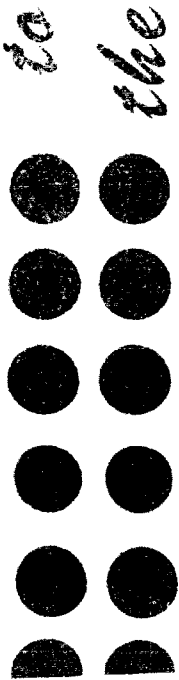
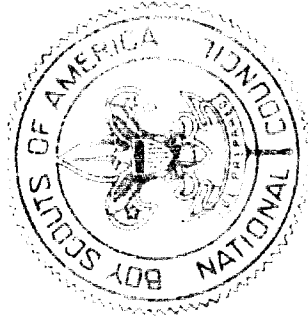


INTRODUCTION



**INTERNATIONAL
MORSE CODE**

THE EASY WAY TO LEARN SENDING AND
RECEIVING OF MESSAGES VIA THE
"CODE".



SIGNALING

Signaling is more than fun. Often it saves you a lot of time and work. In an emergency it may save life.

A Scout's signaling skill was a lifesaver one evening when he was on a fishing trip with his father. In a wind storm a tree blew down, fell across their car, and knocked the father unconscious. After giving first aid, the Scout sized up the situation. The nearest help was at the village across the lake. An ex-Navy radioman ran the boat landing there. The car was facing in that direction, and the headlights still worked. The Scout began signaling "SOS": "Doctor needed," by flashing the lights on and off. The radioman saw the flashes, read the message, and brought a doctor by boat in time to save the father's life.

Scouts use Field Signals and International Morse Code for communicating with each other.

MORSE SIGNALING

The International Morse Code is the most widely used method of getting a message through, and there are many ways of sending Morse: flag, red blinker

light or heliograph by day; flashlight, lantern or torch by night; and at any time by buzzer, whistle, bugle, telegraph, drum or radio. You can invent others. For example, seated next to a friend, you can "talk" by a series of long and short pressures of the hand.

A radio instructor once said, "There is no easy way to learn Morse, but there is a less hard way". First you and a buddy decide whether you are going to learn by ear or by eye -- by buzzer, or by blinker. Then throw away any alphabet with dots (.) and dashes (-) alongside the letters. Instead, use the code given. Now you are on that "less hard" trail, because you are going to learn the Morse language without the useless step of translating it into dots and dashes.

"A" will be a short and a long period of sound, or a short and a long flash of light. Never think or say, "dot dash".

Send the parts of a character close-spaced, leaving the pause between characters. Thus it is didah for "A", not did-dah which would be "ET". A dah should be about three times as long as a dit.

GROUP III

LESSON GROUPS

WORDS USING LETTERS IN

GROUP I

M DahDah V DiDiDiDah
 P DiDahDahDit O (number)DahDahDah
 F DiDiDahDit DahDah
 W DiDahDah

IS, NO, IT, TO, SET,
 SIT, TENT, TONE, NONE,
 TOE, SEA, NEAT, TEN,

ONE, SENT, SEAT, STONE,
 TIN, SON, INTO, STAIN,
 NONE, TEA, ANT, TOAST,
 SEASON, EAST, NET

O DahDahDah

GROUP IV GROUP V

I DiDiDit

Y DahDiDahDah K DahDiDah

N DahDit

B DahDiDiDit X DahDiDiDah

Z DiDiDit

G DahDahDit Z DahDahDiDit

A TENT IS SET. A SON IS IN

A SEA. IT IS. NOT TOAST.

NONE IS SENT TO SINNIE.

J DiDahDahDah 1 DiDahDahDahDah

Q DahDahDiDah 2 DiDiDahDahDah

GROUP II

4 DiDiDiDah Period DiDahDiDahDiDah

Comma DahDahDiDiDahDah

H DiDiDiDit L DiDahDiDit

R DiDahDit U DiDiDah

D DahDiDit C DahDiDahDit

5 DiDiDiDiDit

PROCEDURE SIGNS

GROUP VI GROUP VII

3	DiDiDiDahDah 8 DahDahDahDiDit						
6	DahDiDiDiDit 9 DahDahDahDahDit	Attention	I have a message for you; make ready to receive	RADIO	Call or CQ	BLINKER	Call or AA
7	DahDahDiDiDit Wait DiDahDiDiDit	Go Ahead	I am ready to receive		K		K
	Question DiDiDahDahDiDit	Wait	Wait - I will be ready to receive you or to finish in a moment		AS		AS
	Received O.K. DiDahDit	I cannot receive you	Radio: Your signals are too weak. Blinker: your light not properly aimed		QRJ		W
	End message DiDahDiDahDit	Break	Beginning of text of message		BT		BT
	End communication DiDiDiDahDiDah	End of word	End of word		Space		Space
		End of sentence	Period		AAA		AAA
		Error	I have made a mistake and will repeat		EEEEEEEEE		EEEEEEEEE
		Word received	Made by receiver after each word to indicate received		T		T
		Repeat	Repeat		IMI		IMI
		Message received	Message is received completely		R		R
		End of message	Signing off - no more traffic		AR		AR

Learn one group at a time, then make up words and phrases from this group and send them. As soon as letters have been learned, practice by sending words and phrases only. After learning the Procedure Signs, you are ready to handle messages in the field.

INTERNATIONAL MORSE CODE

NUMERALS

di-dah	1	short-long-long-long
dah-di-di-dit	2	short-short-long-long-long
dah-di-dah-dit	3	short-short-short-long-long
dah-di-di-dit	4	short-short-short-short-long
dah-di-di-dit	5	short-short-short-short-short
dah-di-di-dit	6	long-short-short-short-short
dah-di-di-dit	7	long-long-short-short-short
dah-di-di-dit	8	long-long-long-short-short
dah-di-di-dit	9	long-long-long-long-short
dah-di-di-dit	0	long-long-long-long-long

MORSE SIGNALING WITH A BUZZER

The first job to tackle is to memorize the code. Before wireless or code radio reached its present state of development, the beginner thought that the most important method of using it was by flag and soon found that he was badly handicapped with a great deal to "unlearn". Usually when you use the Morse Code, you will be using it as the code was

Intervals denote sound	Letters	Intervals denote light flashes
di-dah	A	short-long
dah-di-di-dit	B	long-short-short-short
dah-di-dah-dit	C	long-short-long-short
dah-di-dit	D	long-short-short
dit	E	short
di-di-dah-dit	F	short-short-long-short
dah-dah-dit	G	long-long-short
di-di-di-dit	H	short-short-short-short
di-dit	I	short-short
di-dah-dah-dah	J	short-long-long-long
dah-di-dah	K	long-short-long
di-dah-di-dit	L	short-long-short-short
dah-dah	M	long-long
dah-dit	N	long-short
dah-dah-dah	O	long-long-long
di-dah-dah-dit	P	short-long-long-short
dah-dah-di-dah	Q	long-long-short-long
di-dah-dit	R	short-long-short
di-di-dit	S	short-short-short
dah	T	long
di-di-dah	U	short-short-long
di-di-di-dah	V	short-short-short-long
di-dah-dah	W	short-long-long
dah-di-di-dah	X	long-short-short-long
dah-di-dah-dah	Y	long-short-long-long
dah-dah-di-dit	Z	long-long-short-short

originally intended, as a sonic or sound signaling system. The radio, field telegraph, buzzer or whistle will be the instrument. The fastest and most effective means of transmitting the code is by sound. Let's learn it that way!

The idea of learning by sound is that on hearing "dit", you know just by its sound that it is "E".

For equipment you will need something with which to make a sound - your signal set. You need paper and pencil. NO CHARTS.

HOW TO USE THE KEY

To use the key properly, the secret of high-speed sending, have your hand, arm, body in a comfortable, relaxed position. Your feet should be flat on the floor and the key placed so that the entire forearm rests on the desk, or on the same level with the key. Grasp the key lightly but firmly with your thumb and first two fingers. The thumb is not under the knob, rather on the side. Adjust the key so that there is an up and down motion of about one-sixteenth of an inch. Your elbow becomes a pivot and the entire forearm, flexing at the wrist, is used to send the characters. This allows the muscles of your arm to do most of the

work and is less tiring than if the wrist alone were used. Allow the spring to bring the knob back into position; don't pull it back with your thumb or your sending will be "choppy". If you feel your arm and body tightening up, sit back and rest for a moment, because your sending will become an unintelligible mess, if you continue in a nervous tense state. A talk with a telegraph or radio operator may produce some valuable tips on sending.

PRACTICE

You should start practice with another Scout who is in the same stage of code work. The two of you should have buzzers, and if you want to make the practice more interesting, a little time can be spent in hitching two earphones into your buzzer hookup so that you will have a rudimentary field telegraph system. It is not necessary, however, for the simple buzzer will serve admirably.

Send single letters at first. Send them slowly so that the listener may learn to recognize each character quickly and without hesitation. Always remember to divide the work evenly! It is easy to become lopsided, having a great deal more proficiency in sending than in receiving.

When the receipt of single letters seems to be coming easily, start the slow sending of complete words and then short and simple messages. Try to have the material sent at a slightly faster rate than you can copy easily. This will keep you alert and active.

Use one group of characters at a time; take it easy and learn by SOUND.

In copying, write each letter as you receive it. Do not write down dots and dashes! Print the letters. Script is too easily mixed up in rapid copying. If you miss a letter, leave the blank and go on, and don't worry about it or try to figure out what it might have been.

Don't practice too long at one session. Half an hour a day on a regular schedule is better than cramming exhausting labor into one evening. In a short time you will be sending and receiving well above the required rate of seven words a minute. (approx. 35 letters)

After you have obtained reasonable proficiency, try tuning in on the radio. Many commercials sets have a short-wave receiving attachment by which you can tune into the lower bands which carry code work.

It won't be long before you find yourself recognizing word groups and copying them as a group. Write while listening to the next word. You will find that it is far more restful to listen and write at the same time. Good operators are usually copying several words "behind" the signals to which they are listening.

DIRECTIONS FOR USING OFFICIAL SIGNAL SET

In order to operate the Official Scout Signal set and code practice set it is necessary to insert two flashlight batteries (No. 950 Eveready or equivalent) by removing bottom cover.

The position of each battery should correspond with the outline of the batteries molded in the bottom of the case. With the switch (to right of key) on POSITION B the high pitched buzzer effect, such as is used in radio code, is obtained. On POSITION L the light blinker will flash messages. This method is used in the Navy for night signaling from one ship to another. On POSITION C the regulation telegraph key and sounder effect is produced. If two people wish to send and receive messages it is necessary to use 2 sets.

OFFICIAL SCOUT SIGNAL SET

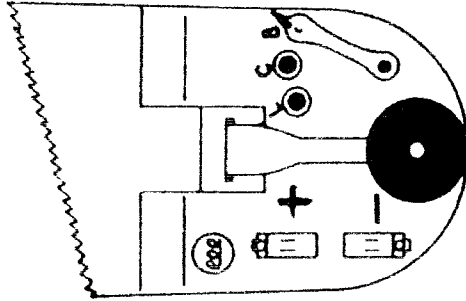


FIGURE 1.
SINGLE SET

With our double set we furnish a coil of 2 conductor connecting wire. One wire should be connected to same clip on each set; that is (+) to (+), the second should be connected to remaining clip on each set, or (-) to (-). SEE FIG. 2. With the batteries properly installed in each set and connections securely made they are now ready for use. The position of the switching lever will govern the sound or light effect at each set.

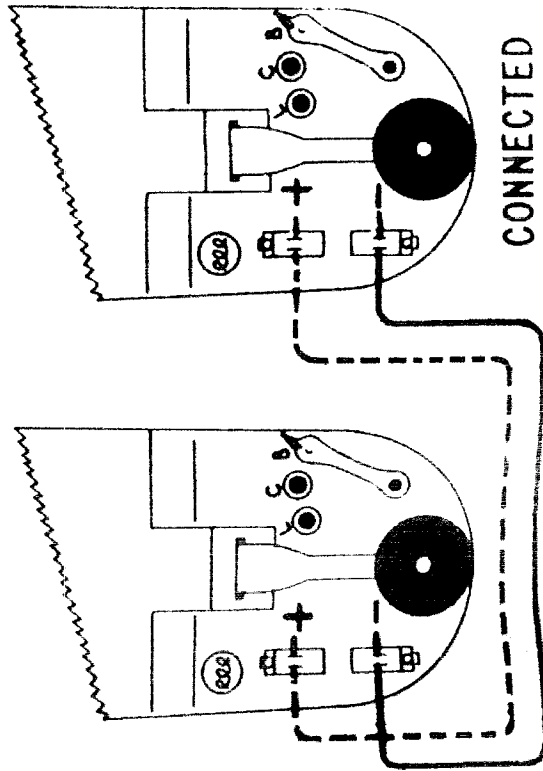


FIGURE 2.
DOUBLE SET

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