QAA to QUZ of the international civil Q code are authorized for use between Allied military stations and civil stations, subject to the provisions of paragraph 102. The allied military Z code (ZAA-ZZZ) is not authorized for use between allied military stations and civil commercial stations.

c. Any nation, service or command may prohibit or restrict the military use, within its area of jurisdiction, of any operating signal. However, when such operating signals are received from other users, they must be recognized and acted upon.

104. Instructions

a. Action. Q or Z signals ordering or indicating that an action is to be taken (a change of frequency, for example) will be answered before the action is taken, unless the "Broadcast" method is used or the station ordering or indicating the action has indicated that an answer is not required.

b. Affirmatives or Negatives. Operating signals, as appropriate, will be used by allied military stations to convey an affirmative or negative sense...

(1) To civil stations by adding "C" (affirmative) or "N" (negative) after the Q signal and any data used with it:

Examples (of replies):

(a) QFQ C means: (Yes) The approach and runway lights are lit.

(b) QAK N means: (No) There is no risk of collision. "NO", instead of "N", is authorized for use by and to civil stations of the Aeronautical Service.

(2) To allied military stations by using the appropriate Q or Z signal:

Examples (of replies):

(a) QHZ means: (Yes) Circle the aerodrome (or go around).

(b) ZOE means: (Yes) Give me your message. I will dispose of it.

Note: In addition to the above, replies to questions from military stations may be made by using ZUE meaning Affirmative (Yes) or ZUG meaning Negative (No).

c. Blank Spaces. Blank spaces in the meanings of Q and Z signals will be completed, in the order in which they appear; however, blank spaces inclosed in parentheses normally will be completed on an optional basis only.

Examples:

(1) QBM BF6 1010Z means: Here is the message sent by BF6 at 1010Z hours.

Note: The meaning assigned QBM is "Here is the message sent by...at...hours"; therefore, as these blank spaces are not included in parentheses, all are completed, in the order in which they appear.

(2) ZKO BG2 means: I have handed over guard to BG2.

Note: The meaning assigned ZKO is "I have handed over guard (to...) (on...kHz (or MHz)) (serial number of last message received was...)"; however, in the above example, the user elected to complete only one of the blank spaces inclosed in parentheses.

104. (Continued)

d. Call Signs. Normally call signs will follow the Q or Z signal to which they refer; however, they also may precede the operating signal for separation or clarity.

e. Frequencies:

(1) When the meaning of a Q or Z signal includes the expression "on... kHz (or MHz)", the figures used alone (not supplemented by an abbreviation) always will indicate the frequency in kilohertz per second. To indicate the frequency in megahertz per second, the figures will be supplemented by the abbreviation "MHz".

(2) Provided that no confusion can arise, in those Q or Z signals whose meaning includes the expression "on...kHz (or MHz)", the circuit designator or other disguised reference, if available, will be used in place of the actual frequency.

(3) Although not provided for in the meaning of a Q or Z signal, a frequency may be used with any such operating signal by adding figures and the appropriate abbreviation ("kHz" (kilohertz per second) or "MHz" (megahertz per second)).

f. Numbered Alternates. Q and Z signals with numbered alternate meanings will be followed, without spacing, by the appropriate number to indicate the meaning intended.

Examples:

(1) QCB2 means: Delay is being caused by your slowness in answering.

Note: QCB has the following numbered alternate meanings - "Delay is being caused by...(1. your transmitting out of turn; 2. your slowness in answering; 3. lack of your reply to my...)."

(2) ZAP5 means: Work single sideband.

Note: ZAP has the following numbered alternate meanings - "Work...(1. simplex; 2. duplex; 3. diplex; 4. multiplex; 5. single sideband)."

g. Plain Language. Plain unabbreviated language is authorized for use to complete or amplify the meaning of operating signals only when no other approved method will do.

h. Questions. Operating signals, as appropriate, will be used by allied military stations to ask questions:

(1) Of civil stations, by adding the prosign  $\overline{IMI}$  after the Q signal and any data used with it;

Example: QAR 15  $\overline{IMI}$  means: May I stop listening on the watch frequency for 15 minutes?

(2) Of military stations, by inserting the prosign  $\overline{INT}$  before the Q or Z signal to which it refers.

Examples:

(a)  $\overline{INT}$  QAR 15 means: May I stop listening on the watch frequency for 15 minutes?

(b)  $\overline{INT}$  ZDJ means: How many groups does your message contain?

104. (Continued)

i. Security. Operating signals possess no security. They must be regarded as the equivalent of plain language.

j. Separation. The separative sign (prosign II, written as a short dash) may be used to separate Q or Z signals when desired.

k. Time Groups. Time groups (including date-time groups) used with Q or Z signals always will be followed, without spacing, by a zone suffix letter (see ACP 121). Although not provided for in the meaning of a Q or Z signal, a time group (including date-time group) may be used with any such operating signal.

l. Units of Measurement. When units of measurement are desired for use which differ from those in the meaning of an operating signal, an appropriate abbreviation will be used (see Chapter 4).

m. Class of Emission (Chapter 6). When using operating signals concerning radio equipment or its use, e.g. QSU, QSW, ZTD, ZTE, ZTJ, ZTM, the class of emission/type of transmission may be indicated by use of the tables in Chapter 6. The operating signal ZTG is used for this purpose unless Chapter 6 is referred to in the meaning of the signal.

Examples:

(1) QSU F1 means: Send or reply on this frequency use frequency shift keyed telegraphy.

(2) ZTM ZTG A3A means: I am unable to use single sideband, reduced carrier, telephony.



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## CHAPTER 2

## OPERATING SIGNALS

## DECODE

## SECTION A - Q SIGNALS

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QAA		
QAB	May I have clearance (for...) from...(place and/or control) to...(place and/or control) at...(figures and units) height above...(datum)?	You are cleared (or...is cleared) by...from...(place and/or control) to...(place and/or control) at...(figures and units) height above...(datum).
QAC		
QAD		
QAE		
QAF	Will you advise me when you are (were) at (over).... (place)?	I am (was) at (over)...(place) (at... hours) (at...(figures and units) height above...(datum).
QAG		Arrange your flight in order to arrive over...(place) at...hours. or I am arranging my flight in order to arrive over...(place) at...hours.
QAH	What is your height above... (datum)?	I am at...(figures and units) height above...(datum). Note: An aircraft is permitted to reply to QAH IMI by using any of the answer forms of signals QBF, QBG, QBH, QBK, QBN or QBP. In such cases the signal QAH is omitted from the reply. or Arrange your flight so as to reach... (figures and units) height above... (datum) at...(hours or place).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QAI	What is the essential traffic? Note: Relates to aircraft and not communication traffic.	The essential traffic is... Note: Relates to aircraft and not communication traffic.
QAJ		
QAK	Is there any risk of collision?	There is risk of collision. Note: This signal should be followed by appropriate Q signals or ICAO approved abbreviations giving instructions for avoiding collision.
QAL	Are you going to land at...(place)? or Has aircraft...landed at...(place)? (See also signal QTP.)	I am going to land at...(place) or (You may) land at...(place). or Aircraft...landed at...(place). (See also signal QTP.)
QAM	What is the latest available meteorological observation for...(place)?	Meteorological observation made at...(place) at...hours was as follows... Note: The information may be given in Q Code form or the AERO form of the International Meteorological Figure Code. When in Q Code, the information is to be given in the following sequence of Q signal answer (or advice) forms: QAN, QBA, QNY, QBB, QNH and/or QFE and, if necessary QNU, QNT, QBJ. It is not normally necessary to precede the QAN, QBA, QNY and QBB information by these Q signals but this may be done if considered desirable. When in the AERO form of International Meteorological Figure Code, the abbreviation AERO is to precede the information.
QAN	What is the surface wind direction and speed at...(place)?	The surface wind direction and speed at...(place) at...hours is... (direction)...(speed figures and units). Note: Unless otherwise indicated in the question, answer (or advice), surface wind direction is given in degrees relative to MAGNETIC North.

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QAO	What is the wind direction in degrees TRUE and speed at...(position or zone/s) at each of the...(figures) ... (units) levels above... (datum)?	The wind direction and speed at... (position or zone/s) at the following heights above...(datum) is:  ...(vertical distance in figures and units) ...degrees TRUE...(speed in figures and units)
QAP	Shall I listen for you (or for...) on...kHz (or ...MHz)? Note: If the frequency is given in megahertz, the abbreviation MHz is to be used. (See also signal QSX).	Listen for me (or for...) on... kHz (...MHz). Note: If the frequency is given in megahertz, the abbreviation MHz is to be used. (See also signal QSX).
QIQ	Am I near a prohibited area (or...prohibited area)?	You are... 1) near 2) flying over a prohibited area (or...prohibited area).
QAR	May I stop listening on the watch frequency for... minutes?	You may stop listening on the watch frequency for...minutes.
QAS		
QAT		
QAU		I am about to jettison fuel.
QAV		
QAW		I am about to carry out overshoot procedure.

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QAX		
QAY	Will you advise me when you pass (passed)...(place) bearing 090 (270) degrees relative to your heading?	I passed:...(place) bearing...degrees relative to my heading at...hours.
QAZ	Are you experiencing communication difficulties through flying in a storm?	I am experiencing communication difficulties through flying in a storm. Note: Attention is invited to the possible supplementary use of signals QAR, QBE, QCS, QRM, QRN, QRX, QSZ or the signal CL to amplify the meaning associated with signal QAZ.
QBA	What is the horizontal visibility at...(place)?	The horizontal visibility at... (place) at...hours is...(distance figures and units).
QBB	What is the amount, type and height above official aerodrome elevation of the base of the cloud (at...(place))?	The amount, type and height above official aerodrome elevation of the base of the cloud at...(place) at... hours is:  ...eighths (...type) at...(figures and units)*  height above official aerodrome elevation.

\*Note: The cloud amount, type (if reported) and vertical distance information is reported in sequence if several cloud layers are present, the order of reporting being from low to high levels in accordance with the following cloud layer specifications:

- a) the lowest individual layer of any amount;
- b) the next higher individual layer the amount of which is three-eighths or more (to the nearest eighth);
- c) the next higher individual layer the amount of which is five-eighths or more (to the nearest eighth).

Example: = QBB CYUL 1300 2 300 FT 3 1500 FT 6 9000 FT =

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QBC	Report meteorological conditions as observed from your aircraft (at... (position or zone)) (at... hours).	The meteorological conditions as observed from my aircraft at... (position or zone) at...hours at... (figures and units) height above... (datum) are... Note: The information may be given in AIREP, or Q Code form. When given in Q Code, the following sequence of Q signal answer (or advice) forms is used: QMX, QNY, QAO, QDF, QMI, QFT and QNI.
QBD	How much fuel have you remaining (expressed as hours and/or minutes of consumption)?	Fuel remaining is...(hours and/or minutes of consumption).
QBE		I am about to wind in my aerial.
QBF	Are you flying in cloud?	I am flying in cloud at...(figures and units) height above...(datum) (and I am ascending (descending) to...(figures and units) height above that datum).
QBG	Are you flying above cloud?	I am flying above cloud and at... (figures and units) height above... (datum) or Maintain a vertical distance of... (figures and units) above cloud, smoke, haze or fog levels.
QBH	Are you flying below cloud?	I am flying below cloud and at... (figures and units) height above... (datum). or Maintain a vertical distance of... (figures and units) below cloud.
QBI	Is flight under IFR compulsory at...(place) (or from...to...(place))?	Flight under IFR is compulsory at... (place) (or from...to...(place)).
QBJ	What is the amount, type and height above...(datum) of the top of the cloud (at... (position or zone))?	At...hours at...(position or zone) the top of the cloud is: amount...eighths (...type) at... (figures and units) height above...(datum).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QBK	Are you flying with no cloud in your vicinity?	I am flying with no cloud in my vicinity and at...(figures and units) height above...(datum).
QBL		
QBM	Has...sent any message for me?	Here is the message sent by...at... hours.
QBN	Are you flying between two layers of cloud?	I am flying between two layers of cloud and at...(figures and units) height above...(datum).
QBO	What is the nearest aerodrome at which flight under VFR is permissible and which would be suitable for my landing?	Flying under VFR is permissible at...(place) which would be suitable for your landing.
QBP	Are you flying in and out of cloud?	I am flying in and out of cloud and at...(figures and units) height above...(datum).
QBQ		
QBR		
QBS		Ascend (or descend) to...(figures and units) height above...(datum) before encountering instrument meteorological conditions or if visibility falls below...(figures and units of distance) and advise.



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QBT	How far, along the runway, from the approach end, can the observer at the runway threshold see the runway lights which will be in operation for my landing (at...(place))?	At...hours, the observer at the threshold of runway number...could see the runway lights in operation for your landing (at...(place)) for a distance of...(figures and units) from the approach end. Note: If the station enquired of is not equipped to make the special observation requested, the reply to QBT IMI is given by the signal QNO.
QBU		
QBV	Have you reached the... (figures and units) height above...(datum) (or... (area or place))?	I have reached the...(figures and units) height above...(datum) (or... (area or place)). or Report reaching the...(figures and units) height above...(datum) (or... (area or place)).
QBW		
QBX	Have you left the... (figures and units) height above...(datum) (or...(area or place))?	I have left the...(figures and units) height above...(datum) (or...(area or place)). or Report leaving the...(figures and units) height above...(datum) (or... (area or place)).
QBY		
QBZ	Report your flying conditions in relation to clouds.	The reply to QBZ IMI is given by the appropriate answer form of signals QBF, QBG, QBH, QBK, QBN and QBP.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QCA	May I change from...(figures and units) to...(figures and units) height above...(datum)?	You may change from...(figures and units) to...(figures and units) height above...(datum). or I am changing from...(figures and units) to...(figures and units) height above...(datum).
QCB		Delay is being caused by...  1) your transmitting out of turn. 2) your slowness in answering. 3) lack of your reply to my...
QCC		
QCD		
QCE	When may I expect approach clearance?	Expect approach clearance at...hours. or No delay expected.
QCF		Delay indefinite. Expect approach clearance not later than...hours.
QCG		
QCH	May I taxi to...(place)?	Cleared to taxi to...(place). (the place is given in plain language).
QCI		Make a 360-degree turn immediately (turning to the...). or I am making a 360-degree turn immediately (turning to the...).
QCJ		
QCK		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QCL		
QCM		
QCN		
QCO		
QCP		
QCQ		
QCR		
QCS		My reception on...frequency has broken down.
QCT		
QCU		
QCV		
QCW		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QCX	What is your full call sign?	My full call sign is... or Use your full call sign until further notice.
QCY		I am working on trailing aerial. or Work on trailing aerial.
QCZ		
QDA		
QDB	Have you sent message... to...?	I have sent message...to...
QDC		
QDD		
QDE		
QDF	What is your D-Value at...(position)?  or What is the D-Value at... (place or position) (at... hours) for the...millibar level?	My D-Value at...(position) at... (figures and units) height above the 1013.2 millibars datum is... (D-Value figures and units)...* (specify plus or minus). or The D-Value at...(place or position) at...hours for the...millibar level is...(D-Value figures and units)...* (specify plus or minus). *Note: When the true altitude (radio altitude) is greater than the pres- sure altitude PS (plus) is used and when it is less MS (minus) is used.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QDG		
QDH		
QDI		
QDJ		
QDK		
QDL	Do you intend to ask me for a series of bearings?	I intend to ask you for a series of bearings.
QDM	Will you indicate the MAGNETIC heading for me to steer towards you (or...) with no wind?	The MAGNETIC heading for you to steer to reach me (or...) with no wind was...degrees (at...hours).
QDN		
QDO		
QDP	Will you accept control (or responsibility) of (for)...now (or at... hours)?	I will accept control (or responsibility) of (for)...now (or at ...hours).
QDQ		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QDR	What is my MAGNETIC bearing from you (or from...)?	Your MAGNETIC bearing from me (or from...) was...degrees (at...hours).
QDS		
QDT	Are you flying in visual meteorological conditions?	I am flying in visual meteorological conditions. or Fly at all times in visual meteorological conditions.
QDU		Cancel my IFR flight plan.
QDV	Are you flying in a horizontal visibility of less than...(figures and units)?	I am flying in a horizontal visibility of less than...(figures and units) at...(figures and units) height above...(datum).
QDW		
QDX		
QDY		
QDZ		



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QEK	Are you ready for immediate take-off?	I am ready for immediate take-off.
QEL	May I take-off (and make a...hand turn after take-off)?	You are cleared to take-off (turn as follows after take-off...).
QEM	What is the condition of the landing surface at... (place)?	The condition of the landing surface at...(place) is... Note: The information is given by sending appropriate NOTAM Code groups.
QEN	Shall I hold my position?	Hold your position.
QEO	Shall I clear the runway (or landing area)? or Have you cleared the runway (or landing area)?	Clear the runway (or landing area). or I have cleared the runway (or landing area).
QEP		
QEQ		
QER		
QES	Is a right-hand circuit in force at...(place)?	A right-hand circuit is in force at...(place).
QET		
QEU		



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QEV		
QEW		
QEX		
QEY		
QEZ		
QFA	What is the meteorological forecast for...(flight, route, section of route or zone) for the period ...hours until...hours?	The meteorological forecast for... (flight, route, section of route or zone) for the period...hours until ...hours is... Note: When the forecast is given in Q Code the following sequence of Q signal answer (or advice) forms is to be given: QAO, QMX, QMI, QNY, QBA, QMW, QFT and QNI.
QFB		The... 1) approach 2) runway 3) approach and runway lights are out of order.
QFC	What is the amount, the type and the height above...(datum) of the base of the cloud at... (place, position or zone)?	At...(place, position or zone) the base of the cloud is...eighths... type at...(figures and units) height above...(datum). Note: If several cloud layers or masses are present, the lowest is reported first.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QFD	1) Is the...visual beacon (at...(place)) in operation? 2) Will you switch on the...visual beacon (at...(place))? 3) Will you extinguish the aerodrome visual beacon (at...(place)) until I have landed?	1) The...visual beacon (at...(place)) is in operation.  2) I will extinguish the aerodrome visual beacon (at...(place)) until your landing is completed.
QFE	(At...(place)) what is the present atmospheric pressure at official aerodrome elevation?	At...(place) the atmospheric pressure at official aerodrome elevation is (or was observed at... hours to be)...millibars.
QFF	(At...(place)) what is the present atmospheric pressure converted to mean sea level in accordance with meteorological practice?	At...(place) the atmospheric pressure converted to mean sea level in accordance with meteorological practice is (or was determined at...hours to be)...millibars.
QFG	Am I overhead?	You are overhead.
QFH	May I descend below the clouds?	You may descend below the clouds.
QFI	Are the aerodrome lights lit?	The aerodrome lights are lit. or Please light the aerodrome lights.
QFJ		
QFK		
QFL		

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QFM	What height above... (datum)... 1) should I maintain? 2) are you maintaining? 3) do you intend cruising at?	... 1) Maintain (or fly at)...(figures and units) height above...(datum). 2) I am maintaining...(figures and units) height above...(datum). 3) I intend cruising at...(figures and units) height above...(datum).
QFN		
QFO	May I land immediately?	You may land immediately.
QFP	Will you give me the latest information concerning... facility (at...(place))?	The latest information concerning... facility (at...(place)) is as follows... Note: The information is given by sending appropriate NOTAM Code groups.
QFQ	Are the approach and runway lights lit?	The approach and runway lights are lit. or Please light the approach and runway lights.
QFR	Does my landing gear appear damaged?	Your landing gear appears damaged.
QFS	Is the...radio facility at...(place) in operation?	The...radio facility at...(place) is in operation (or will be in operation in... hours). or Please have the...radio facility at...(place) put in operation.
QFT	Between what heights above...(datum) has ice formation been observed (at...(position or zone))?	Ice formation has been observed at...(position or zone) in the type of...and with an accretion rate of...between...(figures and units) and...(figures and units) heights above...(datum).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QFT	What is the magnetic direction (or number) of the runway to be used?	The magnetic direction (or number) of the runway to be used is... Note: The runway number is indicated by a two-figure group and the magnetic direction by a three-figure group.
QFV	Are the floodlights switched on?	The floodlights are switched on. or Please switch on the floodlights.
QFW	What is the length of the runway in use in...(units)?	The length of runway...now in use is...(figures and units).
QFX		I am working (or am going to work) on a fixed aerial. or Work on a fixed aerial.
QFY	Please report the present meteorological landing conditions (at...(place)).	The present meteorological landing conditions at...(place) are... Note: When given in Q Code the information is sent in the following sequence: QAN, QBA, QNY, QBB, QNH, and/or QFE and, if necessary, QMU, QNT, QBJ. It is not normally necessary to precede the QAN, QBA, QNY and QBB information by these Q signals but this may be done if considered desirable.
QFZ	What is the aerodrome meteorological forecast for...(place) for the period...hours until...hours?	The aerodrome meteorological forecast for...(place) for the period ...hours until...hours is... Note: When given in Q Code the following sequence of Q signal answer (or advice) forms is to be used: QAN, QBA, QNY, QBB and, if necessary, QMU, QNT and QBJ.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QGA		
QGB		
QGC		There are obstructions to the... of runway...
QGD	Are there on my track any obstructions whose elevation equals or exceeds my altitude?	There are obstructions on your track...(figures and units) height above...(datum).
QGE	What is my distance to your station (or to...)?	Your distance to my station (or to...) is...(distance figures and units). Note: This signal is normally used in conjunction with one of the signals QDM, QDR, QTE or QUJ.
QGF		
QGG		
QGH	May I land using... (procedure or facility)?	You may land using...(procedure or facility).
QGI		
QGJ		
QGK	What track should I make good? or What track are you making good?	Make good a track from...(place) on...degrees...(true or magnetic). or I am making good a track from... (place) on...degrees...(true or magnetic).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QGL	May I enter the... (control area or zone) at...(place)?	You may enter the...(control area or zone) at...(place).
QGM		Leave the...(control area or zone).
QGN	May I be cleared to land (at...(place))?	You are cleared to land (at... (place)).
QGO		Landing is prohibited at...(place).
QGP	What is my number for landing?	You are number...to land.
QGQ	May I hold at...(place)?	Hold at...(place) at...(figures and units) height above...(datum) and await orders.
QGR		
QGS		
QGT		Fly for...minutes on a heading that will enable you to maintain a track reciprocal to your present one.
QGU		Fly for...minutes on a magnetic heading of...degrees.
QGV	Do you see me? or Can you see the aerodrome? or Can you see... (aircraft)?	I see you at...(cardinal or quadrantal point of direction). or I can see the aerodrome. or I see...(aircraft).
QGW	Does my landing gear appear to be down and in place?	Your landing gear appears to be down and in place.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QGX		
QGY		
QGZ		Hold on...direction of...facility.
QHA		
QHB		
QHC		
QHD		
QHE	Will you inform me when you are on...leg of approach?	I am on... 1) cross-wind leg ) 2) down-wind leg ) of approach. 3) base leg ) 4) final leg )
QHF		
QHG	May I enter traffic circuit at...(figures and units) height above...(datum)?	Cleared to enter traffic circuit at...(figures and units) height above...(datum).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QHH	Are you making an emergency landing?	I am making an emergency landing. or Emergency landing being made at... (place). All aircraft below... (figures and units) height above... (datum) and within a distance of... (figures and units) leave...(place or headings).
QHI	Are you (or is...) 1) waterborne? 2) on land?	I am (or...is)... 1) waterborne ) at...hours. 2) on land )
QHJ		
QHK		
QHL		
QHM		
QHN		
QHO		
QHP		
QHQ	May I make a...approach (at...(place))? or Are you making a... approach?	You may make a...approach (at... (place)). or I am making a...approach.



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QHR		
QHS		
QHT		
QHU		
QHV		
QHW		
QHX		
QHY		
QHZ	Shall I circle the aerodrome (or go around)?	Circle the aerodrome (or go around).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QIA		
QIB		
QIC	May I establish communication with...radio station on...kHz. (or...MHz.) now (or at...hours)?	Establish communication with...radio station on...kHz. (or...MHz.) now (or at...hours). or I will establish communication with...radio station on...kHz. (or...MHz.) now (or at...hours).
QID		
QIE		
QIF	What frequency is...using?	...is using...kHz. (or...MHz).
QIG		
QIH		
QII		
QIJ		
QIK		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QIL		
QIM		
QIN		
QIO		
QIP		
QIQ		
QIR		
QIS		
QIT		
QIU		
QIV		
QIW		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QIX		
QIY		
QIZ		
QJA	Is my... 1) tape) 2) mark and space) reversed?	Your... 1) tape) 2) mark and space) is reversed.
QJB	Will you use... 1) radio? 2) cable? 3) telegraph? 4) teletypewriter? 5) telephone? 6) receiver? 7) transmitter? 8) reperforator?	I will use... 1) radio. 2) cable. 3) telegraph. 4) teletypewriter. 5) telephone. 6) receiver. 7) transmitter. 8) reperforator.
QJC	Will you check your... 1) transmitter distributor? 2) auto-head? 3) perforator? 4) reperforator? 5) printer? 6) printer motor? 7) keyboard? 8) antenna system?	I will check my... 1) transmitter distributor. 2) auto-head. 3) perforator. 4) reperforator. 5) printer. 6) printer motor. 7) keyboard. 8) antenna system.
QJD	Am I transmitting... 1) in letters? 2) in figures?	You are transmitting... 1) in letters. 2) in figures.
QJE	Is my frequency shift... 1) too wide? 2) too narrow? 3) correct?	Your frequency shift is... 1) too wide. 2) too narrow (by...hertz). 3) correct.
QJF		My signal as checked by monitor... is satisfactory... 1) locally. 2) as radiated.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QJG	Shall I revert to automatic relay?	Revert to automatic relay.
QJH	Shall I run... 1) my test tape? 2) a test sentence?	Run... 1) your test tape. 2) a test sentence.
QJI	Will you transmit a continuous... 1) mark? 2) space?	I am transmitting a continuous... 1) mark. 2) space.
QJJ		
QJK	Are you receiving... 1) a continuous mark? 2) a continuous space? 3) a mark bias? 4) a space bias?	I am receiving... 1) a continuous mark. 2) a continuous space. 3) a mark bias. 4) a space bias.
QJL		
QJM		
QJN		
QJO		
QJP		
QJQ		
QJR		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QJS		
QJT		
QJU		
QJV		
QJW		
QJX		
QJY		
QJZ		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QKA		
QKB		
QKC		The sea conditions (at...position)... 1) permit alighting but not take-off. 2) render alighting extremely hazardous.
QKD		
QKE		
QKF	May I be relieved (at... hours)?	You may expect to be relieved at... hours (by...1) aircraft...(identification) (type...). 2) vessel whose call sign is...(call sign) (and/or whose name (is...(name))).
QKG	Will relief take place when...(identification) establishes... 1) visual, 2) communications, contact with survivors?	Relief will take place when... (identification) establishes... 1) visual, 2) communications, contact with survivors.
QKH	Report details of the parallel sweep (track) search being (or to be) conducted? or In the parallel sweep (track search being (or to be) conducted, what is (are)... 1) the direction of sweeps, 2) the separation between sweeps, 3) the height above the datum, employed in the search pattern?	The parallel sweep (track) search is being (or to be) conducted...  1) with direction of sweeps... degrees...(true or magnetic). 2) with...(distance figures and units) separation between sweeps. 3) at a height of...(figures) above...(datum).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QKI		
QKJ		
QKK		
QKL		
QKM		
QKN		Aircraft plotted (believed to be you) in position...on track...degrees at...hours.
QKO	What other units are (or will be) taking part in the operation (... (identification of operation))?	In the operation (... (identification)), the following units are (or will be) taking part...(name of units). or ...(name) unit is taking part in operation (... (identification)) (with effect from...hours).
QKP	Which pattern of search is being followed?	The search pattern is... 1) parallel sweep. 2) square search. 3) creeping line ahead. 4) track crawl. 5) contour search. 6) combined search by aircraft and ship. 7) ...(specify).
QKQ		



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QKR		
QKS		
QKT		
QKU		
QKV		
QKW		
QKX		
QKY		
QKZ		
QLA		
QLB	Will you monitor...station and report regarding range, quality, etc.?	I have monitored...station and report (briefly) as follows...

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QLC		
QLD		
QLE		
QLF		
QLG		
QLH	Will you use simultaneous keying on...frequency and ...frequency?	I will now key simultaneously on... frequency and...frequency.
QLI		
QLJ		
QLK		
QLL		
QLM		
QLN		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QLQ		
QLP		
QLQ		
QLR		
QLS		
QLT		
QLU		
QLV	Is the...radio facility still required?	The...radio facility is still required.
QLW		
QLX		
QLY		
QLZ		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QMA		
QMB		
QMC		
QMD		
QME		
QMF		
QMG		
QMH		Shift to transmit and receive on ...kHz (or MHz); if communication is not established within 5 minutes, revert to present frequency.
QMI	Report the vertical distribution of cloud (at...(position or zone)) as observed from your aircraft.	The vertical distribution of cloud as observed from my aircraft at... hours at...(position or zone) is: lowest layer observed*...eighths (...type) with base of...(figures and units) and tops of...(figures and units) (*and similarly in sequence for each of the layers observed.) height above...(datum). Example: = QMI 1400 11 2 CU 1000 FT 2500 FT 6 SC 6000 FT 10030 FT 5 AC 13000 FT 14000 FT ALT =
QMJ		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QMK		
QML		
QMN		
QMO		
QMP		
QMQ		
QMR		
QMS		
QMT		
QMU	What is the surface temperature at... (place) and what is the dew point temperature at that place?	The surface temperature at...(place) at...hours is...degrees and the dew point temperature at that time and place is...degrees.
QMV		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QMW	At...(position or zone) what is (are) the height(s) above...(datum) of the zero celsius isotherm(s)?	At...(position or zone) the zero celsius isotherm(s) is (are) at... (figures and units) height(s) above... (datum).
QMX	What is the air temperature (at...(position or zone)) (at...hours) at the... (figures and units) height above...(datum)?	At...(position or zone) at...hours the air temperature is...(degrees and units) at...(figures and units) height above...(datum). Note: Aircraft reporting QMX information will transmit the temperature figures as corrected for airspeed.
QMY		
QMZ	Have you any amendments to the flight forecast in respect of section of route yet to be traversed?	The following amendment(s) should be made to the flight forecast... (If no amendments, signal QMZ NIL.)
QNA		
QNB		
QNC		
QND		
QNE	What indication will my altimeter give on landing at...(place) at...hours, my sub-scale being set to 1013.2 millibars (29.92 inches)?	On landing at...(place) at...hours, with your sub-scale being set to 1013.2 millibars (29.92 inches), your altimeter will indicate...(figures and units).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QNF		
QNG		
QNH	What should I set on the sub-scale of my altimeter so that the instrument would indicate my elevation if I were on the ground at your station?	If you set the sub-scale of your altimeter to read...millibars (or hundredths of an inch*), the instrument would indicate your elevation if you were on the ground at my station at...hours. *Note: When the setting is given in hundredths of an inch the abbreviation "INS" is used to identify the units.
QNI	Between what heights above...(datum) has turbulence been observed at... (position or zone)?	Turbulence has been observed at... (position or zone) with an intensity of...between...(figures and units) and...(figures and units) heights above...(datum).
QNJ		
QNK		
QNL		
QNM		
QNN		
QNO		I am not equipped to give the information (or provide the facility) requested.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QNP		
QNQ		
QNR		I am approaching my point of no return.
QNS		
QNT	What is the maximum gust speed of the surface wind at...(place)?	The maximum gust speed of the surface wind at...(place) at...hours is... (speed figures and units).
QNU		
QNV		
QNW		
QNX		



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QNY	What is the present weather and the intensity thereof at...(place, position or zone)?	<p>The present weather and intensity thereof at...(place, position or zone) at... hours is... (See Notes a) and b)).</p> <p>Notes:</p> <p>a) When present weather information is transmitted by a ground station, the information shall be selected from the present weather table (Table III) in PANS-MET (Doc 7605-MET/526). If none of these conditions prevail the reply shall be QNY NIL.</p> <p>b) When present weather information is transmitted by an aircraft, the information shall be selected from Item 11, AIREP. If none of these conditions prevail the reply shall be QNY NIL or alternatively the appropriate answer (or advice) form of signals QBF, QBG, QBH, QBK, QBN or QBP. The alternative may also be given in addition to present weather conditions when one or more of the conditions listed in Item 11 prevail.</p>
QNZ		
<p>QOA-QQZ</p> <p>The series QOA to QQZ inclusive is reserved for the Maritime Services and will be promulgated in the next printed change to this publication.</p>		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QRA	What is the name of your station?	The name of my station is...
QRB	How far approximately are you from my station?	The approximate distance between our stations is...nautical miles (or... kilometers).
QRC	By what private enterprise (or State administration) are accounts for charges for your station settled?	The accounts for charges of my station are settled by the private enterprise... (or State administration).
QRD	Where are you bound and where are you from?	I am bound for...from...
QRE	What is your estimated time of arrival at... (or over...) (place)?	My estimated time of arrival at... (or over...) (place) is...hours.
QRF	Are you returning to... (place)?	I am returning to...(place). or Return to...(place).
QRG	Will you tell me my exact frequency (or that of ...)?	Your exact frequency (or that of...) is...kHz (or MHz).
QRH	Does my frequency vary?	Your frequency varies.
QRI	How is the tone of my transmission?	The tone of your transmission is... 1) good. 2) variable. 3) bad.
QRJ	How many radiotelephone calls have you to book?	I have...radiotelephone calls to book.
QRK	What is the intelligibility of my signals (or those of...)?	The intelligibility of your signals (or those of...) is... 1) bad. 2) poor. 3) fair. 4) good. 5) excellent.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QRL	Are you busy?	I am busy (or I am busy with...). Please do not interfere.
QRM	Are you being interfered with?	I am being interfered with (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
QRN	Are you troubled by static?	I am troubled by static (1. nil 2. slightly 3. moderately 4. severely 5. extremely).
QRO	Shall I increase transmitter power?	Increase transmitter power.
QRP	Shall I decrease transmitter power?	Decrease transmitter power.
QRQ	Shall I send faster?	Send faster (...words per minute).
QRR	Are you ready for automatic operation?	I am ready for automatic operation. Send at...words per minute.
QRS	Shall I send more slowly?	Send more slowly (...words per minute).
QRT	Shall I stop sending?	Stop sending.
QRU	Have you anything for me?	I have nothing for you.
QRV	Are you ready?	I am ready.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QRW	Shall I inform... that you are calling him on...kHz (or MHz).	Please inform...that I am calling him on...kHz (or MHz).
QRX	When will you call me again?	I will call you again at...hours (on...kHz (or MHz)).
QRY	What is my turn? (Relates to communication.)	Your turn is number...(or according to any other indication). (Relates to communication.)
QRZ	Who is calling me?	You are being called by...(on... kHz (or MHz)).
QSA	What is the strength of my signals (or those of...)?	The strength of your signals (or those of...) is... 1) scarcely perceptible. 2) weak. 3) fairly good. 4) good. 5) very good.
QSB	Are my signals fading?	Your signals are fading.
QSC	Are you a cargo vessel?	I am a cargo vessel.
QSD	Is my keying defective?	Your keying is defective.
QSE	What is the estimated drift of the survival craft?	The estimated drift of the survival craft is...(figures and units).
QSF	Have you effected rescue?	I have effected rescue and am proceeding to...base (with...persons injured requiring ambulance).
QSG	Shall I send...telegrams at a time?	Send...telegrams at a time.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QSH	Are you able to home on your D/F equipment?	I am able to home on my D/F equipment (on station...).
QSI		I have been unable to break in on your transmission. or Will you inform...(call sign) that I have been unable to break in on his transmission (on...kHz. (or...MHz)).
QSJ	What is the charge to be collected to...including your internal telegraph charge?	The charge to be collected to... including my internal telegraph charge is...francs.
QSK	Can you hear me between your signals and if so can I break in on your transmission?	I can hear you between my signals; break in on my transmission.
QSL	Can you acknowledge receipt?	I am acknowledging receipt.
QSM	Shall I repeat the last telegram which I sent you (or some previous telegram)?	Repeat the last telegram which you sent me (or telegram(s) number(s)...).
QSN	Did you hear me (or... (call sign)) on...kHz (or MHz)?	I did hear you (or...(call sign)) on... kHz (or MHz).
QSO	Can you communicate with... direct or by relay?	I can communicate with...direct (or by relay through...).
QSP	Will you relay to...free of charge?	I will relay to...free of charge.
QSQ	Have you a doctor on board (or is...(name of person) on board)?	I have a doctor on board (or...(name of person) is on board).
QSR	Shall I repeat the call on the calling frequency?	Repeat your call on the calling frequency; did not hear you (or have interference).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QSS	What working frequency will you use?	I will use the working frequency... kHz (normally, only the last three figures of the frequency need be given).
QST		
QSU	Shall I send or reply on this frequency (or on... kHz (or MHz)) (with emissions of class...)?	Send or reply on this frequency (or on...kHz (or MHz)) (with emissions of class...).
QSV	Shall I send a series of V's on this frequency (or...kHz (or MHz))?	Send a series of V's on this frequency (or on...kHz (or MHz)).
QSW	Will you send on this frequency (or on...kHz (or MHz)) (with emissions of class...)?	I am going to send on this frequency (or on...kHz (or MHz)) (with emissions of class...).
QSX	Will you listen to... (call sign(s)) on... kHz (or MHz)?	I am listening to...(call sign(s)) on...kHz (or MHz).
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on...kHz (or MHz)).
QSZ	Shall I send each word or group more than once?	Send each word or group twice (or... times).

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QTA	Shall I cancel telegram number...?	Cancel telegram number...
QTB	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.
QTC	How many telegrams have you to send?	I have...telegrams for you (or for...).
QTD	What has the rescue vessel or rescue aircraft recovered?	...(identification) has recovered... 1) ...(number) survivors. 2) wreckage. 3) ...(number) bodies.
QTE	What is my TRUE bearing from you? or What is my TRUE bearing from...(call sign)? or What is the TRUE bearing of...(call sign) from...(call sign)?	Your TRUE bearing from me is... degrees (at...hours). or Your TRUE bearing from...(call sign) was...degrees (at...hours). or The TRUE bearing of...(call sign) from...(call sign) was...degrees at...hours.
QTF	Will you give me the position of my station according to the bearings taken by the D/F stations which you control?	The position of your station according to the bearings taken by the D/F stations which I control was... latitude...longitude (or other indication of position), class...at... hours.
QTG	Will you send two dashes of ten seconds each followed by your call sign (repeated...times) (on... kHz (or MHz))? or Will you request...to send two dashes of ten seconds followed by his call sign (repeated... times) on... kHz (or MHz)?	I am going to send two dashes of ten seconds each followed by my call sign (repeated...times) (on...kHz (or MHz)). or I have requested...to send two dashes of ten seconds followed by his call sign (repeated...times) on...kHz (or MHz).
QTH	What is your position in latitude and longitude (or according to any other indication)?	My position is...latitude...longitude (or according to any other indication).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QTI	What is your TRUE track?	My TRUE track is...degrees.
QTJ	What is your speed?  (Requests the speed of a ship or aircraft through the water or air respectively.)	My speed is...knots (or...kilometers or...statute miles per hour). (Indicates the speed of a ship or aircraft through the water or air respectively.)
QTK	What is the speed of your aircraft in relation to the surface of the earth?	The speed of my aircraft in relation to the surface of the earth is... knots (or...kilometers or...statute miles per hour).
QTL	What is your TRUE heading?	My TRUE heading is...degrees.
QTM	What is your MAGNETIC heading?	My MAGNETIC heading is...degrees.
QTN	At what time did you depart from...(place)?	I departed from...(place) at...hours.
QTO	Are you airborne? or Have you left dock (or port)?	I am airborne or I have left dock (or port).
QTP	Are you going to alight (or land)? or Are you going to enter dock (or port)?	I am going to alight (or land). or I am going to enter dock (or port).
QTT	Can you communicate with my station by means of the international code of signals?	I am going to communicate with your station by means of the international code of signals.
QTR	What is the correct time?	The correct time is...hours.



## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QTS	Will you send your call sign for tuning purposes or so that your frequency can be measured now (or at...hours) on...kHz (or MHz)?	I will send my call sign for tuning purposes or so that my frequency may be measured now (or at...hours) on... kHz (or MHz).
QTF		The identification signal which follows is superimposed on another transmission.
QTU	What are the hours during which your station is open?	My station is open from...to...hours.
QTV	Shall I stand guard for you on the frequency of... kHz (or MHz) (from... to...hours)?	Stand guard for me on the frequency of...kHz (or MHz) (from...to... hours).
QTW	What is the condition of survivors?	Survivors are in...condition and urgently need...
QTX	Will you keep your station open for further communication with me until further notice (or until... hours)?	I will keep my station open for further communication with you until further notice (or until...hours).
QTY	Are you proceeding to the position of incident and if so when do you expect to arrive?	I am proceeding to the position of incident and expect to arrive at... hours (on...date).
QTZ	Are you continuing the search?	I am continuing the search for... (aircraft, ship, survival craft, survivors or wreckage).
QUA	Have you news of... (call sign)?	Here is news of...(call sign).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QCB	Can you give me in the following order information concerning: the direction in degrees TRUE and speed of the surface wind; visibility; present weather; and amount, type and height of base of cloud above surface elevation at... (place of observation)?	Here is the information requested ... (The units used for speed and distances should be indicated.)
QCC	What is the number (or other indication) of the last message you received from me (or from...(call sign))?	The number (or other indication) of the last message I received from you (or from...(call sign)) is...
QCD	Have you received the urgency signal sent by... (call sign of mobile station)?	I have received the urgency signal sent by...(call sign of mobile station) at...hours.
QCE	Can you use telephony in... (language), with interpreter if necessary; if so, on what frequencies?	I can use telephony in...(language) on...kHz (or MHz).
QCF	Have you received the distress signal sent by... (call sign of mobile station)?	I have received the distress signal sent by...(call sign of mobile station) at...hours.
QCG	Will you be forced to alight (or land)?	I am forced to alight (or land) immediately. or I will be forced to alight (or land) at...(position or place) at...hours.
QCH	Will you give me the present barometric pressure at sea level? Aeronautical Note: Stations of the international aeronautical telecommunication service will interpret this signal as: What is the present atmospheric pressure at the present water level?	The present barometric pressure at sea level is...(units). Aeronautical Note: Stations of the international aeronautical telecommunication service will interpret this signal as: The present atmospheric pressure at the present water level at...(place or position) at... hours is...(figures and units).
QCI	Are your navigation lights working?	My navigation lights are working.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QUJ	Will you indicate the TRUE track to reach you (or...)?	The TRUE track to reach me (or...) is...degrees at... hours.
QUK	Can you tell me the condition of the sea observed at...(place or co-ordinates)?	The sea at...(place or co-ordinates) is...

Aeronautical Note: Stations of the international aeronautical telecommunication service will complete the answer, information or advice form by the use of a numbered alternative as given hereunder, selected according to the average wave height as obtained from the larger wellformed waves of the wave system being observed. If observed height coincides with one of the limits, report the lower numbered alternative, e.g. waves with a mean maximum height of 4 meters are to be reported as "5".

Number		Meters	Height Feet (approx.)
0	Calm-glassy	0	0
1	Calm-rippled	0-0.1	0-1/3
2	Smooth wavelets	0.1-0.5	1/3-1 2/3
3	Slight	0.5-1.25	1 2/3-4
4	Moderate	1.25-2.5	4-8
5	Rough	2.5-4	8-13
6	Very rough	4-6	13-20
7	High	6-9	20-30
8	Very high	9-14	30-45
9	Phenomenal	Over 14	Over 45

QUL	Can you tell me the swell observed at...(place or co-ordinates)?	The swell at...(place or co-ordinates) is...
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Aeronautical Note: Stations of the international aeronautical telecommunication service will complete the answer, information or advice form by the use of the following numbered alternatives:

Number	Length of Swell	Height	Number	Length of Swell	Height
0	-	-	5	Long	Moderate
1	Short or average	Low	6	Short	Heavy
2	Long	Low	7	Average	Heavy
3	Short	Moderate	8	Long	Heavy
4	Average	Moderate	9	Confused	-

Additionally, stations of the international aeronautical telecommunication service may indicate the direction of swell by the use of the appropriate cardinal or quadrantal point abbreviation N, NE, E, SE, etc. following the numbered alternate for indicating swell condition. The descriptions in the above numbered alternatives are as follows:

		Meters	Length of Swell Feet (approx.)
Short	=	0-100	0-300
Average	=	100-200	300-600
Long	=	Over 200	Over 600
		Meters	Height of Swell Feet (approx.)
Low	=	0-2	0-7
Moderate	=	2-4	7-13
Heavy	=	Over 4	Over 13

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
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QUL  
(cont.)

When there is no swell, the numbered alternative "0" is used; when the swell is such that the length and height of the swell waves cannot be determined, the numbered alternative "9" is used.

QUM	May I resume normal working?	Normal working may be resumed.
QUN	<p>Will vessels in my immediate vicinity (or in the vicinity of...latitude... longitude (or of...)) please indicate their position, TRUE course and speed?</p> <p>Aeronautical Notes:            a) All stations of the international aeronautical telecommunication service will interpret this signal (in part) as referring to TRUE TRACK.            b) English-speaking stations of the maritime mobile service may interpret this signal (in part) as referring to TRUE HEADING. When communicating with such stations it is recommended that supplementary use be made of the signal QTI to avoid any misunderstanding.</p>	<p>My position, TRUE course and speed are...</p> <p>Aeronautical Notes:            a) All stations of the international aeronautical telecommunication service will interpret this signal (in part) as referring to TRUE TRACK.            b) English-speaking stations of the maritime mobile service may interpret this signal (in part) as referring to TRUE HEADING. When communicating with such stations it is recommended that supplementary use be made of the signal QTI to avoid any misunderstanding.</p>
QUO	<p>Shall I search for...</p> <ol style="list-style-type: none"> <li>1) aircraft,</li> <li>2) ship,</li> <li>3) survival craft,</li> </ol> <p>in the vicinity of... latitude... longitude (or according to any other indication)?</p>	<p>Please search for...</p> <ol style="list-style-type: none"> <li>1) aircraft,</li> <li>2) ship,</li> <li>3) survival craft,</li> </ol> <p>in the vicinity of... latitude... longitude (or according to any other indication).</p>
QUP	<p>Will you indicate your position by...</p> <ol style="list-style-type: none"> <li>1) searchlight?</li> <li>2) black smoke trail?</li> <li>3) pyrotechnic lights?</li> </ol>	<p>My position is indicated by...</p> <ol style="list-style-type: none"> <li>1) searchlight.</li> <li>2) black smoke trail.</li> <li>3) pyrotechnic lights.</li> </ol>

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
QUQ	Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate your landing?	Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate my landing.
QUR	Have survivors... 1) received survival equipment? 2) been picked up by rescue vessel? 3) been reached by ground rescue party?	Survivors... 1) are in possession of survival equipment dropped by... 2) have been picked up by rescue vessel. 3) have been reached by ground rescue party.
QUS	Have you sighted survivors or wreckage? If so, in what position?	Have sighted... 1) survivors in water, 2) survivors on rafts, 3) wreckage, in position...latitude...longitude (or according to any other indication).
QUT	Is position of incident marked?	Position of incident is marked by... 1) flame or smoke float. 2) sea marker. 3) sea marker dye. 4) ...(specify other marking).
QUU	Shall I home ship or aircraft to my position?	Home ship or aircraft...(call sign) ... 1) to your position by transmitting your call sign and long dashes on... kHz (or MHz). 2) by transmitting on...kHz (or MHz) TRUE track to reach you.
QUV		
QUW	Are you in the search area designated as...(designator or latitude and longitude)?	I am in the...(designation) search area.
QUX		



DECODE  
SECTION B - Z SIGNALS

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZAA		You are not observing proper circuit discipline.
ZAB		Your speed key is improperly adjusted.
ZAC		Cease using speed key.
ZAD		Your operating signal (made at...) received as...(1. Not understood; 2. Not held).
ZAE		I am unable to receive you. Receipt through...
ZAF	Will you patch me through to...(via you or...)?	I am about to patch you through to... (via...).
ZAG		Break...(1. Go ahead with next tape; 2. Go back...feet; 3. Advance your key tape to reference mark number and repeat last transmission (or transmission...)).
ZAH		Unable to relay message...in present form (1. Not in prescribed format; 2. Format lines...incorrect; 3. No on-line facility available; 4. Call signs not encrypted; 5. Text not encrypted). We file. Transmit correctly prepared message to all addressees (or to...).
ZAI		Run... (1. Caller; 2. Test tape; 3. Synchronizing tape; 4. Traffic tape; 5. Marking signals; 6. Spacing signals; 7. Reversals; 8. Run teletypewriter space bar signals). 9. Datel test at....bd
ZAJ		I have (or...has) been unable to break you.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZAK		Transmission on...kHz (or MHz) suspended until...(or was suspended at...) on account of electrical hazards (or...)
ZAL		I am closing down (until...) due to...
ZAM		I am unable to obtain reply from teleprinter switchboard...(for connection to...). Request you call him (or other intermediate switchboard) for me.
ZAN		Transmit only messages of and above precedence...
ZAO		I cannot understand your speech. Use radiotelegraph.
ZAP	Shall I work...(1. Simplex; 2. Duplex; 3. Diplex; 4. Multiplex; 5. Single Sideband; 6. With automatic error correction system; 7. Without automatic error correction system)?	Work...(1. Simplex; 2. Duplex; 3. Diplex; 4. Multiplex; 5. Single Sideband; 6. With automatic error correction system; 7. Without automatic error correction system).
ZAQ		The last word (or group)... (1. Received from you was...; 2. Transmitted to you was...).
ZAR		This is my...request (or reply). (1. First; 2. Second; 3. Third; etc.).
ZAS		Rerun all tapes run on...since... (1. Your present frequency; 2. ...kHz (or MHz); 3. Call sign...; 4. This channel or...channel).
ZAT		Am preparing traffic (perforating tape) for transmission.
ZAU	What is teletype range taken on my signal(s)?	Teletype range taken on your signal(s) is...to...



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZAV		Transmit traffic for me (or for...) by broadcast method until further directed (or until...).
ZAW	Shall I transmit 12 inches of blank tape at short intervals at... words per minute?	Transmit 12 inches of blank tape at short intervals at...words per minute.
ZAX		You are...(1. Causing interference. Listen before sending; 2. Causing interference by inattention to order to wait; 3. Sending at the same time as...(call sign); 4. Causing delay by slowness in answering; 5. Causing delay by slowness in answering my service or procedure messages; 6. Answering out of turn).
ZAY		Transmit traffic to me (or to...on... kHz (or MHz)) without waiting for receipts. I (or...) will receipt for traffic later (on...kHz (or MHz)).
ZAZ		One or more transmitters, simultaneously keying on this broadcast, are defective but transmission will continue on remaining transmitters. Traffic so transmitted will be repeated when full service is restored.
ZBA	What is cause of delay (or of bad transmission)?	Delay (or bad transmission) due to ...
ZBB		For following message you will require a total of...copies.
ZBC		You are transmitting a continuous... (1. Mark; 2. Space).
ZBD	Will you repeat what you (or...) sent (at...)?	Following is what I (or...) sent (at...).
ZBE		Retransmit message...to...(for...) (1. Action; 2. Information).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZBF		For following message use large message forms.
ZBG		You are transmitting in upper case.
ZBH		Make preliminary call before transmitting traffic.
ZBI		Listen for radiotelephony.
ZBJ		
ZBK	Are you receiving my traffic clear?	I am receiving your traffic... (1. Clear; 2. Garbled).
ZBL		I am unable to receive you while I am transmitting. Do not use break-in-procedure.
ZBM		Place...on watch on this frequency. (1. A qualified speed key operator; 2. A competent operator).
ZBN		Your...is reversed. (1. Tape; 2. Mark and space).
ZBO	Of what precedence(s)?	I have (or...has)...(numeral followed by precedence prosign for each precedence) message(s) for you (or for...).
ZBP		Your...(1. Characters are indistinct; 2. Spacing is bad).
ZBQ	When and on what frequency was message... received?	Message...was received at...on... kHz (or MHz).

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZBR	Shall I send by... (1. Direct (R) method; 2. Broadcast (F) method; 3. Intercept (I) method; 4. Repeat back (G) method)?	Send by...(1. Direct (R) method; 2. Broadcast (F) method; 3. Intercept (I) method; 4. Repeat back (G) method).
ZBS		Your...(1. Dots are too heavy; 2. Dots are too light; 3. Dots are varying in bias; 4. Dot spacing is bad; 5. Dots are missing; 6. Dots are burring).
ZBT	How do you count following text group(s) ...?	Text group(s)...should be counted as...group(s).
ZBU		Report when you are in radio communication with...
ZBV		Answer me (or...) on...kHz (or MHz).
ZBW	Will you shift (or ask ...to shift) to trans- mit on...kHz (or MHz)?	I am (or...is) shifting to transmit on...kHz (or MHz).
ZBX	Will you shift (or ask... to shift) to receive on...kHz (or MHz)?	I am (or...is) shifting to receive on...kHz (or MHz).
ZBY		Pass...(1. On broadcast...; 2. On Broadcast...single operator; 3. On Broadcast...two operator period; 4. On Broadcast...general periods only).
ZBZ	What is the printing accuracy of my signals (or those of...)?	The printing accuracy of your signals (or those of...) is...(1. Totally corrupt; 2. Very corrupt; 3. Partly corrupt rendering traffic unaccept- able; 4. Occasionally corrupt but traffic acceptable. 5. Perfect - no corruption).

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZCA		Satellite(s) is/are pre-empted from..... ...Z to .....Z
ZCB		Change to double-hop working using satellites.....West and .....East now (or at..... hours).
ZCC		Establish.....on access.....channel (A/B) 1. 300 db Emergency patch. 2. Phase-reverse-keying.
ZCD		Weight your access to.....(call sign) by.....db
ZCE		Access satellite.....now (or at..... hours) with..... 1. Spread Spectrum Modulation (normal allocation). 2. Spread Spectrum Modulator changed to access..... 3. Spread Spectrum Demodulator changed to access..... 4. Frequency modulation. 5. Phase Shift Keying Modulation.
ZCF		Remove access.....now (or at.....hours) 1. Spread Spectrum Modulation (1 - 40) 2. Frequency Modulation. 3. Phase-reverse-keying. 4. Phase Shift Keying Modulation.
ZCG	What is your frequency modulation deviation?	My frequency modulation deviation is.....
ZCH	What is your tracking mode?	My tracking mode is..... 1. Autotrack. 2. Manual tracking. 3. Hand barring.
ZCI	What is your.....? 1. Total output power. 2. Quality meter reading. 3. Number of accesses. 4. Frequency modulation access power.	My 1. is.....watts. 2. ....% 3. ....accesses. 4. ....watts.
ZCJ	Are you experiencing equipment trouble?	I am experiencing trouble with my..... 1. Spread Spectrum Modulator. 2. Frequency division multiplex equipment. 3. Line modem. 4. Time division multiplex equipment. 5. Switching or patching. 6. Servo system. 7. Transmitter. 8. Receiver. 9. Parametric Amplifier. 10. Phase Shift Keying Modulator.

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZCK	Shall I loop my.....? 1. Spread Spectrum Modulator channel (A/B). 2. Line modem. 3. Time division multiplex equipment. 4. Frequency division multiplex equipment.	Loop your..... 1. Spread Spectrum Modulator Channel.... 2. Line modem. 3. Time division multiplex equipment. 4. Frequency division multiplex equipment.
ZCL	Have you checked speed setting of all equipment on..... (channel/circuit)?	I have checked speed setting on..... (channel/circuit).
ZCM	May I carry out..... on satellite.....? 1. Spread Spectrum Modulation back-to-back check. 2. Range measurement. 3. Power Balance.	Carry out.....on satellite..... 1. Spread Spectrum Modulation back-to-back check. 2. Range measurement. 3. Power Balance.
ZCN	Are you ready to synchronize Spread Spectrum Access?	I am ready to synchronize Spread Spectrum Access.....
ZCO		On your FM/FDM Access..... 1. Suppress telegraph channel...(1 - 9) 2. Open telegraph channel..... (1 - 9)
ZCP		Change (total) radiated power..... 1. On narrow-band to.....watts. 2. On Spread Spectrum.....watts. Note: This power excluded that for access D or E. 3. Of access.....(1-40, N1-N5, D or E) to.....(watts). 4. Of access.....(1-40, RAE) to..... (0,3,6, 9db) below full access at Combiner Unit.
ZCQ		Change FM/FDM mode to Mode.....(A/D) with deviation.....kHz.
ZCR		I am about to initiate..... 1. Serial 2. Parallel synchronization of accesses ..... and .....
ZCS		Switch your Spread Spectrum Access..... modulator to..... 1. Code off 2. Search 3. Sync. 1 4. Sync. 2 5. Traffic 6. Channel A Normal On 7. Channel B Normal on
ZCT		My Spread Spectrum Access demodulator is..... 1. CW tuned 2. In short-code lock 3. In long-code lock 4. In long-code and data-lock on Channel A only. 5. In long-code and data-lock on both channels.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZCU		Set Spread Spectrum Access.....to..... 1. Channel A only. 2. Channel A and B retaining original radiated power for this access.
ZCV		Set speed of Spread Spectrum Access .....Channel.....(A/B) to..... 1. 1300 bd.           4. 1200 bd. 2. 2600 bd.           5. 2400 bd. 3. 600 bd.            6. 4800 bd.
ZCW		1. Check your.....and advise 2. I have lost..... 3. Perform back to back through..... 4. Bypass 5. I have bypassed 6. Retune demodulator To be used in conjunction with ZCX.
ZCX		1. Test loop 1 2. Test loop 2 3. Test loop 3 4. Test loop 4 5. Paramp 6. High Power Amplifier 7. Demodulator 8. Mux Channel A 9. Mux Channel B 10. Demux Channel A 11. Demux Channel B 12. Coder 13. Decoder 14. Tracking (including side lobe) 15. 5 MHz standard 16. Synthesizer 17. Power Supply 18. Modulator 19. Satellite 20. Crypto Equipment 21. Patching DC 22. Patching RF 23. Patching Clock
ZCY		Operate at.....(BPS)..... 1. 75 2. 84 3. 150 4. 168 5. 300 6. 336 87. 672 - 600 8. 1200 9. 2400 10. 4800 11. 9600 To be used in conjunction with ZCZ.

## DECODE

SIG. #	QUESTION	ANSWER, ADVICE OR ORDER
ZCZ		<ol style="list-style-type: none"> <li>1. Coded</li> <li>2. Uncoded</li> <li>3. Satellite Access Channel at...DBW</li> <li>4. Relinquish Satellite Access due to sole access.....</li> <li>5. Relinquish Satellite Access due to violation of Power restrictions</li> <li>6. Increase Power to.....DBW</li> <li>7. Decrease Power to.....DBW</li> <li>8. NB ALPHA</li> <li>9. NB BRAVO</li> <li>10. Change Satellite Access Channel to....at DBW</li> </ol>
ZDA		I have a formal message for you (precedence is...).
ZDB		Expedite reply(ies) to my...(1. Previous operating signal; 2. Request(s) for repetition and correction; 3. Service message...).
ZDC	Does the last message (or message...) require a signal of execution?	Last message (or message...) requires a signal of execution.
ZDD		Bring message...to the circuit.
ZDE		Message...undelivered...(1. Station closed until...Z; 2. Attempting alert station to re-open (for Flash or Immediate precedence only); 3. Will continue efforts to effect disposal; 4. Advise disposition; 5. Will not continue further efforts. Request cancel and file; 6. Give more complete address).
ZDF		Message...was: (1. Received by (addressee(s) designation) at...Z. 2. Received by (addressee(s) designation communications center) at...Z. 3. Delivered to (addressee(s) designation) by broadcast at...Z. 4. Forwarded to (addressee(s) designation) by commercial means at ...Z. 5. Mailed to (addressee(s) designation) at...Z.
ZDG		Accuracy of following message(s) or (message...) is doubtful. Correction or confirmation will be forthcoming.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZDH		Request corrected copy of message... be forwarded to...
ZDI		Place this message (or message...) on... (1. MERCAST; 2. MERCAST one operator period).
ZDJ	How many groups does your message contain?	I have a message containing...groups to transmit to you (or to....)
ZDK	Will you repeat message... (or portion...) (or will you rerun number)?	Following repetition (of...) is made in accordance with your request.
ZDL		Confirmation...(1. Was omitted; 2. Differs from text).
ZDM		I am holding your message....
ZDN		Report disposal of message... your station with any reason for delay.
ZDO		I could not send message...to....
ZDP		Hold my message...until correctness is confirmed.
ZDQ		Message...was relayed to...at...by... (on...kHz (or MHz)).
ZDR		This is a multiple-address or book message tape containing...routing indicators in the routing line which is to be routed in accordance with the established doctrine.



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZDS		Message (or message...) which you have (or...has) just forwarded was incorrectly transmitted. Correct version of message (or part or portion...) is...
ZDT		Exercise messages are not to be sent until further orders (or until...)
ZDU		Pass the following...(1. Private message (telegram); 2. Service telegram...) (Number of words charged for is...).
ZDV		Private message (telegram) received for...Request instructions.
ZDW		In addition to the regular broadcast times, this hydrographic message is to be transmitted on the following hydrographic schedules...(1. ...schedule; 2. All schedules on...(date); 3. All schedules from...to...(dates inclusive).
ZDX		Messages up to and including serial (or circuit) number...have been previously transmitted.
ZDY		Private messages (telegrams) are not to be sent until further orders (or until...).
ZDZ		On...(date) message(s) was (were) mailed to...(command(s)) bearing serial numbers...

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZEA		Pass plain language copy to... by secure means.
ZEB		This is a reprocessed ICAO message.
ZEC	Have you received message...?	Message...(1. Not received; 2. Unidentified. Give better identifying data).
ZED		The following confirmatory information as received is at variance with the text.
ZEE		Request message...be transmitted.
ZEF		This message has been read (received or intercepted) from a ship at sea.
ZEG		This message is not to be decrypted or reported outside the communication center in...(1. Aggressor force; 2. Friendly force).
ZEH		Accuracy of...portion of following message (or message...) is doubtful. Correction or confirmation will be forwarded when received. (1. Heading; 2. Text; 3. Group...to...)
ZEI		Accuracy is doubtful of heading of message received as follows... Check to station of origin if necessary and repeat.
ZEJ		Replies to this message (or message...) are to be sent now (or at...)
ZEK		No answer is required.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZEL	Is message...a correction to message...which was previously transmitted with doubtful or missing groups (words)?	This message is a correction (to message...) (transmitted by...). Note: May only be used in conjunction with ZDG.
ZEM		
ZEN		This message has been delivered by a separate transmission or by other means (1. Messenger/courier; 2. Mail) to the addressee(s) immediately following this operating signal.
ZEO		Transmit this message by rapid means when no charges are involved and to all others by mail.
ZEP		This message (or message...) was incompletely received. Each word or group missed, which is indicated by position of ZEP in the message, will be forwarded as soon as obtained.
ZEQ		Message...has been (1. Missent to this station. Received at...z. Message protected; 2. Missent to this station and unable to protect delivery due to.... Request you re-transmit to the appropriate called station(s); 3. Misrouted to this station and has been rerouted to ...at....z. Recommend corrective action; 4. Misrouted to this station and unable to protect delivery (for...) due to... Request your station protect delivery; 5. Routed to this station in format line 2, but without delivery responsibility in format lines 7 or 8. Advise.)
ZER		This is a multiple-address or book message tape containing...routing indicators in the routing line for which the station called in the pilot is responsible.
ZES		Your message...has been received...(1. Incomplete; 2. Garbled). Request retransmission.
ZET		Message...has been protected and no further action by...is required.
ZEU		Exercise (drill) message.

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZEV	Request you acknowledge message...	Message (or message...) is acknowledged.
ZEW		Your attention is invited, for... (1. Action; 2. Information), to message... which is in your files.
ZEX		This is a book message and may be delivered as a single-address message to addressees for whom you are responsible.
ZEY		This message (or message...) has been (or will be) put on the... broadcast schedules (serial number...)
ZEZ		When delivery is effected of this book message to addressee by commercial means, or when copy is forwarded to confirm message previously delivered by telephone it is to be sent as a single address message. (May only be used in conjunction with ZEX.)
ZFA		Following message has been read (received or intercepted)..
ZFB		Pass this message to... (1. on arrival; 2. On return to base).
ZFC	Have you received (or sent) the executive signal ("Execute") for message...?	Executive signal ("Execute") for last message (or following message) has been made (or was made at...).
ZFD		This message is a suspected duplicate.
ZFE		Pass message...(which is in your files) to addressee(s) for whom you are responsible using the indicated supplementary heading.

## DECODE

SIGNATURE	QUESTION	ANSWER, ADVICE OR ORDER
ZFF		Inform me when this message (or message...) has been received by... (addressee designation) or by... (1. Action addressee(s); 2. Information addressee(s); 3. All addressees; 4. Action addressee's/addressees' message center; 5. Information addressee's/addressees' message center; 6. All addressees' message center). (NOTE: AUTHORIZED FOR USE ON GENERAL MESSAGES).
ZFG		This message is an exact duplicate of a message previously transmitted.
ZFH		This message (or message...) is being (or has been) passed to you (or...) for... (1. Action; 2. Information; 3. Comment) (at the request of...)
ZFI	Is there any reply to message...?	There is no reply to message...
ZFJ		Message(s)...number(s)...not transmitted on this schedule (or on schedule...) are no longer needed.
ZFK	Does message...(or station serial number...) concern me (or...)?	Message...(or station serial number...) ..(1. Does not concern you (or...); 2. No longer concerns you (or...)).
ZFL	Was there any traffic addressed to me on... broadcast schedule between serial numbers... and ....?	Following traffic was addressed to you on...broadcast schedule between serial numbers... and ...
ZFM		Message(s) serial number(s)...(to ...) which was (were) transmitted during unserviceability of one or more transmitters, simultaneously keyed, will now be repeated.
ZFN		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZFO		Message...is being delivered as a basegram message.
ZFP		Basegram.
ZFQ		Two messages (...and...) received under channel number (or station serial number) ... Both released.
ZFR		Cancel transmission...(made under channel or station serial number ...).
ZFS		Make message...same channel or station serial number as this procedure message.
ZFT		Message...received without channel number (or station serial number) following message bearing channel number (or station serial number) ...Message released.
ZFU		Channel numbers...and...preceded message... Lower number recorded and higher number blanked.
ZFV		Message...containing channel number...separated by portions of the message, released subject to correction. Take necessary action to provide corrected copy.
ZFW		BLANK channel number(s)...Forward message...as channel number...
ZFX		Channel number (or station serial number)...is open.
ZFY		
ZFZ		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZGA	What is my call sign for use on this circuit only?	Your call sign for use on this circuit only is...
ZGB		Send (answer)...(1. In alphabetical sequence of call signs. Each station to make its call signs once (or... times); 2. In the following sequence of call signs).
ZGC		Station to station receipts are not required for this FLASH message (authorization for use must be prescribed by authorities controlling networks/systems).
ZGD		Two stations are using the same indefinite call sign on...kHz (or MHz). Both stations are to select different call signs.
ZGE		Send your call sign(s) once (or... times) on this frequency (or on...kHz (or MHz)).
ZGF		Make call signs more distinctly.
ZGG	What is call sign of... (1. Friendly striking force aircraft; 2. Friendly shadowing aircraft; 3. Incoming vessel; 4. Senior officer present afloat (or Officer in tactical command); 5. Ship acting as flagship for...)?	Call sign of...is...(1. Friendly striking force aircraft; 2. Friendly shadowing aircraft; 3. Incoming vessel; 4. Senior officer present afloat (or Officer in tactical command); 5. Ship acting as flagship for...).
ZGH		I am using this transmitter to answer calls on two or more frequencies. Answer to calls may be delayed.
ZGI		I am or have been (or...is or has been) calling you (on...kHz (or MHz)).
ZGJ	When will you call me again on present frequency (or on... kHz (or MHz))?	I will call you again as soon as possible (or at...) on present frequency (or on... kHz (or MHz)).

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZGK	When shall I call you again on present frequency (or on... kHz (or MHz))?	Call me again at...on present frequency (or on...kHz (or MHz)).
ZGL		...will answer calls for me (or for...).
ZGM	Did you (or...) hear... (at...)?	I have (or...has) been unable to communicate with...(since...).
ZGN	When was I (or...) last heard?	Nothing heard from you (or...) (since...)
ZGU	What is my number and sequence in answering?	Your number is... Answer after number... (Numbers to be separated by separative sign).
ZGP		Answer calls for me on present frequency (or on...kHz (or MHz)).
ZGQ		
ZGR		
+ ZGS		
ZGT		
ZGU		
ZGV		



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZGW		
ZGX		
ZGY		
ZGZ		
ZHA	Shall I decrease frequency very slightly (or...kHz) to clear interference?	Decrease frequency very slightly (or...kHz) to clear interference.
ZHB	Shall I increase frequency very slightly (or...kHz) to clear interference?	Increase frequency very slightly (or...kHz) to clear interference.
ZHC		
ZHD		
ZHE		
ZHF		
ZHG		
ZHH		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZHI		
ZHJ		
ZHK		
ZHL		
ZHM		
ZHN	How do you receive my automatic transmission?	Your automatic transmissions are ... (1. Good; 2. Fair; 3. Unreadable).
ZHO	What is your speed of automatic transmission in... (1. Revolutions per minute; 2. Words per minute; 3. Bauds).	My speed of automatic transmission in... (1. Revolutions per minutes; 2. Words per minute; 3. Bauds) is ...
ZHP	What is preventing automatic reception?	Automatic reception is prevented by...
ZHQ		Please listen for me on...kHz (or MHz) and transmit to me on...kHz (or MHz).
ZHR	Is my speed of automatic transmission correct?	Your speed of automatic transmission is... (1. Fast; 2. Slow; 3. Erratic; 4. Correct).
ZHS		
ZHT		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZHU		
ZHV		
ZHW		
ZHX		
ZHY		
ZHZ		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZIA		This message (or message...) is being (or has been) passed out of proper sequence of station serial numbers.
ZIB	Two messages...and... (or group counts and time of origin...and ...), both received as serial number... What are correct serial numbers?	Change station serial number of message...to read number...OR Assign to message...station serial number...
ZIC	What is (are) station serial number(s) or channel number(s) of last message(s) you transmitted to me (or to...)?	Station serial number(s) or channel number(s) of last message(s) transmitted to you (or to...) is (are)...
ZID	What is (are) station serial number(s) or channel number(s) of last message(s) received from me (or from...)?	Station serial number(s) or channel number(s) of last message(s) received from you (or from...) is (are)...
ZIE		Station serial number(s) or channel number(s) (from...) has (have) not been received. Repeat message(s) or cancel serial number(s) or channel number(s).
ZIF		I (or...) did not use serial number(s).
ZIG	Is (are) number(s)... (to...) blank?	Number(s)...(to...) is (are) blank.
ZIH		Repeat headings of message number ...to...transmitted by you (or...) to check serial numbers.
ZII	What was...of your (or ...'s) number...? (1. Date-time group; 2. Filing time)?	My (or...'s) number...had following...(1. Date-time group; 2. Filing time).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZIJ		I am now changing my channel number/letter. Last number sent in this series is that of this message.
ZIK		This is a weather controlled message which is not to be transmitted in the clear over radio circuits.
ZIL		
ZIM		
ZIN		
ZIO		
ZIP		Have set continuous watch, or (1. Single operator period; 2. Two operator period; 3. General periods only; 4. Reduced single operator periods) on broadcast indicated. First serial number received is.../No number yet received.
ZIQ		Have ceased watch on Broadcast, last number received...
ZIR		
ZIS		
ZIT		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZIU		
ZIV		
ZIW		
ZIX		
ZIY		
ZIZ		
ZJA		Read signalling light of...
ZJB	May I close down visual watch now (or at...)?	Close down visual watch now (or at...).
ZJC		Repeat all flag signals made by the senior officer (senior officer present afloat).
ZJD		Use...(1. Better light; 2. Better background).
ZJE		Set visual watch now (or at...)
ZJF		Visual relaying station between senior officer (senior officer present afloat) (or...) and...is to be...

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZJG		Repeat all flashing (or semaphore) messages made by the senior officer (senior officer present afloat).
ZJH		Your light is unreadable...(1. Not trained correctly; 2. Not bright enough; 3. Too bright).
ZJI	What are the call signs of the ships in company with you?	Call signs of the ships in company with me are...(For visual use only).
ZJJ		Use double-flash procedure.
ZJK	Are you (or is...) visual guard for...?	I am (or...is) visual guard for...
ZJL		Hoist the following signal.
ZJM		...(1. Flaghoist; 2. Semaphore; 3. 20 inch signaling projector; 4. 10 inch signaling projector; 5. ALDIS; 6. Intermediate; 7. Heather; 8. Daylight signaling lantern; 9. Masthead flashing light; 10. Infrared; 11. Signal search light; 12. Omnidirectional flashing light. 13. Directional flashing light.
ZJN		Message...has been passed to those for whom I am responsible (or to ...) (at...) but "L" has not been received.
ZJO		Repeat back each group of the text of this message as it is transmitted.
ZJP		Message which follows is to be encrypted and passed to all addressees (by...). (Only to be used by visual not liable to interception.)

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZJQ		Repeat signal (or message...) the senior officer (senior officer present afloat) (or ship indicated) is now transmitting or is about to transmit.
ZJR		Only semaphore is to be used for visual signalling between...and ... (or from...).
ZJS		Directional lights of minimum brilliancy are to be used for all visual traffic between...and... except for messages of precedence priority and above requiring transmission to two or more ships.
ZJT		Broadcast transmitter indicated is about to be taken off for... minutes (or until...).
ZJU		
ZJV		
ZJW		
ZJX		
ZJY		
ZJZ		



## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZKA	Who is controlling station (net control station) on this frequency (or on...kHz (or MHz))?	I am (or...is) controlling station (net control station) on this frequency (or on...kHz (or MHz)).
ZKB	Is it necessary to obtain the permission of the controlling station (net control station) before transmitting messages?	It is necessary to obtain the permission of the controlling station (net control station) before transmitting messages.
ZKC		Substitute code sign (call sign) of control station of group (net) in place of this operating signal.
ZKD	Shall I take control of net (for...) (until...)?	Take control of net (for...) (until...)
ZKE		I (or...) report(s) into circuit (net).
ZKF		Station leaves net temporarily (or for...minutes) (to communicate with...) (will be on...kHz (or MHz)).
ZKG		Observe (or direct...to observe) schedule with...on...kHz (or MHz) (at...).
ZKH	Did you (or...) observe schedule with...(at...)?	I (or...) observed schedule with...(at...).
ZKI		Set watch on...kHz (or MHz)... (1. Continuous; 2. Until further notice).
ZKJ	May I close down (until...)?	...(1. Close down (until...); 2. I am closing down (until...)).
ZKK		Assume radiotelegraph (wireless) organization...forthwith (or at...)

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZKL		Resume normal radio communication now (or at...).
ZKN		Take guard (for...) (on...kHz (or MHz)).
ZKN		I have taken over guard on...kHz (or MHz).
ZKG		I have handed over guard (to...) (on...kHz (or MHz)) (serial number of last message received was...).
ZKP	Are you (or is...) radio guard for... (on...kcs (or mcs))?	I am (or...is) radio guard for... (on...kHz (or MHz)).
ZKQ		Indicate ships or stations for which you are (or...is)...guard. (1. Radio (on...kHz (or MHz))); 2. Visual).
ZKR	On what frequencies are you (or...) maintaining watch?	I am (or...is) maintaining watch on...kHz (or MHz).
ZKS	What stations are keeping watch on...kcs (or mcs) (or are in net)?	Following stations are keeping watch on...kHz (or MHz) (or are in net).
ZKT		Am keeping watch on...kHz (or MHz) for...(1. First five minutes in each half hour; 2. From 10 to 15 and 40 to 45 minutes past the hour; 3. Between...and...minutes past the hour).
ZKU		I am (or...is) maintaining continuous watch, or (1. Single operator period; 2. Two operator period; 3. General periods only; 4. Reduced single operator period) on...(call sign)...Broadcast.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZKV		I am (or...is) standing splitphone watch on...and...kHz (or MHz).
ZKW		
ZKY		
ZKZ		
ZLA		I have pictures of the following types to transmit...(1. Photographs; 2. Weather maps; 3. Blueprints; 4. Printed matter; 5. Test).
ZLB	What drum rotation speed shall I use?	Transmit at...revolutions per minute. (1. 30; 2. 45; 3. 50; 4. 60; 5. 90; 6. 100).
ZLC		Your transmission...(1. Shows objectionable modulation; 2. Suitable for communication but not for picture; 3. Shows caption too close to edge of picture; 4. Shows buckled print; 5. Shows fork drift; 6. Picture shows too much contrast; 7. Picture shows insufficient contrast; 8. Picture shows cross-over).
ZLD		I am unable to...(1. Synchronize with you; 2. Transmit pictures; 3. Copy pictures).
ZLE		Send...(1. Fence; 2. White; 3. Black; 4. Picture; 5. Synchronize; 6. Fence swinging black until I stop you; 7. Fence swinging white until I stop you).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZLF		... (1. Inverter; 2. Converter; 3. 96-line 12 x 18 transceiver; 4. 100-line transceiver.); 5. 300-line transceiver).
ZLG	Shall I transmit... (1. Negative; 2. Positive)?	Transmit... (1. Negative; 2. Positive).
ZLH	Will you transmit map(s)... (...area... time...type).	I am going to transmit map(s)... (...area...time...type).
ZLI		Reverse material on drum and re- run until I break you.
ZLJ	What size lettering shall I use?	Use... (1. Standard telegraphic typewriter; 2. Jumbo typewriter if available; 3. Hand lettering at least 3/16 of an inch high).
ZLK		
ZLL		
ZLM		
ZLN		Facility indicated cannot be operated at present.

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZLO	Is (are) facility(ies) ...operative at your station (or at...)?	The following...facility(ies) is (are) operative at this station (or at...). (1. Homing beacon; 2. Radar beacon; 3. Revolving and/or flashing beacon; 4. Radio beacon; 5. Instrument landing system; 6. Ground control approach; 7. Approach control; 8. Tower transmitter (state which type LF, MF, VHF, or UHF); 9. MF Direction finder; 10. VHF Direction finder; 11. UHF Direction finder; 12. Runway lights; 13. Sandra lights; 14. Radio track guide; 15. Radio range).
ZLP	What is (are) the magnetic line(s) of shoot of the... (facility)?	The magnetic line(s) of shoot of the...(facility) is (are)... degrees.
ZLQ		
ZLR		
ZLS		
ZLT		
ZLU		
ZLV		
ZLW		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZLX		
ZLY		
ZLZ		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZMA	What was bearing of unknown station (or station using call sign...) at... (time) (on...kHz (or MHz))?	Bearing of unknown station (or station using call sign...) was... (at...time) class...(on...kHz (or MHz)).
ZMB		Bearing of you (or of...) was... (class...) from me (or from...) at...(time).
ZMC		Bearing of station which answered message (or transmission) from... was...(at...(time)) class...(on...kHz (or MHz)).
ZMD		1. Your bearing appears to be between...degrees and...degrees, and sense indicates you are to the...(direction) of this station; 2. Your bearing is changing rapidly.
ZME		Pass in direction finding bearing (of...) obtained on...kHz (or MHz) (or between...and...kHz (or MHz)).
ZMF	Will you endeavor to obtain a direction finding bearing of station now transmitting (or of...) (on...kHz (or MHz))?	Bearing of station now transmitting (or of...) (on...kHz (or MHz)) was...(class...) sense determined at...
ZMG		This bearing (course or position) is unreliable. Error in excess of class C bearing (or position) may amount...degrees or miles).
ZMH		Surface craft using call sign... cooperating. Change to...kHz (or MHz) and follow direction finding procedure when called.
ZMI	Will you send your call sign and dashes of five-seconds' duration at intervals in order that I (or...) may home on you?	I am about to send my call sign and dashes of five-seconds' duration at intervals in order that you (or...) may home on me.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZMJ		Check...(1. Correctness of last QUV; 2. Sense of last QDR; 3. Correctness of last QDM; 4. Sense of last QDM).
ZMK		Cannot determine your (or...)'s... (1. Position; 2. Bearing).
ZML		Steer...degrees for 2 minutes if possible and send call sign and long dashes while you are so doing.
ZMM		Increase height to enable more accurate bearing to be completed.
ZMN		Change over to loop direction finding on...kHz (or MHz) (and home on transmissions made by...).
ZMO	What is my position by direction finding bearing from nearest landmark (or from...)?	Your position by direction finding cross bearings from nearest landmark (or from...) is...(class...) at...(hours).
ZMP		Endeavor to plot position from bearings taken on station(s) now transmitting (or of...) (on...kHz (or MHz)).
ZMQ		Cannot determine your position, you are in line or nearly in line with direction finding station baseline.
ZMR		Take over direction finding guard as previously ordered (on...kHz (or MHz)) (from...to...kHz (or MHz)).
ZMS		Carry out short direction finding procedure (as locally prescribed).
ZMT		Sense determination unreliable, bearing may be reciprocal.



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZMU		...(1. Listen (for...) on direction finding on..kHz, (or MHz) (or between...and...kHz (or MHz)); 2. Shift to direction finding frequency...and listen for call sign ...).
ZMV	What is the Grid Course for me to steer to reach you (or...)?	The Grid Course for you to steer to reach me (or...) is...degrees at...hours.
ZMW		
ZMX		
ZMY		
ZMZ		
ZNA		You are encrypting...incorrectly. (1. Operating signals; 2. Radio call signs); 3. Address groups).
ZNB	What is authentication of...(1. Message...; 2. Last transmission; 3. ...)?	Authentication (of...) is... (1. Message...; 2. Last transmission; 3. ...).
ZNC		All transmissions will be authenticated...(1. On all circuits; 2. On this circuit; 3. On... frequency).
ZND		You are using authenticator incorrectly...(1. Verify authenticator system key; 2. Check authentication of your last transmission).
ZNE		I am prepared to authenticate.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZNF		Addressees who are not holders of the cryptographic system employed in the text need not decrypt (decipher), but shall sight (read) translation at first opportunity and obtain copy if applicable.
ZNG		Commands who are included in the collective address used in this heading, who are not holders of the cryptographic system employed in the text, are exempted.
ZNH		Plain-text tape of this message should be prepared during process of decipherment.
ZNI		Shift to...(1. On-line; 2. Plain) operation now.
ZNJ		This message has been has been transmitted under serial number...at... by station whose designation follows. ..(1. By on-line cipher; 2. By off-line encryption)
ZNK		Addressees who do not hold cryptographic facilities are exempted.
ZNL		Receiving Cryptographic Office concerned should refer queries relating to the text of this message (e.g., requests for verification) to... (address designators except plain language). Note: To be used in codress messages when necessary to indicate originating crypto center and then normally limited to messages of Immediate precedence and above.
ZNM		Originator authorizes the transfer of this message into the secure networks of all authorities addressed, provided the networks are secured or approved for the security classification of the message involved.
ZNX		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZNO		Unable to decrypt message... (from indefinite call sign...). Note: Only to be used under circumstances laid down in cryptographic instructions.
ZNP		Transfer operation of channel now to...(1. Normal; 2. Top Secret; 3. Conference; 4. Engineering) on-line cipher operation. Note: This signal is for use only when already in on-line operation.
ZNQ		This message (or message...) received at this station...(1. Without authentication (when authentication is in force); 2. Incorrectly Authenticated. 3. Correctly authenticated.)
ZNR		This message may be forwarded without change by radio or non-approved circuit. Note: The letter U repeated five times following this operating signal indicates that the message which follows is unclassified or is acceptable for transmission over any circuit in its present form.
ZNS		Following message has been authenticated...(This signal is for use only over approved/on-line circuits).
ZNT		Following message has NOT been authenticated...(This signal is for use only over approved/on-line circuits).
ZNU		
ZNV		
ZNW		
ZNX		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZNY		Do not forward this message un-encrypted by radio or non-approved circuit. Note: A letter repeated five times following this operating signal indicates the classification for which the circuit must be approved before the message can be forwarded over it.
ZMZ		Originator has indicated that this message should be forwarded without service action on the text at relay or addressee stations, as the information conveyed is...(1. Perishable; 2. For information only and will be confirmed by other means).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZOA		Relay this message (or message...) by visual (to...).
ZOB		Take (I will take) no further action regarding forwarding message...
ZOC		Station(s) called relay this message to addressees for whom you are responsible.
ZOD		Act as radio link (relaying station) between me and...(or between...and...).
ZOE	Can you accept message for...? (1. on line ; 2. off line).	Give me your message. I will dispose of it...(1. on line; 2. off line).
ZOF		Relay (pass) this message (or message...) to...now (or at...).
ZOG		Transmit (pass) this message (or message...) to...(for...) (1. Action; 2. Information).
ZOH		Send message for...on...kHz (or MHz) by...(1. Receipt method; 2. Broadcast method; 3. Intercept method).
ZOI		Pass this message to the nearest (or...) weather central/control.
ZOJ		Unable to relay message...in present form...(1. Call signs not encrypted; 2. Text not encrypted).
ZOK		Relay this message via...
ZOL		I will relay your call sign to senior officer present afloat, whose call sign is...

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZOM		Delivery of this message by mail in lieu of broadcast permissible (to...).
ZON		Place this message (or message...) on...(1. Continuous wave broadcast; 2. Radioteletype broadcast) indicated by following specific broadcast designator(s)...
ZOO		Place this message (or message...) on MERCAST indicated by following specific broadcast designator(s)...
ZOP		This message (or message...) has been delivered to all broadcast areas (or to the following specific broadcast area(s)...).
ZOQ		Deliver this message (or message...) to all broadcast areas (or to the following specific broadcast area(s)...).
ZOR		1. Route traffic for...via...area broadcast. 2. Beginning at... traffic for you (or...) will be routed via...area broadcast.
ZOS	Request area routing for messages for...?	Area routing for messages for... is...
ZOT		Transmit or handle this message at the lower precedence to the station or address designator(s) which follow(s).
ZOU	How should traffic for...be routed?	Route traffic for...through... (on...kHz (or MHz)).
ZOV		Station designation preceding this operating signal is the correct routing for this message rerouted by...
ZOW		Broadcast this message at special watchkeeping periods for ships with (1. One radio operator; 2. Two radio operators).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZOX		Place this message (or message...) on submarine broadcast indicated by following specific broadcast designator(s)...
ZOY		Relay this message only to the stations(s) whose designation(s) precede this operating signal.
ZOZ		Relay this message (or message...) in its present form without decryption.
ZPA		Your speech is distorted.
ZPB		Your transmitter has strong radiation while idling.
ZPC		Your signals are...(1. Fading badly; 2. Fading slightly; 3. Good for... words per minute; 4. Getting stronger; 5. Getting weaker).
ZPD	Is your signal as checked by monitor... satisfactory (1. Locally; 2. As radiated)?	My signal as checked by monitor... is satisfactory (1. Locally; 2. As radiated).
ZPE		Maximum power is now being radiated.
ZPF	What is the readability of the signals of the group (net) (or of...)?	The readability of the signals of the group (net) (or of...) is... (1 to 5).
ZPG	What is (are) signal strength(s) of group (net) (or of...)?	Signal strength(s) of group (net) is (are) (or of...) is... (1 to 5).
$\frac{3}{2}$ ZPH		This interrupted transmission is cancelled. A complete retransmission from this station will follow without request.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZPI		
ZPJ		
ZPK		
ZPL		
ZPM		
ZPN		IFF switched ON in distress position.
ZPO		The text of this message is to be relayed in precisely the same format as that in which it is received. No characters or machine functions are to be added, inserted or deleted and the relative positions of the groups are to be retained.
ZPP		Message which follows is a submarine surfacing signal to be cleared on calling frequency
ZPQ		
ZPR		I have ___ messages (precedence) prepared in tape relay format for you (or for ___). (Consideration should be given to receiving this message directly on to a printing perforator/typing reperforator).
ZPS		



## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZPT		This transmission is a transmitter pre-acceptance trial. Request expeditious strength and readability reply.
ZPU		If more than one tropical wind warning message in this sequence is awaiting transmission, transmit highest serial number first. (Sequence/serial is understood to include tropical warning name or number and consecutive warning number).
ZPV		If the earlier wind warnings identified by DTG(s) following this signal are awaiting transmission, file those warnings without further transmission.
ZPW		This message canceled at time indicated. File without further transmission.
ZPX		This message (or message....) is forwarded to you for screening and determination of need for broadcast promulgation. Advise broadcast control commander of recommended message disposition.
ZPY		This message (or message.....) has been screened by command authority and requires broadcast delivery.
ZPZ		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZQA		The landing lights at the aerodrome (or at the aerodrome at...) are out of order.
ZQB	What is the magnetic direction in which landing is to be made?	The magnetic direction in which landing is to be made is... degrees.
ZQC	Are you (or is...)... (1. Airborne; 2. Waterborne; 3. On land)?	I am (or...is)...at...(time). (1. Airborne; 2. Waterborne; 3. On land).
ZQD	Am I to carry out the procedure appropriate to the use of the... (facility)?	You are to carry out the procedures appropriate to the use of the... (facility).
ZQE	What is your desired rate of descent expressed in hundreds of feet per minute?	My desired rate of descent is... hundreds of feet per minute.
ZQF	What is the length in yards of the runway in use?	The length of the runway in use is...yards.
ZQG		
ZQH		
ZQI		
ZQJ		
ZQK		
ZQL		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZQY		
ZQX		
ZQQ		
ZQP		
ZQQ		
ZQR		
ZQS		
ZQT		
ZQU		
ZQV		
ZQW		
ZQX		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZQY		
ZQZ		
ZRA	How does my frequency check?	Your frequency is...(1. Correct; 2. Slightly (or...hertz (or kHz)) high; 3. Slightly (or...hertz (or kHz)) low; 4. Stable on steady mark; 5. Stable on steady space; 6. Unstable; 7. Erratic).
ZRB		Check your (or...')s frequency on this circuit (or on...kHz (or MHz)).
ZRC	Shall I tune my transmitter to...(1. Proper frequency; 2. Zero beat with your (or...) transmitter)?	Tune your transmitter to...(1. Proper frequency; 2. Zero beat with my (or...) transmitter).
ZRD	What is the frequency of the...radio facility now in operation?	The frequency of the...radio facility now in operation is...
ZRE	On what frequency do you hear me best?	I hear you best on...kHz (or MHz).
ZRF	Will you send tuning signal on your present frequency (or on...kHz or (MHz)) for 1 minute, or until AS is given?	Am about to send tuning signal on my present frequency (or on...kHz (or MHz)).
ZRG	When will a change of frequency (to...kHz (or MHz)) be necessary?	A change in frequency (to...kHz (or MHz)) will be necessary at approximately...
ZRH	Is my frequency shift correct?	Your frequency shift is...(1. Too wide; 2. Too narrow; 3. Not linear; 4. Correct) (by hertz).
ZRI		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZRJ	Will you check your...?	I will check my...
ZRK	Shall I revert to single channel working?	Revert to single channel working.
ZRL	Are you working on the correct code? NOTE: This meaning applies only to frequency shift diplex.	I am working on the correct code. NOTE: This meaning applies only to frequency shift diplex.
ZRM	Can you receive both sidebands of my independent sideband transmissions?	I can receive...(1. The upper sideband; 2. The lower sideband; 3. Both sidebands).
ZRN	Do you intend to transmit on...(1. The upper sideband; 2. The lower sideband; 3. Both sidebands independently)?	I intend to transmit on...(1. The upper sideband; 2. The lower sideband; 3. Both sidebands independently).
ZRO	Can you read me on...(1. Channel A...; 2. Channel B...; 3. Channel(s)...; 4. All channels)?	I can read you on...(1. Channel A; 2. Channel B; 3. Channel(s); 4. All channels; 5. No channels).
$\frac{1}{2}$ ZRP		Transfer signal on channel...to channel... (Should only be used when order originates from a third working channel. See ZRV for use between directly connected working channels).
ZRQ		Change to other sideband.
ZRR		Message(s)...number(s)...will no longer be broadcast but are effective and of interest (to units indicated).
ZRS		Your carrier is...(1. Over-suppressed; 2. Under-suppressed.)
ZRT		Radiate full unmodulated power for...minutes.

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZRU	Are my tone frequencies correct?	Your tone for... (1. Marking and spacing are high; 2. Marking and spacing are low; 3. Marking and spacing are correct).
ZRV		Transfer signal to channel...
ZRW		
ZRX		
ZRY		
ZRZ		

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZSA	May I ascend to... (height)?	You may ascend to...(height).
ZSB	May I descend to... (height)?	You may descend to...(height).
ZSC		Switch on IFF.
ZSD		IFF switched OFF.
ZSE	Do you have glider in tow?	...(1. We have glider in tow; 2. We are forced to release glider at (approximate position) ...).
ZSF		Switch off...(1. IFF; 2. IFF sets for 10 minutes in area denoted except for ships whose call signs follow).
ZSG	May I make an approach using the facility indicated?	You may approach using the facility indicated.
ZSH		
ZSI		You are...(1. To maintain height of...feet and report over...(call sign) range station; 2. To hold on...leg of the beam...(call sign) range station at height... feet).
ZSJ		
ZSK		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZSL		
ZSM		
ZSN		
ZSO		Send tapes...(1. Once; 2. Twice).
ZSP		
ZSQ		
ZSR		
ZSS		
ZST		
ZSU		
ZSV		
ZSW		



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZSX		
ZSY		
ZSZ		
ZTA		...(1. Radio; 2. Visual; 3. Landline; 4. Teletypewriter (Teleprinter); 5. Telephone; 6. Automatic; 7. Facsimile; 8. Shore telephone; 9. Shore teleprinter; 10. Radio teletypewriter). 11. Satellite.
ZTB		...(1. Transmitter-distributor; 2. Auto-head; 3. Perforator; 4. Reperforator; 5. Printer; 6. Undulator; 7. Keyboard; 8. Frequency shift keyer; 9. Multiplexing carrier base; 10. On line crypto device).
ZTC	...(1. Does my...appear to be faulty; 2. Is your ....faulty)?	...(1. Your...appears to be faulty; 2. My...is faulty).
ZTD	Shall I use....?	Use...
ZTE	Are you (or is...) able to use...?	I am (or...is) able to use...
ZTF	Are repairs completed?	Repairs completed.
ZTG		...(class of emission/type of transmission as indicated in Chapter 6).
ZTH		

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZTI		...(1. Receiver; 2. Transmitter; 3. Power supply; 4. Antenna system; 5. Radio direction finder).
ZTJ		Cease using...
ZTK	Are you (or is...) connected to...?	I am (or...is) connected to...
ZTL	Are you (or is...) about to disconnect?	I am (or...is) about to disconnect.
ZTM		I am (or...is) unable to use...
ZTN	What is my bias distortion?	Your bias distortion is... (1. Excessive; 2. ...percent (marking); 3. ...percent (spacing); 4. ...percent (total distortion).
ZTO	Is my character formation correct?	Your character formation is... (1. Cor- rect; 2. Defective in the start element; 3. Defective in the 1st unit; 4. Def- ective in the 2nd unit; 5. Defective in the 3rd unit; 6. Defective in the 4th unit; 7. Defective in the 5th unit; 8. Defective in the stop element).
ZTP	What is the duration of your modulation cycle?	The duration of my modulation cycle is... <u>50 Baud Equipment</u> 1. 148 milliseconds (7.42 units) fast. 2. 150 milliseconds (7.5 units) correct. 3. 152 milliseconds (7.6 units) slow. 4. ...erratic per character  <u>45.5 Baud Equipment</u> 1. 161 milliseconds (7.35 units) fast. 2. 163 milliseconds (7.42 units) correct. 3. 165 milliseconds (7.5 Units) slow. 4. ...erratic per character.

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZTQ	Will you...(1. get the Circuit Engineer/Facility Control Technician to speak on this circuit (or circuit...); 2. Hand the line over to the Circuit Engineer/Facility Control Technician for check)?	I will...(1. get the Circuit Engineer/Facility Control Technician to speak on the circuit; 2. Hand the line over to the Circuit Engineer/Facility Control Technician for check and call you when check has been completed).
ZTR	Will you...(1. Disconnect your equipment from line and carry out local test, reconnecting to line in ...minutes; 2. Connect your transmit line to your receive line to enable me to carry out a loop test for... minutes)?	I will...(1. Disconnect (or I am disconnecting) my equipment from line and carry (or to carry) out local test reconnecting to line in ...minutes; 2. Connect my transmit line to my receive line to enable you to carry out a loop test for... minutes).
ZTS	Is the line satisfactory?	The line is...(1. Satisfactory; 2. Unsatisfactory).
ZTT		
ZTC		
ZTV		
ZTW		
ZTX		
ZTY		
ZTZ		

## DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZUA	Request a timing signal now (or at...)	Timing signal will be transmitted now (or at...). The numerals indicating the time will be followed by a five-second dash terminating exactly at the time indicated.
ZUB		At...
ZUC		From...to...
ZUD		Until further orders (or until...)
ZUE		Affirmative (Yes).
ZUF		Air Raid...(1. Warning; 2. In progress; 3. All clear).
ZUG		Negative (No).
ZUH		Unable to comply.
ZUI		Your attention is invited to...
ZUJ		Stand by.
ZUK	...(Appointment Code) desires key conversation on this circuit with... (Appointment Code). Will you indicate when you are ready?	...(Appointment Code) is now ready to begin key conversation with...(Appointment Code).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZUL		
ZUM		
ZUN		
ZUO		
ZUP		
ZUQ		
ZUR		
ZUS		
ZUT		
ZUU		
ZUV		
ZUW		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZUX		
ZUY		
ZUZ		
ZVA		Station called is responsible for relay or delivery to all stations in line two (2) or to stations indicated.
ZVB	What was your time over last compulsory reporting point, and ETA at next compulsory reporting point?	My time over last compulsory reporting point was...and my ETA at next compulsory reporting point is...
ZVC		
ZVD		
ZVE	What are the security conditions of your termination(s) of this channel (or...channel/circuit designated)?	Security conditions at my termination of this channel (or...channel/circuit designated) are... (1. Secured for Restricted; 2. Secured for Confidential; 3. Secured for Secret; 4. Secured for Top Secret). Note: The answer to this signal may only be passed on circuits cleared for classified traffic.
ZVF		This channel (or...channel/circuit designated) is unserviceable for classified traffic.
ZVG		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZVH		
ZVI		
ZVJ		
ZVK		
ZVL		
ZVM		
ZVN		
ZVO		
ZVP		
ZVQ		This message, relating to a warning, an alert, distress, or an emergency, is authorized to be relayed via the facilities of your network without prior arrangement.
ZVR		Retransmit this message (or message...) at once to all subordinate stations.
ZVS		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZVT		
ZVU		
ZVV		
ZVW		
ZVX		
ZVY		
ZVZ		



DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZWA		
ZWB		Indicate name of...(1. Operator on watch; 2. Senior rating on watch; 3. Operator who transmitted last message (or message...)). <u>NOTE:</u> This signal is authorized for use in connection with operator training only; it may not be used for any other purpose.
ZWC		The following is to be taken as applying to personnel on watch only.
ZWD		Carry out communication...(visual exercise number...at...senior officer (or...) is to conduct.
ZWE		Voluntary exercise (number...) may be carried out now (or at...).
ZWF		Incorrect.
ZWG		You are correct.
ZWH		Try again.
ZWI		Answer last question (or question...).
ZWJ		Stations are to answer...taking the following duties...A,...B,... C...etc.
ZWK		Following is answer to the last question (or question...).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZWL		No forwarding action to the designation(s) immediately following is required.
ZWM		Correct answer to last question (or question...) is...(or will be found in...).
ZWN		Correct version of the part of the last message (or message...) which was sent incorrectly is... (or will be found in...).
ZWO		Following message (or question, or exercise is for the exercise of... (1. Junior operators; 2. Senior operators; 3. Ratings on watch).
ZWP		A junior operator is to carry out ... (1. A standard flashing exercise; 2. A standard semaphore exercise; 3. A standard radiotelegraphy transmitting exercise; 4. A standard radiotelegraphy receiving exercise).
ZWQ		
ZWR		
ZWS		
ZWT		
ZWU		
ZWV		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZWV		
ZWX		
ZWY		
ZWZ		
ZXA		The following group is a call sign, delivery group or address group. (Used in plain language texts of messages other than procedure messages.)
ZXB		Station(s) to whom this message is routed obtain a complete copy of this interrupted transmission by addressing a service message to the originating station.
ZXC		THIS TRANSMISSION HAS BEEN INTERRUPTED. A RETRANSMISSION WILL FOLLOW WITHOUT REQUEST. (MUST BE FOLLOWED IMMEDIATELY BY VALID END OF MSG SEQUENCE. 15/5)
ZXD		This message is to be delivered to the addressee(s) in tape form.
ZXE		
ZXF		
ZXG		

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZXH		
ZXI		
ZXJ		
ZXK		Station called relay this message (or message...) to...in addition to predetermined responsibilities.
ZXL		
ZXM		
ZXN		
ZXO		Request you obtain retransmission of messages...from station...
ZXP		I have for you...(1. A request for direct air support; 2. A reply to a support request; precedence is...).
ZXQ		I have for you...(1. A request for tactical reconnaissance; 2. A request for photographic reconnaissance; 3. A request for artillery reconnaissance. Precedence is...).
ZXR		Intensive flag signalling will take place shortly (or in...minutes).

DECODE

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZXS		Message which follows is to be handled by... (1. Officer Emergency Cryptographic team; 2. Ratings Emergency Cryptographic team; 3. Senior Communications Rating; 4. Junior Communications Rating; 5. Coder (Educational)).
ZXT		This message is not to be transmitted by radiotelegraph or radiotelephone in any form over part of its route.
ZXU		
ZXV		
ZXW		This message has been delivered to all action addressees whose designations follow this operating signal.
ZXX		This message has been delivered to all information addressees whose designations follow this operating signal.
ZXY		Transmit this message to the addressee(s) indicated by the numeral(s) following... All addressees are to be counted consecutively as they appear (numbers to be separated by the Separative Sign).
ZXZ		

## CHAPTER III

## SECTION A

ENCODE

## SEARCH AND RESCUE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
ALIGHT	Are you going to alight (or land?) or Are you going to enter dock (or port)?	I am going to alight (or land) or I am going to enter dock (or port).	QTP
	Will you be forced to alight (or land)?	I am forced to alight (or land) immediately. or I will be forced to alight (or land) at...(position or place) at...hours.	QUG
AREA	Are you in the search area designated as... (designator or latitude and longitude)?	I am in the...(designation) search area.	QUW
CONDITION	What is the condition of survivors?	Survivors and in... condition and urgently need...	QTW
CONTINUING	Are you continuing the search?	I am continuing the search for...(aircraft, ship, survival craft, survivors or wreckage).	QTZ
DISTRESS	Have you received the distress signal sent by...(call sign of mobile station)?	I have received the distress signal sent by...(call sign of mobile station) at...hours.	QUF
	May I resume normal working?	Normal working may be resumed.	QUM
DOCTOR	Have you a doctor on board (or is...(name of person) on board)?	I have a doctor on board (or...(name of person is on board).	QSQ
DRIPT	What is the estimated drift of the survival craft?	The estimated drift of the survival craft is...(figures and units).	QSE

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
ENDURANCE	How much fuel have you remaining (expressed as hours and/or minutes of consumption)?	Fuel remaining is...(hours and/or minutes of consumption).	QBD
HOMING		Fly for...minutes on a magnetic heading of...degrees.	QGU
	Shall I home ship or aircraft to my position?	Home ship or aircraft... (call sign)...1) to your position by transmitting your call sign and long dashes on...kHz (or MHz). 2) by transmitting on... kHz (or MHz) TRUE track to reach you.	QUU
IFF		IFF switched ON in distress position.	ZPN
LIGHTS	Are your navigation lights working?	My navigation lights are working.	QUI
	Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate your landing?	Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate my landing.	QUQ

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
MARKING	Will you indicate your position by... 1) searchlight? 2) black smoke trail? 3) pyrotechnic lights?	My position is indicated by... 1) searchlight. 2) black smoke trail. 3) pyrotechnic lights.	QUP
	Is position of incident marked?	Position of incident is marked (by...). 1) flame or smoke float. 2) sea marker. 3) sea marker dye. 4) ...(specify other marking).	QUT
NEWS OF	Have you news of ... (call sign)?	Here is news of... (call sign).	QUA
POSITION	Is position of survival craft marked?	Position of survival craft was marked at... hours by... 1) flame or smoke float. 2) sea marker. 3) sea marker dye. 4) ...(specify other marking).	QUY
PROCEED(ING)	Are you proceeding to the position of incident and if so when do you expect to arrive?	I am proceeding to the position of incident and expect to arrive at... hours (on...date).	QTY
RELIEF	May I be relieved (at...hours)?	You may expect to be relieved at...hours (by... 1) aircraft... (identification) (type...). 2) vessel whose call sign is... (call sign) (and/or whose name is... (name)).	QXF



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
RELIEF (Cont'd)	Will relief take place when...(identification) establishes... 1) visual. 2) communications, contact with survivors?	Relief will take place when (identification) establishes... 1) visual. 2) communications, contact with survivors.	QKG
RESCUE	Have you effected rescue?	I have effected rescue and am proceeding to... base (with...persons injured requiring ambulance).	QSF
	What has the rescue vessel or rescue aircraft recovered?	...(identification) has recovered... 1) ...(number) survivors. 2) wreckage. 3) ...(number) bodies.	QTD
	Have survivors... 1) received survival equipment? 2) been picked up by rescue vessel? 3) been reached by ground rescue party?	Survivors... 1) are in possession of survival equipment dropped by... 2) have been picked up by rescue vessel. 3) have been reached by ground rescue party.	QUR
SEA CON- DITIONS		The sea conditions (at... position)... 1) permit alighting but not take-off. 2) render alighting extremely hazardous.	QKC

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SEARCH	Report details of the parallel sweep (track) search being (or to be) conducted? or In the parallel sweep (track) search being (or to be) conducted, what is (are)... 1) the direction of sweeps. 2) the separation between sweeps. 3) the height above the datum, employed in the search pattern?	The parallel sweep (track) search is being (or to be) conducted... 1) with direction of sweeps ...degrees...(true or magnetic). 2) with...(distance figures and units) separation between sweeps. 3) at a height of... (figures) above...(datum).	QKH
	What other units are (or will be) taking part in the operation (...(identification of operation))?	In the operation (...(identification)), the following units are (or will be) taking part...(name and units). or ...(name) unit is taking part in operation (... (identification)) (with effect from...hours).	QKO
	Which pattern of search is being followed?	The search pattern is... 1) parallel sweep. 2) square search. 3) creeping line ahead. 4) track crawl. 5) contour search. 6) combined search by aircraft and ship. 7) ...(specify).	QKP
	Shall I search for... 1) aircraft, 2) ship, 3) survival craft, in the vicinity of... latitude...longitude (or according to any other indication)?	Please search for... 1) aircraft, 2) ship, 3) survival craft, in the vicinity of... latitude...longitude (or according to any other indication).	QUO

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SIGHTING	Have you sighted survivors or wreckage? If so, in what position?	Have sighted... 1) survivors in water. 2) survivors on rafts. 3) wreckage. in position...latitude... longitude (or according to any other indication).	QUS
URGENCY	Have you received the urgency signal sent by...(call sign of mobile station)?	I have received the urgency signal sent by...(call sign of mobile station) at...hours.	QUD

SECTION B  
ENCODE  
 RADIO NAVIGATION

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
BEARINGS	Do you intend to ask me for a series of bearings?	I intend to ask you for a series of bearings.	QDL
BEARINGS, MAGNETIC	Will you indicate the MAGNETIC heading for me to steer towards you (or...) with no wind?  What is my MAGNETIC bearing from you (or from...)?	The MAGNETIC heading for you to steer to reach me (or...) with no wind was ...degrees (at...hours).  Your MAGNETIC bearing from me (or from...) was...degrees (at...hours).	QDM  QDR
BEARINGS, TRUE	What is my TRUE bearing from you? or What is my TRUE bearing from... (call sign)? or What is the TRUE bearing of... (call sign) from ... (call sign)?	Your TRUE bearing from me is...degrees (at...hours). or The TRUE bearing of...(call sign) was...degrees (at...hours). or The TRUE bearing of...(call sign) from...(call sign) was...degrees at...hours.	QTE
HEADING, MAGNETIC	Will you indicate the MAGNETIC heading from me to steer towards you (or...) with no wind?	The MAGNETIC heading for you to steer to reach me (or...) with no wind was...degrees (at...hours).	QDM
HEADING, TRUE	Will you indicate the TRUE track to reach you (or...)?	The TRUE track to reach me (or...) is...degrees at...hours.	QUJ

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
HOLD		You are...(1. To maintain height of...feet and report over...(call sign) range station; 2. To hold on... leg of the beam...(call sign) range station at height ...feet).	ZSI
HOMING	Am I overhead?	You are overhead.	QFG
	Do you see me? or Can you see the aerodrome? or Can you see... (aircraft).	I see you at...(cardinal or quadrantal point of direction). or I can see the aerodrome. or I see...(aircraft).	QGV
	Are you able to home on your DF equipment?	I am able to home on my DF equipment (on station ...).	QSH
	Will vessels in my immediate vicinity (or in the vicinity of...latitude... longitude) (or of...) please indicate their position, TRUE course and speed? Aeronautical Notes: a) All stations of the international aeronautical telecommunication service will interpret this signal (in part) as referring to TRUE TRACK. b) English-speaking stations of the maritime mobile service may interpret this signal (in part) as referring to TRUE HEADING. When communicating with such stations it is recommended that supplementary use be made of the signal QTI to avoid any misunderstanding.	My position, TRUE course and speed are... Aeronautical Notes: a) All stations of the international aeronautical telecommunication service will interpret this signal (in part) as referring to TRUE TRACK. b) English-speaking stations of the maritime mobile service may interpret this signal (in part) as referring to TRUE HEADING. When communicating with such stations it is recommended that supplementary use be made of the signal QTI to avoid any misunderstanding.	QUN

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
HOMING (Cont'd)	Shall I home ship or aircraft to my position?	Home ship or aircraft... 1)...(call sign) to your position by transmitting your call sign and long dashes on...kHz (or MHz). 2) ...(call sign) by transmitting on...kHz (or MHz). courses* to steer to reach you. *Aeronautical Note: Stations of the international aeronautical telecommunication service will interpret "course" to be "headings".	QUU
	Will you send your call sign and dashes of five-seconds' duration at intervals in order that I (or...) may home on you?	I am about to send my call sign and dashes of five-seconds' duration at intervals in order that you (or...) may home on me.	ZMI
		Change over to loop direction finding on... kHz (or MHz) (and home on transmissions made by...).	ZMN
POSITION		Aircraft plotted (believed to be you) in position...on track... degrees at...hours.	QKN
	Will you give me the position of my station according to the bearings taken by the direction-finding stations which you control?	The position of your station according to the bearings taken by the direction-finding stations which I control was...latitude... longitude, class...at... hours. Aeronautical Note: In the aeronautical direction-finding service any other indication of position may be used.	QTF
	What is your position in latitude and longitude (or according to any other indication)?	My position is...latitude ...longitude (or according to any other indication).	QTH

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
PROCEDURE	Will you send two dashes of ten seconds each followed by your call sign (repeated... times) (on...kHz (or MHz))?	I am going to send two dashes of ten seconds each followed by my call sign (repeated...times) (or... kHz (or MHz)).	QTG
	or Will you request...to send two dashes of ten seconds followed by his call sign (repeated...times) on... kHz (or MHz)?	I have requested...to send two dashes of ten seconds followed by his call sign (repeated...times) on... kHz (or MHz).	
	Am I to carry out the procedure appropriate to the use of the... (facility)?	You are to carry out the procedure appropriate to the use of the...(facility).	ZQD
STATION DISTANCE	What is my distance to your station (or to...)?	Your distance to my station (or to...) is... (distance figures and units). Note: This signal is normally used in conjunction with one of the signals QDM, QDR, QTE or QUJ.	QGE
	How far approximately are you from my station?	The approximate distance between our stations is ...nautical miles (or... kilometers).	QRB
STEER		Steer...degrees for 2 minutes if possible and send call sign and long dashes while you are to doing.	ZML
	What is the Grid Course for me to steer to reach you (or...)?	The Grid Course for you to steer to reach me (or...) is...degrees at ...hours.	ZMV

## SECTION C

ENCODE

## DIRECTION FINDING

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL	
BEARINGS	Do you intend to ask me for a series of bearings?	I intend to ask you for a series of bearings.	QDL	
	What was bearing of unknown station (or station using call sign...) at...(time) (on...kHz (or MHz))?	Bearing of unknown station (or station using call sign...) was...(at ...time) class...(on... kHz (or MHz)).	ZMA	
		Bearing of you (or of...) was...(class...) from me (or from...) at...(time).	ZMB	
		Bearing of station which answered message (or transmission) from...was ... (at...(time)) class... (on...kHz (or MHz)).	ZMC	
		1. Your bearing appears to be between...degrees and...degrees, and sense indicates you are to the ... (direction) of this station; 2. Your bearing is changing rapidly.	ZMD	
		Pass in direction finding bearing (of...) obtained on...kHz (or MHz) (or between...and ...kHz (or MHz)).	ZME	
		Will you endeavor to obtain a direction finding bearing of station now transmitting (or of...) (on...kHz (or MHz))?	Bearing of station now transmitting (or of...) (on...kHz (or MHz)) was... (class...) sense determined at...	ZMF
			This bearing (course or position) is unreliable. Error in excess of class C Bearing (or position) may amount...degrees or miles).	ZMG
	Check...(1. Correctness of last QDR; 2. Sense of last QDR; 3. Correctness of last QDM; 4. Sense of last QDM ).		ZMJ	



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
BEARINGS (Cont'd)		Cannot determine your (or...s...(1. Position; 2. Bearing).	ZMK
		Increase height to en- able more accurate bear- ing to be completed.	ZMM
BEARINGS, MAGNETIC	What is my MAGNETIC bearing from you (or from...)?	Your MAGNETIC bearing from me (or from...) was ...degrees (at...hours).	QDR
BEARINGS, TRUE	What is my TRUE bear- ing from you?	Your TRUE bearing from me is...degrees (at...hours).	QTE
	or What is my TRUE bear- ing from...(call sign)?	or Your TRUE bearing from... (call sign) was...degrees (at...hours).	
	or What is the TRUE bear- ing of...(call sign) from...(call sign)?	or The TRUE bearing of...(call sign) from...(call sign) was...degrees at...hours.	
DISTANCE	What is my distance to your station (or to...)?	Your distance to my station (or to...) is... (distance figures and units). Note: This signal is normally used in con- junction with one of the signals QDM, QDR, QTE or QJJ.	QCE
	How far approximately are you from my station?	The approximate distance between our stations is... nautical miles (or...kilo- meters).	QRB
GUARD		Take over direction find- ing guard as previously ordered (on...kHz (or MHz)) (from...to...kHz (or MHz)).	ZNR

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
HOMING		Change over to loop direction finding on... kHz (or MHz) (and home on transmissions made by...).	ZMN
LISTEN	<p>Will you send two dashes of ten seconds each followed by your call sign (repeated ...times) (on... kHz or MHz)?</p> <p>or</p> <p>Will you request... to send two dashes of ten seconds followed by his call sign (repeated... times) on...kHz (or MHz)?</p>	<p>I am going to send two dashes of ten seconds each followed by my call sign (repeated...times) (on kHz (or MHz)).</p> <p>or</p> <p>I have requested...to send two dashes of ten seconds followed by his call sign (repeated... times) on...kHz (or MHz).</p> <p>...(1. Listen (for...) on direction finding on ...kHz, (or MHz) (or between...and...kHz (or MHz)); 2. Shift to direction finding frequency... and listen for call sign ...).</p>	<p>QTG</p> <p>ZMU</p>
POSITION	<p>Will you give me the position of my station according to the bearings taken by the D/F stations which you control?</p> <p>What is your position in latitude and longitude (or according to any other indication)?</p> <p>What is my position by direction finding bearing from nearest landmark (or from...)?</p>	<p>The position of your station according to the bearings taken by the D/F stations which I control was...latitude...longitude (or other indication of position), class...at... hours.</p> <p>My position is...latitude ...longitude (or according to any other indication).</p> <p>Your position by direction finding cross bearings from nearest landmark (or from ...) is...(class...) at... (hours).</p>	<p>QTF</p> <p>QTH</p> <p>ZMO</p>

## SECTION D

ENCODE

## AERONAUTICAL AND SEA OPERATIONS

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
AERIAL		I am about to wind in my aerial.	QBE
		I am working on trailing aerial. or Work on trailing aerial.	QCY
APPROACH	Will you inform me when you are on... leg of approach?	I am on... 1) cross-wind leg) 2) down-wind leg ) of 3) base leg ) approach. 4) final leg )	QHE
	May I make a... approach (at... (place)? or Are you making a... approach?	You may make a...approach (at...(place)). or I am making a...approach.	QHQ
	May I make an approach using the facility indicated?	You may approach using the facility indicated.	ZSG
ARRIVAL		Arrange your flight in order to arrive over... (place) at...hours. or I am arranging my flight in order to arrive over... (place) at...hours.	QAG
	What is your estimated time of arrival at... (or over...) (place)?	My estimated time of arrival at...(or over...) (place) is...hours.	QRE
BEACON	1) Is the...visual beacon (at...(place)) in operation? 2) Will you switch on the...visual beacon (at...(place))? 3) Will you extinguish the aerodrome visual beacon (at...(place)) until I have landed?	1) The...visual beacon (at...(place)) is in operation. 2) I will extinguish the aerodrome visual beacon (at...(place)) until your landing is completed.	QFD

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CARGO VESSEL	Are you a cargo vessel?	I am a cargo vessel.	QSC
CIRCUIT	Is a right-hand circuit in force at...(place)?	A right-hand circuit is in force at...(place).	QES
CLEARANCE	May I have clearance (for...) from... (place and/or control) to...(place and/or control) at ... (figures and units) height above (datum)?	You are cleared (or... is cleared) by...from ... (place and/or control) to...(place and/or control) at...(figures and units) height above... (datum).	QAB
	When may I expect approach clearance?	Expect approach clearance at...hours. or No delay expected.	QCE
	May I be cleared to land (at...(place))?	Delay indefinite. Expect approach clearance not later than...hours.	QCF
	May I enter traffic circuit at... (figures and units) height above... (datum)?	You are cleared to land (at...(place)).  Cleared to enter traffic circuit at...(figures and units) height above... (datum).	QGN QHG
CLOUD	Are you flying in cloud?	I am flying in cloud at ... (figures and units) height above... (datum) (and I am ascending (descending) to... (figures and units) height above that datum).	QBF
	Are you flying above cloud?	I am flying above cloud and at... (figures and units) height above... (datum). or Maintain a vertical distance of... (figures and units) above cloud, smoke, haze or fog levels.	QBG

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CLOUD (Cont'd)	Are you flying below cloud?	I am flying below cloud and at...(figures and units) height above...(datum). or Maintain a vertical distance of...(figures and units) below cloud.	QBH
	Are you flying with no cloud in your vicinity?	I am flying with no cloud in my vicinity and at...(figures and units) height above...(datum).	QBK
	Are you flying between two layers of cloud?	I am flying between two layers of cloud and...(figures and units) height above...(datum).	QBN
	Are you flying in and out of cloud?	I am flying in and out of cloud and at...(figures and units) height above...(datum).	QBP
	Report your flying conditions in relation to clouds.	The reply to QBZ $\overline{IMI}$ is given by the appropriate answer form of signals QBF, QBG, QBH, QBK, QBN and QBP.	QBZ
COLLISION	Is there any risk of collision?	There is risk of collision. Note: This signal should be followed by appropriate Q signals or ICAO approved abbreviations giving instructions for avoiding collision.	QAK
COMMUNICATION	Are you experiencing communication difficulties through flying in a storm?	I am experiencing communication difficulties through flying in a storm. Note: Attention is invited to the possible supplementary use of signals QAR, QBE, QCS, QRM, QRN, QRX, QSZ or the signal CL to amplify the meaning associated with signal QAZ.	QAZ
	Have you anything for me?	I have nothing for you.	QRU

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CONTROL	Will you accept control (or responsibility) of (for) ...now (or at... hours)?	I will accept control (or responsibility) of (for) ...now (or at...hours).	QDP
DEPARTURE	At what time did you depart from... (place)?	I departed from...(place) at...hours.	QIN
	Are you airborne? or Have you left dock (or port)?	I am airborne or I have left dock (or port).	QTO
	Are you (or is...) ... (1. Airborne; 2. Waterborne; 3. On land.)?	I am (or...is)...at... (time). (1. Airborne; 2. Waterborne; 3. On land.)	ZQC
DESTINATION	May I have clearance (for...) from... (place and/or control) to...(place and/or control) at...(figures and units) height above...(datum)?	You are cleared (or...is cleared) by...from... (place and/or control) to...(place and/or control) at...(figures and units) height above...(datum).	QAB
	Are you going to land at...(place)? or Has aircraft...landed at...(place)? (See also signal QTP.)	I am going to land at... (place). or (You may) land at...(place). or Aircraft...landed at... (place). (See also signal QTP.)	QAL
	Where are you bound and where are you from?	I am bound for...from...	QRD
DOCKING	Are you going to alight (or land)? or Are you going to enter dock (or port)?	I am going to alight (or land). or I am going to enter dock (or port).	QTP

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
DOCTOR	Have you a doctor on board (or is...(name of person) on board)?	I have a doctor on board (or...(name of person) is on board).	QSQ
FACILITY	Will you give me the latest information concerning... facility (at... (place))?	The latest information concerning...facility (at...(place)) is as follows... Note: The information is given by sending appropriate NOTAM Code groups.	QFP
		I am not equipped to give the information (or provide the facility requested.)	QNO
FLIGHT CONDITIONS	Are you flying in cloud?	I am flying in cloud at ...(figures and units) height above...(datum) (and I am ascending (descending) to... (figures and units) height above that datum).	QBF
	Report your flying conditions in relation to clouds.	The reply to QBZ $\overline{IMI}$ is given by the appropriate answer form of signals QBF, QBG, QBH, QBK, QBN and QBP.	QBZ
	Are you flying in visual meteorological conditions?	I am flying in visual meteorological conditions. or Fly at all times in visual meteorological conditions.	QDT
	Are you flying in a horizontal visibility of less than... (figures and units)?	I am flying in a horizontal visibility of less than...(figures and units) at...(figures and units) height above...(datum).	QDV
FLIGHT RULES	Is flight under IFR compulsory at... (place) (or from... to...(place))?	Flight under IFR is compulsory at...(place) (or from...to...(place)).	QBI

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
FLIGHT RULES (Cont'd)	What is the nearest aerodrome at which flight under VFR is permissible and which would be suitable for my landing?	Flying under VFR is permissible at...(place) which would be suitable for your landing.	QBO
		Cancel my IFR flight plan.	QDU
FUEL	How much fuel have you remaining (expressed as hours and/or minutes of consumption)?	I am about to jettison fuel.	QAU
		Fuel remaining is... (hours and/or minutes of consumption).	QBD
GLIDER	Do you have glider in tow?	...(1. We have glider in tow; 2. We are forced to release glider at (approximate position)...).	ZSE
HEADING		Fly for...minutes on a heading that will enable you to maintain a track reciprocal to your present one.	QGT
		Fly for...minutes on a magnetic heading of... degrees.	QGU
		My TRUE heading is... degrees.	QTL
		My MAGNETIC heading is... degrees.	QTM
	What is your TRUE heading?		
	What is your MAGNETIC heading?		



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
HEIGHT ALTITUDE	What is your height above...(datum)?	I am at...(figures and units) height above... (datum). Note: An aircraft is permitted to reply to QAH <u>IMI</u> by using any of the answer forms of signals QBF, QBG, QBH, QBK, QBN or QBP. In such cases the signal QAH is omitted from the reply. or Arrange your flight so as to reach...(figures and units) height above... (datum) at...(hours or place).	QAH
		Ascend (or descend) to... (figures and units) height above...(datum) before encountering instrument meteorological conditions or if visibility falls below...(figures and units of distance) and advise.	QBS
	Have you reached the...(figures and units) height above...(datum) (or...(area or place))?	I have reached the... (figures and units) height above...(datum) (or...(area or place)). or Report reaching the... (figures and units) height above...(datum) (or...(area or place)).	QBV
	Have you left the... (figures and units) height above... (datum) (or...(area or place))?	I have left the... (figures and units) height above...(datum) (or...(area or place)). or Report leaving the... (figures and units) height above...(datum) (or...(area or place)).	QBX
	May I change from... (figures and units) to...(figures and units) height above...(datum)?	You may change from... (figures and units) to... (figures and units) height above...(datum). or I am changing from... (figures and units) to... (figures and units) height above...(datum).	QCA
	May I descend below the clouds?	You may descend below the clouds.	QFH

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
HEIGHT ALTITUDE (Cont'd)	What height above... (datum)...	...	QFM
	1) should I maintain?	1) Maintain (or fly at)... (figures and units) height above...(datum).	
	2) are you maintaining?	2) I am maintaining... (figures and units) height above...(datum).	
	3) do you intend cruising at?	3) I intend cruising at... (figures and units) height above...(datum).	
	What is your desired rate of descent ex- pressed in hundreds of feet per minute?	My desired rate of des- cent is...hundreds of feet per minute.	ZQE
May I ascend to... (height)?	You may ascend to... (height).	ZSA	
May I descend to... (height)?	You may descend to... (height).	ZSB	
	You are...(1. To main- tain height of...feet and report over...(call sign) range station; 2. To hold on...leg of the beam... (call sign) range station at height...feet).	ZSI	
HOLD	Shall I hold my position?	Hold your position.	QEN
	May I hold at... (place)?	Hold at...(place) at... (figures and units) height above...(datum) and await orders.	QGQ
		Hold on...direction of... facility.	QGZ
		You are...(1. To maintain height of...feet and re- port over...(call sign) range station; 2. To hold on...leg of the beam... (call sign) range station at height...feet.).	ZSI

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
IFF		Switch ON IFF.	ZSC
		IFF switched OFF.	ZSD
		Switch off...(1. IFF; 2. IFF sets for 10 minutes in area denoted except for ships whose call signs follow).	ZSF
LANDING	May I land immediately?	You may land immediately.	QFO
	May I land using... (procedure or facility)?	You may land using... (procedure or facility).	QGH
		Landing is prohibited at...(place).	QGO
	What is my number for landing?	You are number...to land.	QGP
	Are you making an emergency landing?	I am making an emergency landing. or Emergency landing being made at...(place). All aircraft below...(figures and units) height above... (datum) and within a dis- tance of...(figures and units) leave...(place or headings).	QHH
	Are you going to alight (or land)? or Are you going to enter dock (or port)?	I am going to alight (or land). or I am going to enter dock (or port).	QTP
	Will you be forced to alight (or land)?	I am forced to alight (or land) immediately. or I will be forced to alight (or land) at...(position or place) at...hours.	QUG
	What is the magnetic direction in which landing is to be made?	The magnetic direction in which landing is to be made is...degrees.	ZQB

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
LANDING GEAR	Does my landing gear appear damaged?	Your landing gear appears damaged.	QFR
	Does my landing gear appear to be down and in place?	Your landing gear appears to be down and in place.	QGW
LANDING SURFACE	What is the condition of the landing surface at...(place)?	The condition of the landing surface at...(place) is... Note: The information is given by sending appropriate NOTAM Code groups.	QEM
LIGHTING		The... 1) approach 2) runway 3) approach and runway lights are out of order.	QFB
	Are the aerodrome lights lit?	The aerodrome lights are lit. or Please light the aerodrome lights.	QFI
	Are the approach and runway lights lit?	The approach and runway lights are lit. or Please light the approach and runway lights.	QFQ
	Are the floodlights switched on?	The floodlights are switched on. or Please switch on the floodlights.	QFV
		I am not equipped to give the information (or provide the facility) requested.	QNO
	Are your navigation lights working?	My navigation lights are working.	QUI

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
LIGHTING (Cont'd)	Shall I train my searchlight nearly vertical on a cloud, occulting if possible and, if your aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate your landing?	Please train your searchlight on a cloud, occulting if possible and, if my aircraft is seen or heard, deflect the beam up wind and on the water (or land) to facilitate my landing.	QUQ
		The landing lights at the aerodrome (or at the aerodrome at...) are out of order.	ZQA
OBSTRUCTIONS	Are there on my track any obstructions whose elevation equals or exceeds my altitude?	There are obstructions on your track...(figures and units) height above... (datum).	QGC QGD
OVERSHOOT PROCEDURES		I am about to carry out overshoot procedure.	QAW
PARKING	Have I reached my parking area? or Have you reached your parking area?	You have reached your parking area. or I have reached my parking area.	QEF
	May I leave the parking area? or Have you left the parking area?	You may leave the parking area. or I have left the parking area.	QEG
POSITION	Will you advise me when you are (were) at (over) ... (place)?	I am (was) at (over)... (place) (at...hours) (at ... (figures and units) height above... (datum).	QAF

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
POSITION (Cont'd)	Will you advise me when you pass (passed) ... (place) bearing 090 (270) degrees relative to your heading?	I passed... (place) bearing... degrees relative to my heading at... hours.	QAY
	Shall I hold my position?	Hold your position.	QEN
	Are you (or is... )... 1) waterborne? 2) on land?	I am (or... is)... 1) waterborne) at... hours. 2) on land )	QHI
		Aircraft plotted (believed to be you) in position... on track... degrees at... hours.	QKN
		I am approaching my point of no return.	QNR
	How far approximately are you from my station?	The approximate distance between our stations is... nautical miles (or... kilometers)..	QRB
What is your position in latitude and longitude (or according to any other indication)?	My position is... latitude ... longitude (or according to any other indication).	QTH	
What was your time over last compulsory reporting point, and ETA at next compulsory reporting point?	My time over last compulsory reporting point was ... and my ETA at next compulsory reporting point is...	ZVB	
PRESSURE	What should I set on the sub-scale of my altimeter so that the instrument would indicate my elevation if I were on the ground at your station?	If you set the sub-scale of your altimeter to read ... millibars (or hundredths of an inch*), the instrument would indicate your elevation if you were on the ground at my station at... hours. *Note: When the setting is given in hundredths of an inch the abbreviation "INS" is used to identify the units.	QNH

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
RETURN		I am approaching my point of no return.	QNR
	Are you returning to...(place)?	I am returning to... (place) or Return to...(place).	QRF
RUNWAY	What is the magnetic direction (or number) of the runway to be used?	The magnetic direction (or number) of the runway to be used is... Note: The runway number is indicated by a two-figure group and the magnetic direction by a three-figure group.	QFU
	What is the length of the runway in use in ...(units)?	The length of runway... now in use is...(figures and units).	QFW
	What is the length in yards of the runway in use?	There are obstructions to the...of runway...  The length of the runway in use is...yards.	QGC  ZQF
SAFETY	What is the essential traffic? Note: Relates to aircraft and not communication traffic.	The essential traffic is ... Note: Relates to aircraft and not communication traffic.	QAI
	Am I near a prohibited area (or...prohibited area)?	You are... 1) near 2) flying over a prohibited area (or... prohibited area).	QAA
		Make a 360-degree turn immediately (turning to the...). or I am making a 360-degree turn immediately (turning to the...).	QCI
	Shall I circle the aerodrome (or go around)?	Circle the aerodrome (or go around).	QHZ

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SEE ME	Do you see me? or Can you see the aerodrome? or Can you see... (aircraft)?	I see you at...(cardinal or quadrantal point of direction). or I can see the aerodrome. or I see...(aircraft).	QGV
SPEED	What is your speed? (Requests the speed of a ship or aircraft through the water or air respectively.)	My speed is...knots (or... kilometers or... statute miles per hour). (Indicates the speed of a ship or aircraft through the water or air respec- tively.)	QTJ
	What is the speed of your aircraft in relation to the surface of the earth?	The speed of my aircraft in relation to the surface of the earth is...knots (or...kilometers or...statute miles per hour).	QTK
STEER	What is the Grid Course for me to steer to reach you (or...)?	The Grid Course for you to steer to reach me (or...) is...degrees at ...hours.	ZMV
TAKE-OFF	May I assume position for take-off? or Have you assumed position for take-off?	Cleared to hold at take- off position for runway number... or I am assuming take-off position for runway number ...and am holding.	QETJ
	Are you ready for immediate take-off?	I am ready for immediate take-off.	QEK
	May I take-off (and make a...hand turn after take-off)?	You are cleared to take- off (turn as follows after take-off...).	QEL



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
TRAFFIC	What is the essential traffic? Note: Relates to aircraft and not communication traffic.	The essential traffic is ... Note: Relates to aircraft and not communication traffic.	QAI
ZONE	May I enter the... (control area or zone) at...(place)?	You may enter the... (control area or zone) at...(place).	QGL
		Leave the...(control area or zone).	QGM

SECTION E

ENCODE

METEOROLOGY

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CLOUD	<p>What is the amount, type and height above official aerodrome elevation of the base of the cloud (at... (place))?</p> <p>*Note: The cloud amount, type (if reported and vertical distance information is reported in sequence if several cloud layers are present, the order of reporting being from low to high levels in accordance with the following cloud layer specifications:</p> <p>a) the lowest individual layer of any amount;                      b) the next higher individual layer the amount of which is three-eighths or more (to the nearest eighth);                      c) the next higher individual layer the amount of which is five-eighths or more (to the nearest eighth).</p> <p>Example: - QBB CYUL 1300 2 300 FT 3 1500 FT 6 9000 FT =</p> <p>What is the amount, type and height above ... (datum) of the top of the cloud (at... (position or zone))?</p> <p>What is the amount, the type and the height above... (datum) of the base of the cloud at... (place, position or zone)?</p>	<p>The amount, type and height above official aerodrome elevation of the base of the cloud at... (place) at... hours is:</p> <p>...eighths (...type) at ... (figures and units)*</p> <p>height above official aerodrome elevation.</p> <p>At... hours at... (position or zone) the top of the cloud is:                      amount...eighths (...type) at... (figures and units) height above... (datum).</p> <p>At... (place, position or zone) the base of the cloud is...eighths...type at... (figures and units) height above... (datum).                      Note: If several cloud layers or masses are present, the lowest is reported first.</p>	<p>QBB</p> <p>QBJ</p> <p>QFC</p>

SECTION E

ENCODE

METEOROLOGY

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CLOUD	<p>What is the amount, type and height above official aerodrome elevation of the base of the cloud (at... (place))?</p>	<p>The amount, type and height above official aerodrome elevation of the base of the cloud at...(place) at...hours is:</p> <p>...eights (...type) at ...(figures and units)*</p> <p>height above official aerodrome elevation.</p>	QBB
	<p>*Note: The cloud amount, type (if reported and vertical distance information is reported in sequence if several cloud layers are present, the order of reporting being from low to high levels in accordance with the following cloud layer specifications:</p> <p>a) the lowest individual layer of any amount; b) the next higher individual layer the amount of which is three-eighths or more (to the nearest eighth); c) the next higher individual layer the amount of which is five-eighths or more (to the nearest eighth).</p> <p>Example: - QBB CYUL 1300 2 300 FT 3 1500 FT 6 9000 FT =</p>		
	<p>What is the amount, type and height above ...(datum) of the top of the cloud (at... (position or zone))?</p>	<p>At...hours at...(position or zone) the top of the cloud is: amount...eighths (...type) at...(figures and units) height above...(datum).</p>	QBJ
	<p>What is the amount, the type and the height above...(datum) of the base of the cloud at... (place, position or zone)?</p>	<p>At...(place, position or zone) the base of the cloud is...eighths...type at...(figures and units) height above...(datum). Note: If several cloud layers or masses are present, the lowest is reported first.</p>	QFC

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CLOUD (Cont'd)	Report the vertical distribution of cloud (at...(position or zone)) as observed from your aircraft.	The vertical distribution of cloud as observed from my aircraft at...hours at ...(position or zone) is: lowest layer observed*... eighths (...type) with base of...(figures and units) and tops of...(figures and units) (*and similarly in sequence for each of the layers observed.) height above... (datum). Example: = QMI 1400 11 2 CU 1000 FT 2500 FT 6 SC 6000 FT 10000 FT 5 AC 13000 FT 14000 FT ALT=	QMI
CONDITIONS	Report meteorological conditions as observed from your aircraft (at... (position or zone)) (at...hours).  Please report the present meteorological landing conditions (at...(place)).	The meteorological conditions as observed from my aircraft at...(position or zone) at...hours at... (figures and units) height above...(datum) are... Note: The information may be given in AIREP, or Q Code form. When given in Q Code, the following sequence of Q signal answer (or advice) forms is used: QMX, QNY, QAO, QDF, QMI, QFT and QNI.  The present meteorological landing conditions at... (place) are... Note: When given in Q Code the information is sent in the following sequence: QAN, QBA, QNY, QBB, QNH and/or QFE and, if necessary, QMU, QNT, QBJ. It is not normally necessary to precede the QAN, QBA, QNY and QBB information by these Q signals but this may be done if considered desirable.	QBC  QFY
DELIVERY		If more than one tropical wind warning message in this sequence is awaiting transmission transmit highest serial number first. (Sequence/serial is understood to include tropical warning name or number and consecutive warning number).	ZPU

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
<p>DELIVERY (Cont'd)</p>		<p>If the earlier wind warnings identified by DTG(s) following this signal are awaiting transmission, file those warnings without further transmission.</p>	<p>ZPV</p>
		<p>This message canceled at time indicated. File without further transmission.</p>	<p>ZPW</p>

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
FORECAST	What is the meteorological forecast for...(flight, route, section of route or zone) for the period...hours until...hours?	The meteorological forecast for...(flight, route, section of route or zone) for the period...hours until...hours is... Note: When the forecast is given in Q Code the following sequence of Q signal answer (or advice) forms is to be given: QAO, QMX, QMI, QNY, QBA, QMW, QFT and QNI.	QFA
	What is the aerodrome meteorological forecast for...(place) for the period...hours until...hours?	The aerodrome meteorological forecast for...(place) for the period...hours until...hours is... Note: When given in Q Code the following sequence of Q signal answer (or advice) forms is to be used: QAN, QBA, QNY, QBB and, if necessary, QMU, QNT and QBJ.	QFZ
	Have you any amendments to the flight forecast in respect of section of route yet to be traversed?	The following amendment(s) should be made to the flight forecast...(If no amendments, signal QMZ NIL).	QMZ
	Can you give me in the following order information concerning: the direction in degrees TRUE and speed of the surface wind; visibility; present weather; and amount, type and height of base of cloud above surface elevation...(place of observation)?	Here is the information requested...(the units used for speed and distances should be indicated).	QUB
ICE	Between what heights above...(datum) has ice formation been observed (at... (position or zone))?	Ice formation has been observed at...(position or zone) in the type of...and with an accretion rate of...between... (figures and units) and... (figures and units) heights above...(datum).	QFT

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
OBSERVATION	What is the latest available meteorological observation for...(place)?	<p>Meteorological observation made at...(place) at... hours was as follows...            Note: The information may be given in Q Code form or the AERO form of the international meteorological figure code. When in Q Code, the information is to be given in the following sequence of Q signal answer (or advice) forms: QAN, QBA, QNY, QBB, QNH and/or QFE and, if necessary, QMU, QNT and QBJ. It is not normally necessary to precede the QAN, QBA, QNY and QBB information by these Q signals but this may be done if considered desirable. When in the AERO form of international meteorological figure code, the abbreviation AERO is to precede the information.</p>	QAM
PRESENT WEATHER	What is the present weather and the intensity thereof at ...(place, position or zone)?	<p>The present weather and intensity thereof at...(place, position or zone) at...hours is...(See Notes a) and b)).            Notes:            a) When present weather information is transmitted by a ground station, the information shall be selected from the present weather table (Table III) in PANS-MET (Doc 7605/MET/526). If none of these conditions prevail the reply shall be QNY NIL.            b) When present weather information is transmitted by an aircraft, the information shall be selected from Item 11, AIREP. If none of these conditions prevail the reply shall be QNY NIL or alternatively the appropriate answer (or advice) form of signals QBF, QBG, QBH, QBK, QBN or QBP. The alternative may also be given in addition to present weather conditions when one or more of the conditions listed in Item 11 prevail.</p>	QNY

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
PRESSURE	<p>What is your D-Value at...(position)? or What is the D-Value at...(place or position) (at... hours) for the... millibar level?</p>	<p>My D-Value at...(position) at...(figures and units) height above the 1013.2 millibars datum is... (D-Value figures and units) ...* (specify plus or minus). or The D-Value at...(place or position) at...hours for the...millibar level is... (D-Value figures and units) ...* (specify plus or minus). *Note: When the true altitude (radio altitude) is greater than the pressure altitude PS (Plus) is used and when it is less MS (Minus) is used.</p>	QDF
	<p>(At...(place)) what is the present atmospheric pressure at official aerodrome elevation?</p>	<p>At...(place) the atmospheric pressure at official aerodrome elevation is (or was observed at...hours to be)...millibars.</p>	QFE
	<p>(At...(place)) what is the present atmospheric pressure converted to mean sea level in accordance with meteorological practice?</p>	<p>At...(place) the atmospheric pressure converted to mean sea level in accordance with meteorological practice is (or was determined at... hours to be)...millibars.</p>	QFF
	<p>What indication will my altimeter give on landing at...(place) at...hours, my sub-scale being set to 1013.2 millibars (29.92 inches)?</p>	<p>On landing at...(place) at...hours, with your sub-scale being set to 1013.2, millibars (29.92 inches), your altimeter will indicate...(figures and units).</p>	QNE
	<p>What should I set on the sub-scale of my altimeter so that the instrument would indicate my elevation if I were on the ground at your station?</p>	<p>If you set the sub-scale of your altimeter to read ...millibars (or hundredths of an inch*), the instrument would indicate your elevation if you were on the ground at my station at...hours. *Note: When the setting is given in hundredths of an inch the abbreviation "INS" is used to identify the units.</p>	QNH



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
PRESSURE (Cont'd)	Will you give me the present barometric pressure at sea level? Aeronautical Note: Stations of the international aeronautical telecommunication service will interpret this signal as: What is the present atmospheric pressure at the present water level?	The present barometric pressure at sea level is...(units). Aeronautical Note: Stations of the international aeronautical telecommunication service will interpret this signal as: The present atmospheric pressure at the present water level at...(place or position) at...hours is...(figures and units).	QUH
RESPONSIBILITY	Will you accept control (or responsibility) of (for)...now (or at... hours)?	I will accept control (or responsibility) of (for)... now (or at...hours).	QDP
SEA	Can you tell me the condition of the sea observed at... (place or co-ordinates)?	The sea at...(place or co-ordinates) is...	QUK

Aeronautical Note: Stations of the international aeronautical telecommunication service will complete the answer, information or advice form by the use of a numbered alternative as given hereunder, selected according to the average wave height as obtained from the larger wellformed waves of the wave system being observed. If observed height coincides with one of the limits, report the lower numbered alternative, e.g. waves with a mean maximum height of 4 meters are to be reported as "5".

Number		Height	
		Meters	Feet (approx.)
0	Calm-glassy	0	0
1	Calm-rippled	0-0.1	0-1/3
2	Smooth wavelets	0.1-0.5	1/3-1 2/3
3	Slight	0.5-1.25	1 2/3-4
4	Moderate	1.25-2.5	4-8
5	Rough	2.5-4	8-13
6	Very rough	4-6	13-20
7	High	6-9	20-30
8	Very high	9-14	30-45
9	Phenomenal	Over 14	Over 45

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SWELL	Can you tell me the swell observed at ... (place or co-ordinates)?	The swell at... (place or co-ordinates) is...	QUL

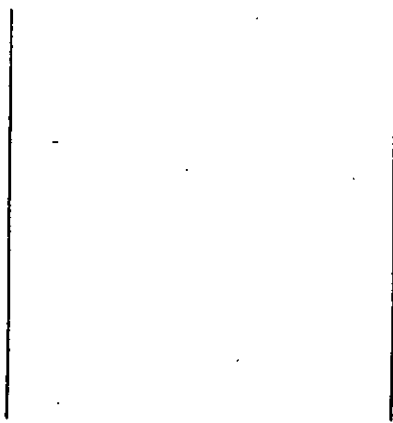
Aeronautical Note: Stations of the international aeronautical telecommunication service will complete the answer, information or advice form by the use of the following numbered alternatives:

Number	Length of Swell	Height
0	-	-
1	Short or average	Low
2	Long	Low
3	Short	Moderate
4	Average	Moderate
5	Long	Moderate
6	Short	Heavy
7	Average	Heavy
8	Long	Heavy
9	Confused	-

Additionally, stations of the international aeronautical telecommunication service may indicate the direction of swell by the use of the appropriate cardinal or quadrantal point abbreviation N, NE, E, SE, etc. following the numbered alternative for indicating swell condition. The descriptions in the above numbered alternatives are as follows:

		Length of Swell	
		Meters	Feet (approx.)
Short	=	0-100	0-300
Average	=	100-200	300-600
Long	=	Over 200	Over 600
		Height of Swell	
		Meters	Feet (approx.)
Low	=	0-2	0-7
Moderate	=	2-4	7-13
Heavy	=	Over 4	Over 13

When there is no swell, the numbered alternative "0" is used; when the swell is such that the length and height of the swell waves cannot be determined, the numbered alternative "9" is used.



## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
TEMPERATURE	At...(position or zone) what is (are) the height(s) above ...(datum) of the zero celsius isotherm(s)?	At...(position or zone) the zero celsius isotherm(s) is (are) at... (figures and units) height(s) above...(datum).	QMW
	What is the air temperature (at...(position or zone)) (at...hours) at the ...(figures and units) height above... (datum)?	At...(position or zone) at...hours the air temperature is...(degrees and units) at...(figures and units) height above... (datum). Note: Aircraft reporting QMX information will transmit the temperature figures as corrected for airspeed.	QMX
	What is the surface temperature at... (place) and what is the dew point temperature at that place?	The surface temperature at...(place) at...hours is...degrees and the dew point temperature at that time and place is... degrees.	QMU
TURBULENCE	Between what heights above...(datum) has turbulence been observed at...(position or zone)?	Turbulence has been observed at...(position or zone) with an intensity of...between...(figures and units) and...(figures and units) heights above...(datum).	QNI
VISIBILITY	What is the horizontal visibility at... (place)?	The horizontal visibility at...(place) at...hours is...(distance figures and units).	QBA
	How far, along the runway, from the approach end, can the observer at the runway threshold see the runway lights which will be in operation for my landing (at...(place))?	At...hours, the observer at the threshold of runway number...could see the runway lights in operation for your landing (at...(place)) for a distance of...(figures and units) from the approach end. Note: If the station enquired of is not equipped to make the special observation requested, the reply to QBT IMI is given by the signal QNO.	QBT

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
WEATHER CONTROLLED MESSAGE		This is a weather controlled message which is not to be transmitted in the clear over radio circuits.	ZIK
		Pass this message to the nearest (or...) weather central/control.	ZOI
WIND	What is the surface wind direction and speed at...(place)?	The surface wind direction and speed at... (place) at...hours is... (direction)...(speed figures and units). Note: Unless otherwise indicated in the question, answer (or advice), surface wind direction is given in degrees relative to MAGNETIC North.	QAN
	What is the wind direction in degrees TRUE and speed at... (position or zone/s) at each of the... (figures)...(units) levels above... (datum)?	The wind direction and speed at...(position or zone/s) at the following heights above...(datum) is: ...(vertical distance in figures and units) ...degrees TRUE...(speed in figures and units) ...(vertical distance in figures and units) ...degrees TRUE...(speed in figures and units).	QAO
	What is the maximum gust speed of the surface wind at... (place)?	The maximum gust speed of the surface wind at ... (place) at...hours is...(speed figures and units).	QNT

## SECTION F

ENCODECOMMUNICATIONS EQUIPMENT AND CIRCUITS  
ADJUSTING AND TESTING

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
ACCURACY	What is the printing accuracy of my signals (or those of ...)?	The printing accuracy of your signals (or those of...) is... (1. Totally corrupt; 2. Very corrupt; 3. Partly corrupt rendering traffic unacceptable; 4. Occasionally corrupt but traffic acceptable; 5. Perfect - no corruption).	ZBZ
AERIAL		I am about to wind in my aerial.	QBE
		I am working on trailing aerial. or Work on trailing aerial.	QCY
		I am working (or am going to work) on a fixed aerial. or Work on a fixed aerial.	QFX
AUTOMATIC	How do you receive my automatic transmissions?	Your automatic transmissions are...(1. Good; 2. Fair; 3. Unreadable.).	ZHN
	What is your speed of automatic transmission in...(1. Revolutions per minute; 2. Words per minute; 3. Bauds.)	My speed of automatic transmission in...(1. Revolutions per minute; 2. Words per minute; 3. Bauds.) is...	ZHO
	What is preventing automatic reception?	Automatic reception is prevented by...	ZHP
	Is my speed of automatic transmission correct?	Your speed of automatic transmission is...(1. Fast; 2. Slow; 3. Erratic; 4. Correct).	ZHR
	Are you ready for automatic operation?	I am ready for automatic operation. Send at... words per minute.	QRR

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
BIAS	What is my bias distortion?	Your bias distortion is... (1. Excessive; 2. ...percent (marking); 3. ...percent (spacing); 4. ...percent (total distortion).	ZTN
CALL	Shall I repeat the call on the calling frequency?	Repeat your call on the calling frequency; did not hear you (or have interference).	QSR
CARRIER		Your carrier is... (1. Over-suppressed; 2. Under-suppressed).	ZRS
CASE	Am I transmitting... 1) in letters? 2) in figures?	You are transmitting... 1) in letters. 2) in figures.	QJD
		You are transmitting in upper case.	ZBG
CHANNEL	Shall I revert to single channel working?	Revert to single channel working.	ZRK
	Can you read me on... (1. Channel A...; 2. Channel B...; 3. Channel (s)...; 4. All channels)?	I can read you on...(1. Channel A; 2. Channel B; 3. Channel(s); 4. All channels; 5. No channels).	ZRO
		Transfer signal on channel ...to channel... (Should only be used when order originates from a third working channel. See ZRV for use between directly connected working channels).	ZRP
		Transfer signal to channel..	ZRV
CHARACTER	Is my character formation correct?	Your character formation is... (1. Correct; 2. Defective in the start element; 3. Defective in the 1st unit; 4. Defective in the 2nd unit; 5. Defective in the third unit; 6. Defective in the 4th unit; 7. Defective in the 5th unit; 8. Defective in the stop element).	ZTO

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CHECK	Will you check your... 1) transmitter dis- tributor? 2) auto-head? 3) perforator? 4) reperforator? 5) printer? 6) printer motor? 7) keyboard? 8) antenna system?	I will check my... 1) transmitter distributor. 2) auto-head. 3) perforator. 4) reperforator. 5) printer. 6) printer motor. 7) keyboard. 8) antenna system.	QJC
	Will you check your...?	I will check my...	ZRJ
CODE	Are you working on the correct code? Note: This meaning applies only to fre- quency shift diplex.	I am working on the correct code. Note: This meaning applies only to frequency shift diplex.	ZRL
CONNECT	Are you (or is...) connected to...?	I am (or...is) connected to...	ZTK
DISCONNECT	Are you (or is...) about to disconnect?	I am (or...is) about to disconnect.	ZTL
EQUIPMENT		Broadcast transmitter indicated is about to be taken off for...minutes (or until...).	ZJT
		...(1. Radio; 2. Visual; 3. Landline; 4. Teletype- writer (teleprinter); 5. Telephone; 6. Automatic; 7. Facsimile; 8. Shore telephone; 9. Shore tele- printer; 10. Radio tele- typewriter).	ZTA

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
EQUIPMENT (Cont'd)		<p>...(1. Transmitter-distributor; 2. Auto-head; 3. Perforator; 4. Reperforator; 5. Printer; 6. Undulator; 7. Keyboard; 8. Frequency shift keyer; 9. Multiplexing carrier base; 10. On line crypto device.</p> <p>...(class of emission/type of transmission as indicated in Chapter 6).</p> <p>...(1. Receiver; 2. Transmitter; 3. Power supply; 4. Antenna system; 5. Radio direction finder).</p>	ZTB  ZTG  ZTI
FACILITIES	Is the...radio facility at... (place) in operation?	<p>The...radio facility at... (place) is in operation (or will be in operation in...hours).</p> <p>or</p> <p>Please have the...radio facility at...(place) put in operation.</p>	QFS
	Is the...radio facility still required?	The...radio facility is still required.	QLV
	Is (are) facility (ies)...operative at your station (or at...)?	<p>Facility indicated cannot be operated at present.</p> <p>The following...facility (ies) is (are) operative at this station (or at ...). (1. Homing beacon; 2. Radar beacon; 3. Revolving and/or Flashing beacon; 4. Radio beacon; 5. Instrument landing system; 6. Ground control approach; 7. Approach control; 8. Tower transmitter (state which type LF, MF, VHF, or UHF); 9. MF Direction finder; 10. VHF Direction finder; 11. UHF Direction finder; 12. Runway lights; 13. Sandra lights; 14. Radio track guide; 15. Radio range).</p>	ZLN  ZLO



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
FREQUENCY (Cont'd)	Shall I increase frequency very slightly (or...kHz) to clear interference?	Increase frequency very slightly (or...kHz) to clear interference.	ZHB
	How does my frequency check?	Your frequency is... (1. Correct; 2. Slightly (or...hertz (or kHz)) high; 3. Slightly (or ...hertz (or kHz)) low; 4. Stable on steady mark; 5. Stable on steady space; 6. Unstable; 7. Erratic).	ZRA
		Check your (or...s) frequency on this circuit (or on...kHz (or MHz)).	ZRB
	What is the frequency of the...radio facility now in operation?	The frequency of the... radio facility now in operation is...	ZRD
	On what frequency do you hear me best?	I hear you best on...kHz (or MHz).	ZRE
	Will you send tuning signal on your present frequency (or on kHz (or MHz)) for 1 minute, or until AS is given?	Am about to send tuning signal on my present frequency (or on...kHz (or MHz)).	ZRF
	When will a change of frequency (to...kHz (or MHz)) be necessary?	A change in frequency (to...kHz (or MHz)) will be necessary at approximately...	ZRG
	Are my tone frequencies correct?	Your tone for...(1. Marking and spacing are high; 2. Marking and spacing are low; 3. Marking and spacing are correct).	ZRU
FREQUENCY SHIFT	Is my frequency shift... 1) too wide? 2) too narrow? 3) correct?	Your frequency shift is... 1) too wide. 2) too narrow (by...hertz). 3) correct.	QJE
	Is my frequency shift correct?	Your frequency shift is ... (1. Too wide; 2. Too narrow; 3. Not linear; 4. Correct) (by...hertz).	ZRH

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
LINE	<p>Will you...(1. disconnect your equipment from line and carry out local test, reconnecting to line in...minutes; 2. connect your transmit line to your receive line to enable me to carry out a loop test for...minutes)?</p> <p>Is the line satisfactory?</p>	<p>I will...(1. disconnect (or I am disconnecting) my equipment from line and carry (or to carry) out local test reconnecting to line in...minutes; 2. connect my transmit line to my receive line to enable you to carry out a loop test for... minutes).</p> <p>The line is...(1. satisfactory; 2. unsatisfactory).</p>	<p>ZTR</p> <p>ZTS</p>
LINES	<p>What is (are) the magnetic line(s) of shoot of the... (facility)?</p>	<p>The magnetic line(s) of shoot of the...(facility) is (are)...degrees.</p>	ZLP
LISTEN		<p>Please listen for me on...kHz (or MHz) and transmit to me on... kHz (or MHz).</p>	ZHQ
MARK/SPACE	<p>Is my...                      1) tape )                      2) mark and space )                      reversed?</p> <p>Will you transmit a continuous...                      1) mark?                      2) space?</p> <p>Are you receiving...                      1) a continuous mark?                      2) a continuous space?                      3) a mark bias?                      4) a space bias?</p>	<p>Your...                      1) tape )                      2) mark and space )                      is reversed.</p> <p>I am transmitting a continuous...                      1) mark.                      2) space.</p> <p>I am receiving...                      1) a continuous mark.                      2) a continuous space.                      3) a mark bias.                      4) a space bias.</p> <p>You are transmitting a continuous...(1. Mark; 2. Space).</p>	<p>QJA</p> <p>QJI</p> <p>QJK</p> <p>ZBC</p>

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
METHOD	Will you use... 1) radio? 2) cable? 3) telegraph? 4) teletypewriter? 5) telephone? 6) receiver? 7) transmitter? 8) reperforator?	I will use... 1) radio. 2) cable. 3) telegraph. 4) teletypewriter. 5) telephone. 6) receiver. 7) transmitter. 8) reperforator.  ...(class of omission/ type of transmission as indicated in Chapter 6).	QJB          ZTG
MODULATION	What is the duration of your modulation cycle?	The duration of my modulation cycle is... <u>50 Baud Equipment</u> 1. 148 milliseconds (7.42 units) fast. 2. 150 milliseconds (7.5 units) correct. 3. 152 milliseconds (7.6 units) slow. 4. ...erratic per character. <u>45.5 Baud Equipment</u> 1. 161 milliseconds (7.35 units) fast. 2. 163 milliseconds (7.42 units) correct. 3. 165 milliseconds (7.5 units) slow. 4. ...erratic per character.	ZTP
MONITOR	Will you monitor... station and report regarding range, quality, etc.?	My signal as checked by monitor...is satisfactory ... 1) locally. 2) as radiated.  I have monitored... station and report (briefly) as follows...	QJF          QLB
PATCH	Will you patch me through to...(via you or...)?	I am about to patch you through to...(via)	ZAF

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
POWER	Shall I increase transmitter power?	Increase transmitter power.	QRO
	Shall I decrease transmitter power?	Decrease transmitter power.	QRP
RADIATION		Maximum power is now being radiated.	ZPE
		Your transmitter has strong radiation while idling.	ZPB
		Radiate full unmodulated power for...minutes.	ZRT
REPAIRS	Are repairs completed?	Repairs completed.	ZTF
SATELLITE		Satellite(s) is/are preempted from .....Z to .....Z	ZCA
		Change to double-hop working using satellites..... West and .....East now (or at ....hours)	ZCB
		Establish.....on access... channel (A/B) 1. 300 db Emergency patch. 2. Phase-reverse-keying.	ZCC
		Weight your access to ..... (call sign) by .....db.	ZCD
		Access satellite .....now (or at..... hours) with.... 1. Spread Spectrum Modulation (normal allocation) 2. Spread Spectrum Modulator changed to access... 3. Spread Spectrum Demodulator changed to access ..... 4. Frequency modulation. 5. Phase Shift Keying Modulation.	ZCE
		Remove access...now (or at .... hours) 1. Spread Spectrum Modulation (1 - 40) 2. Frequency Modulation. 3. Phase-reverse-keying. 4. Phase Shift Keying Modulation.	ZCF

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SATELLITE (Cont'd)	What is your frequency modulation deviation?	My frequency modulation is .....	ZCG
	What is your tracking mode?	My tracking mode is..... 1. Autotrack. 2. Manual tracking. 3. Hand barring.	ZCH
	What is your .....? 1. Total output power. 2. Quality meter reading. 3. Number of accesses. 4. Frequency modulation access power.	My 1 is .....watts 2 is .....% 3 ..... accesses. 4 ..... watts.	ZCI
	Are you experiencing equipment trouble?	I am experiencing trouble with my ..... 1. Spread Spectrum Modulator. 2. Frequency division multiplex equipment. 3. Line modem. 4. Time division multiplex equipment. 5. Switching or patching. 6. Servo system. 7. Transmitter 8. Receiver. 9. Parametric amplifier. 10. Phase Shift Keying Modulator.	ZCJ
	Shall I loop my .....? 1. Spread Spectrum Modulator channel (A/B) 2. Line modem 3. Time division multiplex equipment. 4. Frequency division multiplex equipment.	Loop your ..... 1. Spread Spectrum Modulator channel..... 2. Line modem. 3. Time division multiplex equipment. 4. Frequency division multiplex equipment.....	ZCK
	Have you checked speed setting of all equipment on.....(channel/circuit)	I have checked speed setting on.....(channel/circuit).	ZCL
May I carry out.....on satellite.....? 1. Spread Spectrum Modulation back-to-back check. 2. Range measurement. 3. Power Balance.	Carry out....on satellite... 1. Spread Spectrum Modulation back-to-back check. 2. Range measurement 3. Power Balance.	ZCM	

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SATELLITE (Cont'd)	Are you ready to synchronize Spread Spectrum Access?	I am ready to synchronize Spread Spectrum Access....	ZCN
		On your FM/FDM Access.....	ZCO
		1. Suppress telegraph channel ..... (1 - 9)	
		2. Open telegraph channel .....(1 - 9)	
		Change (total) radiated power.....	ZCP
		1. On narrow-band to ..... watts.	
		2. On Spread Spectrum..... watts. Note: This power excluded that for access D or E.	
		3. Of access....(1-40,N1-N5, D or E) to ..... (watts)	
4. Of access....(1-40, RAE) to.....(0,3,6,9db) below full access at Combiner Unit.			
	Change FM/FDM mode to Mode .....(A/D) with deviation .....kHz	ZCQ	
	I am about to initiate....	ZCR	
	1. Serial		
	2. Parallel synchronization of accesses..... and ...		
	Switch your Spread Spectrum Access....modulator to.....	ZCS	
	1. Code off		
	2. Search		
	3. Sync. 1		
	4. Sync. 2		
	5. Traffic		
	6. Channel A Normal On.		
	7. Channel B Normal On.		
	My Spread Spectrum Access demodulator is.....	ZCT	
	1. CW tuned		
	2. In short-code lock		
	3. In long-code lock		
	4. In long-code and data-lock on Channel A only		
	5. In long-code and data-lock on both channels.		

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SATELLITE (Cont'd)		Set Spread Spectrum Access.....to..... 1. Channel A only. 2. Channel A and B retain- ing original radiated power for this access.	ZCU
		Set speed of Spread Spectrum Access.....Channel....(A/B) to..... 1. 1300 bd.      4. 1200 bd 2. 2600 bd.      5. 2400 bd. 3. 600 bd.        6. 4800 bd.	ZCV
		1. Check your...and advise 2. I have lost ..... 3. Perform back to back through..... 4. Bypass 5. I have bypassed 6. Retune demodulator To be used in conjunction with ZCX.	ZCW
		1. Test loop 1 2. Test loop 2 3. Test loop 3 4. Test loop 4 5. Paramp 6. High Power Amplifier 7. Demodulator 8. Mux Channel A 9. Mux Channel B 10. Demux Channel A 11. Demux Channel B 12. Coder 13. Decoder 14. Tracking (including side lobe) 15. 5 MHz standard 16. Synthesizer 17. Power Supply 18. Modulator 19. Satellite 20. Crypto Equipment 21. Patching DC 22. Patching RF 23. Patching Clock	ZCX





## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SIGNAL QUALITY (Cont'd)	What is the intelligibility of my signals (or those of...)?	The intelligibility of your signals (or those of...) is... 1) bad. 2) poor. 3) fair. 4) good. 5) excellent.	QRK
		Your signals are... (1. Fading badly; 2. Fading slightly; 3. Good for... words per minute; 4. Getting stronger; 5. Getting weaker).	ZPC
	Is your signal as checked by monitor ...satisfactory (1. Locally; 2. As radiated)?	My signal as check by monitor...is satisfactory (1. Locally; 2. as radiated).	ZPD
	What is the readability of the signals of the group (net) (or of...)?	The readability of the signals of the group (net) (or of...) is...(1 to 5)	ZPF
	What is (are) signal strength(s) of group (net) (or of...)?	Signal strength(s) of group (net) is (are) (or of...) is... (1 to 5)	ZPG
	This transmission is a transmitter pre-acceptance trial. Request expeditious strength and readability reply.	ZPT	
SIGNAL STRENGTH	What is the strength of my signals (or those of...)?	The strength of your signals (or those of...) is... 1) scarcely perceptible. 2) weak. 3) fairly good. 4) good. 5) very good.	QSA
	Are my signals fading?	Your signals are fading.	QSB
SPEED KEY		Your speed key is improperly adjusted.	ZAB
SPEECH		Your speech is distorted.	ZPA

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
TAPE	Is my... 1) tape ) 2) mark and space) reversed?	Your... 1) tape ) 2) mark and space) is reversed.	QJA
	Shall I run... 1) my test tape? 2) a test sentence?	Run... 1) your test tape. 2) a test sentence	QJH
	Shall I transmit 12 inches of blank tape at short intervals at...words per minute?	Transmit 12 inches of blank tape at short in- tervals at...words per minute.	ZAW
		Your...is reversed. (1. Tape; 2. Mark and space).	ZBN
TECHNICIAN	Will you...(1. get the Circuit Engineer/Facil- ity Control Technician to speak on this cir- cuit (or circuit...); 2. hand the line over to the Circuit Engineer/ Facility Control Tech- nician for check)?	I will...(1. get the Circuit Engineer/Facil- ity Control Technician to speak on the circuit; 2. hand the line over to the Circuit Engineer/ Facility Control Tech- nician for check and call you when check has been completed).	ZTQ
TELETYPE RANGE	What is teletype range taken on my signal(s)?	Teletype range taken on your signal(s) is...to...	ZAU
TEST	Shall I run... 1) my test tape? 2) a test sentence?	Run... 1) your test tape. 2) a test sentence.	QJH
		Run... (1. Caller; 2. Test tape; 3. Synchronizing tape; 4. Traffic tape; 5. Marking signals; 6. Spacing signals; 7. Reversals; 8. Run tele- typewriter space bar signals). 9. Datel test at...bd	ZAI

## SECTION G

ENCODE

## CIRCUIT DISCIPLINE AND NET CONTROL

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
ACKNOWLEDGE	Can you acknowledge receipt?	I am acknowledging receipt.	QSL
ANSWER		Answer me (or...) on... kHz (or MHz).	ZBV
AUTOMATIC	Shall I revert to automatic relay?	Revert to automatic relay.	QJG
BREAK		I have been unable to break in on your transmission. or Will you inform...(call sign) that I have been unable to break in on his transmission (on... kHz (or MHz)). I have (or...has) been unable to break you.	QSI ZAJ
		I am unable to receive you while I am transmitting. Do not use break-in procedure.	ZBL
BUSY	Are you busy?	I am busy (or I am busy with...). Please do not interfere.	QRL
CALL/CALLING	Shall I inform... that you are calling him on... kHz (or MHz)?	Please inform...that I am calling him on...kHz (or MHz).	QRW

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL	
CALL/CALLING (Cont'd)	When will you call me again?	I will call you again at...hours (on...kHz (or MHz)).	QRX	
	Who is calling me?	You are being called by ... (on...kHz (or...MHz)).	QRZ	
		Make preliminary call before transmitting traffic.	ZBH	
		I am or have been (or... is or has been) calling you (on...kHz (or MHz)).	ZGI	
	When will you call me again on present frequency (or on... kHz (or MHz))?	I will call you again as soon as possible (or at ...) on present frequency (or on...kHz (or MHz)).	ZGJ	
	When shall I call you again on present frequency (or on...kHz (or...MHz))?	Call me again at...on present frequency (or on ...kHz (or MHz)).	ZGK	
		...will answer calls for me (or for...).	ZGL	
		Answer calls for me on present frequency (or on...kHz (or MHz)).	ZGP	
	CALL SIGN	What is your full call sign?	My full call sign is... or Use your full call sign until further notice.	QCX
		What is my call sign for use on this circuit only?	Your call sign for use on this circuit only is...	ZCA
Send (answer)...(1. In alphabetical sequence of call signs. Each station to make its call signs once (or...times); 2. In the following sequence of call signs).			ZGB	
Two stations are using the same indefinite call sign on...kHz (or MHz). Both stations are to select different call signs.			ZGD	

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CALL SIGN (Cont'd)		Send your call sign(s) once (or...times) on this frequency (or on...kHz (or MHz)).	ZGE
		Make call signs more distinctly.	ZGF
	What is call sign of ... (1. Friendly striking force aircraft; 2. Friendly shadowing aircraft; 3. Incoming vessel; 4. Senior officer present afloat (or officer in tactical command); 5. Ship acting as flagship for...)?	Call sign of...is... (1. Friendly striking force aircraft; 2. Friendly shadowing aircraft; 3. Incoming vessel; 4. Senior officer present afloat (or officer in tactical command); 5. Ship acting as flagship for...).	ZGG
CLOSING DOWN		I am closing down (until ... ) due to...	ZAL
	May I close down (until...)?	...(1. Close down (until ...); 2. I am closing down (until...)).	ZKJ
COMMUNICATE WITH	May I establish communication with... radio station on... kHz (or MHz) now (or at...hours)?	Establish communication with...radio station on ...kHz (or MHz) now (or at...hours). or I will establish communication with...radio station on...kHz (or MHz) now (or at...hours).	QIC
	Can you communicate with...direct or by relay?	I can communicate with ...direct (or by relay through...).	QSO
	Can you communicate with my station by means of the international code of signals?	I am going to communicate with your station by means of the international code of signals.	QTQ

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
DELAY		Transmission on...kHz (or MHz) suspended until... (or was suspended at...) on account of electrical hazards (or...).	ZAK
	What is cause of delay (or of bad transmission)?	Delay (or bad transmission) due to...	ZBA
		I am using this transmitter to answer calls on two or more frequencies. Answer to calls may be delayed.	ZGH
DISCIPLINE		You are not observing proper circuit discipline.	ZAA
FREQUENCY		My reception on...frequency has broken down.	QCS
	What frequency is ...using?	...is using...kHz (or MHz).	QIF
		Shift to transmit and receive on...kHz (or MHz); if communication is not established within 5 minutes, revert to present frequency.	QMH
	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on...kHz (or MHz)).	QSY
	Will you shift (or ask...to shift) to transmit on...kHz (or MHz)?	I am (or...is) shifting to transmit on...kHz (or MHz).	ZBW
	Will you shift (or ask...to shift) to receive on...kHz (or MHz)?	I am (or...is) shifting to receive on...kHz (or MHz).	ZBX
GROUPS	Shall I send each word or group more than once?	Send each word or group twice (or...times),	QSZ

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
GROUPS (Cont'd)	Do you agree with my counting of words?	I do not agree with your counting of words; I will repeat the first letter or digit of each word or group.	QTB
		The last word (or group) ... (1. Received from you was...; 2. Transmitted to you was...).	ZAQ
GUARD	May I stop listening on the watch frequency for...minutes?	You may stop listening on the watch frequency for... minutes.	QAR
		Stand guard for me on the frequency of...kHz (or MHz) (from...to...hours).	QTV
	Shall I stand guard for you on the frequency of ...kHz (or MHz) (from ...to...hours)?	Take guard (for...) (on...kHz (or MHz)).	ZKM
		I have taken over guard on...kHz (or MHz).	ZKN
		I have handed over guard (to...) (on...kHz (or MHz)) (serial number of last message received was...).	ZKO
		I am (or...is) radio guard for...(on...kHz (or MHz)).	ZKP
Are you (or is...) radio guard for... (on...kHz (or MHz))?	Indicate ships or stations for which you are (or...is) ...guard. (1. Radio (on... kHz (or MHz)); 2. Visual).	ZKQ	
HEARD	When was I (or...) last heard?	Nothing heard from you (or...) (since...).	ZGN
IDENTIFICATION		The identification signal which follows is superimposed on another transmission.	QTT

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
INTERFERENCE	Are you experiencing communication difficulties through flying in a storm?	I am experiencing communication difficulties through flying in a storm. Note: Attention is invited to the possible supplementary use of signals QAR, QBE, QCS, QRM, QRN, QRX, QSZ or the signal CL to amplify the meaning associated with signal QAZ.	QAZ
	Are you being interfered with?	I am being interfered with.	QRM
	Are you troubled by static?	I am troubled by static.	QRN
		You are...(1. Causing interference. Listen before sending; 2. Causing interference by inattention to order to wait; 3. Sending at the same time as... (call sign); 4. Causing delay by slowness in answering; 5. Causing delay by slowness in answering my service or procedure messages; 6. Answering out of turn).	ZAX
KEYING	Will you use simultaneous keying on... frequency and... frequency?	I will now key simultaneously on...frequency and ...frequency.	QLH
	Is my keying defective?	Your keying is defective.	QSD
		Your...(1. Characters are indistinct; 2. Spacing is bad).	ZBP
		Your...(1. Dots are too heavy; 2. Dots are too light; 3. Dots are varying in bias; 4. Dot spacing is bad; 5. Dots are missing; 6. Dots are burring.).	ZBS



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
LEAVING NET		Station leaves net temporarily (or for...minutes) (to communicate with...) (will be on...kHz (or MHz)).	ZKF
LINK		Act as radio link (relaying station) between me and...(or between...and...).	ZOD
LISTEN	Shall I listen for you (or for...) on ...kHz (or MHz)? Note: If the frequency is given in megacycles, the abbreviation MC is to be used. (See also signal QSX).	Listen for me (or for...) (on...kHz (...MHz)). Note: If the frequency is given in megacycles, the abbreviation MC is to be used. (See also signal QSX).	QAP
	Will you listen to... (call sign(s) on... kHz (or MHz)?	I am listening to...(call sign(s)) on kHz (or MHz).	QSX
		Listen for radiotelephony.	ZBI
MESSAGES	Has...sent any message for me?	Here is the message sent by...at...hours.	QBM
	Have you sent message ...to...?	I have sent message... to...	QDB
	Have you anything for me?	I have nothing for you.	QRU
METHOD	Shall I work... 1. Simplex; 2. Duplex; 3. Diplex; 4. Multiplex; 5. Single Sideband; 6. With automatic error correction system; 7. Without automatic error correction system)?	Work...(1. Simplex; 2. Duplex; 3. Diplex; 4. Multiplex; 5. Single Sideband; 6. With automatic error correction system; 7. Without automatic error correction system).	ZAP
		Transmit traffic for me (or for...) by broadcast method until further directed (or until...).	ZAV

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
METHOD (Cont'd)		Transmit traffic to me (or to...on...kHz (or MHz)) without waiting for receipts. I (or...) will receipt for traffic later (on...kHz (or MHz)).	ZAY
	Shall I send by... (1. Direct (R) method; 2. Broadcast (F) method; 3. Intercept (I) method; 4. Repeat back (G) method)?	Send by...(1. Direct (R) method; 2. Broadcast (F) method; 3. Intercept (I) method; 4. Repeat back (G) method).	ZBR
OPERATING SIGNAL		Your operating signal (made at...) received as ... (1. Not understood; 2. Not held).	ZAD
OPERATION	May I resume normal working?	Normal working may be resumed.	QUM
OPERATOR		Place...on watch on the frequency. (1. A qualified speed key operator; 2. A competent operator).	ZBM
PRECEDENCE		Transmit only messages of and above precedence...	ZAN
	Of what precedence(s) and for whom is (are) your message(s)?	I have (or...has)...(numeral followed by precedence prosign for each precedence message(s) for you (or for ...)).	ZBO
READY	Are you ready?	I am ready.	QRV
RECEPTION		My reception on...frequency has broken down.	QCS
	Can you hear me between your signals and if so can I break in on your transmission?	I can hear you between my signals; break in on my transmission.	QSK

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
RECEPTION (Cont'd)	Did you hear me (or... (call sign) on...kHz (or MHz)?	I did hear you (or... (call sign) on...kHz (or MHz).	QSN
	Are you receiving my traffic clear?	I am unable to receive you. Receipt through...  I am receiving your traffic...(1. Clear; 2. Garbled).	ZAE  ZBK
REPEAT	Will you repeat what you (or...) sent (at...)?	Following is what I (or...) sent (at...).	ZBD
		Send tapes...(1. Once; 2. Twice).	ZSO
REPORTING IN NET		I (or...) report(s) into circuit (net).	ZKE
SCHEDULE		Observe (or direct... to observe) schedule with...on...kHz (or MHz) (at...).	ZKG
	Did you (or...) ob- serve schedule with ...(at...)?	I (or...) observed schedule with...(at...).	ZKH
SPEECH		I cannot understand your speech. Use radiotelegraph.	ZAO
		Your speech is distorted.	ZPA
SPEED	Shall I send faster?	Send faster (...words per minute).	QRQ
	Shall I send more slowly?	Send more slowly (...words per minute).	QRS
	Shall I stop sending?	Stop sending.	QRT

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SPEED KEY		Your speed key is improperly adjusted.	ZAB
		Cease using speed key.	ZAC
STAND BY		Stand by.	ZUJ
STATION IDENTITY	What is your full call sign?	My full call sign is... or Use your full call sign until further notice.	QCX
	What is the name of your station?	The name of my station is ...	QRA
STRENGTH, SIGNAL	What is the strength of my signals (or those of...)?	The strength of your signals (or those of...) is... 1) scarcely perceptible. 2) weak. 3) fairly good. 4) good. 5) very good.	QSA
	Are my signals fading?	Your signals are fading.	QSB
TAPE		Break...(1. Go ahead with next tape; 2. Go back... feet; 3. Advance your key tape to reference mark number...and repeat last transmission (or transmission...)).	ZAG
		Unable to relay message... in present form. We file. Transmit correctly prepared tape under new number to all addressees (or to...).	ZAH

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
TAPE (Cont'd)		Run...(1. Caller; 2. Test tape; 3. Synchronizing tape; 4. Traffic tape; 5. Marking signals; 6. Spacing signals; 7. Reversals; 8. Run teleprinter space bar signals).	ZAI
		I am unable to obtain reply from teleprinter switchboard...(for connection to...). Request you call him (or other intermediate switchboard) for me.	ZAM
		Rerun all tapes run on... since...(1. Your present frequency; 2. ...kHz (or MHz); 3. Call sign...; 4. This channel or... channel).	ZAS
		Am preparing traffic (perforating tape) for transmission.	ZAT
		You are transmitting a continuous...(1. Mark; 2. Space).	ZBC
		You are transmitting in upper case.	ZBG
		Your...is reversed. (1. Tape; 2. Mark and space).	ZBN
	Send tapes...(1. Once; 2. Twice).	ZSO	
TIME	What is the correct time?	The correct time is... hours.	QTR
	What are the hours during which your station is open?	My station is open from ...to...hours.	QTU

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
TRANSMIT	Shall I send or reply on this frequency (or on... kHz (or MHz)) (with emissions of class...)?	Send or reply on this frequency (or on...kHz (or MHz)) with emissions of class...).	QSU
	Will you send on this frequency (or on...kHz (or MHz)) (with emissions of class...)?	I am going to send on this frequency (or on ...kHz (or MHz)) (with emissions of class...).	QSW
		Please listen for me on ...kHz (or MHz) and transmit to me on...kHz (or MHz).	ZHQ
TUNING	Shall I send a series of V's on this frequency (or...kHz (or MHz))?	Send a series of V's on this frequency (or on ...kHz (or MHz)).	QSV
TURN		Delay is being caused by... 1) your transmitting out of turn. 2) your slowness in answering. 3) lack of your reply to my...	QCB
	What is my turn? (Relates to communication.)	Your turn is number... (or according to any other indication). (Relates to communication.)	QRY
	What is my number and sequence in answering?	Your number is... Answer after number... (numbers to be separated by separate sign).	ZGO
WATCH		Have set continuous watch, or (1. Single operator period; 2. Two operator period; 3. General periods only; 4. Reduced single operator periods) on broadcast indicated. First serial number received is.../No number yet received.	ZIP

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
WATCH (Cont'd)	<p>On what frequencies are you (or...) maintaining watch?</p> <p>What stations are keeping watch on... kHz (or MHz) (or are in net)?</p>	Have ceased watch on Broadcast, last number received...	ZIQ
		Set watch on...kHz (or MHz)...(1. Continuous; 2. Until further notice).	ZKI
		Assume radiotelegraph (wireless) organization ...forthwith (or at...).	ZKK
		Resume normal radio communication now (or at...).	ZKL
		I am (or...is) maintaining watch on...kHz (or MHz).	ZKR
		Following stations are keeping watch on...kHz (or MHz) (or are in net).	ZKS
		Am keeping watch on... kHz (or MHz) for...(1. First five minutes in each half hour; 2. From 10 to 15 and 40 to 45 minutes past the hour; 3. Between...and... minutes past the hour).	ZKT
I am (or...is) maintaining continuous watch, or (1. Single operator period; 2. Two operator period; 3. General periods only; 4. Reduced single operator period) on... (call sign)...Broadcast.	ZKU		
I am (or...is) standing splitphone watch on... and...kHz (or MHz).	ZKV		

## SECTION H

ENCODE

## MESSAGE HANDLING

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
ACCURACY		Accuracy of following message(s) or (message...) is doubtful. Correction or confirmation will be forthcoming.	ZDG
		Accuracy of...portion of following message (or message...) is doubtful. Correction or confirmation will be forwarded when received. (1. Heading; 2. Text; 3. Group...to...)	ZEH
		Accuracy is doubtful of heading of message received as follows... Check to station of origin if necessary and repeat.	ZEI
ACKNOWLEDGE	Request you acknowledge message...	Message (or message...) is acknowledged.	ZEV
ANSWER		No answer is required.	ZEK
ATTENTION INVITED		Your attention is invited, for...(1. Action; 2. Information), to message... which is in your files.	ZEW
BASEGRAM		Message...is being delivered as a basegram message.	ZFO
		Basegram.	ZFP



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
BOOK MESSAGE		<p>This is a multiple-address or book message tape containing...routing indicators in the routing line which is to be routed in accordance with the established doctrine.</p> <p>This is a multiple-address or book message tape containing...routing indicators in the routing line for which the station called in the pilot is responsible.</p> <p>This is a book message and may be delivered as a single-address message to addressees for whom you are responsible.</p> <p>When delivery is effected of this book message to addressee by commercial means, or when copy is forwarded to confirm message previously delivered by telephone, it is to be sent as a single address message. (May only be used in conjunction with ZEX).</p>	<p>ZDR</p> <p>ZER</p> <p>ZEX</p> <p>ZEZ</p>
BROADCAST		<p>Pass...(1. On Broadcast ...; 2. On Broadcast... single operator; 3. On Broadcast...two operator period; 4. On Broadcast ...general periods only).</p> <p>In addition to the regular broadcast times, this hydrographic message is to be transmitted on the following hydrographic schedules...(1. ...schedules; 2. All schedules on ...(date); 3. All schedules from...to...(dates inclusive)).</p>	<p>ZBY</p> <p>ZDW</p>

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
BROADCAST (Cont'd)	Was there any traffic addressed to me on... broadcast schedule between serial numbers...and...?	This message (or message ...) has been (or will be put on the...broadcast schedules (serial number ...).	ZEY
		Following traffic was addressed to you on... broadcast schedule between serial numbers... and...	ZFL
		Place this message (or message...) on...(1. Continuous wave broadcast; 2. Radioteletype broadcast) indicated by following specific broadcast designator(s)...	ZON
		This message (or message ...) has been delivered to all broadcast areas (or to the following specific broadcast area(s) ...).	ZOP
		Deliver this message (or message...) to all broadcast areas (or to the following specific broadcast area(s)....).	ZOQ
		Broadcast this message at special watchkeeping periods for ships with (1. One radio operator; 2. Two radio operators).	ZOW
		Place this message (or message...) on submarine broadcast indicated by following specific broadcast designator(s)...	ZOX
		This message (or message...) is forwarded to you for screening and determination of need for broadcast promulgation. Advise broadcast control commander of recommended message disposition.	ZPX
		This message (or message...) has been screened by command authority and requires broadcast delivery.	ZPY

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CALL SIGN		The following group is a call sign, delivery group or address group. (Used in plain language texts of messages other than procedure messages.)	ZXA
CONCERN	Does message... (or station serial number...) concern me (or...)?	Message...(or station serial number...)...1. Does not concern you (or...); 2. No longer concerns you (or...).	ZFK
CONFIRMATION		Confirmation...(1. Was omitted; 2. Differs from text).	ZDL
		The following confirmatory information as received is at variance with the text.	ZED
COPIES		For following message you will require a total of ...copies.	ZBB
		For following message use large message forms.	ZBF
CORRECTION		Request corrected copy of message...be forwarded to...	ZDH
		Message (or message...) which you have (or...has) just forwarded was incorrectly transmitted. Correct version of message (or part of portion...) is...	ZDS
		This message is a correction (to message...) (transmitted by...). Note: May only be used in conjunction with ZDG.	ZEL
	Is message...a correction to message... which was previously transmitted with doubtful or missing groups (words)?		

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CORRECTION (CONT'D)		Make message...same channel or station serial number as this procedures message.	ZFS
		Correct version of the part of the last message (or message...) which was sent incorrectly is...(or will be found in...).	ZWN
DELIVERY		% Message...was: (1. received by (addressee(s)-designation) at...Z. 2. Received by (addressee(s) designation communications center) at...Z. 3. Delivered to (addressee(s) designation) by broadcast at...Z. 4. Forwarded to (addressee(s) designation) by commercial means at...Z. 5. Mailed to (addressee(s) designation) at...Z.	ZDF
		Report disposal of message...your station with any reason for delay.	ZDN
		On...(date) message(s) was(were) mailed to ... (command(s)) bearing serial-numbers...	ZDZ
		This message has been delivered by a separate transmission or by other means (1. Messenger/courier; 2. Mail) to the addressee(s) immediately following this operating signal.	ZEN
		Transmit this message by rapid means when no charges are involved and to all others by mail.	ZEO
		Message...has been protected and no further action by... is required.	ZET

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
DELIVERY (Cont'd)		When delivery is effected of this book message to addressee by commercial means, or when copy is forwarded to confirm message previously delivered by telephone, it is to be sent as a single address message. (May only be used in conjunction with ZEX).	ZEZ
		Inform me when this message (or message...) has been received by... (addressee designation) or by...(1. Action addressee(s); 2. Information addressee(s); 3. All addressees; 4. Action addressee's/addressees' message center; 5. Information addressee's/addressees' message center; 6. All addressees' message center). Note: Not authorized for used on general messages.	ZFF
		Originator has indicated that this message should be forwarded without service action on the text at relay or addressee stations, as the information conveyed is... (1. Perishable; 2. For information only and will be confirmed by other means).	ZNZ
		Take (I will take) no further action regarding forwarding message...	ZOB
		Delivery of this message by mail in lieu of broadcast permissible (to...).	ZOM

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
DELIVERY (Cont'd)		If more than one tropical wind warning message in this sequence is awaiting transmission, transmit highest serial number first. (Sequence/serial is understood to include tropical warning name or number and consecutive warning number).	ZFU
		If the earlier wind warnings identified by DTG(s) following this signal are awaiting transmission, file those warnings without further transmission.	ZFV
		This message canceled at time indicated. File without further transmission.	ZPW
		This message is to be delivered to the addressee(s) in tape form.	ZXD
		This message has been delivered to all action addressees whose designations follow this operating signal.	ZXW
		This message has been delivered to all information addressees whose designations follow this operating signal.	ZXX
		Messages up to and including serial (or circuit) number...have been previously transmitted.	ZDX
		This message is a suspected duplicate.	ZFD
DUPLICATE		This message is an exact duplicate of a message previously transmitted.	ZFG

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
EXECUTION	Does the last message (or message...) require a signal of execution?	Last message (or message ...) requires a signal of execution.	ZDC
	Have you received (or sent) the executive signal ("Execute") for message...?	Executive signal ("Execute") for last message (or following message) has been made (or was made at...).	ZFC
EXERCISE		Exercise messages are not to be sent until further orders (or until...).	ZDT
		This message is not to be decrypted or reported outside the communication center in...(1. Aggressor force; 2. Friendly force).	ZEG
		Exercise (drill) message.	ZEU
GROUPS		The last word (or group) ...(1. Received from you was...; 2. Transmitted to you was...).	ZAQ
	How do you count following text group(s)...?	Text group(s)...should be counted as...group(s).	ZBT
	How many groups does your message contain?	I have a message containing...groups to transmit to you (or to...).	ZDJ
		This message (or message ...) was incompletely received. Each word or group missed, which is indicated by position of ZEP in the message, will be forwarded as soon as obtained.	ZEP
HOLD		I am holding your message...	ZDM
		Hold my message... until correctness is confirmed.	ZDP
INCOMPLETE		Your message...has been received...(1. Incomplete; 2. Garbled.). Request retransmission.	ZES

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
<p>INCOMPLETE (Cont'd)</p>		<p>Station(s) to whom this message is routed obtain a complete copy of this interrupted transmission by addressing a service message to the originating station. (This procedure shall not be used between networks except as bilaterally agreed.)</p>	<p>ZXB</p>
		<p>This interrupted transmission is cancelled. A complete retransmission from this station will follow without request.</p>	<p>ZPH</p>
<p>MERCAST</p>		<p>Place this message (or message...) on...(1. MERCAST; 2. MERCAST one operator period).</p>	<p>ZDI</p>
		<p>Place this message (or message...) on MERCAST indicated by following specific broadcast designator(s)...</p>	<p>Z00</p>
<p>MESSAGE, FORMAL</p>		<p>I have a formal message for you (Precedence is...)</p>	<p>ZDA</p>
<p>MESSAGE, ICAO</p>		<p>This is a reprocessed ICAO message.</p>	<p>ZEB</p>
<p>MESSAGE, MISSENT</p>		<p>Message...has been (1. Missent to this station. Received at...Z. Message protected; 2. Missent to this station and unable to protect delivery due to... Request you re-transmit to the appropriate called station(s); 3. Misrouted to this station and has been rerouted to...at...Z. Recommend corrective action; 4. Misrouted to this station and unable to protect delivery (for...)due to... Request your station protect delivery; 5. Routed to this station in format line 2, but without delivery responsibility in format lines 7 or 8. Advise.)</p>	<p>ZEQ</p>



## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
MESSAGE, NUMBER	What is the number (or other indication) of the last message you received from me (or from...(call sign))?	The number (or other indication) of the last message I received from you (or from...(call sign)) is...	QUC
		Message(s)...number(s)... not transmitted on this schedule (or on schedule ...) are no longer needed.	ZFJ
	Is (are) number(s)... (to...) blank?	Number (s)...(to...) is (are) blank.	ZIG
		Repeat headings of message number...to...transmitted by you (or...) to check serial numbers.	ZIH
	What was...of your (or ...'s) number...? 1. Date-time group; 2. Filing time)?	My (or...'s) number... had following...(1. Date-time group; 2. Filing time).	ZII
Message(s)...number (s)... will no longer be broadcast but are effective and of interest (to units indicated).		ZRR	
MESSAGE SENT BY	Has...sent any message for me?	Here is the message sent by...at...hours.	QBM
METHOD		Send message for...on...kHz (or MHz) by...(1. Receipt method; 2. Broadcast method; 3. Intercept method).	ZOH
NON-DELIVERY		Message...undelivered... (1. Station closed until..Z; 2. Attempting alert station to re-open (for Flash or Immediate precedence only); 3. Will continue efforts to effect disposal; 4. Advise disposition; 5. Will not continue further efforts. Request cancel and file; 6. Give more complete address).	ZDE
		I could not send message ...to...	ZDO

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
OPERATING SIGNAL		Your operating signal (made at...) received as... (1. Not understood; 2. Not held).	ZAD
PASS		Pass plain language copy to...by secure means.	ZEA
		Pass this message to... (1. On arrival; 2. On return to base).	ZFB
		Pass message...(which is in your files) to address-ee(s) for whom you are responsible using the indicated supplementary heading.	ZFE
		This message (or message ...) is being (or has been) passed to you (or...) for ... (1. Action; 2. Information; 3. Comment) (at the request of...).	ZFH
		Transmit (pass) this message (or message...) to...(for...) (1. Action; 2. Information).	ZOG
PRECEDENCE		Transmit only messages of and above precedence...	ZAN
		Transmit or handle this message at the lower precedence to the station or address designator(s) which follow(s).	ZOT
RADIOTELEPHONE	How many radiotelephone calls have you to book?	I have...radiotelephone calls to book.	QRJ
	Can you use telephony in...(language), with interpreter if necessary; if so, on what frequencies?	I can use telephone in...(language) on...kHz (or MHz).	QUE

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
RECEIPT	When and on what frequency was message... received?	Message...was received at...on...kHz (or MHz).	ZBQ
		% Message...was: (1. received by (addressee(s) designation) at...Z. 2. Received by (addressee(s) designation communications center) at...Z. 3. Delivered to (addressee(s) designation) by broadcast at...A. 4. Forwarded to (addressee(s) designation) by commercial means at...Z. 5. Mailed to (addressee(s) designation) at...Z.  Station to station receipts are not required for this FLASH message. (Authorization for use must be prescribed by authorities controlling networks/systems).	ZDF  ZGC
RECEIVE/ INTERCEPT	Have you received message...?	Message...(1. Not received; 2. Unidentified. Give better identifying data).	ZEC
		This message has been read (received or intercepted) from a ship at sea.	ZEF
		Following message has been read (received or intercepted).	ZFA
		% Unable to relay message... in present form (1. Not in prescribed format; 2. Format line...incorrect; 3. No on-line facility available; 4. Call signs not encrypted; 5. Text not encrypted). We file. Transmit correctly prepared message to all addressees (or to...).	ZAH
RELAY		Message was relayed to... at...by...(on...kHz or MHz))	ZDQ
		Station(s) called relay this message to addressees for whom you are responsible	ZOC

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
RELAY (Cont'd)	Can you accept message for... (1. on line; 2. off line).	Give me your message. I will dispose of it...(1. on line; 2. off line).	ZOE
		Relay (pass) this message (or message...) to...now (or at...)	ZOF
		Unable to relay message... in present form...(1. Call signs not encrypted; 2. Text not encrypted).	ZOJ
		Relay this message via...	ZOK
		Relay this message only to the station(s) whose designation(s) precede this operating signal.	ZOY
		Relay this message (or message...) in its present form without decryption.	ZOZ
		The text of this message is to be relayed in precisely the same format as that in which it is received. No characters or machine functions are to be added, inserted or deleted and the relative positions of the groups are to be retained.	ZPO
		Station called is responsible for relay or delivery to all stations in line two (2) or to stations indicated.	ZVA
		This message, relating to a warning, an alert, distress, or an emergency, is authorized to be relayed via the facilities of your network without prior arrangement.	ZVQ
		Retransmit this message (or message...) at once to all subordinate stations.	ZVR
		No forwarding action to the designation(s) immediately following is required.	ZWL
		I have ___ messages (precedence) prepared in tape relay format for you (or for ___). (Consideration should be given to receiving this message directly on to a printing perforator/typing reperforator).	ZPR

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
RELAY (Cont'd)		Station called relay this message (or message...) to... in addition to predetermined responsibilities.	ZXK
		transmit this message to the addressee(s) indicated by the numeral(s) following... All addressees are to be counted consecutively as they appear (numbers to be separated by the Separative Sign).	ZXY
RELEASE		Originator authorized the transfer of this message into the secure networks of all authorities addressed, provided the networks are secure or approved for the classification of the message involved.	ZNM
REPETITION	Will you repeat what you (or...) sent (at...)?	Following is what I (or...) sent (at...).	ZBD
		Retransmit message...to... (for...) (1. Action; 2. Information).	ZBE
	Will you repeat message...(or portion ...) (or will you re-run number)?	Following repetition (of...) is made in accordance with your request.	ZDK
		Message(s) serial number(s) ...(to...) which was (were) transmitted during unserviceability of one or more transmitters, simultaneously keyed, will now be repeated.	ZFM
REPLY		Request you obtain retransmission of messages...from station...	ZXO
		Expedite reply(ies) to my ...(1. Previous operating signal; 2. Request(s) for repetition and correction; 3. Service message...).	ZDB
		Replies to this message (or message...) are to be sent now (or at...).	ZEJ
	Is there any reply to message...?	There is no reply to message...	ZFI

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
REQUEST		This is my...request (or reply). (1. First; 2. Second; 3. Third; etc.).	ZAR
		Bring message...to the circuit.	ZDD
		Request message...be transmitted.	ZEE
ROUTING		1. Route traffic for... via...area broadcast. 2. Beginning at...traffic for you (or...) will be routed via...area broadcast.	ZOR
	Request area routing for messages for...?	Area routing for messages for...is...	ZOS
	How should traffic for...be routed?	Route traffic for... through...(on...kHz (or MHz)).	ZOU
		Station designation preceding this operating signal is the correct routing for this message rerouted by...	ZOV
SERIAL/CHANNEL NUMBER		Two messages (...and...) received under channel number (or station serial number)... Both released.	ZFQ
		Cancel transmission... (made under channel or station serial number ...).	ZFR
		Message...received without channel number (or station serial number) following message bearing channel number (or station serial number) ...Message released.	ZFT
		Channel numbers...and... preceded message...Lower number recorded and higher number blanked.	ZFU

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SERIAL/CHANNEL NUMBER (Cont'd)		Message...containing channel number...separated by portions of the message, released subject to correction. Take necessary action to provide corrected copy.	ZFV
		BLANK channel number(s) ...Forward message...as channel number...	ZFW
		Channel number (or station serial number) is open.	ZFX
		This message (or message ...) is being (or has been) passed out of proper sequence of station serial numbers.	ZIA
	Two messages... and...(or group counts and time of origin... and...), both received as serial number... What are correct serial numbers?	Change station serial number of message...to read number...OR Assign to message...station serial number...	ZIB
	What is (are) station serial number(s) or channel number(s) of last message(s) you transmitted to me (or to...)?	Station serial number(s) or channel number(s) of last message(s) transmitted to you (or to...) is (are)...	ZIC
	What is (are) station serial number(s) or channel number(s) of last message(s) received from me (or from...)?	Station serial number(s) or channel number(s) of last message(s) received from you (or from...) is (are)...	ZID
		Station serial number(s) or channel number(s)... (from...) has (have) not been received. Repeat message(s) or cancel serial number(s) or channel number(s).	ZIE
		I (or...) did not use serial number(s)...	ZIF

## ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SERIAL/CHANNEL NUMBER (Cont'd)		I am now changing my channel number/letter. Last number sent in this series is that of this message	ZIJ
SUBMARINE SIGNAL		Message which follows is a submarine surfacing signal to be cleared on calling frequency.	ZPP
TAPE		Rerun all tapes run on... since...(1. Your present frequency; 2. ...kHz (or MHz); 3. Call sign...; 4. This channel or...channel).	ZAS
		Am preparing traffic (perforating tape) for transmission.	ZAT
TELEGRAM	By what private enterprise (or State administration) are accounts for charges for you station settled?	The accounts for charges of my station are settled by the private enterprise... (or State administration).	QRC
	Shall I send... telegrams at a time?	Send...telegrams at a time.	QSG
	What is the charge to be collected to.... including your internal telegraph charge?	The charge to be collected to...including my internal telegraph charge is...francs.	QSJ
	Shall I repeat the last telegram which I sent you (or some previous telegram)?	Repeat the last telegram which you sent me (or telegram(s) number(s)...).	QSM
	Shall I cancel telegram number... as if it had not been sent?	Cancel telegram number... as if it had not been sent.	QTA
	How many telegrams have you to send?	I have...telegrams for you (or for...).	QTC
		Pass the following...(1. Private message (telegram); 2. Service Telegram...) (Number of words charged for is...).	ZDU
		Private message (telegram) received for...Request instructions.	ZDV



ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
TELEGRAM (Cont'd)		Private messages (telegrams) are not to be sent until further orders (or until...).	ZDY
TOLL	What is the charge to be collected to... including our internal telegraph charge?	The charge to be collected to...including my internal telegraph charge is...francs.	QSJ
	Will you relay to... free of charge?	I will relay to...free of charge.	QSP

## SECTION I

ENCODE

## SECURITY AND CRYPTOGRAPHIC

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
AUTHENTICA- TION	What is authentication of...(1. Message...; 2. Last transmission; 3. ...)?	Authentication (of...) is ... (1. Message...; 2. Last transmission; 3. ...).	ZNB
		All transmissions will be authenticated... (1. On all circuits; 2. On this circuit; 3. On...frequency).	ZNC
		You are using authenticator incorrectly...(1. Verify authenticator system key; 2. Check authentication of your last transmission).	ZND
		I am prepared to authenticate.	ZNE
		% This message (or message...) received at this station... (1. Without authentication (when authentication is in force); 2. Incorrectly authenticated; 3. Correctly authenticated).	ZNQ
		Following message has been authenticated...(This signal is for use only over approved/on-line circuits).	ZNS
		Following message has NOT been authenticated...(This signal is for use only over approved/on-line circuits).	ZNT
		This channel (or...channel/circuit designated) is un-serviceable for classified traffic.	ZVF
		Plain-text tape of this message should be prepared during process of decipherment.	ZNH
		Unable to decrypt message ...(from indefinite call sign...). Note: Only to be used under circumstances laid down in cryptographic instructions.	ZNO

DECIPHER

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
ENCIPHER		You are encrypting...incorrectly. (1. Operating signals; 2. Radio call signs; 3. Address groups).	ZNA
NON-APPROVED CIRCUIT		Do not forward this message unencrypted by radio or non-approved circuit.  This message may be forwarded without change by radio or non-approved circuit.	ZNY  ZNR
NON-HOLDERS		Addressees who are not holders of the cryptographic system employed in the text need not decrypt (decipher), but shall sight (read) translation at first opportunity and obtain copy if applicable.  Commands who are included in the collective address used in this heading, who are not holders of the cryptographic system employed in the text, are exempted.	ZNF  ZNG
		Addressees who do not hold cryptographic facilities are exempted.	ZNK
OPERATION		Shift to...(1. On-line; 2. Plain)operation now.  Transfer operation of channel now to...(1. Normal; 2. Top Secret; 3. Conference; 4. Engineering) on-line cipher operation. Note: This signal is for use only when already in on-line cipher operation.	ZNI  ZNP

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
PERSONNEL		Message which follows is to be handled by... (1. Officer Emergency Cryptographic team; 2. Ratings Emergency Cryptographic team; 3. Senior Communications Rating; 4. Junior Communications Rating; 5. Coder (Educational).	ZXS
QUERY		Receiving Cryptographic Office concerned should refer queries relating to the text of this message (e.g., requests for verification) to... (address designators except plain language). Note: to be used in co-dress messages when necessary to indicate originating crypto center and then normally limited to messages of Immediate precedence and above.	ZNL
RELAY		This message is not to be transmitted by radio telegraph or radiotelephone in any form over part of its route.	ZXT
RELEASE		Originator authorized the transfer of this message into the secure networks of all authorities addressed provided the networks are secured or approved for the security classification of the message involved.	ZNM

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SECURITY	What are the security conditions of your termination(s) of this channel (or...channel/circuit designated)?	Security conditions at my termination of this channel (or...channel/circuit designated) are...(1. Secured for Restricted; 2. Secured for Confidential; 3. Secured for Secret; 4. Secured for Top Secret). NOTE: The answer to this signal may only be passed on circuits cleared for classified traffic.	ZVE
%TRANSMISSION		This message has been transmitted under serial number ...at...by station whose designation follows...(1. By on-line cipher; 2. By off-line encryption).	ZNJ
WEATHER CONTROLLED MESSAGE		This is a weather controlled message which is not to be transmitted in the clear over radio circuits.	ZIK

## SECTION J

ENCODE

## VISUAL

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
CALL SIGN	What are the call signs of the ships in company with you?	Call signs of ths ships in company with me...(For visual use only).	ZJI
EQUIPMENT		...(1. Flaghoist; 2. Semaphore; 3. 20 inch signaling projector; 4. 10 inch signaling projector; 5. ALDIS; 6. Intermediate; 7. Heather; 8. Daylight signaling lantern; 9. Masthead flashing light; 10. Infrared; 11. Signal search light; 12. Omnidirectional flashing light; 13. Directional flashing light.	ZJM
EXERCISE		Intensive flag signalling will take place shortly (or in ... minutes).	ZXR
LIGHTS		Read signaling light of...  Your light is unreadable ... (1. Not trained correctly; 2. Not bright enough; 3. Too bright).	ZJA ZJH
		Directional lights of minimum brilliancy are to be used for all visual traffic between...and... except for messages of precedence priority and above requiring transmission to two or more ships.	ZJS
MESSAGES		Message...has been passed to those for whom I am responsible (or to...) (at...) but "L" has not been received.	ZJN

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
MESSAGES (Cont'd)		Message which follows is to be encrypted and passed to all addressees (by...). (Only to be used by visual not liable to interception.)	ZJP
PROCEDURES		Use double-flash procedure.	ZJJ
RELAY		Visual relaying station between senior officer (senior officer present afloat) (or...) and...is to be...	ZJF
		Relay this message (or message...) by visual (to...).	ZOA
		I will relay your call sign to senior officer present afloat, whose call sign is...	ZOL
REPEAT		Repeat all flashing (or semaphore) messages made by the senior officer (senior officer present afloat).	ZJG
		Repeat back each group of the text of this message as it is transmitted.	ZJO
		Repeat signal (or message ...) the senior officer (senior officer present afloat) (or ship indicated) is now transmitting or is about to transmit.	ZJQ
SEMAPHORE		Only semaphore is to be used for visual signaling between...and...(or from...).	ZJR

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
SIGNAL		Repeat all flag signals made by the senior officer (senior officer present afloat).	ZJC
		Hoist the following signal.	ZJL
USE		Use...(1. Better light; 2. Better background).	ZJD
WATCH/GUARD	May I close down visual watch now (or at...)?	Close down visual watch now (or at...).	ZJB
		Set visual watch now (or at...).	ZJE
	Are you (or is...) visual guard for ...?	I am (or...is) visual guard for...	ZJK



## SECTION K

ENCODE

## EXERCISE AND MISCELLANEOUS

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
AFFIRMATIVE		Affirmative (Yes).	ZUE
AIR RAID		Air Raid...(1. Warning; 2. In progress; 3. All clear).	ZUF
AIR SUPPORT		I have for you...(1. A request for direct air support; 2. A reply to a support request; prece- dence is...).	ZXP
AT...		At...	ZUB
ATTENTION		Your attention is invited to...	ZUI
COMPLY, UNABLE		Unable to comply.	ZUH
CORRECT		You are correct.	ZWG
		Correct version of the part of the last message (or message...) which was sent incorrectly is... (or will be found in...).	ZWN
CONFERENCE	...(Appointment Code) desires key conversa- tion on this circuit with...(Appointment Code). Will you indi- cate when you are ready?	...(Appointment Code) is now ready to begin key conversation with... (Appointment Code).	ZUK

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
DUTIES		Stations are to answer... taking the following duties ...A; ...B, ...C...etc.	ZWJ
EXERCISE		Indicate name of... (1. Operator on watch; 2. Senior rating on watch; 3. Operator who transmitted last message (or message ...)). Note: This signal is authorized for use on connection with operator training only; it may not be used for any other purpose.	ZWB
		The following is to be taken as applying to personnel on watch only.	ZWC
		Carry out communication ... (visual exercise number...at...senior officer (or...)) is to conduct.	ZWD
		Voluntary exercise (number...) may be carried out now (or at...).	ZWE
		Answer last question (or question...).	ZWI
		Following is answer to the last question (or question...).	ZWK
		Correct answer to last question (or question...) is...(or will be found in...).	ZWM
		Following message (or question, or exercise is for the exercise of... (1. Junior operators; 2. Senior operators; 3. Ratings on watch).	ZWO

ENCODE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
EXERCISE (Cont'd)		A junior operator is to carry out...(1. A standard flashing exercise; 2. A standard semaphore exercise; 3. A standard radiotelegraphy transmitting exercise; 4. A standard radiotelegraphy receiving exercise).	ZWP
FROM		From...to...	ZUC
INCORRECT		Incorrect.	ZWF
NEGATIVE		Negative (No).	ZUG
ORDERS		Until further orders (or until...).	ZUD
RECONNAISSANCE		I have for you...(1. A request for tactical reconnaissance; 2. A request for photographic reconnaissance; 3. A request for artillery reconnaissance. Precedence is...).	ZXQ
STANDBY		Standby.	ZUJ

ENCORE

KEY	QUESTION	ANSWER, ADVICE OR ORDER	SIGNAL
TIMING	Request a timing signal now (or at...).	Timing signal will be transmitted now (or at...). The numerals indicating the time will be followed by a five-second dash terminating exactly at the time indicated.	ZUA
TRY AGAIN		Try again.	ZWH
USE	Shall I use...?	Use...	ZTD
	Are you (or is...) able to use...?	I am (or...is) able to use...	ZTE
		Cease using...	ZTJ
		I am (or...is) unable to use...	ZTM

## CHAPTER 4

## MISCELLANEOUS ABBREVIATIONS AND SYMBOLS

## SECTION A - DECODE

ABBREVIATION OR SYMBOL	SIGNIFICATION	ABBREVIATION OR SYMBOL	SIGNIFICATION
AC	Alto cumulus.	DCT	Direct (in relation to flight plan clearances and type of approach).
AAC	Area control.	DES	I am descending (to... (figures and units) height above...(datum)).
ACFT	Aircraft.	DF	Your bearing at...hours was...degrees in the doubtful sector of this station, with a possible error of...degrees.
AD	Aerodrome.	DG	Please advise me if you note an error in the bearing given.
ADZ	Advise.	DI	Bearing doubtful in consequence of the bad quality of your signal.
AERO	Aero form of the International Code.	DJ	Bearing doubtful because of interference.
AGN	Again.	DO	Bearing doubtful. Ask for another bearing later (or at...hours).
AIR	Relative to air.	DP	Possible error of bearing may amount to... degrees.
ANT	Before.	DRT	Keep straight ahead.
APP	Approach control.	DS	Adjust your transmitter, the minimum of your signal is too broad.
APR	After...(time or place).	DT	I cannot furnish you with a bearing, the minimum of your signal is too broad.
ARFOR	Area forecast.	DJ	Position not guaranteed.
ARR	Arrive (or arrival).	DY	This station is not able to determine the sense of the bearing.
AS	Altostratus.	DZ	What is your approximate direction relative to this station?
ASC	I am ascending (to... figures and units) height above...(datum)).		Your bearing is reciprocal. (To be used only by the control station of a group of direction-finding stations when it is addressing stations of the same group.)
ATC	Air traffic control (in general).		
ATP	At...(time or place).		
AWY	Airway.		
BABS	Beam approach beacon system.		
BCST	Broadcast.		
BOH	Break-off height.		
BRF	Short (used to indicate the type of approach desired or required).		
BTN	Between.		
CB	Cumulonimbus.		
CC	Cirrocumulus.		
CEN	Degrees centigrade.		
CI	Cirrus.		
CLA	Clear type of ice formation.		
CLR	Cleared to...		
CS	Cirrostratus.		
CTA	Control area.		
CTR	Control zone.		
CU	Cumulus.		
DB	I cannot give you a bearing. You are not in the calibrated sector of this station.		
DC	The minimum of your signal is suitable for the bearing.		

## SECTION A - DECODE

ABBREVIATION OR SYMBOL	SIGNIFICATION	ABBREVIATION OR SYMBOL	SIGNIFICATION
E	East or Eastern longitude.	INP	If not possible.
ER	Here... Aeronautical Note: In the international aeronautical telecommunication service ER may also be used to indicate Herewith... Landing off a runway is permitted.	INS	Inches (dimensional unit).
ERB	ETA	IR	Ice on runway.
ETA	Estimated time of arrival.	IRL	Intersection of range legs.
ETD	Estimated time of departure.	IVB	If forward visibility is less than...(figures and units).
EPI	The information is estimated.	IVR	If forward flight visibility remains...(figures and units).
FAH	Degrees Fahrenheit.	KC, KCS,	Kilocycles/kilohertz per second.
FBL	Light (used to qualify icing, turbulence, interference or static reports).	KHz	Kilohertz.
FIFOR	Flight forecast.	KG	Kilograms.
FIR	Flight information region.	KM	Kilometers.
FL	The indication of vertical distance is given as flight level reference number.	KMH	Kilometers per hour.
FLT	Flight.	KT	Knots.
FNA	Final approach.	LB	Pounds (weight).
FOT	Units of English system.	LEFT	Left (direction of turn).
FSL	Full stop landing.	LF	Low frequency (30 to 300 kHz.).
FT	Feet (dimensional unit).	LNG	Long (used to indicate the type of approach desired or required).
GCA	Ground controlled approach system.	IRG	Long range.
GEO	Geographic or true.	LSA	Low intensity approach lighting system.
GMT	Greenwich mean time.	ISB	High intensity approach lighting system.
GND	Relative to ground.	M	Meters.
HBN	Hazard beacon.	MAG	Magnetic.
HEL	Helicopter.	MB	Millibars.
HF	High frequency (3,000 to 30,000 kHz.).	MC, MCS or	Megacycles/megahertz per second.
HR	Hours (period of time).	MHz	The indication of vertical distance is given as TRUE height above mean sea level (e.g. after applying the correction for ambient temperature to the altitude reading of a pressure altimeter set to QNH).
IAR	Intersection of air routes.	MER	Meteorological.
ID	Identification.	MET	Medium frequency (300 to 3,000 kHz.).
IFR	Instrument flight rules.	MF	Marker radio beacon.
ILS	Instrument landing system.	MKR	Statute mile(s).
IMI	Interrogation sign (question mark) (...-...).	ML	Minute (or minutes).
IMT	Immediately.	MN	Maintain.
INA	Initial approach.	MNTN	Moderate (used to qualify icing, turbulence, interference or static reports).
INF	Below...	MOD	

SECTION A - DECODE

ABBREVIATION OR SYMBOL	SIGNIFICATION	ABBREVIATION OR SYMBOL	SIGNIFICATION
STD	The indication of vertical distance is given as the reading, without correction for ambient temperature, of a pressure altimeter having the sub-scale set to 1013.2 millibars (29.92 inches).	WX	Weather.
		XS	Atmospheric.
		YD	Yards.
		YR	Your.
SUP	Above...		
SW	South-West.		
TAF	Abbreviated aerodrome forecast.		
TAFOR	Aerodrome forecast.		
TER	The indication of vertical distance is given as TRUE height above official aerodrome level (e.g. after applying the correction for ambient temperature to the vertical distance reading of a pressure altimeter set to QFE).		
TFZ	Traffic zone.		
TGL	Touch and go landing.		
TIL	Until.		
TIP	Until past...(place).		
TO	To...(place).		
TRB	It is not necessary to keep to the runways and taxiways after landing.		
TT	Teletypewriter.		
TWR	Aerodrome control.		
UAB	Until advised by...		
UFN	Until further notice.		
VAN	Runway control van.		
VIA	By way of...		
VIO	Heavy (used to qualify interference or static reports).		
VFR	Visual flight rules.		
VHF	Very high frequency (30,000 kHz. to 300 MHz.).		
VLR	Very long range.		
VOR	VHF omnidirectional radio range.		
VSA	By visual reference to the ground.		
W	West or Western longitude.		

MISCELLANEOUS ABBREVIATIONS AND SYMBOLSSECTION B - ENCODE

SIGNIFICATION	ABBREVIATION OR SYMBOL	SIGNIFICATION	ABBREVIATION OR SYMBOL
A		C	
Abbreviated aerodrome forecast	TAF	Cirrocumulus.	CC
Above...	SUP	Cirrostratus	CS
Adjust your transmitter, the minimum of your signal is too broad.	DS	Cirrus.	CI
Advise.	ADZ	Clear type of ice formation.	CLA
Aero form of the International Code.	AERO	Cleared to...	CLR
Aerodrome.	AD	Control area.	CTA
Aerodrome control.	TWR	Control zone.	CTR
Aerodrome forecast.	TAFOR	Cumulonimbus.	CB
After...(time or place).	APR	Cumulus.	CU
Again.	AGN	D	
Relative to air.	AIR	Degrees centigrade.	CEN
Aircraft.	ACFT	Degrees Fahrenheit.	FAH
Air traffic control (in general).	ATC	Descent through cloud (procedure).	PP
Airway.	AWY	Direct (in relation to flight plan clearances and type of approach).	DCT
Alto cumulus.	AC	E	
Altostratus.	AS	East or Eastern longitude.	E
Approach control.	APP	Estimated time of arrival.	ETA
Area control.	ACC	Estimated time of departure.	ETD
Area forecast.	ARFOR	F	
Arrive (or arrival).	ARR	Feet (dimension unit).	FT
As soon as possible.	SAP	Final approach.	FNA
At...(time or place).	ATP	Flight.	FLT
Atmospherics.	XS	Flight forecast.	FIFOR
B		Flight information region.	FIR
Beam approach beacon system.	BABS	Full stop landing.	FSL
Bearing doubtful. Ask for another bearing later (or at...hours).	DO	G	
Bearing doubtful because of interference.	DJ	Geographic or true.	GEO
Bearing doubtful in consequence of the bad quality of your signal.	DI	Greenwich mean time.	GMT
Before.	ANT	Ground controlled approach system.	GCA
Below...	INF	H	
Between.	BTN	Hazard beacon.	HBN
Break-off height.	BOH	Heavy (used to qualify interference or static reports).	VIO
Broadcast.	BCST	Helicopter.	HEL
By visual reference to the ground.	VSA	Here...Aeronautical Note: In the international aeronautical telecommunication service ER may also be used to indicate Herewith...	ER
By way of...	VIA		



## SECTION B - ENCODE

SIGNIFICATION	ABBREVIATION OR SYMBOL	SIGNIFICATION	ABBREVIATION OR SYMBOL
High frequency (3,000 to 30,000 kHz.)	HF	Kilometers per hour.	KMH
High intensity approach lighting system.	LSB	Knots.	KT
Hours (period of time).	HR		
I		L	
I am ascending (to... (figures and units) height above...(datum)).	ASC	Landing off a runway is permitted.	ERB
I am descending (to... (figures and units) height above...(datum)).	DES	Left (direction of turn).	LEFT
I cannot furnish you with a bearing, the minimum of your signal is too broad.	DT	Light (used to qualify icing, turbulence, interference or static reports).	FBL
I cannot give you a bearing. You are not in the calibrated sector of this station.	DB	Long (used to indicate the type of approach desired or required).	LNG
Ice on the runway.	IR	Long range.	LRG
Identification.	ID	Low frequency (30 to 300 kHz.).	LF
If forward flight visibility remains..(figures and units).	IVR	Low intensity approach lighting system.	ISA
If forward visibility is less than... (figures and units).	IVB		
I have nothing to send to you.	NIL	M	
Indication of an order.	ORD	Magnetic.	MAG
If not possible.	INP	Maintain.	MNTN
Immediately.	IMT	Marker radio beacon.	MKR
Inches (dimensional unit).	INS	Medium frequency (300 to 3000 kHz).	MF
Initial approach.	INA	Medium range.	MRG
Instrument flight rules.	IFR	Megacycles/megahertz per second.	MC, MCS or MHz
Instrument landing system.	IILS	Meteorological.	MET
Interrogation sign (question mark) (...).	IMI	Meters	M
Intersection of air routes.	IAR	Metric units.	MTU
Intersection of range legs.	IRL	Millibars.	MB
It is not necessary to keep to the runways and taxiways after landing.	TRB	Minus.	MS
		Minute (or minutes).	MN
K		Mixed type of ice formation (white and clear).	MX
Keep straight ahead.	DRT	Moderate (used to qualify icing, turbulence, interference or static reports).	MOD
Kilocycles/kilohertz per second.	KC, KCS,		
Kilograms.	KG	N	
Kilometers.	KM	Nautical mile(s).	NM
		Nimbostratus.	NS
		No.	NO
		Non-directional radio beacon.	NDB
		Normal.	NML
		North (cardinal point of direction).	NORTH

## SECTION B - ENCODE

SIGNIFICATION	ABBREVIATION OR SYMBOL	SIGNIFICATION	ABBREVIATION OR SYMBOL
North-East.	NE	Short (used to indicate the type of approach desired or required).	BRF
North latitude. (to be used only with figures indicating latitude, e.g. 4730N.)		Short range.	SRG
Aeronautical Note: In the maritime mobile service, the abbreviation N signifies No and is used in that service to give a negative sense to Q signals.	N	Slow.	SLW
North-West.	NW	South or Southern latitude.	S
Number.	NR	South-East.	SE
Non-directional radio beacon.	NDB	South-West.	SW
		Standard instrument approach.	SIA
P		Standard instrument departure.	SID
Passenger(s).	PSGR	Standard regional route transmitting frequencies.	RUT
Please advise me if you note an error in the bearing given.	DG	Statute mile(s).	ML
Plus.	PS	Statute miles per hour.	MPH
Position not guaranteed.	DU	Straight in approach.	STA
Possible error of bearing may amount to... degrees.	DP	Stratocumulus.	SC
Pounds (weight)	LB	Stratus.	ST
Practice low approach.	PLA		
Procedure turn.	PTN	T	
		Teletypewriter.	TT
Q		The control indicated is Operational Control.	OPC
Quadrant.	QUAD	The control referred to is Radio Control.	RAD
		The indication of vertical distance is given as flight level reference number.	FL
R		The indication of vertical distance is given as the reading without correction for ambient temperature, of a pressure altimeter having the sub-scale set to 1013.2 millibars (29.92 inches).	STD
Radio.	RDO	The indication of vertical distance is given as TRUE height above official aerodrome level (e.g. after applying the correction for ambient temperature to the vertical distance reading of a pressure altimeter set to QFE).	TER
Radio range.	RNG		
Radio teletypewriter.	RTT		
Rapid.	RP		
Reach cruising altitude.	RCA		
Receiving only.	RON		
Relative to air.	AIR		
Relative to ground.	GND		
Reporting point.	REP		
Right (direction of turn).	RITE		
Route forecast.	ROFOR		
Runway.	RNWX		
Runway control van.	VAN		
S			
Schedule.	SKED		
Severe (used to qualify icing and turbulence reports).	SEV		

## SECTION B - ENCODE

SIGNIFICATION	ABBREVIATION OR SYMBOL	SIGNIFICATION	ABBREVIATION OR SYMBOL
The indication of vertical distance is (or is to be) replaced by the indication of the pressure, expressed in millibars, at the level and the position of the aircraft.	PRES	<b>V</b> Very high frequency (30,000 kHz to 300 MHz). VHF omnidirectional radio range. Very long range. Visual flight rules.	VHF VOR VLR VFR
The indication of vertical distance is given as TRUE height above mean sea level (e.g. after applying the correction for ambient temperature to the altitude reading of a pressure altimeter set to QNH).	MER	<b>W</b> Weather. West or Western longitude. White type of ice formation.	WX W OPA
The information is estimated.	ETI	<b>Y</b> Yards. Your. Your bearing at... hours was...degrees in the doubtful sector of this station, with a possible error of... degrees.	YD YR DF
The information refers to forecast and not to present conditions.	PREV	Your bearing is reciprocal. (To be used only by the Control Station of a group of direction-finding stations when it is addressing stations of the same group).	DZ
The indication of vertical distance is given as the reading, without correction for ambient temperature, of a pressure altimeter set to QFE. (The abbreviation should only be used in the vicinity of the station which provided the QFE setting.)	SOL		
The minimum of your signal is suitable for the bearing.	DC		
This station is not able to determine the sense of the bearing. What is your approximate direction relative to this station?	DY		
TO...(place).	TO		
Touch and go landing.	TGL		
Traffic zone.	TFZ		
<b>U</b> Units of English system.	FOT		
Until.	TIL		
Until advised by...	UAB		
Until further notice.	UFN		
Until past...(place).	TIP		

CHAPTER 5

SERIES ZYA - ZZZ

(RESERVED FOR US USE)

SIGNAL	QUESTION	ANSWER, ADVICE, OR ORDER
ZYA		1. This message is for DCS major relay stations only. Do not transmit to connected minor relay or tributary stations; 2. DCS major relay stations transmit to connected minor relay and tributary stations. Minor relays transmit to connected tributary stations.
ZYB		
ZYC		This message not to be transmitted on fleet broadcasts. Fleet broadcast stations originate a service message to units copying, signifying that the general message is of no concern.
ZYD		Transmit this message to (1. All minor relay and tributary stations; 2. Do not transmit this message to minor relay or tributary stations).
ZYE		Reserved for use by NSA.
ZYF		Reserved for use by NSA.
ZYG		Reserved for use by NSA.

SIGNAL	QUESTION	ANSWER, ADVICE, OR ORDER
ZYH		Reserved for use by NSA.
ZYI		Reserved for use by NSA.
ZYJ		
ZYK		Station-to-station receipts are not required for this message. Not applicable to stations where automatic switching equipments are programmed to acknowledge receipt of flash precedence messages.
ZYL		
ZYM		
ZYN		For U.S. State Department use only. Automatic switching system will not retain this message in historical file. Direct service request to originating station.
ZYO		Reserved for use by NSA.

SIGNAL	QUESTION	ANSWER, ADVICE, OR ORDER
ZYP	What is downgrading and/or declassifying marking for message (.....)	Marking for message .... is ... 1. (Date) (GDS) 2. (Date) (ADS) 3. XGDS 1    4. XGDS 2 5. XGDS 3    6. XGDS 4 Note: when use of one of above markings is not appropriate, state regarding instructions in narrative form.
ZYQ		This message must be delivered to the addressee(s) for whom you are responsible as a single address message only.
ZYS		Reserved for use by NSA.
ZYT		
ZYU		This is a narrative message (for use in AUTODIN).
Zyv		This is a service message (for use in AUTODIN).
ZYW		This message must be visually inspected before submitting it to machine processing.

SIGNAL	QUESTION	ANSWER, ADVICE, OR ORDER
ZYX		
ZYY		
ZYZ		Your message...subjected to possible compromise. Message classification exceeded security clearance of your circuit.
ZZA		For U.S. State Department use only. Computer reaction required.
ZZB		
ZZC		All recipients of this message may not be aware of the complete address composition of the AIG(s) listed in the original heading or readdressal heading(s). This information should not be required by all recipients. However, if absolutely essential, the address composition(s) may be obtained from the message originator, or from the readdressal authority as appropriate.
ZZD		This is a composite message, formed by combining several short messages, all for the same addressee, under this single autodin header (for use in AUTODIN only).
ZZE		No major category of AUTODIN content indicator code has been assigned to cover this message (for use in AUTODIN only).

SIGNAL	QUESTION	ANSWER, ADVICE, OR ORDER
ZZF		
ZZG		This message is an alternatively routed collective call message. Deliver a copy to addressee(s) for whom you are responsible. Do not reintroduce into the system as a collective call message.
ZZH		This is a Department of State message (for use in Diplomatic Telecommunications System (DTS) of the NCS).
ZZI		
ZZJ		
ZZK		Delivery of this immediate precedence message to the following specific routing indicator(s) or specific address designator(s) is required regardless of time, day or night.
ZZL		(For ACP 127 format) this message is forwarded under the provision of EFTO Policy. Disregard the conflicting security warning operating Signals. (For JANAP 128 format) this message is forwarded under the provision of EFTO policy.
ZZM		Reserved for use by the U.S. Department of State. To be used by the DTS automatic switches to indicate catastrophic failure of a switch within the DTS.



SIGNAL	QUESTION	ANSWER, ADVICE, OR ORDER
ZZN		Reserved for use by U.S. Department of State. To be used by the DTS satellite system for component failure within satellite network.
ZZO		Reserved for use by U.S. Department of State. To be used by the DTS satellite system for component failure within satellite network.
ZZP		Reserved for use by U.S. Department of State. To be used by the DTS satellite system for component failure within satellite network.
ZZQ		Reserved for use by U.S. Department of State. To be used by the DTS satellite system for component failure within satellite network.
ZZR		Reserved for use by NSA.
ZZS		Reserved for use by NSA.
ZZT		Reserved for use by U.S. Department of State. To be used by the DTS satellite system for component failure within satellite network.
ZZU		Your message...has been received with incorrect card count...(1. Card count short; 2. Card count over). Request rerun.
ZZV		Reserved for use by U.S. Department of State. To be used by the DTS satellite system for component failure within satellite network.

SIGNAL	QUESTION	ANSWER, ADVICE, OR ORDER
ZZW		
ZZX		
ZZY		For use on U.S. Department of State privacy telegrams that have been authorized on-line transmission.
ZZZ		

CHAPTER 5

SERIES ZYA-ZZZ

(Reserved for intra-nation,  
intra-service, or intra-  
command use.)

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZYA		
ZYB		
ZYC		
ZYD		
ZYE		
ZYF		
ZYG		
ZYH		
ZYL		
ZYJ		

*Deleted 12/4*

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZYK ✓		
ZYL		
ZYM ✓		
ZYN ✓		
ZYO ✓		
ZYP ✓		
ZYQ ✓		
ZYR		
ZYS		
ZYT ✓		
ZYU ✓		

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*Deleted 12/4*

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZVY ✓		
ZYW ✓		
ZYY ✓		
ZYY ✓		
ZYZ ✓		
ZZA ✓		
ZZB		
ZZC		
ZZD ✓		
ZZE ✓		
ZZF ✓		
ZZG ✓		

*Deleted 12/4*

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZZH ✓		
ZZI		
ZZJ		
ZZK		
ZZL ✓		
ZZM		
ZZN		
ZZO		
ZZP		
ZZQ		
ZZR		
ZZS		

*Deleted*  
12/4 5-4

ORIGINAL

SIGNAL	QUESTION	ANSWER, ADVICE OR ORDER
ZZT		
ZZU		
ZZV		
ZZW		
ZZX		
ZZY		
ZZZ		

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*12/14*

CHAPTER 6

(Extract from Radio Regulations, Geneva, 1959)

DESIGNATION OF EMISSIONS

## Section I. Classification

105 2. Emissions are classified and symbolized according to the following characteristics: (See Note)

- (1) Type of modulation of main carrier
- (2) Type of transmission
- (3) Supplementary characteristics

Note: As an exception to the provisions of Nos. 106 to 108, damped waves are designated by B.

106	3.	(1) Types of modulation of main carrier:	Symbol.
		a) Amplitude	A
		b) Frequency (or Phase)	F
		c) Pulse	P
107		(2) Types of transmission:	
		a) Absence of any modulation intended to carry information	0
		b) Telegraphy without the use of a modulating audio frequency	1
		c) Telegraphy by the on-off keying of a modulating audio frequency or audio frequencies, or by the on-off keying of the modulated emission (special case: an unkeyed modulated emission)	2
		d) Telephony (including sound broadcasting)	3
		e) Facsimile (with modulation of main carrier either directly or by a frequency modulated sub-carrier)	4
		f) Television (vision only)	5
		g) Four-frequency duplex telegraphy	6
		h) Multichannel voice-frequency telegraphy	7
		i) Cases not covered by the above	9



- 108 (3) Supplementary characteristics:
- a) Double sideband (none)
  - b) Single sideband:
    - \_\_reduced carrier A
    - \_\_full carrier H
    - \_\_suppressed carrier J
  - c) Two independent sidebands B
  - d) Vestigial sideband C
  - e) Pulse:
    - \_\_amplitude modulated D
    - \_\_width (or duration) modulated E
    - \_\_phase (or position) modulated F
    - \_\_code modulated G

109 4. The classification of typical emissions is tabulated as follows:

Type of Modulation of Main Carrier	Type of Transmission	Supplementary Characteristics	Symbol	
Amplitude Modulation	With no modulation	—	A0	
	Telegraphy without the use of a modulating audio frequency (by on-off keying)	—	A1	
	Telegraphy by the on-off keying of an amplitude-modulating audio frequency or audio frequencies, or by the on-off keying of the modulated emission (special case: an unkeyed emission amplitude modulated)	—	A2	
	Telephony		Double sideband	A3
			Single sideband, reduced carrier	A3A
			Single sideband, suppressed carrier	A3J
	Two independent sidebands	A3B		

Type of Modulation of Main Carrier	Type of Transmission	Supplementary Characteristics	Symbol
Amplitude Modulation (continued)	Facsimile (with modulation of main carrier either directly or by a frequency modulated sub-carrier)	—	A-4
	Television	Single sideband, reduced carrier	A-4A
	Multichannel voice-frequency telegraphy	Vestigial sideband	A5C
	Cases not covered by the above, e.g. a combination of telephony and telegraphy	Single sideband, reduced carrier	A7A
Frequency (or Phase) Modulation	Telegraphy by frequency shift keying without the use of a modulating audio frequency: one of two frequencies being emitted at any instant	—	F1
	Telegraphy by the on-off keying of a frequency modulating audio frequency or by the on-off keying of a frequency modulated emission (special case: an unkeyed emission, frequency modulated)	—	F2
	Telephony	—	F3
	Facsimile by direct frequency modulation of the carrier	—	F4
	Television	—	F5
	Four-frequency duplex telegraphy	—	F6
	Cases not covered by the above, in which the main carrier is frequency modulated	—	F9

Type of Modulation of Main Carrier	Type of Transmission	Supplementary Characteristics	Symbol
Pulse Modulation	A pulsed carrier without any modulation intended to carry information (e.g. radar)	—	P0
	Telegraphy by the on-off keying of a pulsed carrier without the use of a modulating audio frequency	—	P1D
	Telegraphy by the on-off keying of a modulating audio frequency or audio frequencies, or by the on-off keying of a modulated pulsed carrier (special case: an unkeyed modulated pulsed carrier)	Audio frequency or audio frequencies modulating the amplitude of the pulses	P2D
		Audio frequency or audio frequencies modulating the width (or duration) of the pulses	P2E
		Audio frequency or audio frequencies modulating the phase (or position) or the pulses	P2F
	Telephony	Amplitude modulated pulses	P3D
		Width (or duration) modulated pulses	P3E
		Phase (or position) modulated pulses	P3F
		Code modulated pulses (after sampling and quantization)	P3G
	Cases not covered by the above in which the main carrier is pulse modulated	—	P9

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III (Reverse Blank)	Original	3D-7, 3D-8	Change No. 1
V (Reverse Blank)	Original	3D-9 to 3D-16	Original
VII, VIII	Original	3E-1 to 3E-2a (Reverse Blank)	Change No. 1
IX, X	Change No. 4	3E-3 to 3E-9 (Reverse Blank)	Original
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1-3, 1-4	Change No. 1	3F-3 to 3F-8	Change No. 1
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2A-9 to 2A-13 (Reverse Blank)	Change No. 1	3G-1 to 3G-14	Change No. 1
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2A-27 to 2A-31 (Reverse Blank)	Change No. 1	3H-3, 3H-4	Change No. 5
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2B-3 to 2B-5 (Reverse Blank)	Change No. 5	3J-3 (Reverse Blank)	Original
2B-7 to 2B-16	Change No. 1	3K-1 to 3K-4	Original
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2B-21 to 2B-23 (Reverse Blank)	Change No. 1	5-1 to 5-5 (Reverse Blank)	Original
2B-25 to 2B-29 (Reverse Blank)	Change No. 5	6-1 to 6-4	Original
2B-31 to 2B-38	Change No. 1	LEP-1 (Reverse Blank)	Change No. 5
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2B-43, 2B-44	Change No. 4		
2B-45, 2B-46	Change No. 1		
2B-47 (Reverse Blank)	Change No. 4		
2B-49, 2B-50	Change No. 5		
2B-51 to 2B-53 (Reverse Blank)	Change No. 1		
2B-55, 2B-56	Change No. 4		
2B-57, 2B-58	Change No. 1		
2B-59 (Reverse Blank)	Change No. 5		
2B-61 to 2B-65 (Reverse Blank)	Change No. 1		
2B-67 to 2B-71 (Reverse Blank)	Change No. 1		
3A-1, 3A-2	Change No. 1		
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3A-5, 3A-6	Original		
3B-1, 3B-2	Change No. 1		
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LEP-1

CHANGE NO. 5  
(Reverse Blank)

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Section B	4B-1 to 4B-4	Change No. 1
Chapter 5	5-1 to 5-5 (Reverse Blank)	Original
Chapter 6	6-1 to 6-4	Original
List of Effective Pages	LEP-1 (Reverse Blank) LEP-3 (Reverse Blank)	Change No. 4 Change No. 4

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Section C	3C-1 to 3C-4	Change No. 1
Section D	3D-1 to 3D-6 3D-7, 3D-8 3D-9 to 3D-16	Original Change No. 1 Original
Section E	3E-1 to 3E-2a(Reverse Blank) 3E-3 to 3E-9(ReverseBlank)	Change No. 1 Original
Section F	3F-1, 3F-2 3F-3 to 3F-13 (Reverse Blank)	Original Change No. 1
Section G	3G-1 to 3G-14	Change No. 1
Section H	3H-1 to 3H-4 3H-5, 3H-6 3H-7, 3H-8 3H-9 to 3H-12 3H-13, 3H-14 3H-15 to 3H-18	Original Change No. 1 Original Change No. 1 Change No. 2 Change No. 1
Section I	3I-1, 3I-2 3I-3, 3I-4	Change No. 2 Change No. 1
Section J	3J-1, 3J-2 3J-3 (Reverse Blank)	Change No. 1 Original
Section K	3K-1 to 3K-4	Original
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Section A	4A-1 to 4A-4	Change No. 1
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Chapter 6	6-1 to 6-4	Original
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