## MC ELROY CHART OF CODES AND SIGNALS

> On the following 11 pages you will discover the details.


|  | NTE | ATION <br> (CONTINENTAL | MOR | RSE |
| :---: | :---: | :---: | :---: | :---: |
|  | Ietters | optional LETTERS | PUINCTUA and other | TIONS SIGNS |
| A | .- | a...- | Period |  |
| B | -... | á or å.---- | Comma |  |
| C | -. | ch $=-==$ | Colon | ----... |
| D | --. | $\begin{aligned} & \text { é..... } \\ & \text { ñ..... } \end{aligned}$ | Question mark |  |
| E | . | 0----. |  |  |
| F | -.-* | 4...-- | Adostrophe | ------ |
| G | ==* | FIGURES | Hyphen | -*...- |
| H | .... | 1.---- | Fraction bar |  |
| 1 | .. | 2..--- |  | -..-- |
| J |  | 3...-- | Brackets | ------ |
| K | ...- | 4....- | Double hyphen | -...- |
| L | -. | 5..... | Underline | ------ |
| M | -- | 7--... | Understeed | **** |
| N | -- | 8 ---.. | Error |  |
| 0 | --- | 9 ----- |  |  |
| P | ---- | 0----- | End of message | ----- |
| Q | ---- | FIGURES IN ROUTINE | Invitation lo transmit |  |
| R | - | 1.- |  |  |
| S | ... | 2..- | Wait | --... |
| T | - | 3...- | End of work | ...-.- |
| U | --- | 4....- | Starting |  |
| $\checkmark$ | - | 5..... | signal | ----- |
| W |  | $\begin{aligned} & 6 \ldots \ldots \\ & 7 \ldots \ldots \end{aligned}$ | Separation signal |  |
| $\mathbf{X}$ | =... | 8-.. | 'Semicolon |  |
| Y |  | 9. | $\bullet$ - ${ }^{\text {coter }}$ |  |
| Z | --.. | 0 - | mark | -...-. |

Numerals and punctuation marks are the same in the codes for all languages.
+Not official but in gunerul use.

## AMERICAN MORSE



Punctuation composed by Walter P. Phillips in 1876. He also made a compilation of few letter abbreviations of about 2000 commonly used words. This "Phillips Code" is used by newspaper telegraphers.


Typists can learn to transcribe inked slip at high speed in 4 to 6 weoks.
Use G15FL set of practice tapes and associated equipment with this chart.


## " $\varphi$ " SIGNALS

## (THE SIGNALS TAKE THE FORM OF ADVICES WHEN THE QUESTION MARK IS OMITTED)

Originally developed for ship radiotelegraph communications, they are now used in all radiotelegraph services.

QRA What is the name of your station?
QRB $\begin{gathered}\text { How for approximately are you from } m y \\ \text { station? }\end{gathered}$
QRC What company (or State Administration) settles
QRD Where are you bound and where are you from?
QRG Will you tell me my exact freavency (wave
QRH Does my frequency (wavelength) vary?
QRI
is my note good?
QR
Do you receive me badly? Are my signalid
QRK Whut is the readability of my signals (1 to 5)?
QRL. Are you busy?
QRM Are you being interfered with?
QRN Are you troubled by atmospherics?
QRO shall I increase power?
QRP shall I decrease power?
QRQ shall I send faster?
QRS shall I send more slowly?
QRT Shall I stop sendina?
QRIJ Have vou anvthina for me?
QRV Are you ready?
QRW Shall I tell......that yov are calling him
QRX Shall I wail? When will you call me again?
QRY What is my turn?

QRZ Who is calling me?
QSA What is the strength of my signals (1 to 5) ?
QSB Does the strength of my signals vary?
QSD is my keying correct; are my sianals distinct?
QSG $\begin{gathered}\text { Shall I send } \\ \text { gram) at a time ? }\end{gathered}$ telegrams (or one tele.
QSJ What is the charge per word for What is the charge per word for
including your internal telegraph charge?
QSK shall I sentinue with the transmistion of oll my
QSL
Can you give me acknowledgment of receipt?
QSM shall I repeat the last telegram I sent youz
QSO $\begin{gathered}\text { Can you communicale with } \\ \text { (or through the medium of }\end{gathered}$
$\xrightarrow{\text { direct }}$
QSP Will you retransmit te ..........fres of chorge?
QSR Has the distress call received from

QSV 5hall I send a series of VVv ......... ?
QSW Will you send on ond or on waves of type $\mathrm{Al}, \mathrm{A}, \mathrm{A}, \mathrm{A} 3$ or B ( m
QSX Will you listen for $\ldots \mathrm{kc} / \mathrm{s}$ (or.............. $3^{\text {(call sign) on }}$
QSY
 (or $\quad \cdots . . m_{\text {I }}$ without changing the type of
Whave? l change to transmission on another wave
QSZ shall I send each word or group twice?
QIA $\begin{gathered}\text { 3hull ' cumel leleurum ran no.........as if it } \\ \text { had not been sent? }\end{gathered}$
QTB Do you agree with my number of words?
QTC How many telegrams have you to send?
QTC What is my treve bearing in rolotion to you? OR
QTE* $^{*} \begin{gathered}\text { (call is ign) } \\ \text { What is } \\ \text { in relation to. }\end{gathered}$

QTF Will you give me the position of my slation ac cording to the bearings taken by the dions
tion-finding stations which you control?
Will you send your call sign for fifty second your bearing?
What is your position in latitude and long
What is your true course?
QTJ
QTM QTM QTO my distance.

Have you left dock (or port) ?
QTP Are you going to enter dock (or port) ?
QTQ $\begin{gathered}\text { Can you communicale with my station by mean } \\ \text { of the International Code of Signals? }\end{gathered}$
QTR What is the exact time?
QTU What are the hours during which your station QUA Hare Yov news of
QUB Can you give me in this order, information the
Can you give me in this order, information con cerning: visibility, heiaht of clouds, around
wind for
(place of observation) QUC What is the last message received by you from QUD Have you received the urgency signal sent by QUF Have you received the distress signal sent by QUG $\begin{gathered}\text { Are you being forced to alight in the sea (or } \\ \text { to land) }\end{gathered}$ QUH ${ }^{\text {will you indicate the present barometric pres }}$ at sea level?
QUJ* Will you indicote the true course for me ${ }^{1}$
QUK Cun you tell me the condition of the sea ob QUL Can you tell me the swell observed of

QUM is the distress troffic ended?

## AERONAUTICAL "O" SIGNALS

## Used Especially in Airways Communications by Authority of the FCC.

QAA At what time do you expect to arrive QAB Are you making for $\qquad$
QAC Are you returning to $\qquad$
QAD At what time did you leave (place of departure)?
QAE (place
QAF of the aircraft station)?
QAF At what time did you pass
(call sign
$\qquad$
QAG Arrange your flight in order to arrive at (time) at ....... (place). OR
I am arranging my flight in order to arrive at ….... (time) at (place).
QAH what is your height?
QAI Has any aircraft been signalled in my vicinity?
QAJ
Shall I try to search for an aircraft in my vicinity (or by any other indicafion) ? OR
Shall I try to search for aircraft in my vicinity (or by any other indication) ?
QAK is another aircraft flying in my vicinity, involving a risk of collision? OR
Is aircraft.......fying in my vicinity involving a risk of collision?
QAL Are you going to land at $\qquad$
QAM Can you give me the latest meteoro logical weather report for (place of observation) ?
QAN Can you give me the latest meteoro logical report concerning surface wind for .......... (place of observation) ?
QAO Can you give me the latest meteorological report concerning upper wind for …....... (place of observation) ${ }^{2}$

II I listen for you (or for
QAP kilocycles (or ........ metres) ?
QAQ Am 1 in the vicinity of a prohibited area or of ...... prohibited area (name of the prohibited area) ?
QAR May I stop listening on the watch wave for .......... minutes?
QAS You are flying over a prohibited area or over prohibited area (name of prohibited area).
QAT Shall I continue to send?
QAX
have you in your aircraft the following person for whom I have a waiting radiotelegram? (Here follows the designation of the person as it appears in the address of the radiotelegram: name and qualifications).
QAZ Are you flying in a thunderstorm?

What is the visibility at ...... (place) ?
What is the height of the cloud base at (place) ?

QBC Can you transmit to me the meterological observation at present made by you from the aircraft?
QBE I am about to wind in my aerial.
QBF Are you flying in cloud?
QBG Are you flying above cloud?
QBH Are you flying below cloud?
QBI The bad visibility regulations are in force.
At what height is the upper limit of cloud?
QBM Has $\qquad$ sent any message for me?
QBN Are you flying between two layers of
QBT You are missing your dots.
QBU Are you sure of the accuracy of telegram ................ ?
QBW Did you receive the telegram sent at QCA You are cousing delay by your slowQCA ness in answering.
QCB You are causing delay by answering out of vour turn.
QCG ${ }^{\text {Shall I stand guard for you on the fre- }}$ quency of .......... kilocycles (wave
length of ........ metres)?
QCM There seems to be a defect in your transmission.
QCP Your note is bad.
QCS My reception on long waves has broken QCS down.
QCT My reception on short waves has broken
QCY I am working on trailing aerial OR
QDB Work on trailing aerial.
Have you sent telegram ........... to ?
QDC Telegram ...... has been sent by wire.
QDD Telegram No. ..... has been refused by .... as not in order. Please inby arm sender.
QDH What is causing the present interfer-
QDK Answer in the alphabetical order of the call signs.
QDL Do you intend to ask me for a series of bearings?
QDM What is the magnetic course to steer with no wind to make for you or for with no wind for
QDO Can you have transmitted by station, on its working wave (or on the .......... wave), its call sign followed by a prolonged dash for minutes, in order to permit me to use my aircraft D/F installation?
QDR What is my magnetic bearing in relation to you or to
(Complete code available on request)

## COMMERCIAL"Z" SIGNALS

Signals take the form of advices when question mark is omitted. These signals are used on commercial radiotelegraph circuits throughout the world.

ZMP
Wipers or clicks here.
Your transmitter has strong idle radia- tion.

All clear of traffic.
We are holding your
Alter your wavelength.
How are your receiving conditions?
We can receive absolutely nothing.
Your signals are unreadable.
Your signals weak but readable.
Your signals strong readable.
.........signals good for.........w.p.m.
Your signals getting stronger.

Static heavy here.

Wipers or clicks here.

Your transmitter has
Can you receive code?

Cease sending.
Mispunch or perforator failures.
Are you in direct communication with How are your conditions for auto reception?
Our conditions unsuitable for undulator or automatic recording.

ZTA Transmit by auto.
ZBY Break, go back yard. (Metre.)
ZBN Break and go ahead with new slip.
ZPR Rerun slip at present running.
ZRL Rerun slip before one now running.
ZPP Punch plain only.
ZFB Signals are fading badly.
ZFA Failing auto.
ZRA Reversed auto tape.
ZYS What is your speed of transmission?
ZSV Your speed varying.
ZBS Your signals blurring.
ZDH Your dots are too heavy (long), adjust lighter.
ZDL Your dots are too light (short), adjust heavier.
ZDM Your dots missing.
ZDV Your dots varying length, please
ZFS signals are fading slightly.
ZTH Transmit by hand.
ZHS Send high speed auto................p.m.
ZSO Transmit slips once.
ZST Transmit slips twice.
ZOR Transmit revs continuously.
ZLB Give long breaks, please.
ZUB We have been unable to break you.
ZNB We do not get your breaks, we send twice.
ZLD We are getting long dash from you.
ZAP Acknowledge, please.
ZMQ stand bi for
ZMO stand bi moment.
ZKQ Say when ready to resume.
ZOH what traffic have you on hand?
ZVF
Signals varying in frequency.
Please observe and furnish frame code
reports on
(call-letters and frequency) kilocycles.
We have checked (transmitter call-let-
ters) $\ldots \ldots \ldots \ldots . . .$. . Signals are radiating on air ok.
Local receiving conditions poor; please increase to maximum.

U. S. ARMY AND U. S. NAVY PHONETIC ALPHABET

| Able (Affirm)* | How (Hypo)* | Oboe (Option)* | Victor |
| :---: | :---: | :---: | :---: |
| Bator <br> Chorlie (Cast)* | Item (Inter)* Jig | Patar (Prap)* Queen | Willinm Xray |
| Dog ( | King | Roger | Yoke |
| Easy | Love | Sugar (Sail)* | Zebra (Zed)* |
| Fox | Mike | Tare |  |
| George | Nan (Negat)* | Uncle (Unit)* |  |

## POSTAL TELEGRAPH - WESTERN UNION PHONETIC ALPHABET

| Adam | Hervy | Oonon | Unise |
| :--- | :--- | :--- | :--- |
| Boston | Ida | Peler | Vistor |
| Chicage | John | Queen | Willom |
| Denwer | King | Robert | Xray |
| Edward | Lincoln | Sugar | Young |
| Frank | Mary | Thaman | Zero |
| George | Newyork |  |  |

## JAPANESE MORSE <br> （SOMETIMES REFERRED TO AS RATA KANA RADIO CODE）

| $\stackrel{\text { A }}{\text {－}}$ | $\stackrel{\mathrm{KA}}{\boldsymbol{\wedge}}$ | $\frac{5 A}{\forall}$ | $\stackrel{T A A}{\text { TA }}$ | $\stackrel{N A}{\underset{~}{\prime}}$ | $\frac{\mathrm{HA}}{\mathrm{C}}$ | $\frac{M A}{P}$ | $\stackrel{Y A}{Ð}$ | $\stackrel{R A}{ラ}$ | ワ |
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| オ | $コ$ | ソ | － | ／ | ホ | モ | $\exists$ | 口 | $\ni$ |
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| ン |  |  |  |  |  |  |  |  |  |



## GREEK

## Geike morla <br> 

A ..- Alpho

| B | … |
| :--- | :--- |
| Г | Beta |

- ... Delto
E. Epsilon

Z .... Zeta
H .... Eto
$\boldsymbol{\theta}$..... Theta
I .. loto
K ..- Koppa
A .... Lambda
M .- Mu

П .... pi
P ... Rho
$\Sigma \ldots$ Sigmo
T - Tau
Y ...- Ypsilon
Ф .... Phi
X -..-- Ch
$\Psi$.... Psi
$\boldsymbol{\Omega}$.-- Omega
HY...- Eto Ypsilon
YI ....- Ypsilon loto
OY..- Omicron Ypailon
AI ...- Alpha lota
AY...- Alpha Ypsilon
EY ..... Epsilon Ypsilon
OI .-.... Omicron lota

## RUSSIAN

|  | mass |  |
| :---: | :---: | :---: |
| A | .- | A |
| Б | -... | B |
| B | - | V |
| $\Gamma$ | --. | G |
| д | --. | D |
| E, 3 | . | E |
| H | .... | J |
| 3 | --.. | Z |
| И | .. | I |
| Й | ---- | Y |
| H | --- | K |
| ת | .-.. | L |
| M | -- | M |
| H | -- | N |
| 0 | --- | 0 |
| $\Pi$ | .--. | P |
| P | - | R |
| C | ... | S |
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| y | ..- | U |
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