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Editor's Notes:

The reader is reminded that these texts have been written a long time ago. Consequently, they may use some terms or express sentiments which were current at the time, regardless of what we may think of them at the beginning of the 21st century. For reasons of historical accuracy they have been preserved in their original form.

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First printed 1940

Reprinted 1940

Reprinted 1941

Reprinted 1943

Second Edition (Revised) 1944

Reprinted 1945

Reprinted 1947

Complete Signalling Instructor

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FOREWORD

I have been interested in reading through Mr. Sparrow's book. With a sort of rueful feeling I realize that life has become very much more complex since the first edition of the book, *The Boy Scouts' Complete Signalling Instructor*, issued by Messrs. Brown, Son & Ferguson, Ltd., of Glasgow. But I think you will admit that the imaginative and the practical blend very well together in this new book, and the hard bits look easy when wrapped up in Mr. Sparrow's way.

C. F. AUSTIN, M.A.,
Formerly Secretary St. Panoras,
A.D.C. Plymouth.

PREFACE TO SECOND EDITION

The printing of a Second Edition enables a number of corrections and additions to be made to bring this book in line with methods in common use to-day.

Scoutmaster D. H. S .

Penzance, 1944.

NOTE BY THE PUBLISHERS

The first edition of *The Boy Scouts' Complete Signalling Instructor*, written by "A Signalling Officer", was published in 1914. The book ran through several editions. At our request Mr. Kenneth C. Sparrow has produced this new edition which utilizes some of the original material of the *Signalling Instructor* and at the same time presents a view of the Scout Signalling Tests in modern form in a clear and straightforward manner.

Complete Signalling Instructor

NOTE TO READERS.

This is a book of *instruction* in SIGNALLING, but it is also a book of SUGGESTIONS designed to help the reader to get more fun out of his signalling. Scouts are not the only ones to communicate with each other by means of signals, for we live in a world in which signals of one sort or another are in everyday use. Early in the morning we are awakened by the signal of the alarm clock or a noisy cockerel or the sound of familiar feet moving about outside the bedroom. We heat some water in a kettle perhaps listening for the signal to announce that the kettle is boiling. The postman gives his knock and we know that the letters are on the mat.

The factory hooter signals that it is 8 o'clock and time for us to be off from home. It may be we signal a bus to make it stop or we watch the guard of our train waving his green flag. If on a bicycle we may be compelled to obey the traffic signals or some signal made by a policeman who is safeguarding the users of the road. At ten to nine the school bell rings perhaps, and we hurry off to the classroom, and so the day goes on and we look for and listen for signals most of the time because we are living things with receiving organs to appreciate the significance of the many and varied signals which are made.

As far as Scouting is concerned, we take a special interest in learning how to communicate with each other and to give information to each other by means of signs and signals. At our Troop meetings we are controlled by hand signals or signs, whistle signals or by the spoken word. We learn to signal with flags – the Morse code or the Semaphore code; we use secret signs for our tracking; we write code messages and we use invisible inks. What fun it all is to be able to communicate in this way. We even have our own Scout salute and unlike other people shake hands with fellow Scouts with the left hand. This is what the Founder says about our Signalling tests:–

"The object of the Signalling test is to develop concentration of mind, accuracy, quickness of eye, strength of eyesight, spelling." – *The Wolf Cub's Handbook*.

About Semaphore, he writes in the same book: "Before beginning to learn to signal in Semaphore you should think carefully what signalling means. It means that you are sending a message to someone who is *out of reach of your voice*. It is very difficult to give a really clear message, with details, to someone without being able to speak to them. So your job is to do it with flags, in the clearest way you can, making it as easy as possible for the receiver to understand you as you are able. So, from the beginning 'Do Your Best' to signal well; don't think you can send a letter any old way, just because you are only practicing."

Again, to Wolf Cubs he writes:–

"You will find signalling in the Morse code rather more difficult than in Semaphore. But it has many advantages. For instance, you can signal Morse in many ways, besides with flags: with the telegraph key, with light (heliograph or electric light), etc. If you are good at winking it is even possible to 'talk' in Morse with your eyes! Or you can get the 'tivet-tikka' very well with a dinner knife on a wooden table, using your finger and thumb as the pivot, and calling the tap of the blade 'tivet' (or dot) and of the handle, 'tikka' (or dash)."

Writing to Scouts in *Scouting for Boys* our late beloved Chief says:–

"Scouts have to be very clever at passing news secretly from one place to another, or signalling to each other".

"Signalling cannot be learned in a day".

BUT – "It is not *difficult* to learn if you set about it with a will". Well, there you are: the Founder regarded our Signalling tests as being most important – that is my excuse for writing this book of suggestions to help you *to enjoy your signalling*.

BOY SCOUT SIGNALLING TESTS.

Second Class Badge. – Signalling Test.

Know the Semaphore or Morse sign for every letter in the alphabet and for the numerals, and be able to send and read a simple message. He must also understand the use of the calling-up sign and its answer, the general answer, the end of message sign and its answer, and the erase signal.

First Class Badge. – Signalling Test.

Send and receive a message either in Semaphore, at rate four (20 letters a minute), or in Morse, at rate three (15 letters a minute). He must also understand the alphabetical check for numerals.

Signaller Badge. –

1. Send and receive by flag in Semaphore at rate seven (35 letters a minute) and in Morse at rate five (25 letters a minute).
2. Send and receive at rate six (30 letters a minute) on buzzer or sounder.
3. Send and receive at rate five (25 letters it minute) by lamp, heliograph or disc.

NOTE. – 90 per cent accuracy must be obtained in all the above tests (1), (2) and (3).

4. Have a good knowledge of the simple procedure outlined in the official *Scout Manual of Signalling*.
5. Have a good knowledge of the various signs and signals given in *Scouting for Boys*.

CHAPTER I.

METHODS OF SIGNALLING.

A Scout must pass a test in "Signalling" before he is finally awarded the Second Class badge. There is a Signalling test for the First Class badge and there is also a special 'Signaller' proficiency badge. All these tests demand a certain proficiency in signalling by means of the Semaphore or Morse code, with the result that the average Scout thinks that the term "Signalling" refers *only* to the two codes.

When Scouting first started signalling *did* mean Semaphore or Morse to a very large extent, but to-day when we refer to the sending of messages we think at once of information broadcast by means of the *wireless* and now *television*. To understand this change which has been evolving for a long time it would be as well to look back into history a little in order to find out more about this idea of sending messages over distances. The word "signal" comes from the Latin meaning "a mark" or "a sign", and refers to the various means whereby information is sent over a distance by some pre-arranged code when verbal statements would either be undesirable or impracticable or perhaps unnecessary. Quite obviously the method of making the signals will vary with the general circumstances and purpose of transmitting the information. To-day we use signals in connection with matters of everyday importance – control of traffic, control of the railways, for communication at sea or for inter-communication in time of war.

Signalling is an art which is probably as old as civilization, and it seems that man has always had a desire and occasion to convey information to others by means of a system of signals. That mysterious method of communication still used in remote parts of Africa, communication by means of the drum; is a method which has been used for centuries. Our Founder had practical experience of this method, and most of us have been made familiar with the possibilities of such communication through the medium of the "Jungle" films. Within the last few years Scouts had the opportunity of imitating a primitive method of communication something like the African method when the huge bonfires were built and lit on our hills and moors as part of a national celebration. We imitated the famous beacon fires of Armada days. Compared with the African drum method our methods were quite crude and primitive; but the lighting of warning beacon fires is *one* clue to the origin of our modern methods of signalling.

For thousands of years primitive peoples have signalled important news of peace or war or of feasting over long distances by one method or another. Smoke signals are not the entire property of the North American Red Indian of "Settler" days. In our own country, history books tell us that the Picts made smoke signals beyond the Roman walls, signals seen by the Roman sentries but meaningless to them. There is still a lot to be said for a sign-language. What a wealth of information can be conveyed by a gesture, a look or the raising of the hand.

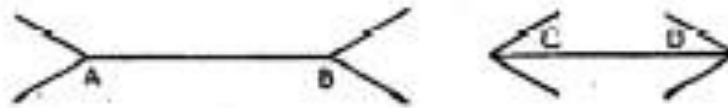
The assistant in the saleroom signalling to the auctioneer is not using anything particularly modern, for information has been conveyed by signs for thousands of years.

In our Scout tests we do certainly think of signalling in terms of Semaphore or Morse, but we should do well to remember that our test is really one of being able *to signal*, that is, communicate in the wider sense of the word. Our test says "Semaphore" or "Morse", but it is much more fun to use the wider interpretation and I fancy that is what our Founder had in mind when he made signalling one of the Scout tests. In the regulations for the Signaller badge, for example, a section is devoted to the various signs and signals as given in *Scouting for Boys*,

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including hand, whistle and tracking signals or signs. It is for this reason that in this book, whilst due prominence is given to the Semaphore and Morse codes, an attempt is made to suggest that signalling is much more than a knowledge of the two "regulation" codes, but is really the whole idea of being able to convey information in such a way that it can be understood by the reader.

This may be done by using visible objects, movements of flags or a light, sounds and in fact anything that is capable of affecting our *senses*. We are provided with what are known as sense organs for the reception of impressions or stimuli as they are called. We speak of the sense of touch, sight, taste, smell and hearing and the organs concerned, areas of the skin, eyes, tongue, nose and ears. These are really receiving stations for information which comes from the outside world. During the daytime we make use of our eyes to a very large extent although even our eyes may fail us as when we see an "optical illusion". Just look at the one given below and you will see what I mean. Your eyes will give you certain information, *i.e.* that one line is shorter than the other, which is quite wrong as measurement will prove.



At night the eyes tend to go "off duty" with the result that the ears are relied on to a far greater extent to give its information about the outside world. That is why we seem to hear "more" sounds at night, sounds of which we are unaware during the day because of the wealth of information which, the eyes are supplying to the brain all the time. The signals which we receive by means of our sense organs are transmitted throughout the body by means of the system of nerves which may be compared very conveniently with a telegraph system. The "head office" is the brain which interprets the various signals and transmits suitable replies to the muscles or other parts of the body. In everyday life the transmission of signals goes on from one living thing to another often by means of mechanical aids. The Semaphore system was in use before the telegraph or wireless became widespread and general.

Visual signalling appears to have been invented by a Captain Bolton of the 12th Regiment, British Army, and a Captain Colomb, R.N., in 1861. It occurred to them that the dots and dashes of the Morse code which were already in use in the telegraph system might be transmitted by the flashing of lights at night or by the waving of flags or arms by day. Two years later the War Office took official notice of this suggestion and soon the system was adopted by the Army and Navy. This new method was used with remarkable success in the Abyssinian campaign of 1867-68.

The telegraph system goes back to 1854 in the Crimea when the British Army made use of cables for communication with the Army Headquarters; and in 1864 the first British Army signalling unit was formed attached to the Royal Engineers. Thus the evolution of signalling has been from visual methods, signs and signals, aided by science, through the electric telegraph system to wireless telegraphy, and perhaps it may go beyond to the general use of some television system. Signalling has been an important part of the British military activities for nearly a century, whereas a country like Germany did not issue official signalling regulations until 1902. The reason is that Britain has a colonial empire which is scattered and rapid communication has always been an important factor in maintaining the unity of the empire. The importance of the heliograph was realized during the campaigns on the North West Frontier of India at the end of the 19th century. Message carrying in wartime changed from the runner or aide-de-camp on horseback to a system of rapid transmission of signals, and with the changing conditions of modern warfare the carrying of signals has received increasing recognition in importance.

In spite of all this, Semaphore signalling is still retained for use on the sea where no physical communication by wires or cables is practicable. Communication under such conditions must either be by some visual means; or by sound, wireless, or in these days, by aeroplane or underwater sounding apparatus. Semaphore is more or less ideal for short distance

communication if *visibility* is good; as many as 25 words a minute can be transmitted. Owing to the limits of the physical powers of the human eye a speed of 12 words a minute in Morse by a flashing light system by day or night is a fast rate. These methods then are not used quite so extensively now as in the past, but they are used as the basis of our Scout tests not so much because they are a means of communication but because they represent methods which are practicable for Scouts to use with *subsequent value of the training involved*. It isn't possible for every Scout Troop to transmit by means of wireless waves (or even by a "buzzer"), but it is possible for all Scouts to learn to signal by making movements, of arms or flags in the Morse or Semaphore code. These two codes will therefore be described in some detail as they are the methods of signalling particularly mentioned in our Scout tests.

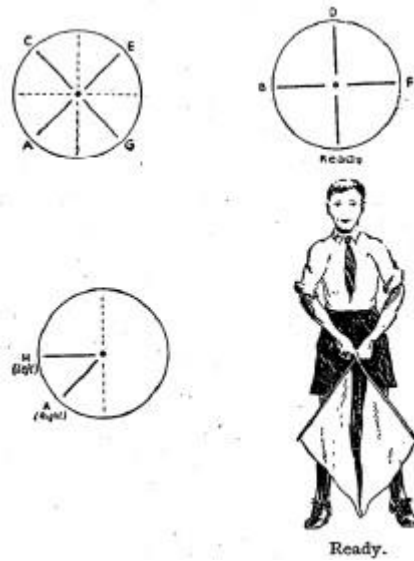
THE SEMAPHORE CODE.

The word "Semaphore" is derived from the Greek meaning "sign" and "carrying", that is, a method of conveying signs. Semaphore signalling was used before the telegraph and still is used in the Navy for communication. If you want to make a person at a distance come over to you it is quite a common practice to wave the arm with a sweeping movement over the head and round towards the back of the body. Semaphore signalling is really only a more scientific application of this principle; there was a time when Semaphore stations, each with its tall mast and long signalling arms, linked London with the South coast, when Napoleon's Grand Army waited at Boulogne on the other side of the English Channel. These stations were erected on hilltops so that the signalling arms could be seen distinctly at considerable distances.

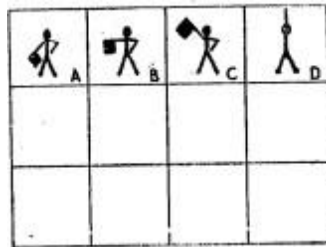
Here is a plain line diagram which will help you to see the exact position at which the arm or arms are placed for each letter.



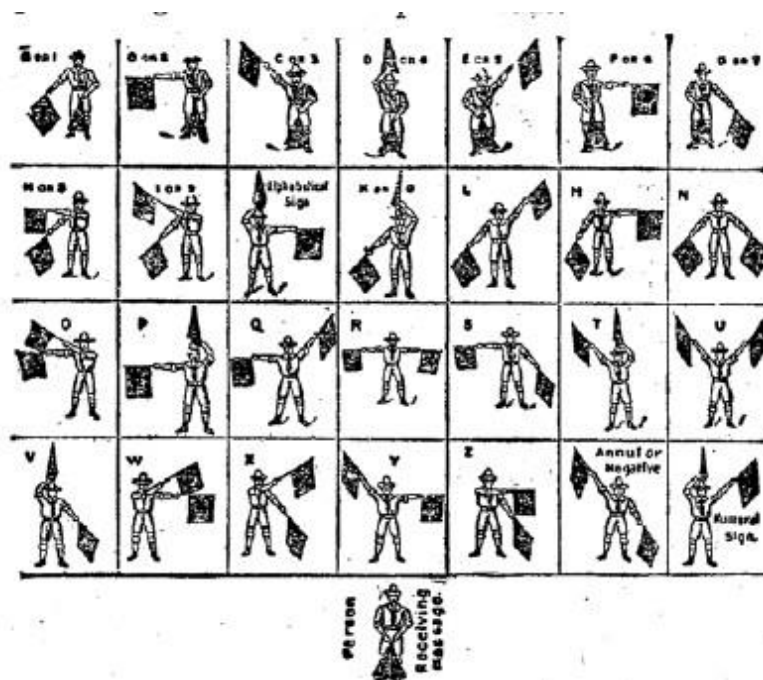
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When you have studied the diagrams carefully, try to write out the alphabet in Semaphore code using little "pin men" as suggested by the illustration given below.



Here is yet another illustration of the letters of the alphabet signalled in Semaphore code.



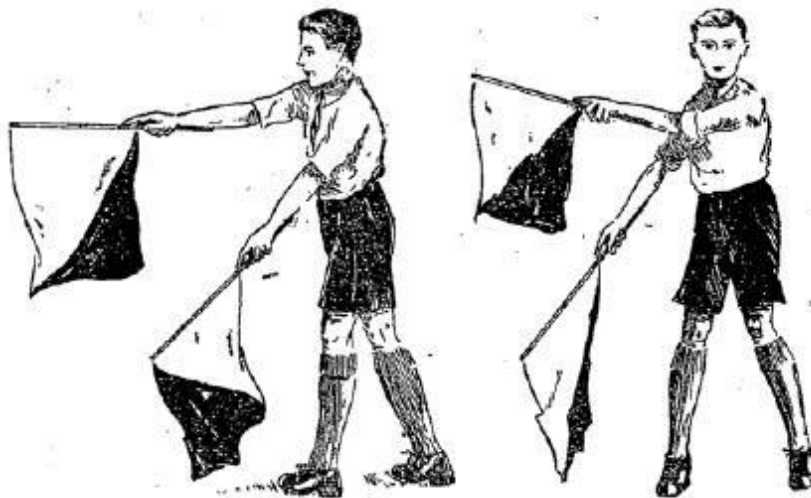
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As additional practice complete this illustration.

A	B	C	D	E	F	G
H	I	J	K	L	M	N
O	P	Q	R	S	T	U
V	W	X	Y	Z		

STYLE.

Semaphore is quite easy to read provided it is sent *accurately*, which implies that the sender must be able to make the *exact angles* with his arms or flags. The illustration helps to make this clear.



The letter Z as seen when standing
BEHIND the signaller. Note the
easy stance and the accurate angle
made by the arms.

The letter H (or is it I ?) as seen
when standing in *front* of the
signaller. Note the awkward stance.

The circle made about the body by the arms in signalling has its centre at shoulder level and is divided up into eight parts. The arm must be kept STRAIGHT, and if a flag is used in addition the arm and flag should form one straight line. The Semaphore signs are made by using either arm separately or by using the two together each **at** a different angle.



This is how to practice making correct angles.
By using mirrors in this way it is possible to see how the letter
being sent appears to the observer.

THE "READY" POSITION

The Scout who is sending a message in Semaphore must stand with feet well apart (10 ins.) so that there is no danger of toppling over or of leaning in such a way that the signalling angles are difficult to read. The *sender* MUST face the Scout *receiving* the message, and he *must* stand against a suitable *background* or his signals will not be read. If there is opportunity, try "reading" a message sent by a Scout in a khaki uniform standing close to a haystack; standing close to a high hedge; standing on a bank with the sky for background or standing in the middle of a meadow. As with most things, a practical trial instead of a "guess" after reading the above statement is very desirable.

Stand with feet apart, a flag in either hand, the arms straight and pressed close to the body, the flags crossed in front of your shins, the right flag over the left; *or* if flags are not used, stand with the feet apart, arms crossed in front of the body with the right hand clasped over the left. Either arm or both may then be extended to make one or more of the Semaphore angles. When only one arm or flag is in use the other will be kept at the "Ready" position. Normally both arms or flags will not be brought back to the "Ready" position except at the end of a group of letters. An exception is made when two similar letters are signalled, e.g. *LL* as in *S I G N ALL E D*. The two arms are then brought back to the "Ready" position for a *short* time and shot out again smartly to form the letter again. This return to the "Ready" position is also true for the "Alphabetical sign (*J*)" and the "Numerical sign" when a change is coming from letters to numbers or the other way about.

The "Circle" Method of learning Semaphore.

- Circle 1.* Letters A to G.
A, B and C are made with the RIGHT arm.
D with EITHER arm.
E, F and G, with the LEFT arm.

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There is no need to learn ALL the Semaphore signs BEFORE beginning to signal; that is to convey information to another Scout at a distance. It is possible to send WORDS composed of the letters within the first circle only. It is rather fun for two Scouts to practice sending first circle words to each other in the form of a "knockout" competition, the winner being the one who sends the most words without repetition of words.

Examples. – BE, ACE, BAD, BEG, CABBAGE, ADD, FACE, DEAF, CAGE, BED, CAB, etc.

- Circle 2.* Letters H to N omitting J.
The RIGHT arm is held at the "A" position and the LEFT arm moves round the body as though it were being used separately to make the letters B, C, D, E, F and G.
Right arm at "A" position and left arm at "B" position = H.

It is easy to make letters using *one* arm on one side of the body or the other, with the arm which is not in use at the "Ready" position. It is not so easy to extend TWO arms to ONE side of the body UNLESS the body is *turned* so that both arms extend for the same distance from the body. Some Scouters prefer to recommend that the feet should *not* be moved to facilitate signalling those letters that need two arms on the one side of the body – they recommend that the direction of the head and feet should not be moved but that the trunk should be swung round from the hips. For my own part I prefer a swiveling of the feet – raise the heels and twist as though making the first movement of "right turn" or "left turn". This quite easy movement automatically brings the body round so that the two arms extend an equal distance from the body and it is quite easy to see just which letter is being signalled. Again, practice by sending words composed of letters in the first or second circles.

*Examples:-*BALL, FLANNEL, HIKE, BANDAGE, BAND, etc.

- Circle 3.* Letters O to S
The *right* arm is moved up to the "B" position and the *left* arm moves round the body as though it were being used separately to form the letters C, D, E, F, and G.

Practice by sending words composed of the letters of the first three circles.

*Examples:-*POSSESSION, PICKLED, SACKING, BLACKBOARD, GARBAGE, etc.

- Circle 4.* Letters T, U, Y, and Erase.
The *right* arm is moved up to the position for the letter "C" and the *left* arm moves round as though in the position for D, E, F, and G.
- Circle 5.* Numerical sign, Alphabetical sign or J, and V.
The *right* arm is held at the position for D and the *left* arm moves as though being used separately to form the letters E, F, and G.
- Circle 6.* W and X.
The *right* arm is kept at the position for the letter E, the *left* arm moving down through an angle of 45 degrees to form X.
- Circle 7.* Z (the opposite of H).

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Numbers. – The letters A to K (omitting J, the Alphabetical sign) may also be used to represent numerals:-

A = 1	D = 4	G = 7
B = 2	E = 5	H = 8
C = 3	F = 6	I = 9
	K = 0 (not 10)	

The letters A to K ONLY represent numerals IF THE NUMERICAL SIGN has been signalled.

Example. – Numerical sign: A C H K = 1380.

Practice sending dates or street numbers, making use of the Alphabetical sign and Numerical sign:-

Example.– December 25th, 1950, would be signalled. D E C E M B E R Numerical sign B E Alphabetical sign, T H, Numerical sign A I E K.

The flags or arms would be brought to the "Ready" position at the end of the word December, after the Numerical sign in each case, after B E representing 25, after the Alphabetical sign, the T H, and at the end of the statement.

The "Opposites" Method.– Once the "Circle" method has been mastered and that is really only a matter of constant practice, it is interesting to try signalling letters and their opposites.

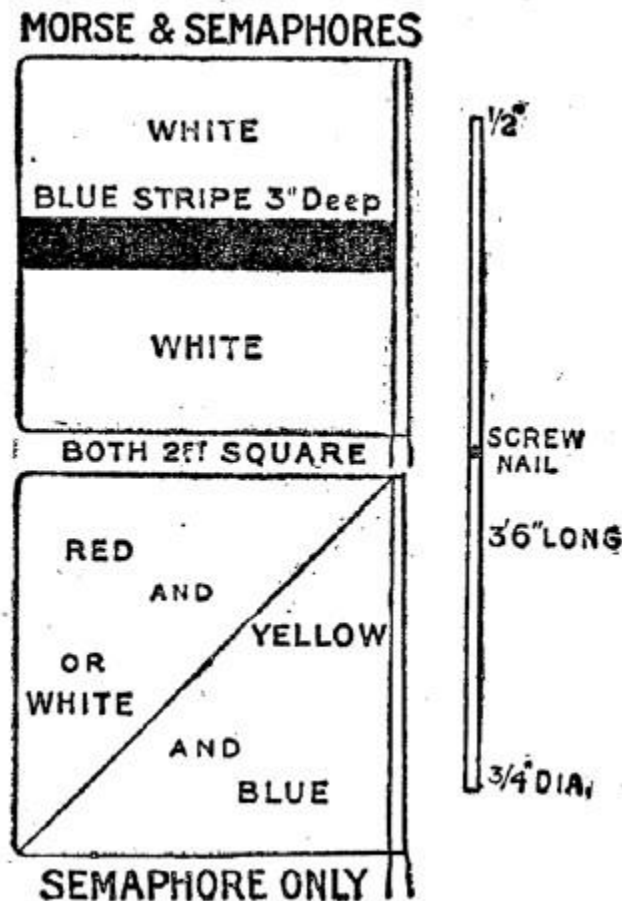
<i>Example.</i>	<i>Letter</i>	<i>Opposite</i>
	A	G
	B	F
	C	E
	D	has no opposite and may be made with either arm.
	H	Z
	I	X
	K	V
	L	Erase
	M	S
	N	U
	O	W
	P	J or Alphabetical
	Q	Y
	R	has no opposite for obvious reasons.
	T	Numerical

The sending of Semaphore signs accurately is very important. Reading and sending can only be learnt by constant PRACTICE. It is of little use being able to READ Semaphore IF the Scout SENDING the message does not hold his arms at the CORRECT ANGLES. The flags or arms should be moved smartly from one position to another, the correct angles being acquired by constant practice. It is good fun to Practice signalling by standing between a lighted candle on a table and a wall as movement of the arms will cast shadows on the wall and the angles made can be noted and if necessary corrected. A Scout learning to signal in Semaphore really does need to practice with the help of another Scout who is a good signaller. Books can do a lot to help in all sorts of ways especially in the matter of telling the reader what NOT to do, BUT practical experience is essential. Get a Scout to signal to you from a distance – odd letters first, then short words, followed by longer words and finally sentences with the accompanying special signs as used in a complete transmission. If a Scout is not available to practice with, you should invest in

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a packet of "Semaphore Signalling Cards which are published by Brown, Son & Ferguson, Ltd., the publishers of this book. These cards are aids to reading signalling.

Note on Signalling Flags for Semaphore.



Signalling flags may be made any size as long as they are square. The usual sizes are 18 inches by 18 inches or 2 feet by 2 feet. The same flags may be used for both Semaphore and Morse, being white with a blue horizontal stripe for dark backgrounds and an all blue flag for light backgrounds. The pole is made of light wood, tapering from 1/2 inch at the top to 3/4 inch at the butt end. The pole fits into the hem of the flag and is tied on to the pole by means of tapes and a small screw on the pole. The top of the hem, into which the top of the pole fits, should be of double thickness. The flag is made of a light fabric material.

The flag in common use for Semaphore is a *diagonal* flag. These may be blue and white diagonal or red and yellow diagonal, two flags of the same colour forming a pair. These flags are usually 18 inches square. The diagrams should help to make this clear.

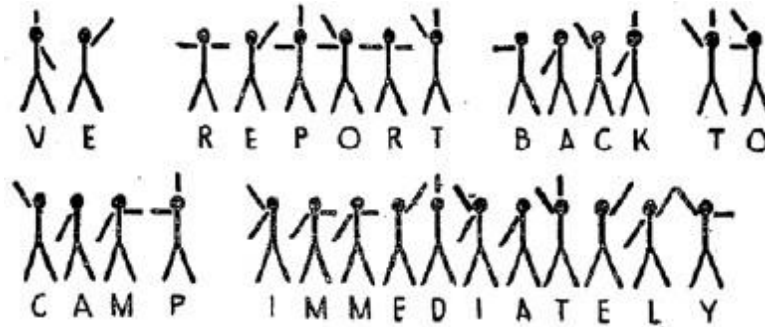
Sending a Message in Semaphore.— The attention of the "Receiving Station" must be attracted by the signal V E repeated until the "Reader" acknowledges by sending the sign for K. This acknowledgment means that the Scout who is to read the message is ready to commence.

Example:— Message— **Report back to Camp immediately.**

The Scout sending the message will proceed to signal the message, letter by letter, allowing his arms to return to the "Ready" position after each group of letters forming a word. When he has sent a word he will wait until the "Reader" makes the answering signal A to indicate that he has

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received the word. The sign for a "full-stop" is AAA and the end of the message sign is AR, so that after the word "immediately" the Scout sending the message will send the groups of letters AAA and AR to indicate that he has finished his message. The "pin men" show how the message would appear to the "Reader" if a whole line of Scouts each signalling one letter were to signal at the same time.



It is a great help to accuracy if when sending a message the sender can have the assistance of another Scout to callout the message to him; and similarly if the reader can have a second Scout to write down the message as received. This arrangement enables the two important people, sender and reader, to keep on the alert. Both the sender's assistant and the reader will inform their partners of the end of a group of letters forming a word by calling out "Group" or just "Ready". Because some of the letters in the alphabet sound very much alike when called out, *e.g.* M and N or B and C, a kind of "signalese" or signalling language is used to prevent mistakes from being made.

"Phonetic" Names.

A	Able	J	Jig	S	Sugar
B	Baker	K	King	T	Tare
C	Charlie	L	Love	U	Uncle
D	Dog	M	Monkey	V	Victor
E	Easy	N	Nan	W	William
F	Fox	O	Oboe	X	X-ray
G	George	P	Peter	Y	Yorker
H	How	Q	Queen	Z	Zebra
I	Item	R	Roger		

Special Signs to Note:

Calling up sign	VE
Answered by	K
Completion of a group of letters	"Ready" position
Answered by	A (Known as the General Answer)
End of a sentence – full-stop	AAA (sent as a group)
End of a message	AR (sent as a group)
Answered by	R
Alphabetical sign	J (letters following)
Numerical sign	T (numbers following)
Erase	Opposite L (cancel group)

General Answer.— When sending and the General Answer (A) is NOT received the group is repeated until the General Answer is received. Every Signal or group (in Semaphore or Morse) is answered by the General Answer with the following exceptions.

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- (a) Calling up sign VE which is answered by K
- (b) End of message signal AR which is answered by R.
- (c) Group composed entirely or partly of figures such as 42nd, which would be answered by the check DB meaning 42.
- (d) "Good-bye" GB which is answered by GB.

For general interest a "Table of Procedure Signals and Special Signs" is here given. Further information concerning this Table may, if required, be obtained from the book *Boy Scout Tests and How to Pass Them*, published by Brown Son & Ferguson, Ltd. of Glasgow, price 4/6. For the purposes of the ordinary Scout tests the signs mentioned in this book are sufficient.

Name	Signal		By which Station sent
	Semaphore	Morse	
General Answer	A	— T	Receiving
Calling-up Sign	VE	— — — — — <u>VE</u> (as one symbol)	Sending
Erase	Opposite to L	8 dots	Either
"Wait a minute"	Q	— — — — —	Receiving
Block Capitals Sign	UK	— — — — — <u>UK</u> (as one symbol)	Either Sending Sending
Work After	WA	— — — — —	} Either Receiving Sending
Work Before	WB	— — — — —	
"Carry On"	K	— — — — —	
Break Sign	II	— — — — —	
"Call for Light"	W	— — — — —	Either
End of Message	AR	— — — — — <u>AR</u> (as one symbol)	Sending
Message Received	R	— — — — —	Receiving
Separating whole numbers from fractions	MM	— — — — —	Sending
Full Stop	AAA	— — — — — <u>AAA</u> (as one symbol)	Sending
Decimal Point	FI	— — — — —	Sending
Oblique Stroke	XE	— — — — — <u>XE</u> (as one symbol)	Sending
Horizontal Bar	EX	— — — — —	Sending
Brackets	KK	— — — — —	Sending
Hyphen	DU	— — — — —	Sending
"You are Correct"	C	— — — — —	Sending
"Number of group so and so"	GR	— — — — —	Either
Inverted Commas	RR	— — — — —	Sending
"Move to your Right"	MR	— — — — —	} Either Any
"Move to your Left"	ML	— — — — —	
"Move Higher or Further off"	MH	— — — — —	
"Move Lower or Closer in"	MO	— — — — —	
"Who are You?"	AA	— — — — —	
Numerical Sign	Opposite to letter T	No sign in Morse as long numerals are sent	} Sending
Alphabetical Sign	J	— — — — —	
Open Light	OL	— — — — —	Either
"Good-bye"	GB	— — — — —	Either

Complete Signalling Instructor

Purpose	How Answered
The General Answer is sent by a party of Signallers when they have read a group, or signal, sent to them and are satisfied that they have read it correctly. Showing intention to send a message.	K or Q
To erase a word sent incorrectly or a figure checked back incorrectly. Only to be used immediately after a mistake As an answer to VE .	General Answer
When one station wishes to interrupt the work. Break Q or IIQ is sent.	General Answer
Sent before and after groups in capitals or underlined, in the message.	General Answer
To obtain a missing group, or correct a doubtful one.	General Answer
As an answer to VE , the Calling-up Sign.	General Answer
Sent between the number of group and addresses; the addresses and the text; and the text and TOO . (Time of origin.) Also before the interruption signal Q .	
Used by a station which cannot read the other's light. To denote that the message is finished.	Attending to the light R
Sent in Answer to AR after necessary corrections have been made.	
Wherever mixed numbers appear in a message.	
Used between sentences. Always written as AAA in the message form.	General Answer
Sent wherever a point occurs in the message.	Sent back with the check letters for the figures
Wherever it occurs in the message.	Ditto
To indicate the bar in fractions.	
Before and after groups in brackets in the message.	General Answer
Sent where written in the message.	General Answer, if separate group
Used with GR and the number of groups when the receiving station has pointed out an error in the counting of the group.	C itself is not answered but the figures only are checked back
Used with figures to correct the number of groups.	GR itself is not answered but the figures used with it are checked back
Used as in the case of KK —brackets.	General Answer
To move the other station so that the station sending the instructions may be able to read their signals more easily.	General Answer. Move in the direction
Can be used without previously sending VE to find out identity of signallers.	General Answer followed by stating who you are
When, after getting into communication, there is no message to be sent.	General Answer
Sent Before } any figures in the message (if sent by semaphore) Sent After }	General Answer
For the other station to open their light so that you may align your instrument.	General Answer to comply with request
To show that station sending it is ceasing operations.	GB

N.B.—The bar over letters, e.g. **VE**, indicates that this is sent as though one letter with no space.

Additional Note on Signal Station Work.—The word "Station" is used to describe a group of signallers. The Scouts sending the message will form the "sending station", whilst those taking down the message will be called the "receiving station". In addition there may be a transmitting station in between two terminal stations, that is the station sending out the message and the station finally receiving the message, this of course being necessary where the receiving station cannot see the sending station. A good way of practicing this sort of thing is to arrange for pairs of Scouts to be stationed at the corners of a building — Scout Headquarters, for example. The first group can see the second and the second can see the first and also a third group. The message which the first group sends cannot be read directly by the third group, but only indirectly because the second group passes on the message. This dodge is very useful when there is not the time available to go off at a distance so that the receiving station cannot see the sending station. The diagram given on the page opposite will help to make this clear.

Complete Signalling Instructor

Sending Station Duties.—

1. *Caller.*— He has charge of the message and calls out each letter or group to—

2. *Sender.*— He sends the message as directed by the "Caller" using some convenient method.

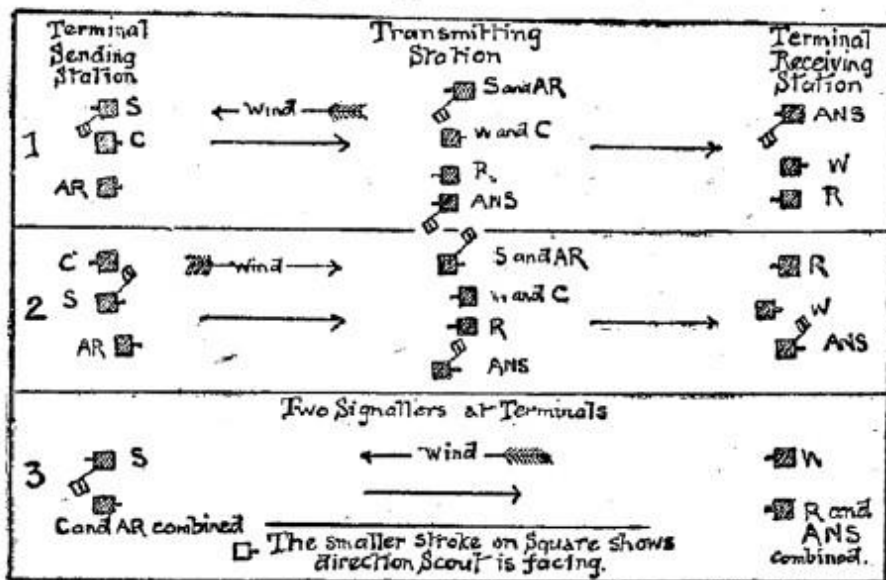
If a third Scout is available he might be styled the "Answer Reader" and his duties would be to watch for answering signals from the other station.

Receiving Station Duties.—

1. *Writer.*— As the Reader calls out each letter or group he writes down whatever is called out and if satisfied with it orders the Answerer — if a third Scout is available — to send back the appropriate answer.

2. *Reader.*— His duty is to watch the sending (or transmitting) station for signals calling out the signals he observes to the "Writer." He will indicate to the Writer the end of each group of letters. If a third Scout is available he promptly sends back the answers as ordered by the Writer. If not available, the Reader will answer instead.

Signalling Station Work.



Key to Signallers:—S = Sender, R = Reader, W = Writer, C = Caller, AR = Answer Reader, ANS = Answerer.

Where the sending station cannot see the receiving station it is necessary to have a transmitting station.

CHAPTER III.

THE MORSE CODE.

MORSE is practically unlimited in its application to everyday life. The locomotive driver with his engine whistle, the roadman with his red flag, the schoolboy with his torch or the schoolgirl with her knitting needles can all if they wish communicate with someone else by means of the Morse code.

"Signalling practice, while it is educating the boy's intelligence, is at the same time giving him valuable physical exercise hour after hour in body-twisting and arm-work, and in training the eye, but it is a practice which should be taken out of doors, so that it does not degenerate into a mere indoor exercise devoid of utility, purpose, or romance". – (*Aids to Scoutmastership*)

When the Founder first wrote the words quoted above less emphasis was placed on the value of physical training as part of the normal school curriculum than is placed to-day. Indeed "P.T." to-day is one of the most valuable lessons in the time table of the modern schoolboy. Physical training and biology have both become general in the schools since Scouting started, and bearing this in mind it will be seen that the original intention of the Founder with regard to the physical exercise side of Signalling is not now quite so urgent. The Founder makes a strong point of the value of Signalling as an aid to character training because of the individual effort required on the part of the Scout; and this always has been and still is the main reason why Signalling should be included in the Scout badge tests. Learning to be a signaller means really hard work – often a hard slog until the elements have been mastered followed by intense concentration involving considerable intelligence.

The romance of secret codes and secret signals has not disappeared with the invention of television, and he who can communicate with his fellows at a distance by making signs and signals can still get a thrill out of it, unknown to the uninitiated. To tackle a job and to complete it after the novelty has worn off and things become difficult is one of the finest aids to character training – a "want" which the Signalling tests supply to the full. An efficient signaller must be mentally alert and alert in body; he must be accurate and exact in his body movements, his speech and in his general smartness, all features worthy of the attention of every Scoutmaster.

The Semaphore and Morse codes may both be used to inculcate these character training attributes; "Most Scouts seem to select the Semaphore code for the Scout Signalling tests possibly because the use of arms or flags to make visual signs seems more real than the use of a "buzzer", or it may be that to the young Scout, Morse appears to be just a jumble of sounds or flag movements. The first point to be emphasized is that Morse is a matter of *rhythm* and *timing* and not a matter of *angle* as in the Semaphore code. The letters in this system are formed by what are termed "*dots*" and "*dashes*", the difference between a dot and a dash being a matter of the time-interval. *The dash is always three times the length of the dot*, no matter what instrument is being used for the transmission. There are thus all sorts of possibilities of methods of sending information in the Morse code – flags, light flashes, pencil taps, whistling, etc. It is *most important* that the correct interval of time should be allowed at the end of each letter before the next is commenced, namely, an interval equivalent to *one dash*. Naturally, the signaller must signal the dots and dashes composing the letter being sent without any pause which might be interpreted as the "dash" between two letters. The letter C is – - - -, and the letter N is – -, and so a pause between the first dot in C and the second dash would make the letter C read as two N's.

As already explained in the "Semaphore" chapter, letters which sound alike are known by names.

NOTE.– In "Sound" Morse *dot* is replaced by *dit* or *di* (see explanation later); *dash* is replaced by *dah*.

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The names are given in the following list:-

ALPHABET PRONUNCIATION CHANGES

Adopted by Allied Forces, December, 1942.

A is for Able instead of Ack	N Nan instead of Nuts
B Baker instead of Beer	O Oboe instead of Orange
C remains Charlie	P Peter instead of Pip
D for Dog instead of Don	Q remains Queen
E Easy instead of Edward	R for Roger instead of Robert
F Fox instead of Freddie	S remains Sugar
G remains George	T for Tare instead of Toe
H for How instead of Harry	U remains Uncle
I Item instead of Ink	V for Victor instead of Vic
J Jig instead of Johnnie	W remains William
K remains King	X remains X-ray
L for Love instead of London	Y for Yorker instead of Yoke
M Monkey instead of Mike	Z remains at Zebra

0. Zero	5. Fi-yiv
1. Wun	6. Six
2. Too	7. Seven
3. Thu-ree	8. Ate
4. Fe-wer	9. Niner

The Morse Alphabet.

A . -	H	N - - .	T -
B - . . .	I . .	O - - - -	U . . -
C - - . -	J . - - - -	P - - . -	V . . . -
D - . .	K - - -	Q - - - -	W - - -
E .	L . - . .	R . - .	X - - -
F . . - .	M - -	S . . .	Y - - - -
G - - -			Z - - - .

How to Learn the Morse Alphabet.

The Morse alphabet is so made up that those letters which occur most often in an English sentence are represented by the shortest symbols. Before learning the Morse alphabet it is essential to learn the correct method of sending dots (dits) and dashes (dahs). Probably the best way to learn how to make the correct intervals of time is to commence by practicing with a dummy key or "buzzer" and NOT with flags, as flags are difficult to handle at first and the wrist movements necessary are tiring to the beginner. There are various methods for learning the Morse alphabet and what appeals to one may not appeal to another.

Some Scouts may prefer a "memory" system for learning such as the ones illustrated below.

Memory Systems for Learning

<i>First Method.</i>	<i>Opposites.</i>
A . -	- - N
B - - - -	. - - - J
D - - -	- - - W
E .	- T
F . - - -	- - - Q
G - - - -	. - - U
I . -	- - M
K - - - -	. - - R
L . - - -	- - - Y
O - - - -	. - - S
P . - - - -	- - - X

N.B.— This method is now regarded as obsolete — some say it leads to confusion.

Letters with no Opposite.

C - - - -	H . - - -
V . - - -	Z - - - -

Second Method

Section 1.

Dots. (Dits)

E .
I . -
S . - -
H . - - -

Dashes. (Dahs)

- T
- - M
- - - O

Section 2.

Opposites.

A . -	- - N
B - - - -	. - - V
D - - -	- - - U
F . - - -	. - - L
G - - - -	- - - W
Q - - - - -	- - - Y

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Section 3.

Sandwiches.

K	— . . —	R	. . . —
P	X	— . . . —

Letters with no Opposite.

C	—	J
		Z	—

The numerals are shown as a separate group below.

Numerals.

1	. . . . .	6	—
2	. . . . .	7	—
3	. . . . .	8	—
4	. . . . .	9	—
5	. . . . .	0	—

The Long Numerals (Sender)

1	—	4	. . . . .	8	—
2	. . . . .	5	. . . . .	9	—
3	. . . . .	6	—	0	—
		7	—		

The Short Numerals

(As checked back by receiver)

1	. . . . .	A	5	. . . . .	E	8	—	D
2	. . . . .	U	6	—	9	—	N	
3	. . . . .	V	7	—	B	0	—	T
4							

Third Method

Groups.

Group 1

Unit Letters

E	—	T	—
---	---	---	---

Group 2

Two-unit Letters

A	N
I	M

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Group 3	Three-unit Letters.	
	D - . .	U . . -
	G - - . .	W . - - -
	K - . - -	R . - . .
	O - - - -	S . . .
Group 4	Four-unit Letters	
	B -	V . . . -
	C - . - . .	
	F	L . - . . .
	H	
	J . - - - -	
	P . - - . .	X - . . . -
	A - - . . -	Y - . - . -
	Z - - . . .	

NOTE.—CHJZ have "Continental" opposites.

A more interesting method, because actual words are quickly used is next suggested.

Learn the letters E I S H T M O first as they present no difficulty and then try sending and reading words formed by those seven letters such as:— It, hit, she, his, set, met, the, hot, test, shoes, host, etc. The continual repetition of the same seven letters soon enables them to be learnt. Next, either add the two letters which follow in the list printed above — A and N, and try to make up some more words with the *nine* letters, or take a second group of letters A B N V D V and memorize those; Practice making words with them and then try to make use of the two groups of letters learnt. Don't try to learn too many letters at once: learn a few letters thoroughly and learn how to use them to make words before proceeding to the next set of letters. The advantage of this method is that all the time the letters are being used to form *words*, no matter how simple, and so the whole scheme appears to have a meaning; whereas just to use a whole lot of letters is apt to be muddling and rather uninteresting.

When the alphabet has been mastered, get out into the open by day or night and practice sending words such as:—

(a) Dot (Dit) and dash (dah) Letters.

Hisses, most, shoots, mite, time.

(b) *Opposite letters, first group* — A N U D V B.

Behave, deed, tent, nets, thousand.

(c) *Opposite letters, second group* — R K F L G W

Britain, wreck, ghost, verse.

(d) *Opposite letters, third group* — P X A Y Z.

Axe, quest, yesterday, acquire.

The only real system to learn a letter is to know the letter in its *entirety*. To explain further what is meant; look at this word SCOUT; you do not spell it out when you read it, you say, quickly and correctly SCOUT; you would never think of reading it out as S-C-O-U-T. Now try to realize that — - - - is C and not dash, dot, dash, dot, or dah, dit, dah, dit.

Complete Signalling Instructor

Morse in Sound.

For telegraphic purposes Morse must be considered as a series of sound formations. Dots and dashes of the printed code must be transformed into sound groups.

Example.— V - - - — dit dit dit dah NOT dot dot dot dash. This becomes ditditditdah or in rhythmic form this becomes didididah.

Notice that the equivalent sound for a dot is either *dit* or *di* depending on its relationship with the other units in the letter:— Didah = A but the sounds Dit Dah (ditdah) would make two distinct letters Dit (E) Dah (T).

It is difficult to get the correct rhythmic sound spacings at first but it will come with practice. Study the following "Rhythmic" Table carefully then attempt to read a section of a newspaper making the correct sounds for each letter and trying to get the correct spacings.

A . —	Didah	N . —	Dahdit
B — . . .	Dahdididit	O — — —	Dahdahdah
C — . — .	Dahdidahdit	P . — — .	Didahdahdit
D — . .	Dahdidit	Q — — . —	Dahdahdidah
E .	Dit	R . — .	Didahdit
F . . — .	Dididahdit	S . . .	Dididit
G — — .	Dahdahdit	T —	Dah
H	Didididit	U . . —	Dididah
I . .	Didit	V . . . —	Didididah
J . — — —	Didahdahdah	W . — —	Didahdah
K — . —	Dahdidah	X — . . —	Dahdididah
L . — . .	Didahdidit	Y — . — —	Dahdidahdah
M — —	Dahdah	Z — — . .	Dahdahdidit

Morse Flag Signalling

This method of signalling Morse by flag is regarded by many as out-of-date for communication in time of war. It is still, however, used in Army training to teach the code.

Stance.— A Scout sending by Morse flag should stand comfortably with feet apart, his weight on the soles of the feet and the body leaning a little forward. He should look straight to his front and not at his flag. When using the flag the movements should be performed freely with the aid of both arms and wrists. To keep the flag unfurled, wave the flag so that the point of the pole described an elongated figure-of-eight. The illustrations given below will help you to understand how to hold and use the flag.

The best way to learn to handle the Morse flag properly is to get the help and advice of someone who is a GOOD signaller. A book can easily show you how NOT to handle the flags, but it is more difficult to show you exactly how they should be held even by good diagrams.

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Style.

In order to ensure a good style make a note of the following points:—

The right hand should always be above the left. Have the thumbs pointing *up* the pole.

Keep the hands opposite the centre of the face, *i.e.* hands level with the nose.

Keep the elbows well away from the sides.

Work with the wrists loose – the arms and body not being worked in any way.

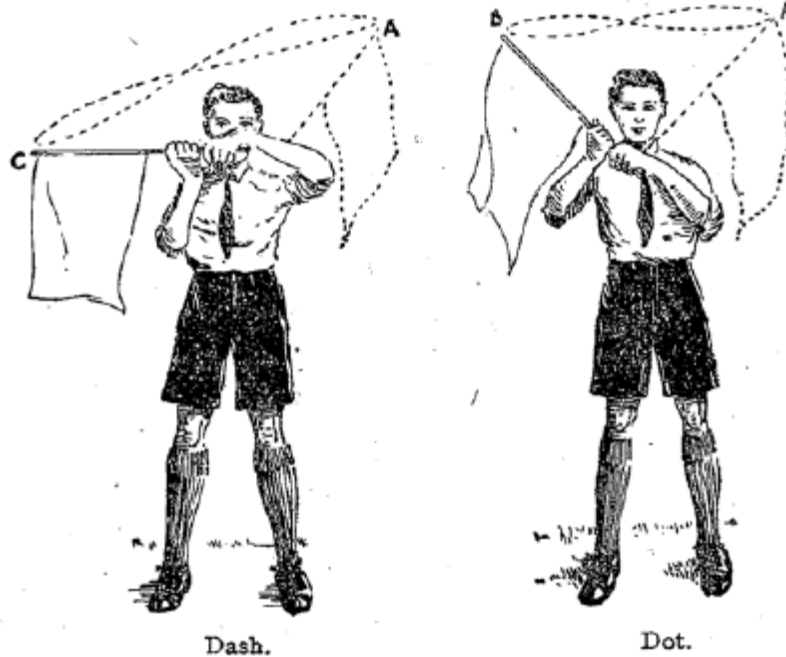
The illustrations are based on drawings from *The Scout* and will help to explain these points.



Prepare to signal.



Ready position.



Hands level with the nose.



Prepare to signal.

The Dummy Key.

The sound made by it is similar to that of a telegraph sender. If a Scout can master the use of the dummy key to send and receive Morse signals he will not find much difficulty in sending and reading by lamp, heliograph or buzzer. When sending, the knob should be held with the thumb and first two fingers, the key being depressed evenly and to its full extent for dots as well as dashes; the fingers should not leave the knob, but by relaxing the pressure the spring should be allowed to pull the key back to its normal position. Once the correct method of forming the letters has been learned then the letters may be grouped and sentences sent as an exercise. The correct separating intervals for the letter must be observed. A *good style* at a SLOW speed is preferable to speed without style.

Scout Procedure for a Signalled Message. (Morse or Semaphore.)

1. VE (Calling up) – answered by K (if ready) or A (if not).
2. Address To (name, etc.) of person for whom message is intended.

Complete Signalling Instructor

3. Address From (name, etc.) of sender of message,
4. The words of the message.
5. AR (end of message signal) – answered by R.

The Message Form illustrated below is quite a useful one to use and is not unlike the form used by the A.R.P. organization – a Message Form is to help ensure accuracy.

MESSAGE FORM.				
RECEIVED		SENT		DATE
At By	At By	At By	At By	NO. OF MESSAGE
NUMBER OF GROUPS		To		
ii		V		
FROM		ii		
Time of origin				AR
ORIGINATOR'S SIGNATURE				
(Not to be Signalled.)				

Explanation of Message Form.-

Section 1. For the signaller's use only – this information is not to be signalled.

Section 2. The text of the message. The originator writes his message here and everything he writes including V and AR must be signalled.

Section 3. The originator signs his name here, giving authority for the message to be sent – his name is not signalled.

If this Message Form is used the SENT column is left blank by the receiving station and the RECEIVED column is left blank by the sending station. It is by no means essential to use a Message Form or to use the particular one suggested above; as long as the information is transmitted correctly from one station to the other it does not really matter about the way it is recorded provided that *accuracy* is aimed at every time.

The way to become a signaller is to Practice-Practice -Practice!

CHAPTER IV.

THE HIGHWAY CODE.

ROAD SIGNS.

Most Scouts are apt to think of signalling as being confined to Morse and Semaphore. As Scouts we ought to give a wider interpretation to the word: the use of signs and signals comes into quite a number of our Scout tests and Proficiency badges. The Cyclist badge is a King's Scout badge and an interesting badge for cyclist Scouts to aim at getting. Test 4 for this badge is as follows:-

Know the Highway Code, traffic signals, correct time for lighting up – *i.e.* time after sunset – the signs of the C.T.C. and N.C.U. or A.A. and R.A.C., understand the system of road numbering, and be able to read a road map.

There is a batch of signals for you! – Signals which mean so much in maintaining the safety of the road. The Minister of Transport has this to say to all users of the road:-

"This Code is put into your hands in the sincere hope that the study and observance of its provisions will make the roads safer and more convenient for you and all others who use the King's Highway."

"Its provisions are a simple summary of the best and widest experience, each one of them written down in the resolute desire to prevent that kind of mistake or thoughtless action which may result in some one's bereavement or suffering."

"This Code is the standard of conduct for the road."

"Respect for the Code and for the spirit underlying it is so much a moral duty that its practice should become a habit and its breach a reproach."

Every Scout attempting to gain the Cyclist badge is expected to understand the Highway Code. A copy of this may be obtained from His Majesty's Stationery Office, Adastral House, Kingsway, London, W.C.2, price 1d., or through any bookseller.

In this chapter your attention is only called to certain aspects of this Highway Code and you are strongly recommended to purchase a copy for yourself or your Patrol. Scouts should remember that ALL PERSONS have a right to use the road and that care and courtesy should be the characteristics of all users of the highway. A Scout should be on the alert for all traffic signals, signs and lines. The Founder has pointed out that a Scout should be a trained observer and has suggested that it is a disgrace for a Scout travelling with another person if he (the Scout) is not the first to see anything unusual and interesting close at hand or at a distance. Not only must a Scout whether cyclist or pedestrian be on the look-out for official signals, but he should also be able to make the appropriate signals when necessary to indicate his intentions to persons concerned, hence a Scout should be familiar with the signs and signals as depicted in the Highway Code. By permission of the Controller of H.M. Stationery Office extracts from the Highway Code are included in this chapter.

Complete Signalling Instructor



"Stop" Signal No. 1
as viewed by the driver for
whom it is intended.



"Stop" Signal No. 2
as viewed by the driver for
whom it is intended.



Combined "Stop" Signals Nos. 1 and 2.



"Proceed" Signal No. 3
as viewed by the driver for whom it is intended.



"Proceed" Signals No. 4
as viewed by the drivers for whom they are intended.

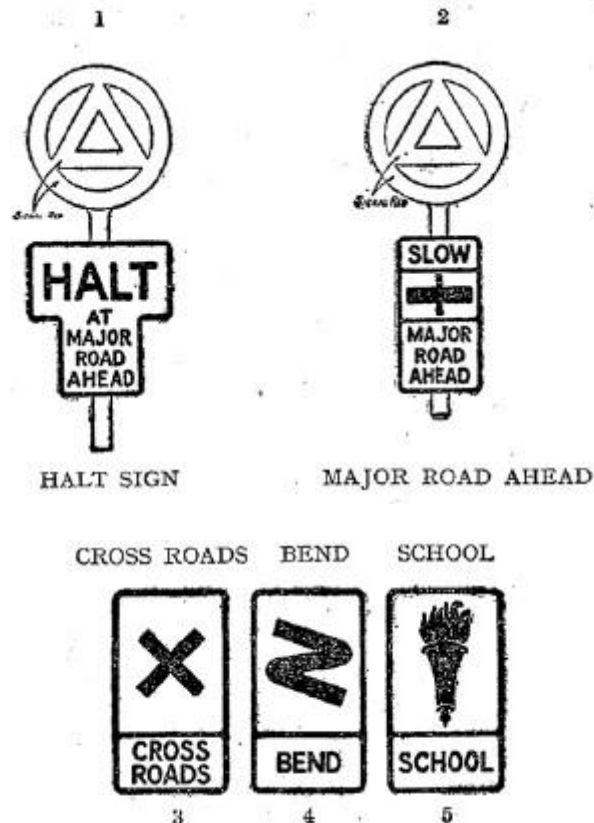
Note that the constable does not turn his body, because he may be holding up vehicles in front of him and behind him.

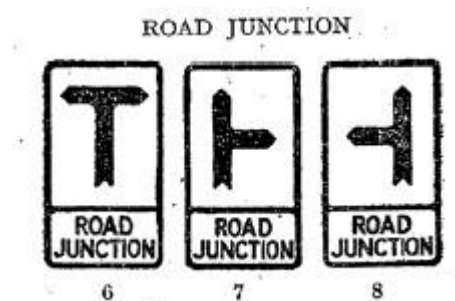
Complete Signalling Instructor

In the Code is an "Appendix" dealing with the traffic signals that every road user should know. First of all there is an account of the signals officially recommended and which are intended to cover the ordinary situations which arise in traffic control. Signals 1 to 4 are specially illustrated to show how they appear to the drivers for whom they are intended. It makes no difference if, as will often happen, the police constable's other arm is engaged in making another signal. Nos. 1 and 2 combined is the "Stop" signal. Nos. 1 and 2 or No.4 is the "Proceed" signal.

If you happen to have a copy of *Boy Scout Tests and How to Pass them* (published by Brown, Son & Ferguson, Ltd., of Glasgow), you will be able to study the Highway Code from that book as it is reprinted by permission and useful notes are added. In this book your attention is called to the fact that road and traffic signals are very important in everyday life. In most towns nowadays there are automatic traffic signals in operation at many road junctions and busy crossings. In a way these are automatic policemen and the signals given must be obeyed in the interests of road safety. A red signal means STOP and wait behind the stop line on the carriageway; red and amber signals showing together mean that you are to STOP *but* be prepared to go when the green shows; a green signal means PROCEED if the road is clear but with particular care if the intention is to turn right or left; the amber light alone means stop at the stop line unless the amber signal appears when you have already passed the stop line or are so close to it that to pull up might cause an accident; a green arrow showing with the red signal allows vehicles to proceed in the direction indicated by the arrow.

The traffic signs illustrated below are among the more important of the signs which should be familiar to all users of the road.





Suggestions.

1. Buy a copy of the Highway Code.
2. Make a simple map of the district around your own home or your headquarters and mark on it the position of all the automatic traffic signals. This will involve exploration of the district which in itself will be a useful piece of work towards the gaining of the Pathfinder badge. No doubt an inquiry at the local police station would assist.
3. Make a list of all the different traffic signs to be seen in your district, keeping the record in log-form with some indication of the position of each sign.
4. Prepare illustrations of traffic signs on postcards but leaving them unnamed. Pass these cards round when next your Patrol is at work in the Patrol Den and see how many of your Scouts can recognize them.
5. Suggest to your Scoutmaster that he makes some of the signs used by policemen to control traffic and that the Troop writes down the meaning of the signs, or individual Scouts describe them verbally.
6. If there is a special traffic department in connection with the local police force, inquire whether the police give lectures to such organizations as Scout Troops on the traffic signs and the correct use of the road.
7. If you have a cycle follow the course of one road, noting the various traffic signs and trying to spot why the signs have been erected at certain places.

The users of the road often belong to associations or organizations which safeguard the interests of their members and try to help them get about on the roads with a minimum of trouble and inconvenience to other road-users. The Cyclists Touring Club and the National Union of Cyclists cater for the cyclists, whereas the Royal Automobile Club and the Automobile Association help the motorist. All these organizations have their own signs for assisting road-users.

CYCLISTS TAKE CARE.

A code of cycling conduct approved and issued by the Cyclists Touring Club, 8 Craven Hill, London, W.2.

The Law requires that you

Carry on your machine, when cycling during the hours of darkness, a white front light and an unobscured and efficient rear reflector plus a white surface of not less than 12 square inches. (If you elect of your own free will to carry a lighted red rear lamp, instead of a reflector, you may dispense with the white surface.) Carry a white front light also on the sidecar, if one is attached to your cycle, when riding at night.

Do not hold on to other vehicles unless you have lawful authority or reasonable cause.

Give way to pedestrians at all pedestrian crossings not controlled by police or light signals.

Obey traffic signals whether you are riding or wheeling your machine.

Go slowly or come to a stop before entering a major road from a minor road if there is a traffic sign requiring you to do so.

The Highway Code exhorts you to

Keep as near to the left as practicable unless about to overtake or turn to the right.

Avoid riding too many abreast and thus impeding other traffic.

Be able always to pull up within the distance for which you can see the road is clear.

Overtake only on the right, except when a driver in front has signalled his intention to turn to the right. (Subject to any local provisions to the contrary, tramcars may be overtaken on either side.)

Avoid overtaking at a pedestrian crossing, at crossroads, or at a blind corner.

Give the appropriate signal clearly and in good time before you stop or slow down or change direction and when approaching a constable or other person controlling traffic.

Common Sense impels you to

See that your brakes and tyres are dependable. Avoid cutting corners on the wrong side.

Dismount when it is risky to proceed.

Beware of skidding on greasy or muddy roads, through applying your brakes suddenly, or through carelessly negotiating manholes, drain covers and tram lines. Avoid depending on "the other fellow".

Keep an eye on the movements of other traffic;

Ordinary Courtesy implies that you will

Always behave towards other road users as you would like them to behave towards you.

Always be a true sportsman.

Help to promote goodwill on the roads.

CHAPTER V.

SUGGESTIONS FOR GAMES AND PRACTICES.

THE whole of Scouting is a game – the game of "Scouting for boys" and the ideal method of Scout training is through the medium of games and stunts. In work or play, energy is used up and just as much or even more energy may be required for play than work. The big difference is that play is a voluntary method of using up energy usually in an interesting way. The small boy, seemingly tired out, can still summon up reserves of energy if the suggestion of a game of football is made. The signalling tests lend themselves very well to play and very little signalling need be done as a set piece of instruction. All that is needed is a little originality and some enthusiasm. It is not difficult to be original: the essence of originality lies in being able to make a note of certain ideas and in being able to combine those ideas in a different form to suit a particular occasion, a particular group of Scouts or particular surroundings. One of the aims of the writer of this book is to make *suggestions* to you which will help you to concoct some original signalling games and stunts. The ability and skill to signal are apt to fade away in the "between" period which so often comes after the gaining of the Second Class badge and before work for the First Class badge has really started in earnest. It is essential to practice and to keep on practicing in order to remain a proficient signaller, and this means that to maintain interest, new ways of serving up the old material must be discovered. This fact has been kept in mind when compiling the suggestions listed below, and it is hoped that readers will be able to serve up old material in new form for the benefit of their own Troops or Patrols.

1. Suggestions for Signalling activities based on the Second Class Test.

SIGNALLING.

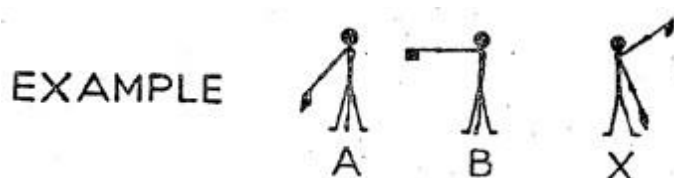
Recognition.— A Patrol game, players seated round a small table. The P.L. has a pack of cards which he has made, the Morse sign or the Semaphore diagram of a certain letter being on each card. He turns up the cards one by one and the Scout who calls out the name of the letter correctly, *e.g.* Monkey not M, takes that card. The Scout with most cards at the end of the game is the winner. Can also be used for an inter-Patrol game.

Deduction.— Two sides. A series of cards are given out to each member of the two sides and on the card is printed a letter or a number of letters. The two sets of cards are exactly alike so that a member of each side will have the same letter or letters printed on his card. The S.M. goes some distance away and signals a certain letter. The boys look at their cards and see if they have the letter signalled. If so, whoever has that card runs as hard as he can to the S.M., *i.e.* it should be a race between two Scouts, one from each side, but quickness of recognition will be the deciding factor, the quick reader gaining a start.

Game for the Clubroom.— Patrols sit in file. In front of each a little distance away is a chalk ring in which a book is placed. A second and similar ring is drawn on the floor a short distance from the back of the Patrol. A letter is allotted to each boy, all the No. 1s. having the same letter. The S.M. signals a letter and the boys holding that letter jump up, run and take the book and place it in the circle at the back of the Patrol and sit down. First boy back in his place scores a point for his Patrol.

Skeleton Semaphore.— Get each Scout to construct an oblong 2½ ins. by 3 ins. and marked off into ½ in. squares. In each square starting at the left hand corner and working from left to right a little man is placed (just a straight line) with his arms extended in the correct semaphore position of the letter.

Complete Signalling Instructor



The erase, numeral, alphabetical and ready positions can also be indicated.

Signalling Dominoes. From *The Scouter*.— This is an excellent game for learning either Semaphore or Morse. Take 26 small cards and copy out the signalling alphabet on them. Do not put the name of the sign on any part of the card. Put a bold mark at the top to show which is the right way up, otherwise you will not know whether you have got U or N in Semaphore or F or L in Morse. If there are three players, deal out six cards to each and put the rest of the cards in the pool. The player to the dealer's left then plays any card he likes and the next player must then play the letter on one side of it. If one player puts down K, the next man must play J or L. If a player cannot play he can draw one from the pool. If he still cannot go the next man goes. The winner is he who gets rid of all his cards first.

Making Words.— Each Scout makes his pack of Semaphore and Morse cards. The P.L. chooses a word in which the same letter only occurs once, e.g. "Victory", and calls it out. All Scouts then sort out their cards from their pack (which has been well shuffled) and race to see who can form the word correctly with the cards first.

Signalling Sentences. From *The Totem*.— The following sentences contain all the letters of the alphabet and are, therefore, useful for signalling practice and tests:

"Dan quickly brought Vera my box of jig-saw puzzles."

"Good Jazz bands provide excellent amusement for the weary cricket queues."

"Has lazy James ever been quick except when falling down"?

"Quite a few men acknowledge that jazz is but extravagant syncopation."

Sealed Messages.— A sealed message is given to each P.L. and at a given signal all P.L.'s open their messages and find inside something like writing in the matchstick figures mentioned previously or as the common method of writing Morse by depicting dots and dashes.

Morse or Semaphore Relay.— This game should be timed carefully. The Patrol is lined up at the end of the room, and the P.L. given a flag or flags. Each boy is given one word of a message. When the whistle sounds the first boy races to the other end of the room turns round and signals his word, runs back and hands the flag or flags to the second boy who does the same and so on. Any word not correctly signalled must be sent again. Useful for an inter-Patrol competition.

Signalling Relay.— Members of the Patrol are spaced out at some distance from each other and a message is given to the first Scout to signal to the second (quite short). The second signals on to the third what he believes to be the message and so on. Correctness of message at the end of the relay is looked for.

The Trail.— Each Scout is given pencil and paper and instructed to make an oblong 10 squares by 8 squares and into each is placed a letter — the S.M. must have the thing already prepared in front of him so that the chart of each Scout is exactly alike. The top row might read a, x, s, g, i o, v, m, w, q, and so on. When that has been completed the S.M. signals certain letters and each Scout connects up in pencil the letters signalled. The complete thing which must be worked out beforehand will form a trail. Correct path, 2 points.

Deaf and Dumb Alphabet.— Full instructions for this activity can be obtained from numerous sources. Sometimes half an hour of the Troop program carried out in silence, communication only being made by signals of some description or other, will help to make Scouts realize what a gift we have in speech. Also if a part of the Troop program is carried out with bandaged eyes it does help the boys to realize what their blind brother Scouts miss. At first they will treat it as a joke but later other impressions will sink into their minds.

Fire Signals.— In some countries signals are made by means of fire-smoke by day and flames by night. A fire for smoke signalling is built by heaping green leaves and grass or damped vegetation on to a well-burning fire which has been built in the ordinary way. The signal is made by covering the fire with a damp blanket or piece of thick damp sacking, the cloth being removed to release a puff of smoke, after which the fire is covered again. For a short puff the blanket is held away from the fire while two is counted, and then replaced while eight is counted. For short puffs two and eight are counted alternately. For long puffs six and eight should be, counted alternately.

Three long puffs "Go on."

A succession of short puffs "Come here."

Alternate long and short puffs "Danger. "

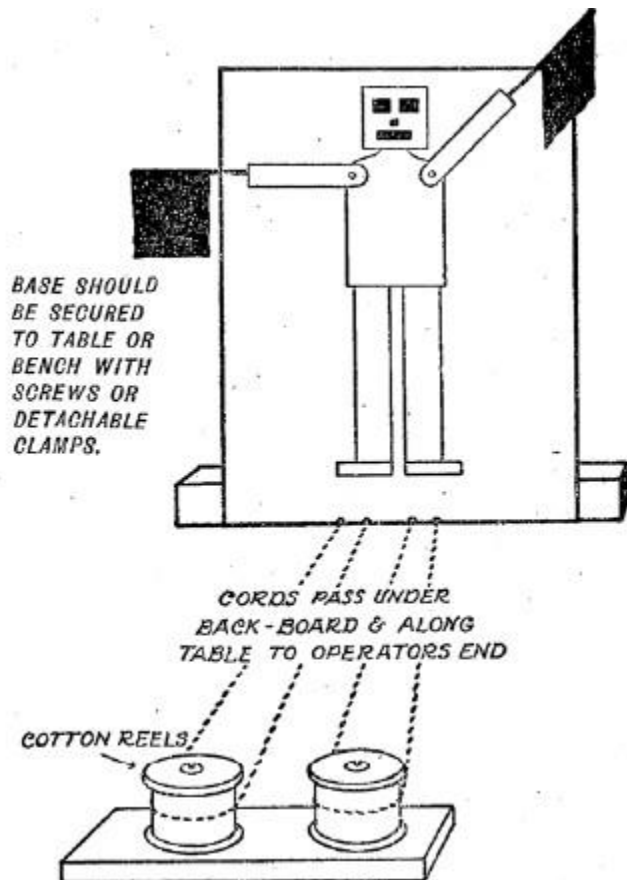
A continuous column of smoke "The camp is here."

Two columns of smoke (two fires) "I am lost."

A fire for flare signals at night is built with dry wood so as to make as bright a flame as possible. The signals are made by two Scouts holding a blanket between the fire and those to whom the signal is being sent, so that the view of the flame is alternately hidden and visible. The code is the same for flame signals as for smoke signals, a short view of the flame corresponding to a short puff. It is a good idea for Patrols or Troops to invent their own code.

Animal Calls.— These calls or cries can be used by individual Patrols for secret signalling. Each Patrol has its own Patrol Animal and its own Patrol call. The dog; the horse; the cow; the cat; the pigeon; the peewit; the curlew and the owl are all very easy to imitate and a code can be constructed from them. Three short barks like a dog may mean "Where are you?" and so on. It is left to each Patrol to make its own code, which, of course, should be really secret and not the property of the whole Troop.

A Robot Signaller.— This robot signaller can easily be made from pieces of Meccano, from wood or tin. The idea is taken from *The Daily Express*. The base of the model is a sheet of three-ply wood about 12 ins. sq. This is screwed to a base about $\frac{1}{2}$ in. thick and $1\frac{1}{2}$ ins. wide. The figure of a robot man is outlined on the board and painted in aluminium paint, the background being black. His arms are cut from the thin fretwood and wooden sticks are fastened to the ends. Flags of any thin material are sewn or stuck to the sticks. Each arm has a short length of $\frac{1}{8}$ in. wooden rod firmly stuck in a hole bored at the shoulder end. Holes are drilled in the board so that when the shoulder spindles are put through the arm comes in correct position on the figure. Drop the left arm in place, fitting a thin brass washer from your wireless kit between it and the board, so that it does not scrape the painted figure. On the portion of spindle projecting behind the board glue a small window blind pulley. Put the right arm in place, but add extra washers sufficient to allow it to clear the left arm. Add another pulley to this spindle, and support the rear ends of both spindles as shown.



Now put 4 saw-cuts through the base strip to allow of cords passing over the pulleys and under the front of the board, and file little grooves under the latter so that the cords will not be jammed between it and the table. The "operating" control can be readily grasped from the sketch. The instructor can have his class grouped around, and while sitting at the far end of the table has only to twist the cotton reels to make the robot swing his arms and go through the Semaphore alphabet. A touch of powdered resin on the pulleys is useful if the cords tend to slip. Stout sewing thread can be used but silk fishing line is better.

Educational Hike.— If the Troop is conveniently situated near a railway station it is a simple matter to get into touch with the stationmaster and arrange a visit to see how the railway signal system works. The London Underground Railways have sets of lantern slides explaining their system of signals which will be loaned free on application. There are also other great commercial concerns which use some system of signalling, a visit to which will help to impress upon the Scouts that signalling is of great use in the world.

Heliograph Signalling.— Useful for signalling a special private code or Morse code by day, using reflection of the rays of the sun (if any!), or by night, using shuttered lamps which as army surplus can be obtained at a reasonable price from marine store dealers.

Signalling Display.— It may happen that the Troop is asked to give a display at a garden fete or some other similar function. A well trained signalling display is excellent provided that the audience are told what is being signalled. This information can be given to them by having ready a long roll of hessian which can be slowly unrolled and on which the letters and words of the message being signalled by the display group are painted in large white letters. As the sending of the message proceeds so the hessian can be unrolled and its value for other functions is in no way lessened.

Troop Speed Signalling Championship.— There can be a champion of the Second Class badge standard and one of First Class standard. Speed tests prepared beforehand in both sending and receiving individual letters or sentences can easily be carried out.

Word Signalling.— A Patrol game. The first Scout signals the letter which is to form the first letter of the subsequent words, *e.g.* A. The second Scout must signal a word of two letters the first letter being A, *e.g.* At or An. The third Scout must signal a word of three letters the first of which is A, *e.g.* ATE or AIR and so on, Scouts dropping out of the game if they miss a turn. This can be done with most of the letters of the alphabet.

Signalled Stories.— A Patrol Competition game. Each Patrol in turn is asked to signal a brief story. The P.L. commences and may signal — Once upon a time. The next Scout, in his Patrol without any help from any other member of the Patrol must add a short piece to the story which the S.M. takes down in writing as do all other Scouts in the other Patrols. Each Patrol has its turn at signalling a story on the spur of the moment, and points are awarded for what appears to be the most connected story and for correctness of signalling. Or the S.M. may give out some titles for stories and each Patrol is allowed to concoct a story about the title and then signal it to the rest.

Jumbled Names.— The S.M. signals groups of letters which when put down on paper and re-arranged will form names of, *e.g.* garden flowers. Example:- The S.M. signals "EOSR" which re-arranged becomes "ROSE," and so on. There are other subjects which can be chosen, *e.g.* names of Scouts; names of animals; Patrol names; local names, and so on.

Suggestions for Signalling activities based on the Second Class and First Class Tests.

Signalling Competition.— As part of a Patrol Competition, inform each Patrol that the usual apparatus for signalling Morse is not available and suggest that each Scout or each Patrol should invent some method of transmitting in the code, *e.g.* pencil tapping, clicking with the tongue and teeth and so on.

Rhythm Signals.— Tap out the rhythm of Scout songs by means of the toe or a pencil on a piece of wood and see which Patrol can spot the most tunes. This can be quite fun; in the days before petrol rationing the author sometimes relieved the monotony of a long journey for his car passengers by "playing" tunes with the accelerator of the car.

Signalled Instructions.— The Troop or Patrol should be arranged in a wide circle. A good signaller proceeds to control the Troop or Patrol by means of simple instructions, e.g. run, kneel, blow nose, hop on right foot, bend, stop, Patrols in Indian file and so on.

Historical Signalling.— To introduce numbers into signalling in an interesting way, signal — What happened in 1066, 1801, etc., or Who lives at 102 Church Road?

Comic Remarks.— Scouts in pairs. The first Scout signals some complimentary remark (or otherwise) to the second Scout who has to make a fitting reply. A game like this relieves the seriousness of a ten minutes signalling practice.

Code Game (published in *The Scouter*).

Arrange a simple code such as the one which was published recently in *The Scouter* and then communicate information to another Scout who knows the code as shown in the illustration.

Another Code Game.— The P.L. of one Patrol signals instructions to his Patrol as suggested in the previous game by means of combinations of letters and a second Patrol tries to discover the code which is being used.

Patrol Relay.— Representatives of each Patrol arranged around a building so that each group of Scouts can see the senders in turn. A Scout from each Patrol in the first group signals a word to his "opposite

number" in the second group, who relays the word to the third Patrol representative who is round the corner of the building. Meanwhile the second word is being sent to avoid undue waiting on the part of any Scouts. The same message should be given to each Patrol. There are many variations of this possible.

Long Distance Instructions.— Signal a set of instructions to the whole Troop which has been sent some distance away. The instructions might ask for a flagpole to be erected by each Patrol at a certain spot or they might provide the information that the Troop Headquarters had been seized by armed bandits. This is a test in message receiving and in carrying out a set of instructions.

Patrol Treasure Hunt.— Signal instructions to the Patrols to tell them where to start on the trail of the treasure. These instructions might involve compass directions. Arrange for further instructions to be signalled from a distance to add new sections to the trail which the Patrols must follow. This idea can easily be modified and adapted to meet varying needs.

Night Games.— A special section is devoted to "Night Signalling" in the book, on *Night Scouting*, by K. Graham Thomson, D.C.C., Notts., obtainable at The Scout Shops.

Emergency.— P.L.s sent some distance away and given instructions to report, by signalling to the Patrols, that a bad accident has occurred and that they want certain materials to be brought over to them at once.

	A	B	C	D
A	Stay where you are, but keep a good look out.	Move forward.	Come back.	Other side are approaching.
B	Return to camp	Gather Patrol together.	Have you seen the A. S. M. anywhere?	Yes.
C	No	What would you like me to do next?	Isn't it nearly time for tea, Skipper?	The fire won't burn. Get some decent wood.
D	I've captured an enemy. What will I do?	Sorry. I grovel and won't do it again.	Keep down out of sight, you fat-head.	Game's off. Let's all get together.
E	100 yards.	Five minutes ago.	Ten minutes.	Who's afraid of the big bad wolf?

Here is a sample conversation: S.M.—AD; AB; EA. P.L.—DA. S.M.—ED; AA; BC. P.L.—BD; ED. S.M.—DC. P.L.—DB; CC. S.M.—EC; CD; BB. P.L.—BD; CB. S.M.—BA; DD.

CHAPTER VI.

SCOUT SIGNS.

THIS is really a book of *signs and signals* and not just a set of instructions for the Semaphore and Morse codes useful though they are. A Scout is interested in all sorts of signs and signals because he is constantly coming across them in everyday life. Man has always tried to communicate with others at a distance in order to benefit himself or those of his particular group. We are so used to the idea of "talking" to each other in order to convey ideas and suggestions that we are all inclined to take language for granted. It is most interesting to observe the gradual production of sounds, the forming of words and then sentences during the growth of a young human. At first there is the cry – the hunger cry, the cry due to pain and the various baby noises to express delight. One writer has said that to the baby the world must appear as "one big buzz – a world in which strange shapes minister to the comfort and well-being of the baby to the accompaniment of strange and often weird noises. The baby makes a great step forwards when he can "say" dad-dad or da-da, or some such simple sounds and these at first are used without recognition of the adult meaning attached to the expression of sound. In a way the baby is in the position of primitive man in his helplessness to make sounds capable of conveying a great variety of ideas. In our language we use hundreds of words to express our ideas and to communicate with each other – the wider our reading the longer our vocabulary.

The sign language of the Indians is a Scout language being instinctive and natural, the signs being used being always those which would naturally be used to illustrate an idea. The gestures made in "Sign" talk are the basis of the gestures used in oratory, in dramatic art and in everyday life and are therefore in constant use. Indian Sign talk is twice as fast as ordinary English, 200 Indian signs being equivalent to about 1200 English words. Sign talk can be understood as far as the eye can see. The Sign reader must be mentally alert to talk by means of Sign language, which acts as a wonderful stimulus to the mind and therefore helps to develop clear and accurate thinking both of which claims are made for the use of the Morse or Semaphore codes. Sign language is a language of beauty and imagery, a complete language by means of which any thought can be expressed. Indian Sign language belongs to Scouting, because it is genuine Indian practice, and years ago in the Indian country every Scout had to talk "Sign". Where the spoken language is not possible or desirable it is most useful. The deaf and dumb alphabet is in a way a modified form of Indian Sign language.

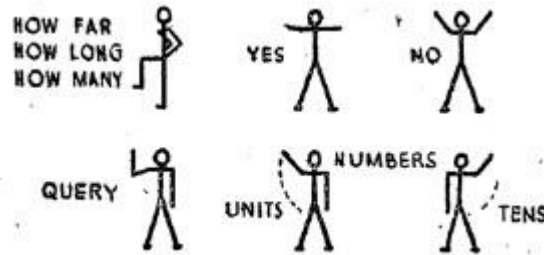
A few suggestions for using "Sign" language are given below:-

1. **Stranger in a Foreign Land.**— A Patrol game. One Scout is sent away from the Patrol to the S.M. who gives him some such instruction as this to convey to the Patrol by signs only: "I want 2 yards of 1-inch rope; a Scout staff; a Patrol axe and a frapping mallet." The Scout chosen then returns to the Patrol and attempts to communicate his message without speaking – it is often quite difficult *not* to speak as speech is in such common use!
2. **Instructions.**— S.M. gives instructions to Scouts by means of signs only, *e.g.* kneel down, come here, blow your nose twice with a handkerchief, go 10 feet away and so on; With a little practice this is quite successful.
3. **Mime.**— "Dumb Charades" are well known – a mime is a more elaborate form of the same thing. Patrol "Dumb Charades" may be tried, each Patrol acting in such a manner as to convey the idea of a certain word or a happening to the rest of the Troop. To make this more interesting a problem could be set on these lines:

Complete Signalling Instructor

"The Patrol is journeying to Cape Town by aeroplane. The aeroplane is compelled to make a landing in a clearing in the African jungle. The landing is carried out successfully, BUT hostile natives are seen to be approaching – what might YOUR Patrol have done under similar circumstances?" A good mime entitled "The Tall Tall Castle" may be purchased from the Scout Shop, 25 Buckingham Palace Road, London, S.W.1, and is very suitable for Scout displays.

4. **Acting Semaphore.**– (Idea by "Gilcraft" in *The Scouter*). A few signals are chosen such as:-



–the rest is done in dumb crambo. "A" wishes to know how far it is to the nearest water; holds up water bottle; drinks; turns bottle upside down and shakes. Query? "B" points direction. "A" how far? etc.

5. **Trades Competition.**– As part of a Patrol competition, make suitable actions to represent a trade or, profession, g. Carpenter – go through motions of planing a piece of wood; Schoolmaster – prepare to administer punishment, etc. Each Patrol writes down a list-obviously some harder ones must also be introduced.

6. **Deaf and Dumb Alphabet.**–



7. **Man with Lost Memory.**– Each Patrol is visited in turn by a "stranger" who has had an accident with the result that he has lost his memory and the power of speech. Each Patrol is allowed to search the "stranger" for clues to his identity, and the stranger is allowed to make several clues by means of signs. The Patrol must attempt to identify the man with a view to getting in touch with his friends. The stranger should have appropriate clues such as a piece of a letter, driving license (imaginary) with part of name torn away, cutting from a newspaper and so on.

8. **Oi! or Ah!**– Let each Patrol see what it can do to make up a scene in which the only expressions are as above. By varying the tone of voice or the pitch many different meanings can be conveyed especially with the help of a few gestures. The scene should really be a simple Patrol "playlet".

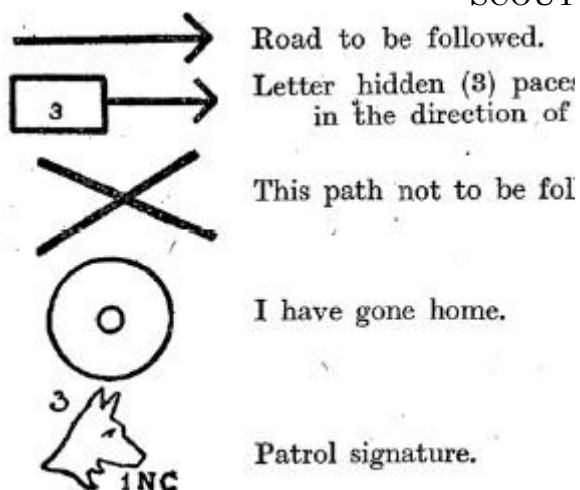
9. **Accident.**— The Patrol has come across an accident whilst hiking over the cliffs. In the distance they can see the Coastguard Station. To get to the Coastguard Station means descending to sea level and then climbing another cliff which would take considerable time and the need for adult assistance is urgent. How could the Patrol attract the attention of the Coastguard and convey to him the necessary information? What exactly would *your* Patrol do under the circumstances?

10. **Sign Letter.**— Each Scout to attempt to write a short letter by using "sign" of some sort, no actual word to be written. Readers of *The Scout* will be familiar with "sign writing" of this sort.

TRACKING.

The Scout Tracking Signs.— Before a boy can become a Scout he must pass the Tenderfoot badge tests. Included in those tests is a knowledge of the Scout tracking signs – very simple ones but nevertheless very useful ones.

SCOUT TRACKING SIGNS.



And ones which can and have been used in everyday life. To follow a trail laid over unknown ground is no easy task and the following of such a trail calls for mental, alertness and sound observation, two of the essentials which Scout training helps to inculcate.

It is desirable to make some secret-mark on each of these signs when they are used in order that the signs may not be confused with Signs made by others (*e.g.* in towns) or in order that "natural" signs may not be taken for the "artificial" ones being laid.



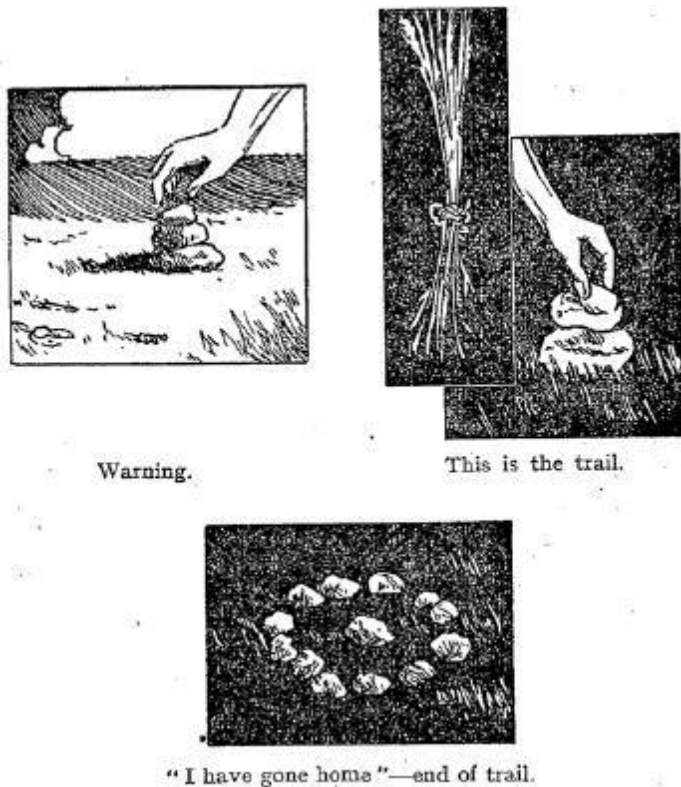
Follow this arrow.



Don't go this way.



Sign chalked on a tree.



These signs can be made in all sorts of ways. They should not be too large or too obvious or they will fail to provide a test of tracking powers. When making the signs be careful *not to disfigure the countryside in any way*, e.g. do NOT use ochre or coloured powders which will leave a stain for weeks. It is not desirable even to use chalk unless circumstances make it essential. Do NOT damage trees by "blazing" a trail – that is unnecessary in this country and may seriously injure the trees. As far as possible make the signs with natural materials without doing *unnecessary* damage to plants. There is no reason why an oak leaf should not be so placed that it appears to be growing on a sycamore tree or why a tuft of grass should not be tied in a knot; but do NOT pull branches off trees or uproot flowering plants in order to make signs.

The illustrations will show you *how* to make signs—there are many other ways, these are just suggestions.

Suggestions for Using the signs required by the Tenderfoot and Second Class badges.

TENDERFOOT SIGNS.

SIGNS.

Signs.— The construction of the principal tracking signs must be taught and the boy must know their meaning. If he is given good diagrams of the signs as patterns he can sketch them very carefully and paint them in black thus making a permanent record for himself.

Signs.— Obtain some needles which will sew with a medium thickness of string. Thread the needle with a piece of white string such as grocers use; roughly sketch in the tracking signs on a piece of dark coloured cartridge paper or thin cardboard and stitch on to the cardboard the design of the tracking signs. If preferred, brown string may be sewed on a white background. This will also make a useful chart for display in the Patrol Corner.

Signs.— The tracking signs may also be constructed with Meccano outfits or similar engineering outfits, or by joining matches together with pins. See that the matches have been used.

Aeroplane Guide Signs.— Take the boys outside and let them form the signs on a large scale with pieces of wood or lumps of stone, etc. Make it a game by stating that everybody is stranded in the Arctic wastes and the only way of communicating with the outside world is by making signs to aeroplanes indicating what is required.

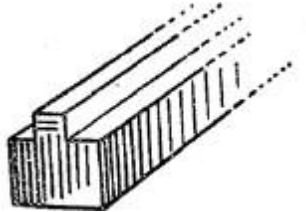
This has been done in the Arctic where a ship was wedged in the ice and signalled to an aeroplane by means of gigantic signs – words written in coal which showed up well against the white background. A short talk might be given on the use of large signs.

Signs.— The ingenious recruit can make a wooden shield at school in the handicraft lesson, permission to do this being readily granted if the object is explained. The signs may then be

Complete Signalling Instructor

carved on the shield or burnt in with some suitable tool, and a small white label attached beneath bearing an explanatory inscription.

Potato cuts.— Cheaper and easier to make than "Lino" cuts. Obtain some large potatoes, wash them and peel them and cut them into regular blocks rectangular in shape. Curve away the potato with a knife so as to leave the design standing out boldly like the lettering on a rubber stamp. For example, the sign, "This road to be followed" will start like this (see illustration).



When the tracking signs have been made, use a paint brush to add the ink or paint to the blocks which may then be used for decorating the Patrol notice board announcements or may be stamped on the Patrol Emblem.

This will prove an attractive occupation to many.

Simple Trail.— Make a simple trail using sticks, chalk, leaves, scratches, or other obvious signs over a fairly easy course.

Snakes and Ladders.— For the Patrol Corner. Instead of "snakes" and "ladders" place the various tracking signs which mean that certain distances and directions may be travelled. "I have gone home" sign can mean a return to the start, etc.

Donkey.— Make sets of cards bearing the Scout signs. Remove all but one of a certain kind and play as for the "Card" game. Patrol Corners.

Examination.— When the new recruit is ready to be examined, having been instructed by his Patrol Leader, he should be shown a series of "tracking cards" which should be made and kept by the Scouter. The signs are used so as to tell a story which the boy should be able to relate to the examiner. As an example, the story which the diagrams represent may be as follows:— A Scout was walking along a street when he saw an arrow (point to arrow on card when explaining to the boys just what is required). What did that Scout do in all probability? (Boy should indicate what happened, *i.e.* he went this way because the sign means . . .) Simple tracking pictures which can be interpreted by words are very easy to invent. The Scouter will find it helpful to have a series of such cards from which he can make a selection for each boy examined.

SPECIAL SIGNALS.

Troop Signals.— A Patrol has its "Patrol Call" and perhaps it's "Patrol Yell". In the same way there are certain recognized Troop signs to be used in order to control and give directions to the Troop as a whole. These signals may be given by means of a whistle or by making Signs with the arms. Some of these signals which are in general use are mentioned below.

One long blast on a whistle.— Silence! Stop whatever you are doing and listen for instructions.

Three short blasts followed by one long blast on a whistle.— Patrol Leaders are wanted. Leaders come h-e-r-e.

Troop call to indicate that the whole Troop is to be given a Troop instruction:—

One short sharp blast followed by, *e.g.* a "roll" on the whistle as though making a wood pigeon call imitation.

This whistle signal is usually followed by a hand signal to indicate what the Troop is to do next, *e.g.*

Sweeping movement of hand across the body — close in, form a semicircle.

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Arms bent at elbows, hands touching forehead – "arrowhead" formation, *i.e.* Patrols arranged in file in a half circle, smallest Scout in the front, of each Patrol grading backwards to the tallest Scout, P.L. standing on the right of his Patrol at the front.

Arms stretched out – Patrols in a straight line, Patrol Leader one pace in front of his Patrol: ,

Arms bent at the elbows, forearms making a right angle with the upper arm – Patrols in horizontal lines one behind the other so as to form a column with plenty of space between the Patrols.

Same, but bent arm held nearer head – Patrols in close column.

Arms outstretched in front of body, hands pointing to ground – Patrols in "Indian" file.

Extra hand signals which may be used are summarized below:-

HAND SIGNALS.

SIGNAL.	To INDICATE.
(a) Arm swung from rear to front below the shoulder	"Advance" or "Forward."
(b) Arm circled above the head	"Retire."
(c) Hand raised in line with the shoulder, elbow bent	"Quick time."
(d) Clenched hand moved up and down between the thigh and shoulder	"Double."
(e) Arm raised at full extent above the head	"Halt."
(f) Body turned in the required direction and arm. extended in line with the shoulder	"Incline."
(g) Circular movement of the extended arm in line with the shoulder in the required direction	"Wheel."
(h) Two or three slight movements of the open hand towards the ground	"Lie down."
(i) Arm at full extent over head and waved a few times slowly from side to side, the hand to be open and to come down as low as the hips on both sides of the body*	"Extend."
(k) Hand placed on top of the head, the elbow to be square to the right or left, according to which hand is used **	"Close."
(l) Arm swung from rear to front above the shoulder	"Reinforce."
(m) Staff held up above, and as if guarding the head	"Enemy in sight in small numbers."
(n) As in (m), but staff raised and lowered frequently	"Enemy in sight in large numbers."
(o) Staff held up at full extent of arm, point uppermost	"No enemy in sight."

* This signal denotes extension from the centre. If the extension is to be made to the right, finish the signal by pointing to the right. If the extension is to be made to the left, finish the signal by pointing to the left.

** This signal denotes "Close on the centre." If it is desired to close on the right, finish the signal by pointing to the right. If the close is to be on the left, point to the left.

NOTE.– All signals should be made with whichever arm will show most clearly what is meant.

SECOND CLASS TRACKING ACTIVITIES.

Chalk Chase.—The Scouts taking part in a "Chalk Chase" are assumed to have a knowledge of the common tracking signs. Two Scouts are picked to go off as runners and they are allowed a 15 minutes start. These two Scouts will make Scout signs with chalk, a sufficient amount of "sign" being left by them to enable the others to follow. At the end of the 15 minutes the main party set off to track down the runners, carefully noting the signs and following their unspoken instructions. The runners should attach a pre-arranged secret sign to each of their signs so that stray arrows and circles left by children may not be used as indicators of direction. The number of the Troop, *e.g.* 13th, may be used. This chase provides a good Saturday afternoon activity.

Special Track.—The S.M. or some senior Scout lays a special trail, placing a definite number of signs and a note is made of the position and type of each sign left. The trackers must make a note of the position and type of the signs which they observe so that their results may be checked with the statement of those who made the trail.

Flag Raid.—There are many forms of "Flag Raid" and the following may be taken as a general scheme. Rockets or thunder flashes or other similar fireworks which can be used for signals, etc., create the correct atmosphere for a night raid which is far more exciting than that which is played by daylight. The Scouts are divided into two sides. One party is given a number of flags to guard. These flags must be placed in reasonably conspicuous places and no member of the defending party must hide within 50 yards of the flags. The attackers must stalk down the defenders and attempt to capture the flags without being "killed". A good method of "killing" is for the two sides either to wear their scarves loosely tucked through the belt (NOT tied to the belt) or to wear special paper tabs which will easily come off when pulled – a "kill" resulting when a scarf or a paper tab is lost. There should be a time limit. This general idea can be adorned and improved in many ways.

Blind Fox.—As a game for the clubroom this is quite good. One Scout represents the "fox" and he stands at one end of the room with his face turned to the wall and counts up to a certain number (he varies each time) and then looks round at the other Scouts who are attempting to start from the opposite end of the room and touch him, without being seen to move, when the "fox" looks around suddenly. This is a test of quietness, skill of balance and alertness. Every time the "fox" turns his face to the wall the Scouts can creep up nearer to him, but if when the "fox" turns round he sees a Scout in the act of moving that Scout must go back and start again.

Jack O' Lantern.—Two Scouts are given an acetylene lamp or a powerful electric torch and are allowed a start of 3 minutes. At the end of that time they must flash the light three times and repeat the flashes at 2 minute intervals. The rest of the Scouts follow up the flashes of light and try to catch the Scouts with the light. This is a game for a very cold and dark night, the Scouts being kept on the move the whole of the time.

Will O' the Wisp.—One member is selected from each Patrol. Flash lamps are required with movable coloured glass in the top. Each P.L. selects a colour, *e.g.* red, green, yellow, white or blue. The representative of each Patrol is given a coloured light but the colour given is not, the colour of his own Patrol. These are given a start of so many minutes after which the others follow up, each Patrol following its own colour of light which it imagines has been stolen by the members of another Patrol.

Observation.—The S.M. should come into the clubroom with certain mistakes in his uniform or general appearance, as for example:- No garter tabs; belt wrong way round, shorts back to front, etc. He should inspect the Troop as usual, making no comments to the effect that anything is the matter with him. See how quickly someone points out that he is incorrectly dressed. It has been tried, and will work very well. The first week the S.M. might very obviously be wrongly attired, but a few weeks later he should have smaller details wrong and see what happens.

Mannequin Parade.— Obtain the services of several Rover Scouts and ask them to arrange a number of mistakes in their uniform and then let them go to each Patrol Corner and spend a minute displaying themselves. At the end of the evening ask each Patrol to write a report on the Rovers pointing out all mistakes. These reports can then be checked by a recital of the faults which must be noted by the Scouter in charge, information being obtained from the Rovers.

Sense Training – Smell.— Send the Troop outside the clubroom for a few minutes. Get them all to blindfold each other. Soak pieces of rag in some of the following substances and place each rag at about nose level in some conspicuous place for a first attempt. One rag per Patrol. Allow each Patrol to smell their rag (a particular odour) before placing the rag in the clubroom. When the rags are in position the Scouts are allowed into the room still blindfolded and the members of each Patrol must track down their particular smell. This is a somewhat difficult test but worth a trial. Suitable substances are:— Paraffin; damp carbide; oil of cloves; oil of lavender; onion juice; Mansion polish or other highly odoriferous substance.

Sense Training – Smell.— Place a number of different substances in a series, of test tubes such as;— Petrol; boot polish; water; paraffin; camphor; vinegar; jam; weak ammonia, etc. The Troop sits in a circle and each Scout is blindfolded. The tubes are passed round one by one and each Scout has a smell. After they have all been passed round, bandages are removed from the eyes and each Scout writes down the names of the liquids or solids which were passed round, and if possible they should be in the correct order (additional points).

Sense Training – Sound.— Pencil and paper for each Scout. All lights out or worked behind a curtain. The S.M. lets fall a number of objects and the Scouts listen carefully and try to tell by the sound which is emitted when the object hits the floor what that object is. The solution is written down at the end, or the light is turned up for a moment. Examples:— A coin; a tin pail; rubber ball; nothing; a pin; an old cup; a sheet of paper and a teaspoon.

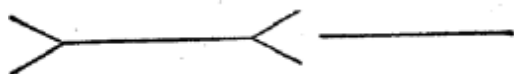
Sense Training – Sound.— This time the noises are varied. Examples:— Saw a piece of wood; a clock ticking; a watch ticking; a nail being knocked in; filling a cup with water; biting an apple; eating a biscuit; walking; crawling and many others. Each Scout must write down what he thinks is happening behind the screen.

Sense Training – Taste.— A series of jars are made up containing different substances of a harmless nature. Scouts are seated in a circle with eyes bandaged. The jars are passed round and each Scout dips in a finger and tastes the contents. After a certain number have been passed round the bandages are removed and each Scout writes down what he has tasted. Examples:— Water; vinegar, Epsom salts; onion juice; sherbet; jam; treacle; butter, etc. It should be stated that the substances are harmless as otherwise it would be bad Scouting for Scouts to taste unknown substances which might be poisonous.

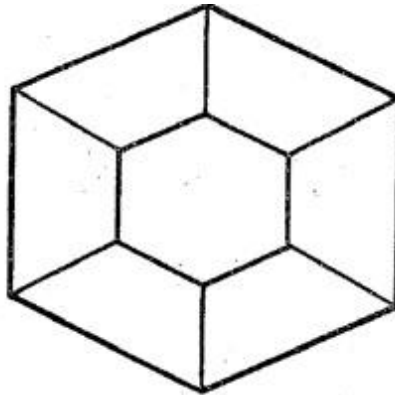
Sense Training – Touch.— A series of bags are made up each containing different articles, *e.g.* beans; rice; stones; money; buttons; cloth; lead shot; paper, etc. The bags are passed round and each Scout is allowed to handle them and he tries to determine what is inside the bag merely by feeling the bag and its contents. After feeling all the bags he writes down a list.

Sense Training – Touch.— Scouts are seated in a circle with hands behind backs. A series of small articles are passed along from hand to hand, *e.g.* farthing; sixpence; half-crown; penny; stud; Tenderfoot badge; etc. Each Scout actually feels the objects and he must make a mental note of each object as it is passed round and must make a list of the objects in the *correct* order, when all the objects have been passed round. As the correct order is essential it is advisable to have not more than six objects for a start.

Sense Training – Sight.— Use some form of optical illusion, *e.g.* which of the following lines is the longer?



What is this? – Box, inlay, hexagon?



Indoor Stalking.– The next best to camp stalking. The S.M. wears rubber shoes. The call of some animal is chosen. One Patrol at a time is blindfolded and the S.M. moves very quietly about the room softly giving the call of the chosen animal. See how long it takes for some member of the Patrol to catch the S.M. See which Patrol succeeds in the shortest time.

Indoor Stalking.– Make a barricade of chairs, tables and anything movable across the clubroom, after a certain number of boys forming one side have been sent out of the room. These must be blindfolded and wear rubber slippers. When the barricade is complete the lights are turned out and the boys allowed to enter the room. The object is to get through or over the barricade without displacing any component part of the barricade, which should be so constructed that the above instructions *can* be carried out.

Indoor Stalking.– A barricade is erected as above. One Scout is provided with a torch and he stands astride one end of the barrier. Lights out. The rest of the Scouts are not blindfolded but must try to pass the obstruction without being heard by the Scout with the torch who at the least sound will direct his torch to the spot, and if he can call out the name of the Scout trapped in his circle of light then that Scout is out of the game. The winner is the first Scout through the barrier without being caught.

Observation Game.– Paper and pencils required. Give an account of the notices which were on the board last Troop night. Points for the best reports.

Concentration.– A factor which is necessary for the tracker. The good old game of "O'Grady" is excellent for this. The Troop lines up. After the word "Go" only the orders prefixed by "O'Grady says," must be obeyed. Example:– "Go. Troop alert!" No Scouts must move or they are out of the game. "O'Grady says, Troop alert!" Everybody must then come to the alert. Those who hesitate are *also* out of the game, etc.

Observation.– A stranger comes to live in (name of a suitable town or village) and wants to know a great deal about (). If he were to ask you these questions what would you reply? Paper and pencils. Example:– 1. What railway stations are there? 2. What are the names of the churches? 3. Who owns the chief shop in the place? 4. Where could I get a doctor quickly? .5. What buses pass through the town, etc. This is a test of everyday observation.

Tin Can Copper.– A favourite West London street game which can be adapted to Troop environment. One Scout is the "copper" and he has a tin with some stones inside and the lid put on. Some other Scout seizes the tin and throws it away as hard as he can. The "copper" rushes after the tin, the rest hide as best as they can. The "copper" must walk backwards to the original place and must not look round till he gets there. Once back in the original position he scans all around and when he sees some Scout and can recognize him he runs back to the base and shaking the tin calls out loudly – "Jimmy, one, two, three!" Jimmy is then out of the game. The others try

to get up to the unguarded tin when the "copper" has gone off to search for them in another direction, and throw it away again, whereupon everybody, whether caught or not, runs away and hides again.

Tracking Pit.— If it is possible to obtain the use of a piece of waste land a tracking pit can be made. The soil should be light in texture (a generous addition of sand will help), well dug and raked over after each track has been made. For a start such simple exercises as walking across the pit, followed by running across and then walking across with a heavy load, make a very good introduction to harder "stories written in the sand". Many really hard tracking problems can be constructed when Scouts become proficient.

Sand Trays.— A fascinating game for the Patrol to try on a Patrol meeting night is to cover the top of a table with "silver sand" which can be purchased from builders merchants quite cheaply. A landscape model of the desert or mountain type can be constructed and Scouts can each try to draw a tracking story in the sand. Many other things can be added to the sand to make the scene more realistic.

Detectives.— Before the Troop meeting attach a number of pieces of damp blotting paper to different objects in the clubroom, *e.g.* the cupboard door, the notice board, the chair, etc. Inform the Troop that clues are required to help solve a murder crime, committed by a notorious criminal who has the audacity to stick blue blotting paper wherever he goes. Has he been in this room? If so, wander round and suggest what things he touched and to which he left his sign attached. No talking, five minutes allowed. At the end of that time each Scout is given paper and pencil and is asked to write down where the clues were placed. Add up the points for each Patrol, and arrange a Patrol order from the results on which you can award 10, 6, 3, 1 points for the Patrol competition.

Observation.— The S.M. if he can find time should examine the vicinity of the clubroom within a radius of, say, 100 yds. If in the country he can collect certain plant specimens which may be growing near the clubroom. If the Headquarters is situated near a shopping centre he can ask the grocer or the butcher to lend him certain advertising devices which they may have had in their windows or conspicuous samples of their wares and so on. The S.M. gives out paper and pencils, and then proceeds to show the articles he has collected to the Troop, stating that each has been collected from within a certain radius from the clubroom. Each Scout writes down a brief description of the place or position from which the article was obtained. This game tests local observation. It is surprising how many Scouts forget what sort of shop is nearest to H.Q.'s unless it is a sweet shop!

Whistle Stalking.— S.M. goes off with his whistle and hides himself away in the long grass or up a tree or in some similar place and at intervals gives blasts on the whistle. The trackers must track down the S.M. by following the sound of the whistle. The S.M. should preferably hide in the long grass and not move so that the stalkers may creep up to him without being seen. If the S.M. can identify the approaching Scout then that Scout must lie still and rank as dead.

Whistle Trail.— A Scout is sent off with a Scout whistle which he is told to blow at intervals of a few minutes. He is given a reasonable start and he may move about in what direction he pleases provided that he blows the whistle at the stated intervals. The Scout sent off should be a capable runner and a Scout who can lead the trackers a good dance. He should try always to keep out of sight so that the trackers must get their bearings entirely by estimating the direction he is taking, by the whistle signals.

Thread Trail.— A suitable piece of waste land is chosen. A senior Scout is given a start of twenty minutes and told to tie pieces of red thread in fairly conspicuous places starting from a definite point. The trackers must search well and endeavour to find the hiding place of the stalked Scout by following the threads. The trail is difficult and should not be too long.

Hidden Scouts.— This forms a good Saturday afternoon Scouting game. The troop is divided into two sides. One side go ahead along an arranged route and hide themselves as best they can. After

10 minutes or so the other party follow and endeavour to spot the hiding places of each Scout as they walk along. No straying from the route is allowed. Each Scout then writes down the hiding place and name of the Scouts he has spotted in hiding. Then the side which have been the stalked become the stalkers and make their attempt. Results are afterwards compared and discussed. This game can be played *en route* for some destination which is going to serve as a base for the afternoon's activities.

Treasure Hunt.— There are many versions of this popular game. It is advisable to make up instructions for each Patrol, all trails leading to the treasure ground. If possible, the routes should be of equal length. One Patrol can be given instructions as follows: "Leave H.Q.'s and take the first turning on the left: follow the route of the 526d bus until you come to the White Horse Hotel. Turn to your right here, and proceed until you come to a railway bridge which you cross and then take the first turning on the right and then the second on the left. The treasure is hidden in the ground (a wooden tent peg with the Troop number and name inscribed upon it) within 100 yards of the old elm tree which stands due North from where you are now standing, assuming that you have just made the last turn." The Patrols should all converge on the same spot and seek for the treasure, points being awarded for the correct following of the trail (P.L. 's must name the streets, etc., along which they pass or into which they turn, etc.), discovery of the treasure and general smartness.

Hare and Hounds.— This game is too well known to merit description here. Choose good hares and make them use conspicuous pieces of rag (brightly coloured) which can quickly be collected by the hounds as they follow the trail and so *no litter is left about the district*.

Lost Patrol Leaders.— The S.M. gives instructions privately to each P.L. and tells him to make for a certain spot laying a good trail as he goes. After sufficient start, each Patrol of Scouts under the Patrol Second set off to follow the trail whose signs have the Patrol secret sign attached to them. When the P.L. has been discovered by his Patrol he will open an envelope containing instructions from the S.M. which the Patrol Second has brought with him. The whole Patrol then obeys these instructions which are in the nature of making for a particular destination. This game gives scope to the Patrol Second to act on his own initiative.

Message Relay.— Preferably played in the open country, but a modified version can be played indoors. Scouts are spaced out at intervals of 200 yards or so. Two opposing sides. The same message is given to the first runner on each side and he runs to the next Scout on his side and repeats by word of mouth the message which he has been given. When the second Scout is sure of the message he runs on to the third and so on. Last man runs to S.M. and repeats the message which will probably be very different from the message which was related to the first Scout. This game helps to train accuracy and commonsense reasoning powers which are valuable for tracking.

Observation.— A Patrol game. The P.L. takes his Scouts to some lane along which passes a certain amount of pedestrian traffic and tells his Scouts to hide at intervals. They remain in hiding for about 10 minutes until the P.L. blows his whistle. The P.L. then asks his Scouts what they have seen passing by. After several shots the boys will be able to give accurate descriptions of, e.g. pedestrians, and suggest what profession they belong to, etc.

Where From?— Paper and pencils required. Scouts are detailed off in pairs to strategic points where traffic can be observed passing by. Each pair of Scouts are asked to make a note of ten motor index numbers and return to the clubroom. They are then asked to find out from a key to motor index numbers (found in many diaries, etc.) the name of the county in which the car is registered. This is a good way of learning geography. See how many counties are represented in the combined lists of all Scouts.

Marks.— If suitable conditions prevail – wet, muddy lanes and roads – take Scouts out and let them follow the track of a bicycle and explain the different movements of the cyclist as indicated by the track. Or let them follow peculiar wheel marks made by passing cars and see if they can

determine the make of tyre used. The tracks of cattle, horses and pedestrians can also be observed.

Man and his Object.— A party game. Two Scouts leave the room and select a subject and object, *e.g.* "Jack Hobbs and his Cricket Bat" or "The Chief Scout and his Shorts". They return to the room and each of the remaining Scouts is allowed in turn to question the "subject" who must answer "Yes" or "No" to all questions. Example:— "Are you alive?" — "Yes." "Were you born in London?" — "Yes" "Are you a Scout?" — "Yes". And so on until the subject has been tracked down.

Then in the same way the object must be identified and two more Scouts go out of the room.

Explorers.— A piece of country is defined by definite boundaries and each Patrol is detailed off to explore and make a report on the area with special reference to, *e.g.* camping possibilities; water; fuel, shelter; houses, and so on. This can form an interesting morning game in camp, points being awarded, for the best analysis of the area.

How Green You Are.— A favourite party game. A Scout is sent out of the room and the rest of the Scouts decide on something which they wish him to do when he enters the room, *e.g.* suck his big toe! The Scout is then invited to enter the room and all start singing "How green you are" to the tune of "Auld Lang Syne," singing loudly when he is "warm," *i.e.* if he touches his foot; singing softly when he is "cold", *i.e.* does something remote from the suggested thing. Eventually he will solve the problem.

Spotting Unusual Things.— A Patrol of Scouts is taken along a length of street and asked to make a note of unusual or out-of-the-ordinary things which he sees, *e.g.* "Ersanmine" for the name of a house; a peculiar statue in a garden; a shuttered house, a humorous type of weather vane and so on. The leader must use his discretion as to what is out-of-the-ordinary, etc.

Stalking.— The Scouts are seated in a circle. One Scout is blindfolded and sits in the middle holding a Scout whistle in his hand. The rest of the Scouts are given a number by the S.M. who gives the numbers to different Scouts by pointing to a particular Scout and saying a number. He then says, "No. 4 is going to stalk you. Listen carefully." Scout No. 4 then very quietly attempts to creep from his place in the circle up to the Scout in the centre and snatch the whistle from him. If the Scout in the centre hears sounds of movement and can point to the direction of that sound then the stalker changes places with the Scout in the middle, and the game is played again. This game encourages silence in outdoor tracking.

Silence Game.— A Scout is blindfolded and is made to stand at one end of the room. The rest of the Troop are arranged as for P. T. at school with the S.M. as instructor. All Scouts must do exactly as does the S.M., but they must do it as quietly as possible, *e.g.* the S.M. quietly carries out the actions of knees full bend and all Scouts must do the same. The Scout whose eyes are bandaged must attempt to tell just what the Troop is doing by listening for tell-tale sounds, such as boots creaking, joints cracking, grunts, etc. As a more difficult game he must point out the offender who makes the sound — just the rough direction.

Deduction.— Each Patrol in turn is allowed to examine an old coat which has been "doctored". The sleeves can contain patches; there may be a smell of tobacco about the coat; a piece of chalk may be in one pocket; there may be a bus ticket in a pocket and so on. Each Patrol is asked to write a report concerning the owner of the jacket, *i.e.* from the above they could say that he probably smoked; might be a schoolmaster; probably poor; has recently travelled on a certain route and so on. Beware of Scouts making rash statements.

Observation.— Arrange around the walls of the clubroom a number of cuttings clipped from the daily press depicting advertisements of well-known commodities. The name of the goods must be removed. Give each Scout paper and pencil and ask him to supply the names of all the adverts which can be numbered. The same idea can be repeated with the photos of popular persons; photos of Scouts when babies; and completion of slogans, *e.g.* " builds bonnie babies."

Reproducing Plans from Memory.— Display to each Patrol a large scale diagram representing a simple plan of some area. Allow the Patrol to study this plan for a few minutes and then, taking

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Puzzles.— Also published from time to time by *The Scout*, consisting of a picture depicting an imaginary scene, there being many things in the scene whose name begins with the same letter, e.g. Scout; staff; slipper; swimmer, etc., Good fun for the Patrol meeting in the winter.

Crossword Puzzles.— These are quite good for Patrol meetings as an aid to concentration and ingenuity, faculties required by the good tracker.

Maze Puzzles.— These can be obtained from any large firm of stationers or educational publishers. With practice the trail can be followed quickly and accurately. Good tests for the eye.

Optical Illusions.— Already mentioned. Demonstrate in an afternoon's walk some of the common optical illusions which are to be seen in everyday surroundings.

Posters.— Most companies are only too willing to send samples of their posters to Scoutmasters. Posters such as those formerly issued by the Empire Marketing Board form a good subject for training a Patrol to pick out quickly the essential construction and detail of the picture which will help in work outdoors when a sign is being looked for.

Kim's Game.— Detail Patrols off to study shop windows or hoardings, allowing them about 15 minutes. When they return to H.Q.'s each Scout writes down his description.

Kim's Game.— The usual method. About 24 small articles are placed on the table and each Scout is allowed to look at them for 1 minute; after which the table is covered and each Scout must write down a list of the things which were on the table.

Kim's Game.— Chalk on the floor twenty squares and in each square place a small object. Troop given 1 minute to observe the exact position of each article, and they retire to Patrol Corners to make a plan of the arrangement of all the objects, *i.e.* they place the name of each object, or draw a rough diagram of that object in the correct square. The S.M. must note position of each article. One square may be left blank to make things harder.

Ribbon Trail.— A field is chosen for this game. Before the game the S.M. goes round and attaches pieces of coloured ribbon to different objects. These may be white, green and red. Each Scout is then told to trot slowly round a certain detailed course with instructions to keep his eyes open for the pieces of ribbon and to make a note of the place and colour. White 1 point, red 2 points, and green 4 points because more difficult to see. Report to be given in at finish.

Secret Signs.— Obtain some book dealing with Indian sign language and let the Patrol Practice writing in this form of language and let them try to converse with each other by signs. The Scout Law can be written in sign language.

Whistle Signals.— A secret code can be invented for Patrol use and possibly for Troop use. One long blast — Silence, alert, wait for next signal. Two short blasts — All right. A succession of long slow blasts — Get farther away, scatter; spread out. A succession of short sharp blasts — Fall In, close in. Three short blasts plus one long — Leaders come here. A succession of long and short blasts alternately — Be ready, look out. This method of signalling can be practiced outside, or the P.L. may make the signals in the clubroom and get his Scout to write down what the signal means in words or to write it down in Morse signs. Useful for giving instructions when tracking.

Secret Codes.— Change letters, one letter representing another. Write down all the letters of the alphabet and then ditto backwards below.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Z	Y	X	W	V	U	T	S	R	Q	P	O	N	M	L	K	J	I	H	G	F	E	D	C	B	A

Thus HXLFG means SCOUT.

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AB	CD	EF
GH	IJ	KL
MN	OP	QR

UV	
ST	WX
YZ	

Thus the words "The Scout" are written:-

>:JL >UUV>

Secret Codes.— Another useful code in which the letters are not used is the bar code. The drawbacks to this is that it makes the message rather long. The vowels a, e, i, o, u are represented by 1, 2, 3, 4, 5. The rest of the letters except B, K, and S are as follows (B, K, S are the bars alone.).

B	1 C
	2 D
	3 F
	4 G
	5 H
	6 J

K	1 L
	2 M
	3 N
	4 P
	5 Q
	6 R

S	1 T
	2 V
	3 W
	4 X
	5 Y
	6 Z

|||-1,|-5,(2)|||;-1,(4),(5),|||-1, THE SCOUT

Secret Code.— Word Code. — Arrange the letters of the alphabet in the form of a square, 5 letters each way.

	S	C	O	U	T
S	A	B	C	D	E
C	F	G	H	I	J
O	K	L	M	N	O
U	P	Q	R	S	T
T	U	V	W	X	Y

Z is missed out but is rarely used. The keyboard chosen must be of five letters, e.g. SCOUT.

Read off your letters, e.g. A will be SS; B-SC, etc.

To make the distinction between the letters clearer use the form of A equals Ss; B-Sc.- Secret then becomes in this code:--UuStSoUoStUt.

Secret Code.— The Scout staff or a pencil can also be used. Wrap a narrow strip of paper round a staff as if making a twist, see that the edge overlaps (a strip from the margin of a newspaper will do). Write the message in large writing, remove from staff or pencil and fold up. The message can only be read if wrapped round a stick of the same diameter approximately.

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Secret Codes.— Perhaps this code is the ideal one, If the P.L. wishes to communicate to his Patrol the following message. "We will meet by the lamp at four o'clock to-day." He writes down the words as follows:—

W	M	T	P	R	K
E	E	H	A	O	T
W	E	E	T	C	O
I	T	L	F	L	D
L	B	A	O	O	A
L	Y	M	U	C	Y

The words have been arranged in vertical columns, so that they read downwards, and all that remains to be done is to arrange the letters so that they form an imaginary sentence horizontally, e.g. Wmt Prkee Ha Otweetco It Lf ld lbaooa Lym Uc Y. Having arranged with the Patrol that the width of the horizontal columns shall be six letters (more or less) any member of the Patrol can then de-code the message by proceeding as above.

Invisible Inks.— Write on paper with a pen which has been dipped in the juice of an onion or a lemon or some acid fruit. The writing is invisible – heat and the writing appears as brown stains. Also salt and water used on dark paper.

Invisible Inks.— A solution of nitro-muriate of cobalt if used as ink turns green when heated but on cooling loses its colour again. A solution of cobalt acetate with a little nitre will turn pink when heated, colourless when cool. Useful for writing secret instructions when tracking.

Code.— Get two sheets of notepaper, a pencil, a mirror and a basin of water (cold). Take one sheet of paper and soak it in the water and lay it on the mirror. Now take the other piece of paper, lay it on top of the wet piece and write down the message. The writing also appears on the wet sheet. When the wet sheet is dried in front of the fire the writing disappears. When it is soaked in water again the writing becomes visible once more.

Indoor Stalking.— For the Patrol meeting individual Scouts are sent out of the room which is then altered, things being strewn across the floor, chairs, etc. The room is then plunged into darkness and the Scout who has been sent out of the room must crawl from one end of the room to the other if possible without touching anything. Each thing touched counts 1 point against him. See which Scout has the least number of points against him.

Kim's Game.— A box of the variety used for sending eggs away in, *i.e.* with small partitions across, is required. Certain objects are placed in each compartment and the Scout is allowed to study them for a minute. The things are then tipped out of the box, mixed up and the Scout is required to fill the box again exactly as it was when he started. Each object must be in the correct compartment.

Concentration.— The game of "Pelmanism" which is played with the ordinary playing cards or the "Happy Families" are two good games useful for training concentration and accurate memory.










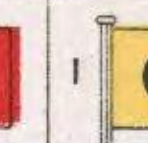



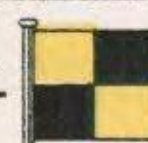








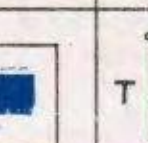
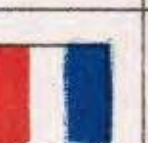
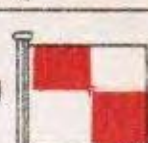


Inspectors.—A Patrol is taken into the clubroom which has been re-arranged purposely. They are allowed 5 minutes to inspect the room and are then asked to leave the room and write a report on the room.

Kim's Game.— Describe four objects with as much detail as possible after 1 minute's observation.



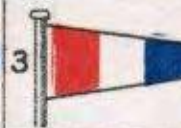

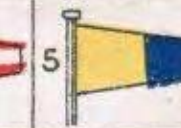




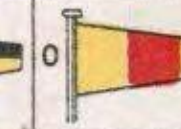
NATIONAL COLOURS



INTERNATIONAL CODE OF SIGNALS

CODE FLAG				AND ANSWERING PENDANT	
A		B		C	
D		E		F	
G		H		I	
J		K		L	
M		N		O	
P		Q		R	
S		T		U	
V		W		X	
Y		Z			

NUMERAL PENDANTS.

1		2		3	
4		5			
6		7		8	
9		0			

SUBSTITUTES.

FIRST SUBSTITUTE		SECOND SUBSTITUTE		THIRD SUBSTITUTE	
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CHAPTER VII.

THE INTERNATIONAL CODE OF SIGNALS.

(A note for Sea Scouts.)

The flags which are those used in the Mercantile Marine, must be committed to memory, and you must be able to recognize them at a distance. This can only be accomplished by first studying the coloured pages and then taking this book with you down to the beach and noting all the flags that you may see flying. There is a flag for each letter of the alphabet and with the exceptions of A and B (which are burgees) they are all square flags.

There are 10 numeral pendants, 3 substitute flags and the answering pendant, making a total of 40 in all.

A bare knowledge of the flags is of very little use unless you know where to find their meaning, as it is very seldom that each flag hoisted represents its particular letter in a word.

In connection with the flags is published a book which gives the meaning of certain combinations of flags, and in this way a lot of time and trouble is saved, as a two, three, or four flag signal may and usually does indicate a whole sentence. Its name is the International Code of Signals, Vol. 1, and it costs 15s. Extracts from it are to be found in *Brown's Signalling* (4s. 0d.), and in *Tait's New Seamanship* (8s. 6d.) both published by Brown, Son & Ferguson, Ltd., Glasgow, and those parts of it which are most likely to be required by Scouts are reproduced below. The extracts are taken from the Code which came into force on January 1st, 1934, which is being practiced now.

Method of Signalling by Flags.— As a general rule, only one hoist should be shown at a time, but in any case each hoist or group of hoists is to be kept flying until it has been answered by the receiving ship. The transmitting ship should always hoist the signal where it can be most easily seen by the receiving ship, that is, in such a position that the flags will blow out clear and be free from smoke.

How to Call.— If no signal letters are hoisted superior to the signal it will be understood as being addressed to all ships within visual signalling distance; in all other cases the signal letters of the ship or ships addressed are to be hoisted superior to the signal.

How to Answer Signals.— All ships to which signals are addressed or which are indicated in signals are to hoist the answering pendant "at the dip" as soon as they see each hoist, *i.e.* about half way up the full extent of the halyards, and "close-up," *i.e.* at the full extent of the halyards, immediately they understand it. It is to be lowered to the dip as soon as the hoist is hauled down in the transmitting ship, being hoisted close up again as soon as the next hoist is understood, and so on until the signal is completed.

How to Complete a Signal.— The transmitting ship is to hoist the answering pendant singly after the last hoist of the signal to indicate that the message is completed. The receiving ship is to answer this in a similar manner to all the other hoists.

How to Act when Signals are not understood.— If the receiving ship cannot clearly distinguish the signal made to her she is to keep the answering pendant at the dip and hoist an appropriate signal to inform the transmitting ship of the reason. Such a signal is found in the General Code. Similarly, if she can distinguish the signal but cannot understand the purport of it she should hoist the appropriate signal VB, meaning "Signal not understood though flags are distinguished."

Hoists of Flags.— Signals may consist of 1, 2, 3, or 4 flags. In certain cases, *i.e.* those relating to Time and Position, they may consist of 5, 6, or 7 flags.

One Flag Signals are those that are *Urgent or of very common use*.

- A I am undergoing a full speed trial.
- B I am taking in or discharging explosives.
- C Yes (Affirmative).
- D Keep clear of me. I am maneuvering with difficulty
- E I am altering my course to starboard.
- F I am disabled. Communicate with me.
- G I require a pilot.
- H I have a pilot on board.
- I I am altering my course to port.
- J I am going to send a message by semaphore.
- K You should stop your vessel instantly.
- L You should stop. I have something important to communicate.
- M I have a doctor on board.
- N No (Negative).
- O Man overboard.
- P In harbour (Blue Peter).– All persons are to repair on board as the vessel is about to proceed to sea. (*Note-To be hoisted at the foremast head.*)
AT SEA– Your lights are out or burning badly.
- Q My vessel is healthy and I request free pratique.
- R The way is off my ship; you may feel your way past me.
- S My engines are going full speed astern.
- T Do not pass ahead of me.
- U You are standing into danger.
- V I require assistance.
- W I require medical assistance.
- X Stop carrying out your intentions and watch for my signals.
- Y I am carrying mails.
- Z To be used to address or call shore stations.

Certain towing signals (*see Appendix D of the Code*) are also made with one flag.

Two-letter Signals or Two-Flag Signals.– Two-letter signals have been given meanings next in importance to the above and consist mostly of distress and maneuvering signals, with the addition of a few general signals of common use. They begin at AC and end at ZN. You should memorize particularly NC, which means "I am in distress and require immediate assistance."

Three-Flag Signals are used for the remaining words, phrases and sentences.

Four-Flag Signals.– Geographical Signals, all of which have Flag A uppermost. Signal letters of ships, signal stations, etc.

Use of Substitutes.– The use of substitutes enables the same signal flag to be repeated one or more times in the same group, while still only carrying one set of flags. A substitute can only repeat a signal flag of the same class as that immediately preceding it; that is, if it follows one or more alphabetical flags it represents one of those flags. Similarly, if it follows one or more numeral pendants it represents one of those pendants. No substitute can ever be used more than once in the same group. The answering pendant, when used as a decimal point, is to be disregarded in determining which substitute to use.

The 1st Substitute always repeats the uppermost signal flag of that class of flags immediately preceding the substitute.

The 2nd Substitute always repeats the second flag, counting from the top, of that class of flags immediately preceding the substitute.

The 3rd Substitute always repeats the third signal flag, counting from the top, of that class of flags immediately preceding the substitute.

Examples.-

JULL	is signalled	Jul 3rd Subs.
BBCB	"	B 1st Subs. C. 2nd Subs.
1000	"	1 0 2nd Subs. 3rd Subs.
BB,T1330	"	B 1st Subs. T. 13 2nd Subs. 0

It is interesting to note that an early code of signals for the use of mariners was published by Captain Marryat in 1817. Since then there have been many others produced in various countries,

The present International Code enables communication to be established between ships of seven different nationalities, namely English, French, German, Italian, Japanese, Norwegian and Spanish and editions of the Code Book are published in all these languages. In each edition, after the General Code, there appears a short section headed "Decode", which enables words and phrases of a foreign language for which there are not equivalents in the language receiving the message to be read in the latter language. The Decode Section, therefore, is not used except in the case of signals between ships of different countries. (*Reproduced from "Boy Scout Tests and How to Pass Them."*)

CHAPTER VIII.

WEATHER LORE.

"Will it be good weather for the week-end camp?" Why not know for yourself?

Weather Signs from the Skies, etc.

Soft looking clouds indicate fine weather.
Hard edged clouds indicate rain.
Jagged clouds indicate a gale.
Swift moving low-lying clouds indicate rain.
Clouds moving apparently against the wind foretell change in the weather.
South-west wind brings rain.
East wind brings dry cool weather.
South wind brings heat.
Wind veering with the sun indicates an improvement in the weather.
Wind backing left-handed against the sun means rain or wind.
A copper sky means heavy rain.
A red dawn means heavy rain in a few hours.
A grey sunrise is a certain indicant of fine weather.
A "mackerel" sunset means dull weather tomorrow.
A red sunset means good weather tomorrow.
A yellow sunset means wind tomorrow.
A pale yellow sunset means rain, possibly through the night.
A rainbow in the morning means more rain to follow.
Full moon rising clear means fine weather.
If the full moon rises pale expect rain.
A halo close to the moon means unsettled weather.
A red moon indicates wind.
A heavy dew in the morning means that the day will be hot.
If you can see a longer distance than usual in the morning expect rain within 12 hours.
Usual clearness and when objects seem very near means a breaking up soon of fine weather.

Weather Signs from Animals, Birds, etc.

Cattle caper about before rain.
Dogs sniff the air before a change of weather.
Grazing horses shelter for a shower but go on eating if the rain is to be prolonged.
All birds fly lower when rain is coming.
Swallows flying high indicate fine weather; flying low they indicate rain.
Peacocks scream before rain.
Crows fly up from their nests and circle round before.
The more noise they make the greater the coming storm.
Sparrows become excited and chirp continuously before a rain storm.
Perching birds perch on lower branches before a storm.
Cormorant at the mouth of a river foretell a heavy storm from the Sea.
Bats flying late means good day tomorrow.

Beetles fly before fine weather.

No bees are visible when a storm is coming.

Fish are very sensitive to weather changes, particularly thunder.

When they dart about a great deal it indicates a change, probably rain.

Cobwebs in the morning covered with dewdrops mean hot weather coming or continuing.

Smoke in the morning sinks before rain.

If it goes straight up it will be a fine day.

Tobacco and salt become moist before rain.

CHAPTER IX.

MAP SIGNS USED BY SCOUTS.



CONVENTIONAL SIGNS AND LETTERING USED IN FIELD SKETCHING.

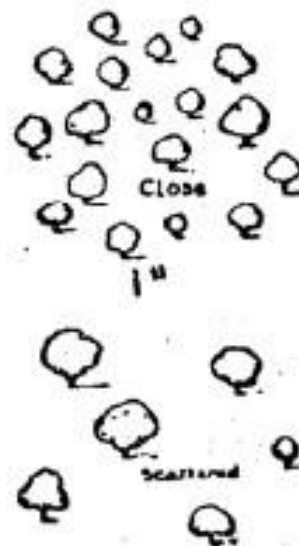
Conventional Signs, etc.


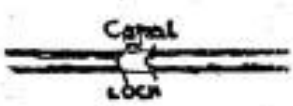
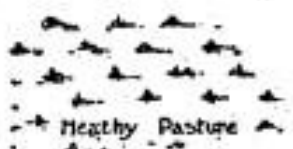
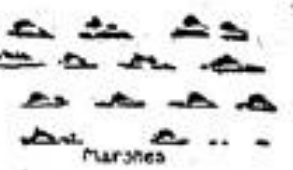




ORDNANCE MAPS.



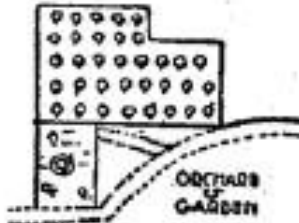

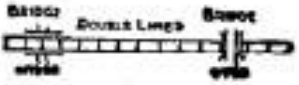


The following symbols are those used on the Ordnance Maps:-


<i>Meaning.</i>	<i>Sign.</i>	
ROAD 1st Class		Fenced. Unfenced
Main Road from town to town, 14 feet of metalling - - - -	=====	..... .....
ROAD 2nd Class		
Country Road from village to village under 14 feet of metalling	=====	..... .....
ROAD 3rd Class		
Same as 2nd Class, but in bad repair - - - -	=====	..... .....
ROAD 4th Class		
Unmetalled cart tracks - - - -	=====	..... .....
FOOTPATHS and BRIDLE PATHS -	-----	
COUNTY BOUNDARIES - - - -	-----	
PARISH BOUNDARIES - - - -	-----	
CHURCHES on 1-inch Maps - -	Same as in Military Maps.	

TREES (Deciduous)
Shed their leaves in the Autumn - . . .



Meaning.	Sign.
TREES (Coniferous) Good cover both summer and winter - - - -	
CANAL - - - - -	
UNCULTIVATED GROUND - - - -	
UNCULTIVATED GROUND - - - -	
UNCULTIVATED GROUND - - - -	
UNCULTIVATED GROUND - - - -	
RIVERS AND STREAM - - - -	
DIRECTION OF FLOW OF STREAM - -	
WELL - - - - -	Wo.

<i>Meaning.</i>	<i>Sign.</i>
QUARRY - - - - -	
GRAVEL OR SAND PIT - - - - -	
ORCHARD AND GARDEN - - - - -	
RAILWAYS (1-inch Maps) - - - - -	
RAILWAYS (6-inch Map) - - - - -	
PARKS AND ORNAMENTAL GROUNDS - - - - -	
TRIGONOMETRICAL POINT (levels shown here) - - - - -	

	<i>Meaning</i>	<i>Sign.</i>
CONTOURS	- - - - -	
BENCH MARKS (levels)	- - -	BM
LETTER BOX	- - - - -	LB
POST OFFICE, at Village	- - -	P
TELEGRAPH and POST OFFICE, at Village	- - - - -	T
FOOT BRIDGE	- - - - -	FB
FOOT PATH	- - - - -	FP
MILE STONE	- - - - -	MS
MILE POST	- - - - -	MP
STATION	- - - - -	Sta

See "SURVEYING AND MAPPING SIMPLIFIED". By KENNETH C. SPARROW. 2/- (per post 2/2). An excellent treatise by a Scouter well qualified to teach on this subject. Published by Brown, Son & Ferguson, Ltd., 52-58 Darnley Street, Glasgow, S.1.

SCOUT MESSENGERS.

"A Scout's duty is to be useful and to help others."

In peace time there is no lack of opportunity to make this Scout Law practical but in wartime with the existence of a Home Front there is added opportunity. This fact has been recognized by the institution of a Civil Defence Badge. The requirements of this badge are as follows – Must have the permission of his parent or guardian given on the Civil Defence badge form and must:-

1. Be able to carry verbal messages and to write them down correctly, and to report either verbally or in writing on any important occurrence which he has witnessed. Be able to use the telephone competently, and understand the instructions contained in the Telephone Directory.
2. Have a special knowledge of the locality in which he is likely to serve, with particular reference to the form of service, e.g., A.R.P. Stations, Casualty Clearing Stations, Gasproof Shelters, Evacuation and other Rallying Posts, Wardens and Observers Posts, alternative forms of Communications.
3. Have a practical knowledge of the fitting and care of civilian gas masks.
4. Know the dangers of panic in the case of an emergency, and how to preserve discipline and good order among nervous people, and particularly children.
5. Be enrolled by his Local Scout Authorities as willing to undertake some definite National Service; either under Scout Authority or under some recognized Public Authority when he is eligible to do so.

Quite obviously a Scout will not expect to send a message in semaphore sign standing in the open street at the height of a blitz – if on duty he may however be asked to make communication possible between one duty post and another. On the other hand he may be forced to act on his own initiative in order to communicate valuable information – it is here that general Scout training comes in. He may be required to telephone a message, to carry a verbal message, to carry a note by hand or by bicycle or by some other method under extremely difficult circumstances.

If the message is a written one then nothing helpful can be stated here as to its delivery for that would depend entirely on the circumstances existing at the time – it need only be said that such a message should be placed about the person in such a way that there is little risk of its being lost. If a Scout is called upon to *write* a message or report then attention must be given to the following suggestions:-

1. Most schoolboys carry but *all* Scouts should carry a small pencil and a *small* pad of paper e.g. a diary, as part of Scout uniform – they come in useful on all sorts of occasions.
2. It must be possible for the receiver of the message *to read* what has been recorded – it is therefore probably better to *print* the message rather than to write.
3. Start the message by stating *to whom it is sent*, the date and time of sending the message and state the name, rank etc., of the *sender*. *Be brief, be clear, be accurate*, when writing a message and make sure that its sense is understood by questioning the messenger as to its meaning. If you are the *messenger* taking somebody else's message *be sure you understand* the message (unless it is secret) in order that that you may help by supplying additional information if required. *Be certain of your destination* and ask for full directions.

If a Scout is called upon to carry a *verbal* message or to dictate a verbal message for someone else to carry, then the following points must be kept in mind.

1. A verbal message is risky unless *concise* – it should only be used if a written message is impossible if speed is of the utmost importance.
2. The messenger must be able to repeat the message to the sender without hesitation and must be able to explain in his own words in case the exact wording is forgotten en route.

3. If you are the messenger then you must question the sender on any point which to you is not clear. You must obtain *clear directions* concerning your destination.

In order to be able to dictate or write a report concerning some incident it is important to be a good *observer*. A trained observer will see what other people miss – look in *Scouting for Boys* for some examples which our Founder recorded. Train yourself to be an observer as part of your Patrol and Troop Training – every week in certain of the weekly papers you will see what are termed “Photocrimes” imagine you are the detective and write your report and comment before looking at the solution. Practice is vital and so all sorts of incidents should be staged indoors and out of doors in order to get practice. These suggestions will help but *practice* will make you into a good observer and reporter. Ask your Scoutmaster for observation tests as part of the Troop meeting or ask for practice in sending and carrying messages of all types. It is only by constant practice that success is assured.