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CHAPTER 1
INTRODUCTION

1–1. Purpose and Scope
The purpose of this manual is to help students learn audible International Morse Code (IMC). It is written in two parts.

a. Part I, Information for the Student, explains the method of learning IMC by tape-recorded lessons. When the student has learned the code, additional recordings are used to increase the speed of code recognition and to teach code sending.

b. Part II, Information for the Instructor, will help him implement the IMC program.

1–2. Objectives
The objectives of this manual are—

a. To explain the code-voice method of teaching IMC.

b. To explain the procedure for acquiring a code reception ability of 15 groups per minute (gpm).

c. To explain how to adjust the telegraph key and send code.

d. To teach military lettering and the phonetic alphabet.

1–3. Comments on Publication
You are encouraged to submit recommended changes or comments to improve this manual. Make sure you key your comments to the specific page, paragraph, and line of the text in which the change is recommended. Give reasons for your comments to make sure they are understood and evaluated properly. Forward your comments directly to the Commanding General, U.S. Army Signal Center and School, ATTN: SIGDTL–3, Fort Monmouth, N.J. 07703.

1–4. References
Refer to appendix A for related publications and training aids.

1–5. Radio Operator

a. There is a continuing military need for men who can receive IMC. Only the human code operator can hear and correctly translate the weak and wavering signal received from a distant operator on a frequency jammed by atmospherics or other signals. Radiotelegraphy, using IMC, provides the most reliable means of communication over long distances or under adverse conditions.

b. As a radio operator, you will be trained in radiotelegraphy and other communication procedures. Training in radiotelegraph procedures will be introduced as your code speed progresses. When you have reached a qualifying speed, you will be trained to operate in a simulated radio network to become familiar with all phases of station practice. You will also be taught how to install and operate various types of radio sets as well as the necessary electronic fundamentals to understand how radio sets work.
PART ONE
INFORMATION FOR THE STUDENT

CHAPTER 2
CODE INSTRUCTION

2-1. General
When someone speaks of learning a new language, we usually visualize months of pronunciation practice and the building of a vocabulary of at least a thousand words. In the International Morse Code language, you only have to build a vocabulary of 26 letters and 10 numbers to have an entire method of communication available to you.

2-2. Code Language

a. The International Morse Code is a unique language that will enable you to get the message through when other means of communication fail. It is a language that consists of short and long sounds that can penetrate interference with greater clarity than spoken words.

b. The sounds in code are expressed as dits and dahs; a short sound is dit, and a long sound is dah. Combination of dits and dahs are used to form the 26 letters of the alphabet and the 10 numbers. When listening to combinations of dits and dahs, you must hear the particular character as a whole sound with a distinct rhythm. The code phonic sound of each letter of the alphabet and each number is shown in figure 2-1. Notice that a dit is contracted to d (the t is lost in the d of the syllable that follows) except when a dit forms the final syllable of a character. For example, the letter L expressed phonically is d dah d dit.

2-3. Military Lettering

a. To copy code quickly and accurately, use the military method of printing letters and numbers as shown in figure 2-2. Notice that this figure also indicates the phonetic name for each letter of the alphabet and the pronunciation of the names and numbers.

b. Observe the following rules in military lettering. These rules are illustrated in figure 2-2.

(1) Make U's with square corners to prevent them from looking like V's.

(2) Place a short line through Z to prevent confusion with the numbers 2 or 7.

(3) Place a slanted stroke through the number 0 (zero) to distinguish it from the letter O.

(4) Underscore the number 1 to avoid confusion with the letter I.

(5) Make the letter E with two strokes, not three or four. This saves time.

(6) Print the number 5 carefully to prevent confusion with the letter S.

(7) When you use ruled paper or message blanks, print slightly above the line (fig. 2-3). If the horizontal base stroke is made on the ruling on the paper, the letter U might be confused with the number 11, or the letter I with the number 1, or F with E.

c. When you do not have to struggle with the problem of printing, you can concentrate better on your code reception. The faster you can print, the easier it will be for you to copy code. But remember, your printing must be legible and neat.
### Phonic Sound of International Morse Code

<table>
<thead>
<tr>
<th>LETTER</th>
<th>PHONIC SOUND</th>
<th>LETTER</th>
<th>PHONIC SOUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>di DAH</td>
<td>N</td>
<td>DAH dit</td>
</tr>
<tr>
<td>B</td>
<td>DAH di di dit</td>
<td>O</td>
<td>DAH DAH DAH</td>
</tr>
<tr>
<td>C</td>
<td>DAH di DAH dit</td>
<td>P</td>
<td>di DAH DAH</td>
</tr>
<tr>
<td>D</td>
<td>DAH di dit</td>
<td>Q</td>
<td>DAH DAH di DAH</td>
</tr>
<tr>
<td>E</td>
<td>dit</td>
<td>R</td>
<td>di DAH dit</td>
</tr>
<tr>
<td>F</td>
<td>di di DAH dit</td>
<td>S</td>
<td>di di dit</td>
</tr>
<tr>
<td>G</td>
<td>DAH DAH dit</td>
<td>T</td>
<td>DAH</td>
</tr>
<tr>
<td>H</td>
<td>di di di dit</td>
<td>U</td>
<td>di di DAH</td>
</tr>
<tr>
<td>I</td>
<td>di dit</td>
<td>V</td>
<td>di di di DAH</td>
</tr>
<tr>
<td>J</td>
<td>DAH DAH DAH</td>
<td>W</td>
<td>di DAH DAH</td>
</tr>
<tr>
<td>K</td>
<td>DAH di DAH</td>
<td>X</td>
<td>DAH di di DAH</td>
</tr>
<tr>
<td>L</td>
<td>di DAH di dit</td>
<td>Y</td>
<td>DAH di DAH DAH</td>
</tr>
<tr>
<td>M</td>
<td>DAH DAH</td>
<td>Z</td>
<td>DAH DAH di dit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>PHONIC SOUND</th>
<th>NUMBER</th>
<th>PHONIC SOUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>di DAH DAH DAH DAH</td>
<td>6</td>
<td>DAH di di dit</td>
</tr>
<tr>
<td>2</td>
<td>di di DAH DAH DAH</td>
<td>7</td>
<td>DAH DAH di dit</td>
</tr>
<tr>
<td>3</td>
<td>di di DAH DAH DAH</td>
<td>8</td>
<td>DAH DAH DAH di dit</td>
</tr>
<tr>
<td>4</td>
<td>di di di di DAH</td>
<td>9</td>
<td>DAH DAH DAH DAH dit</td>
</tr>
<tr>
<td>5</td>
<td>di di di di dit</td>
<td>Ø</td>
<td>DAH DAH DAH DAH</td>
</tr>
</tbody>
</table>

#### 2-4. Learning the Code Characters

* a. The 36 code characters will be presented to you in 4 tape-recorded lessons. Each lesson will teach you nine code characters in several recorded versions. The different versions are designed to make the instruction as interesting as possible. Additional series of recorded lessons provide even greater variety.

* b. In each of the tape-recorded lessons, you will first be introduced to each code character and then be given basic code practice in each character. The code characters are first introduced by their phonetic names. This is followed by a vocal imitation of the code sound and then by the code signal as you will hear it on the radio. During actual practice you will hear a code signal or a group of signals; then a voice will call back the signal by its phonetic name.

This is the code-voice method which has proved to be the most effective method for teaching IMC.

#### 2-5. Code Practice Sheet

* a. The code practice sheet (fig. 2-4) is designed to make recording code groups easy for you. It lets you practice printing in groups of five characters (the most commonly used code group) and provides a continuous record of your progress.

* b. When using the code practice sheet, follow the instructions listed below and illustrated in figure 2-4. The numbered arrows in figure 2-4 correspond to the subparagraph numbers below.

(1) Fill in the heading on each sheet before the code practice begins.
(2) As you hear each code signal, print the character it represents in the bottom row of squares. Start at the first block.

(3) If you have recorded any characters incorrectly, print the correction in the top square above the error on callback.

(4) Leave the top square blank if the character in the bottom square is correct.

(5) If you do not know the code character, leave the space blank. Print the correct character in the top square when it is identified later. By leaving the space blank and listening for the next character, you avoid pondering too long over one particular signal, which might cause you to miss the next two or three characters.

c. On the back of the code practice sheet there is a place for plain language exercise and a section you will use for progress checks.

2–6. Code Standards

a. To standardize IMC speeds, the five-letter word PARIS is used to establish a nominal speed in groups per minute (gpm) at all speed levels. For example, a speed of 20 groups per minute is established by setting tape equipment or regulating hand-sent transmission to a speed that will send the work PARIS exactly 20 times in 1 minute. The actual number of groups transmitted per minute depends on the frequency appearance of code characters and on the timing standard used.

(1) Some instructional tapes use the CODEZ standard. The word CODEZ is a typical five-letter code group. This standard was originally used to time IMC transmissions consisting of five-character code groups containing letters of the alphabet appearing at equal frequency. The actual number of groups transmitted in 1 minute is the same as the nominal speed of transmission.

(2) The word PARIS was used originally to time clear text or plain language transmissions. This standard is used to determine the number of five-letter plain language words transmitted per minute.

(3) A change in timing standard or in frequency appearance of code characters will change the actual speed of transmission accordingly.
(4) When measuring the IMC receiving or sending ability of students or operators, consider the content of the IMC material as well as to the actual speed of transmission in words or groups per minute.

(5) Most IMC training material consists of both letter and number code groups. When using material weighted to include three alphabets to ten numbers, the relationship between the PARIS (nominal) speed and CODEZ (actual) speed in groups per minute is as follows:

<table>
<thead>
<tr>
<th>PARIS (gpm)</th>
<th>CODEZ (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>6.43</td>
</tr>
<tr>
<td>10</td>
<td>8.82</td>
</tr>
<tr>
<td>13</td>
<td>10.94</td>
</tr>
<tr>
<td>15</td>
<td>12.59</td>
</tr>
</tbody>
</table>

b. At a speed of 20 gpm the signal is heard as one sound unit and not as separate dits and dahs. The elements of the code characters have this relationship:

1. The dit is the unit of length.
2. The dah is equal to 3 dits.
3. The space between the dits and dahs within the character is equal to 1 dit.
4. The space between characters is equal to 3 dits.
5. The space between groups is equal to 7 dits.

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4. The space between characters is equal to 3 dits.
5. The space between groups is equal to 7 dits.

c. Basic code lessons are presented at 5 gpm; however, each character is sent at a rate of 20 gpm (tone speed) with the space between characters and groups of characters increased to result in a lower speed. As your skill in copying code increases, the space between characters will be decreased for each speed level.

2-7. Receiving Practice

When you learn the 36 code characters and pass the 5-gpm code test, the next step will be
to increase your code reception speed. This is accomplished by the tape-recorded 7-gpm through 18-gpm receiving practice program. The progressively faster code speeds in each lesson in appendix D provide prompt reinforcement of your response to the code signals. You will also be able to determine your exact code receiving speed as you progress and note improvements by checking the highest gpm you have copied correctly.
CHAPTER 3
SENDING CODE

Section I. USING HAND KEY

3-1. General
No doubt you are anxious to start sending code. Before sending, however, you should be able to receive all letters and numbers at 5 gpm. Approximately one third of the code practice time will be spent transmitting, however, the time may vary according to your ability to develop a good sending jist. You must keep in mind the importance of good sending as well as accurate receiving so that you will become the best possible radio operator.

3-2. Hand Key Adjustment

a. Before you attempt to use the hand key, you must learn the function of each of its parts and be able to adjust it properly. Figure 3-1 is a detailed drawing of a hand key indicating the parts referred to below.

b. Mounted on each side of the key are the lateral blocks, which house the trunnion screws. A locknut on each trunnion screw is used to secure the trunnion screws in place once the correct adjustment is made. The key lever extends along the main axis of the key and is held in place by the trunnion screws. At the far end of the key lever is the space adjusting screw. Its purpose is to adjust the space between the contacts. The key button, made of insulating material, screws into the key lever. A spring tension screw provides a means of setting the spring tension for the desired amount of upward movement (lift) of the key lever. Notice that all screw adjustments are secured by locknuts. The circuit to be keyed is connected to the hand key by binding posts.

c. To adjust the hand key properly follow the instructions described below.

(1) Loosen the locknut on the space adjusting screw and turn the screw counterclockwise until there is approximately ¼-inch of space between the contacts.

(2) Loosen the locknut on the spring tension screw and turn the screw counterclockwise until all spring tension is released.

(3) Loosen the locknut on each trunnion screw. Adjust the two trunnion screws until the contacts are aligned. The contact on the key lever should be directly above the contact mounted on the key base. Tighten both trunnion screws simultaneously until the key lever remains up or in an open contact position. Loosen each trunnion screw slightly until the key lever falls freely. Grasp the trunnion screws firmly with one hand to prevent them from turning and tighten the locknuts with the other hand.

(4) Fold a sheet of ordinary paper twice (four thicknesses) and place this paper between the two contacts. Tighten the space adjusting screw until the contacts begin to exert pressure as you move the paper. Grasp the space adjusting screw with one hand and tighten the locknut with the other hand. Remove the paper. The space between the contacts should be approximately 1/32 of an inch. This setting applies to all keys. It is not a matter of individual preference.

(5) Turn the spring tension screw clockwise until the spring begins to exert pressure and raises the key lever. Turn the spring tension screw one and one-half turns clockwise. Tighten the locknut. A pencil mark on the spring tension screw will help you to measure the amount of turn. The amount of spring tension required depends on you. However, it
should never be more than the minimum amount necessary to form clear and distinct IMC characters.

d. Improper adjustment of the hand key can result in one or more of the following conditions:

(1) **Too much spring tension** forces the key lever up before the elements are completely formed, causing short dits and dahs. In addition, you will be required to expend more effort while sending and will become tired after a short period of time.

(2) **Not enough spring tension** causes the elements of the code characters to run together or the space between elements to be irregular.

(3) **Too much space between the contacts** has the same effect on sending as too much spring tension. **Too little space** between the contacts has an effect similar to weak spring tension.

(4) **Trunnion screws that are too tight** cause the key lever to bind. **Trunnion screws that are too loose** might keep the contacts from meeting in proper alignment.

(5) **Dirty contacts** cause scratchy or intermittent keying. Keep the contacts clean at all times. Contacts may be cleaned by sliding paper between them while exerting slight pressure on the key button.

(6) **Locknuts that have not been tightened** cause the key to get out of adjustment while sending. Insure that all locknuts are secure after adjusting the trunnion, space adjusting, and spring tension screws.

3-3. Hand Position at Key

a. Take a natural and comfortable sitting position at the key. Sit erect with your body parallel to the table and your feet flat on the floor, one slightly ahead of the other. Place
your arm on the table at a comfortable angle with your fingers curved naturally above the key button.

b. Place your first and second fingers on the top of the key button (fig. 3-2) with the tips slightly overlapping the back edge so that your first finger is to the left of the key lever and your second finger is to the right. Your third and fourth fingers should curve naturally under the palm of your hand.

c. Place your thumb along the edge of the key button. It will act as a pivot for your wrist.

d. Press down lightly on the key, using a straight downward motion of your forearm for each element of each character. Your wrist should be 1-inch to 1½-inches above the table top and act as a hinge.

Note. This is one technique. The other is to press down lightly on the key while moving your forearm upward to form each element of each code character.

---

**3-4. Sending Practice**

a. When you are in a comfortable position at the key, you can start sending a series of dits. Do not try to send the dits rapidly; try to develop a relaxed hand that will enable you to send smoothly. The dits should be evenly spaced, and each should be the same duration. Be sure to put wrist and forearm movement into each dit. If you emphasize the wrist motion your timing will be more accurate and your hand and arm muscles will be more relaxed. Check yourself by sending a series of E I S H 5 in random order.

b. After you have sent a number of dit characters, you can start sending dahs. Remember that the wrist and forearm movement will help to develop you timing. Practice dah characters T M O 0 in any order.

c. When you have completed the dit and dah exercise, you can combine dits and dahs in the simple characters and then in the longer characters and numbers. The relationship that exists between the elements of the code characters is—

1. The dit is the unit of length.
2. The dah is equal to three dits.
3. The space between the dits and dahs within the character is equal to one dit.
4. The space between characters and groups of characters changes as code speed increases.

d. Do not become anxious about increasing your speed. If you concentrate on clarity and accuracy, your progress will be satisfactory. A good practice to follow is not to send faster than you can receive. The exercises in appendix E include a majority of the more difficult characters for additional sending practice. Remember the wrist and forearm movement for each dit and each dah.

---

**3-5. Testing**

a. You will find sending tests are less demanding than receiving tests. During your
sending practice you will be able to record your sending or have someone monitor it so you can check your timing and character formation.

b. Prepare for a sending test by taking your place at the sending key and making any necessary adjustments to it. Send a few characters before the test so that you can get the feel of the key and also can relax.

c. It is especially important to realize that sending speed must be achieved gradually. Through systematic sending practice your speed will increase as your timing improves.

3-6. Method of Correcting Errors

If you make an error during the sending test, you must know how to correct it. Use the procedures in the following example to correct your errors.

Example:
Here is the series you are to send:

<table>
<thead>
<tr>
<th>Group</th>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KRGBV</td>
</tr>
<tr>
<td>2</td>
<td>PLKED</td>
</tr>
<tr>
<td>3</td>
<td>QZXSW</td>
</tr>
<tr>
<td>4</td>
<td>RGSMI</td>
</tr>
<tr>
<td>5</td>
<td>PJAXC</td>
</tr>
<tr>
<td>6</td>
<td>FKS RD</td>
</tr>
</tbody>
</table>

Suppose in group 6 you make a mistake in the third letter and you send an “H” instead of an “S”. (See below.)

<table>
<thead>
<tr>
<th>Group</th>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KRGBV</td>
</tr>
<tr>
<td>2</td>
<td>PLKED</td>
</tr>
<tr>
<td>3</td>
<td>QZXSW</td>
</tr>
<tr>
<td>4</td>
<td>RGSMI</td>
</tr>
<tr>
<td>5</td>
<td>PJAXC</td>
</tr>
<tr>
<td>6</td>
<td>FKH</td>
</tr>
</tbody>
</table>

To correct your mistake, send a series of 8 E’s (EEEEEEEE) immediately after the error, and then repeat the preceding group (group 5 in this example). Next send group 6 correctly and continue with your transmission. Your transmission will look like this.

KRGBV PLKED QZXSW RGSMI PJAXC FKH EEEEEEEE PJAXC FKS RD

When copying back your tape draw a line through the group with the error. The transmission should read as shown below:

KRGBV PLKED QZXSW RGSMI PJAXC FKH FKS RD

3-7. Grading

To qualify at a given speed you must send continuously for 3 minutes, then receive and record your own transmission. You should be able to copy at least 2 consecutive minutes out of 3. At the conclusion of a test, your instructor will inform you if you passed or failed the sending requirement. If you pass the test, you can increase your sending speed to the next test level. If you failed, your instructor will assign remedial exercises to correct your sending or timing mistakes.

Section II. USING THE SEMIAUTOMATIC AND AUTOMATIC KEYS

3-7. General

A semiautomatic (mechanical) or automatic (electronic) key may be used when code has to be sent for long periods of time. The semiautomatic and automatic keys are designed to make code sending easier rather than faster. When you use either of these keys, the hand and wrist motion is horizontal rather than vertical. Perfect control is far more important than speed. You must be especially careful to send dits accurately, because careless sending will not be understood.

3-8. Semiautomatic Key

To send code with the semiautomatic key (fig. 3–3), move the knob to the left for dahs and move the dit paddle to the right for dits. When the dit paddle is moved to the right it causes the vibrating reed to make and break the dit contact. The number of dits sent is determined by the length of time the dit paddle is held to the right.

3-9. Adjusting Semiautomatic Key

a. Examine the key for mechanical and electrical defects in the following manner:
(1) Make certain that both dit contacts and dah contacts are clean and aligned.

(2) Be sure that the level pivoting screw is loose enough to permit the lever to move freely.

(3) Be sure that all supporting parts are secure.

(4) Inspect the cord and plug for broken insulation or loose connections.

b. Follow the instructions below for adjusting the semiautomatic key.

(1) Place the key (fig. 3-3) on a level surface.

(2) Loosen the locknut on the back stop screw and adjust the screw until the reed lightly touches the deadener. Tighten the locknut.

(3) Loosen the locknut on the front stop screw. Adjust the screw until the separation between it and the reed is approximately 0.015 inch. Insert ten pages of this manual between the screw and lever to serve as a convenient gage. A greater separation is permissible if you prefer more lever movement. Tighten the locknut.

(4) Press the dit paddle to the right. Hold the lever in this position and stop the vibration of the reed. Adjust the dit contact adjusting screw until the dit contacts just
meet. This important adjustment determines whether the dits will be too heavy or too light. Make the adjustment without flexing the contact spring. Tighten the locknut on the dit contact adjusting screw without disturbing the adjustment.

(5) If the dits are too fast, move the weights located on the reed in the direction of the deadener. If the dits are too slow, move the weights in the opposite direction.

(6) Adjust the dit retractive spring and the dah tension spring for ease of operation.

(7) The key is adjusted correctly when a series of dits and the space between the dits are of equal duration.

c. No further adjustment should be required unless you are certain the code elements are not being formed properly. If any of the locknuts become loose, readjust the key if necessary.

d. Repositioning the weights to change the speed of the dits or to change the tension of the dit retractive spring and dah tension spring will not effect the adjustment of the semiautomatic key. Make these changes to suit your requirements.

Figure 3-4. Automatic (electronic) key.
3–10. **Automatic Key**

The automatic key (fig. 3–4) forms self-completing dits and dahs with a constant *dit-to-space-to-dah* ratio. This is accomplished electronically rather than mechanically as in the semiautomatic key. The automatic key sends dahs when the key is moved to the left and dits when it is moved to the right. Only simple adjustments of the *speed* (control) knob and the *volume* (control) knob are necessary before sending code.
CHAPTER 4

STUDENT PROGRESS

4-1. General

a. No other student will progress in quite the same way as you do. Your success in receiving and sending code is an individual accomplishment that depends on your concentration, patience, and self-confidence. Ideally, a multi-channel code system will provide a large variety of practice lessons that will permit you to progress at your own speed.

b. Think subconsciously in code language when you read newspapers, letters, signs, or posters. This spare time practice is one of the most important factors in your progress. Whistle or voice the code in di-dah form and learn to recognize all characters by their sound pattern, not by separate elements. Remember that code characters are sent so that they are heard as a complete sound.

4-2. Receiving Errors

a. A common type of receiving error is called dotting. This occurs when you confuse characters that differ from one another by the number of dits contained in the signal. For example, if you record S instead of H, or D instead of B, etc., you have made dotting errors. Special remedial lessons that emphasize the dit characters will help you correct these errors.

b. Another common receiving error is called copying too close. This is the tendency to copy the character too quickly before you have heard all of the signal. Examples would be copying an A for a W, a J for an L, or an R for an L. If you make this mistake, you will have to practice delaying your response to the code signal. Remedial lessons for correcting these errors require you to listen carefully for two or three code signals before writing any-thing on your practice sheet. One of the requirements for improving accuracy and increasing recording speed is copying behind the characters being sent. This delayed response allows you time to hear the whole character before you record it.

c. As with any skill, confidence is required to pass progress tests and to relieve tension. The way to gain this confidence is by participating in the code practice program which was prepared for that purpose.

4-3. Cumulative Code Practice Records

a. The graph (fig. 4-1) provides a basis for comparing your performance through the course with other students' performances under similar training conditions. The family of curves represents a cumulative record of code learning based on the records of many trainees through 15-gpm code speed.

b. The graph shows you or your instructor where you stand in relation to the group. For example, if you had 50 hours of code practice and just passed the 12-gpm test, you are doing as well as 38 percent of the students in your class. In the same number of practice hours, 14 percent have passed 15 gpm and 67 percent have passed 10 gpm.

c. Frequently your instructor is interested in knowing how far you should progress in a given number of hours. Assuming that you are doing as well as 88 percent of the students, you should qualify on 15 gpm after 67 hours of practice. The graph shows what can be done with accurate records.

d. The figures on the graph have a high degree of accuracy for a typical instructional situation, but may not apply to every situation because of different teaching methods or stu-
dent aptitude. Your instructor may devise similar graphs for his own classes. The requirements for making such a graph are a record of practice hours and the number of groups per minute your class can copy correctly.

4-4. Retention of Code Skills

a. Once you have thoroughly learned IMC, retention is assured, regardless of the time interval between practice sessions. If you have learned to receive code without error at 5 or 7 gpm you will probably be able to recognize individual code signals 10 or 15 years later.

b. While the retention of IMC as a language is assured, your speed of code recognition can be adversely affected in a very short period of time. You should strive to reach the highest level of speed in receiving code in the allotted time because there may be several weeks between the time you leave school and the time you begin actual code operation. Some operators may regress as much as 5 gpm in code receiving speed in a week without practice. Graduates of code operator schools who have an IMC receiving speed of 15 gpm may be unable to operate in a continuous wave (CW) net at 10 gpm if practice is not maintained.

c. It is absolutely essential that you follow a schedule of code practice or CW operation to retain proficiency. Your IMC receiving speeds will increase and your ability to communicate by code will improve proportionately to the amount of practice you do.

d. Only after years of code operation and achieving a code receiving speed of 25 gpm or higher will you then be able to go without practice with little, if any, effect on your code copying ability.

e. When you use other means of communication, you should spend some off-duty time copying IMC. Radio receivers, which are components of the radio communication system, may be utilized for this practice.
5-1. The Code-Voice Method
   a. The code-voice method is the most effective method devised to teach International Morse Code. Its name is derived from the method of identifying a code signal by voice, giving the student immediate knowledge of his correct or incorrect response to a code signal.
   
b. Each of the four lessons shown below contains nine code characters. The least difficult characters appear in lesson 1. The code characters rated next in order of complexity appear in lesson 2. Lesson 3 contains the remaining nine letters of the alphabet, and lesson 4 presents the numbers one through nine. Lessons 2, 3, and 4 contain a relatively high percentage of characters learned in previous lessons.

   (1) Lesson 1  E I S T M O A N W
   (2) Lesson 2  B C D G Q X Y Z 0
   (3) Lesson 3  F H J K L P R U V
   (4) Lesson 4  1 2 3 4 5 6 7 8 9

c. Another version of the basic lessons contains only concentrated practice on the new signals. This reduces monotony caused by overlearning and provides practice on segments of the alphabet with which the student may have difficulty.

d. An alternate basic program has all 36 code characters appearing in each lesson. It is useful as a refresher program for students who have received previous training in IMC and as a way to expedite advancement of fast learners. It can also be used as an alternate method of presentation in conjunction with the basic IMC series.

5-2. Receiving Practice
   a. The most recent method devised to increase the speed of code reception is based on an extensive experiment conducted in IMC training. The practice material is presented in progressively faster code speeds at 1-gpm speed increments. The practical exercise in appendix D contains all of the practice material used in the program. This exercise provides prompt reinforcement for student response. He corrects his own paper to determine his code receiving speed.

   b. In the traditional IMC receiving program, code speeds from 7 to 25 gpm are presented in 2- or 3-gpm increments. Progress from one speed to the next may cause periods of practice which produce little improvement, but this effect is reduced by using the receiving practice suggested in a above. However, the traditional program can be used to provide variety in code practice.

5-3. Remedial IMC Program
   a. A remedial IMC receiving program may be necessary due to persistent inaccuracies by some trainees. The two most common types of errors in receiving are dotting and copying too close.

   (1) The most difficult characters in teaching IMC are the dot signals for 6, 5, 4, H, and V. The students confuse the 6 with B, the 5 with H, the H with S, and the 4 with V. Students also have a tendency to hear code signals shorter than they actually are which would, for example, substitute and S for an H more often than an H for an S.
(2) Teach students to delay their response to a code signal. Instruct them to copy one or two characters behind the signal to avoid those errors produced by copying too close.

b. A series of magnetic tape recordings prepared for each of the receiving speeds (7, 10, and 13 gpm) will help the student to increase speed of character recognition. One series is a completion exercise which requires the use of a special exercise sheet.

5-4. Program Implementation

a. For optimum results the IMC program should be reproduced from 1/4-inch by 3,600-foot magnetic tape on 10 1/2-inch reels with tape speed set at 7 1/2-inches per second. This provides four periods of instruction per tape and eliminates winding or rewinding, keeping tape breakage at a minimum. If possible, place the magnetic tape reproducers in a central control room and transmit the code over cables to switchboard facilities in the classroom.

b. Enough reproducers should be available to channel all code necessary to meet the trainee requirements. Separate channels can be used for each part of the IMC program listed below.

(1) Basic IMC Series.
(2) IMC Receiving Practice.
(3) IMC Receiving Test Program (7-25 groups per minute).
(4) Remedial IMC Receiving Program.
(5) IMC Sending.

5-5. Proficiency Standards

a. Receiving. Qualification requirements for a given speed in receiving IMC are 3 out of 5 consecutive minutes of copy. Some errors may be allowed during code speed progression to the qualifying code speed.

b. Sending. Trainees are required to transmit IMC at each speed for 3 minutes. A tape recording is made of their transmission or the students' sending can be monitored. They will qualify if they are able to transmit the required number of groups and copy back their own transmission for 2 consecutive minutes out of 3.

5-6. Instruction Aids and Techniques

a. As an instructor you play a vital role in the success of the IMC course. You must be constantly aware of the difficulties of each student in your class and to take prompt remedial action. The tape-recorded code program alone cannot teach code. You have to keep the students interested and motivated at all times. As an instructor ask yourself—

(1) How can I assure each student of my sincere interest in his progress?
(2) How can I make the learning process easier for him?

b. As an instructor of IMC, you are responsible for stimulating your students' interest and attentiveness. Careful observance of student progress will keep you aware of the need for corrective action.

c. Here are some procedures and techniques that you can use to supplement the tape-recorded instructional material.

(1) Place a list of the code characters of each basic lesson in some prominent place in the code room.
(2) Rehearse the code sounds with the students using both vocal imitation and audio oscillator with a hand key.
(3) Emphasize the importance of learning code by the sound of each character. Point out the difference in the sound of code signals that appear to be similar to the student.
(4) Maintain an active interest in the problems students may have with IMC.
(5) Observe each student carefully during the tape-recorded practice portion of the class.
(6) Summarize each code receiving period and have progress test papers available as soon as they have been graded.
(7) Make constructive criticism when criticism is needed.

d. After a few hours of code instruction, you will be able to pick out those students who will require a personalized remedial program.
When you have determined a student's specific difficulty, give him individual instruction. In remedial programs, vocal imitation practice on the difficult characters used in conjunction with a hand key and code oscillator have proved very successful. When code sounds have been learned, follow the same general procedure as recorded on the tape lessons. Encourage student participation in identifying the hand sent signals. Discourage students from mentally repeating or echoing the IMC sound in vocal imitation prior to recording the character. When this happens, it is an indication that the student does not know the code sound, which will limit his ability to copy code at higher speeds. When you feel that the student is on the right track, return him to his class.
CHAPTER 6
FIELD TRAINING PROGRAM

6-1. General
You may be asked to establish a code training program in your field unit or to organize code practice sessions to maintain code proficiency in your unit. The information below suggests training devices and practice systems for a code-voice program for beginners as well as a group of characters for increasing speed of code recognition.

6-2. Teaching Basic Code
   a. The sample script and code practice groups in appendix B may be used in whole or part to serve as a guide for teaching basic IMC. The program is divided into four lessons starting with the easier characters and progressing to the more difficult ones. Introduce each new character by its phonetic name, call out its phonic sound in dit dah form, and then transmit the code character. After the characters are introduced send them in random order in groups of five followed by immediate identification of the character. During the next exercise transmit the code character but do not identify it for 3 or 4 seconds; this delay allows the student time to print the character he thinks it is. Continue through the four lessons following this procedure.

   b. You can implement this program with a code oscillator and a hand key if more elaborate code practice equipment is not available.

6-3. Advanced Code Program
   a. Appendix C contains 20 lessons with all 36 code characters in each lesson. These lessons can be used as a guide to advance speed of code recognition after your students pass the 5-gpm code test or as basic code practice material in addition to that mentioned in paragraph 6-2.

   b. These lessons are presented in doubles, singles, and 5-gpm runs. The additional lessons available in appendix D, Receiving Practice, and appendix E, Sending Practice, will provide you with a variety of code practice exercises that will give you a flexibility to meet your students' individual needs.

6-4. Code Training Devices
   a. When elaborate code equipment and distribution systems used in service schools are not available or are impractical, you can use a number of substitute devices that are in Army supply. You can start a code program in your field unit with as little equipment as a code oscillator and a hand key.

   b. The tape method of instruction involves using equipment that automatically reproduces audible code practice signals previously recorded in ink on paper tape. Code signals may be presented at varying speeds depending on the teaching pattern being followed. The tape method is particularly good for teaching large groups. Code practice tapes are made of %-inch-wide rolls of paper with inked lines which produce IMC signals when used with appropriate equipment. The tapes are prepared for beginners and advanced students. Loudspeakers or headsets are used for student reception of the code signals.

   c. The recorder-reproducer method uses equipment that records code, voice, music, noise, or combinations thereof on metallic wire, magnetic tape, or phonograph records. Code signals are reproduced through speakers or headsets. This method is useful not only for receiving but also for recording students sending so that they can see where they need practice.

   d. The items described in a, b, and c above...
are stock items available through normal supply channels. Refer to appendix A for information on specific items.

6-5. Code Practice System

a. One type of a newly developed code practice system consists of two parts, the recorder-reproducer for the student and the control device for the instructor. This tape recorder-reproducer provides 5 1⁄2 hours of code instruction recorded on 22 channels which are selected by means of a dial. The self-instruction system operates from batteries or line voltage so the student can practice code anywhere. The prerecorded tape can be used to teach IMC or as practice exercises to maintain code proficiency. In addition to receiving practice, it also provides for sending practice. The student can send code with the hand key and record it on the drill tape. Then he can play back both the master track and the drill track for comparison of his sending with the master track.

b. The instructor control device completes the code practice system when group instructions are required. You can transmit your voice, code exercises, or recorded instructions from any audio source with the special instructor headset through the instructor control. This is accomplished by wireless communication to the student. The instructor headset can also be used to monitor individual student progress by simply plugging into the recorder-reproducer.
APPENDIX A

REFERENCES

1. Department of the Army publications

AR 320–50  
Authorized Abbreviations.

PM 21–6  
Techniques of Military Instruction.

FM 24–18  
Field Radio Techniques.

DA Pam 108–1  
Index of Army Films, Transparencies, GTA Charts, and Recordings.

DA Pam 301–1  
Index of Administrative Publications.

DA Pam 310–3  
Index of Doctrinal Training and Organizational Publications.

DA Pam 310–4  
Index of Technical Manuals, Technical Bulletins, Supply Manuals, (Types 7, 8 and 9), Supply Bulletins, and Lubrication Orders.

DA Pam 310–5  
Military Publications Index of Graphic Training Aids and Devices.

AR 320–5  
Dictionary of United States Army Terms.

FM 21-6  
Code Training Set AN/GSC-T1A.

FM 24-18  
Operator's Manual Code Practice Equipments

DA Pam 108–1  

DA Pam 301–1  

DA Pam 310–3  

DA Pam 310–4  
Sound Recorder-Reproducer Sets AN/TNH–2A and AN/TNH–2B.

DA Pam 310–5  
Sound Recorder-Reproducer RD–87A/U.

DA Pam 310–4  
Code Recorder RD–60/U.

AR 320–5  
Operator, Organizational, Field and Depot Maintenance Manual Re- 

FM 21-6  
corder-Reproducer, Sound. RD–173/UN and RD–173A/UN.

FM 24-18  
Operator, Organizational, DS, GS, and Depot Maintenance Manual, 

DA Pam 108–1  
Including Repair Parts and Special Tool Lists

DA Pam 301–1  
Recorder-Reproducer RD–173B/UN.

DA Pam 310–3  

DA Pam 310–4  
International Morse Code, Hand Sending.

2. Training Film

TF 11–3697  
Instructions for the Use of the Morse Code.
APPENDIX B

BASIC IMC LESSONS 1 THROUGH 4

Note to the Instructor:

The following Basic IMC Lessons will serve as a guide for you to implement a code program in your unit. These lessons require no more equipment than a code oscillator and a hand key.

Basic IMC Lesson 1

When someone speaks of learning a new language, we usually visualize months of pronunciation practice and building a vocabulary of at least a thousand words. In the International Morse Code language you are about to learn, you have only to build a vocabulary of 26 letters and 10 numerals, and an entire method of communication is available to you. Do you know of any learning process where you can get so much for so little? If you remain in the military service, you will find 05B or 05C to be an excellent MOS. In civilian life, electronic communication offers almost unlimited opportunities. Or you may wish to join the thousands who find radio to be a fascinating hobby.

This first lesson in International Morse Code contains nine letters. There will be a number of presentations, varied so that the learning process will be as pleasant as possible. First you will hear each letter and its phonetic name, followed by the International Morse Code or IMC signal transmitted five times.

Have pencil and paper ready. Print each letter as it is transmitted.

Now you will hear double transmissions of each letter, followed by immediate identification. Print each letter as it is identified.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Phonetic Name</th>
<th>Code Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Echo</td>
<td>E E E E E</td>
</tr>
<tr>
<td>I</td>
<td>India</td>
<td>I I I I I</td>
</tr>
<tr>
<td>S</td>
<td>Sierra</td>
<td>S S S S S</td>
</tr>
<tr>
<td>T</td>
<td>Tango</td>
<td>T T T T T</td>
</tr>
<tr>
<td>M</td>
<td>Mike</td>
<td>M M M M M</td>
</tr>
<tr>
<td>O</td>
<td>Oscar</td>
<td>O O O O O</td>
</tr>
<tr>
<td>A</td>
<td>Alfa</td>
<td>A A A A A</td>
</tr>
<tr>
<td>N</td>
<td>November</td>
<td>N N N N N</td>
</tr>
<tr>
<td>W</td>
<td>Whiskey</td>
<td>W W W W W</td>
</tr>
</tbody>
</table>

We will repeat these characters now, calling each letter by its phonetic name, giving the vocal imitation, and then the International Morse Code, or IMC, signal transmitted five times.

Continue to print each letter as it is transmitted.

Echo. Dit. (E E E E E)
India. Didit. (I I I I I)
Sierra. Dididit. (S S S S S)
Tango. Dah. (T T T T T)
Mike. Dahdah. (M M M M M)
Oscar. Dahdahdah. (O O O O O)
Alfa. Didah. (A A A A A)
November. Dahdith. (N N N N N)
Whiskey. Didahdah. (W W W W W)
In the exercise just completed, you were told immediately which letter the signal represented. In the following exercise, you will have approximately 3 seconds to see if you can identify and print the correct letter. If you do not recognize the code signal, leave the space blank, and then print the correct letter in the top square when the phonetic callback is given. (3 second delay)

<table>
<thead>
<tr>
<th>TSMIA</th>
<th>OENWI</th>
<th>OTSIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANMTE</td>
<td>ANIOM</td>
<td>TIEWS</td>
</tr>
<tr>
<td>WMMSA</td>
<td>ITMEO</td>
<td>MTSEW</td>
</tr>
<tr>
<td>NOAMS</td>
<td>IANET</td>
<td>SMOEI</td>
</tr>
</tbody>
</table>

How many of these 100 code characters were you able to recognize and record correctly? Look over your paper for a moment and take note of any characters that were difficult for you to identify.

Due to the similarity of construction of some IMC characters, students sometimes confuse one letter with another. Remember, you are concerned only with sound patterns. Listen to a review of the first nine characters and try to hear them as the letters they represent.

E or Echo. Dit. (EEEEEE)

<table>
<thead>
<tr>
<th>ETTET</th>
<th>SOSSO</th>
<th>AANNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOSWS</td>
<td>NNAAA</td>
<td>MOIMI</td>
</tr>
</tbody>
</table>

(Call back)

In the exercise just completed you had 3 seconds to identify and record each letter. Now you will receive an exercise of lesson 1 characters, in random order, with the time shortened to 2 second intervals between characters,

<table>
<thead>
<tr>
<th>OMEIT</th>
<th>WSAEM</th>
<th>SANTI</th>
</tr>
</thead>
</table>

(Call back)

Each lesson concludes with a progress check at a speed of 5 groups per minute. You will now receive 5 practice groups at this speed,

<table>
<thead>
<tr>
<th>METAW</th>
<th>NOASI</th>
<th>OMETI</th>
</tr>
</thead>
</table>

(Call back)

Now turn to the progress portion of your paper. During the remainder of the period you will receive a progress check on the nine letters of this lesson.
The second lesson or unit of International Morse Code consists of eight letters and one numeral.

Your practice this period will be devoted almost entirely to learning these nine new code characters. You will have only a brief review of the characters of lesson 1 immediately prior to the progress check.

Let's begin practice by learning the code sounds of the characters of lesson 2.

B or Bravo ... Dahdiddidit ... (B B B B B)
C or Charlie ... Dahdiddahdidah ... (C C C C C)

(Call back 1 second after third repetition)

BBB  C C C  D D D  G G G  Q Q Q  X X X  Y Y Y  Z Z Z  0 0 0

Once more:

(Repeat as above)

This is the sound of B or Bravo. Dahdiddidit. (B B B B B)
This is C or Charlie. Dahdiddahdidah. (C C C C C)
This is D or Delta. Dahdididah. (D D D D D)
This is G or Golf. Dahdidahdah. (G G G G G)
This is Q or Quebec. Dahdahdidah. (Q Q Q Q Q)
This is X or X-ray. Dahdidahdah. (X X X X X)
This is Y or Yankee. Dahdahahdah. (Y Y Y Y Y)
This is Z or Zulu. Dahdahdidah. (Z Z Z Z Z)

And this is 0. Dahdahahdah (0 0 0)

The more often you respond correctly to individual code signals at slow speeds, the easier it will be for you to increase your speed of recognition. The following code signals will be sounded and identified immediately after being sent. Listen closely to the sound of the signal and then print the letter or numeral as the phonetic callback is given.

... Ready...

G D D G G G Q Q G G Q
Y Y Q Q B B Y Y Z Z
Z 0 0 Y Y G G Q Q 0
Q Q X X Y Y Z Z 0 0

In your next exercise, you will be given a short period of time to see if you can recognize any of these code characters before their phonetic names are announced. If you do not recognize a signal, leave a blank space on your paper, then enter the letter or numeral in the top row of squares as the phonetic callback is given.

(Call back singles) (2-second reinforcement)
Take a few moments and review your paper. You have just received 100 code characters. How many did you copy correctly? (Pause 30 seconds)

If all code characters were as easy to learn as the numeral 0, IMC would not be a challenge. What makes code difficult for some people to learn is, first, poor concentration resulting in not hearing the code character correctly, and second, confusion between characters because the code sounds have not been thoroughly learned.

During your next exercise, you will hear and record code characters in groups of five. The characters most often confused will be appearing within the same group.

... Ready ...

(Call back after each group) (3 seconds after each group)

(3-second spacing between characters)

| YCBDB       | GZGZG       | CYCYC       | QZQZQ       | XBBX       |
| ZBZBZ       | DGDDG       | QXXQX       | YCYCY       | DDBBD      |
| GGGZG       | XXXYX       | QYYQY       | DDBBD       | CYYC       |
| DGDGD       | ZZQQZ       | XXXYY       | BBDDB       | CYYC       |

To qualify on each of the 4 basic lessons, you must be able to copy at least 15 consecutive groups with a maximum of 4 errors. The speed of the progress check is 5 groups per minute. This means that during the practice portion of each period you must not only learn each signal, but you must be able to recognize each one in a very short period of time.

To assist you in increasing your speed of recognition, the following 5-character code groups will be transmitted at progressively faster speeds. You will hear and record five groups. Then you will be given a phonetic call-back so that you may check your reception.

You will have a time interval of approximately 2 seconds between characters, and approximately 4 seconds between each group during the transmission of the first five groups.

... Ready ...

(Call back after fifth group)

| ZGCQC       | XGQ0B       | GX0GC       | ZYXBC       | ZBDYQ      |

See if you can recognize the nine code characters of lesson 2 transmitted at 5 groups per minute.

(Call back after fifth group)

| YZBGQ       | CXD0Q       | DGYB       | XQBGD       | YZDQ       |

All progress checks on basic code contain characters from the previous lesson. Don't forget the nine code characters learned on lesson 1.

(Call back one phonetic for both characters)

| EEIISSTTMMOO | AA NN WW |

Turn to the progress check portion of your paper. For the remainder of the period, you will receive 5-character code groups at the speed of 5 groups per minute.

(Basic IMC Lesson 3)

You have learned to readily recognize 18 International Morse Code characters and are now ready to advance to lesson 3. In lesson 3 you will learn nine new characters. Upon comple-
tion of this lesson you will have learned all of the 26 letters and 1 numeral. You are already more than halfway to your basic goal, since the numerals are easier to learn than the letters.

First you will hear the phonetic name of each letter, followed by the IMC sound transmitted five times. Following the presentation of the nine lesson 3 characters, you will be given a brief review of lessons 1 and 2. Finally you will be given a progress test of the entire alphabet and the numeral zero.

Ready with paper and pencil?

Print each letter properly as it is transmitted in IMC:

Foxtrot. Dididahdit. (F F F F F)
Hotel. Didididit. (H H H H H)
Juliet. Didahdahdah. (J J J J J)
Kilo. Dahdidah. (K K K K K)
Lima. Didahdidit. (L L L L L)
Papa. Didahdahdit. (P P P P P)

(1-second reinforcement)

FFHHJJ
KLPPPL
PPPRLK
VJJJKK

In the previous exercise you were told immediately which letter the signal represented. In the following exercise you will have approximately 3 seconds to see if you can identify the letter and the signal it represents.

FJFJH
KLKPR
VRUVR
JFHLK

You have just received 100 code characters. Take a few moments and review your paper. How many code characters were you able to recognize?

(Pause for students to look over papers)

On each of the four basic lessons most of the similar sounding characters appear as new characters to be learned. Here are the nine code characters of lesson 3, presented in the order of their similarity.

Romeo. Didahdit. (R R R R R)
Uniform. Dididah. (U U U U U)
Victor. Didididah. (V V V V V)

We will repeat these nine characters in the same manner. Listen carefully and associate each letter with its IMC sound pattern.

Foxtrot. Dididahdit. (F F F F F)
Hotel. Didididit. (H H H H H)
Juliet. Didahdahdah. (J J J J J)
Kilo. Dahdidah. (K K K K K)
Lima. Didahdidit. (L L L L L)
Papa. Didahdahdit. (P P P P P)
Romeo. Didahdit. (R R R R R)
Uniform. Dididah. (U U U U U)
Victor. Didididah. (V V V V V)

Now you will hear these same code characters with a callback after each transmission. Print the letter as the phonetic callback is given. The same signal will be sounded again after first being sent and identified phonetically.

UVVFV
FFJLJ
KKHHH

If you do not recognize the code signal, leave the space blank, and then print the letter representing the code character in the square directly above when the phonetic callback is given.

UVFVF
HKJLP
VRPUP
FHHFJ

For your next exercise you will hear and
record code characters in groups of five with a phonetic callback after each group. The similar sounding characters will appear within the same group.

<table>
<thead>
<tr>
<th>UVUVU</th>
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<th>KRRKK</th>
<th>VHHVU</th>
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<td>FLLFF</td>
<td>KRRKK</td>
<td>UUVFU</td>
<td>JPPJH</td>
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</table>

To qualify on a progress check you must be able to recognize code characters within 1½ seconds. In the previous exercise the code characters were separated by an interval of 3 seconds. To assist you in increasing your speed of character recognition, in the following exercise you will hear and record five 5-character code groups with a 2-second interval between characters, and a 5-second interval between groups.

UHLRL  KRHUF  FRPJK  HVHLF  KLJPU

(Call back these five groups)

The next five groups will be at the speed of 5 groups per minute.

FVURJ  HFLKP  RLHUV  PURKJ  VHFKH

(Call back the above)

In review, here are the code characters of lessons 1 and 2. Each character will be sounded twice followed by its phonetic name.

EE II SS TT MM OO AA NN WW
BB CC DD GG QQ XX YY ZZ 00

Turn to the progress check portion of your paper. During the remainder of the period you will receive a test on the 26 letters and 1 numeral contained in lessons 1, 2, and 3.

Basic IMC Lesson 4

This is the fourth and last basic lesson in International Morse Code. It introduces nine new characters which are the numerals one through nine (niner). You will find that these characters are quite easily learned. Numerals one through five all begin with a dit and have a progressive pattern, while six through niner begin with a dah and contain a dah progression.

Listen attentively as the numerals are introduced to you. You will hear each numeral spoken, followed by its vocal imitation, then five transmissions of that numeral in International Morse Code.

After the numerals have been presented, you will receive exercises to reinforce your recognition of these new characters. Near the end of the period, you will receive a review of all characters previously learned and finally you will receive a progress check.

Now, let's learn the nine numerals. Have pencil and paper ready and print each character as it is transmitted.

One... Didahdahdah... (1 1 1 1 1)
Two... Dididahdah... (2 2 2 2 2)
Three... Didididah... (2 2 2 2 2)
Four... Dididididah... (4 4 4 4 4)
Five... Didididididit... (5 5 5 5 5)
Six... Dahdidididit... (6 6 6 6 6)
Seven... Dahdahdidididit... (7 7 7 7 7)
Eight... Dahdahdahdididit... (8 8 8 8 8)
Niner... Dahdahdahdahdidit... (9 9 9 9 9)

Now listen to these numerals again. Con-
tinue to print each number as it is transmitted.
(Repeat as above)
You will now hear double transmissions of each numeral. Each transmission will be fol-

(1-second reinforcement)

11995 57744 33224 47711 99336
62255 44221 16655 88337 71199
66442 27788 44229 95577 66885
51122 77993 36644 22557 76688

Here is another exercise with single trans-
missions of the new characters; however, there will be 3-second pauses between transmissions for you to recognize and print the characters.

93612 87439 25714 63986 42538
19857 28943 67524 19868 41652
45681 29133 27854 96745 81397
62741 25896 86459 37415 89234

Let's go back now and review these nine new characters. Don't anticipate and don't try to count the dits and dahs. Listen to the entire sound patterns and hear them as the numerals they represent.

One ... Didahdahdah ... (11111)
Two ... Didahdahdah ... (22222)

If you do not recognize a singal or record it incorrectly, print the correct numeral in the top block as the callback is given at the end of the pause.

Three ... Didididahdah ... (33333)
Four ... Dididididah ... (44444)
Five ... Dididididdit ... (55555)
Six ... Dahdidididit ... (66666)
Seven ... Dahdahdididit ... (77777)
Eight ... Dahdahdahdidit ... (88888)
Niner ... Dahdahdahdahdit ... (99999)

In the next exercise you will hear and record numerals in groups of five with a callback after each group.

39427 91865 46587 12395 72413

Now, try to increase your speed of response in an exercise with 2 seconds between characters and 5 seconds between groups.

54752 81346 97132 75429 61642

The next five groups of numerals will be sent at a speed of 5 groups per minute.

77419 56328 47612 95821 85649

Here is a review of lessons 1, 2, and 3. Each character will be sounded twice, followed by its phonetic name.

EE II SS TT MM OO AA NN WW
BB CC DD GG QQ XX YY ZZ 00
FF HH JJ KK LL PP RR UU VV

Now turn to the progress check portion of your paper. During the remainder of the period you will receive a test on the 26 letters and 10 numerals. The letters and numerals will not be mixed within a group.

Stand by.
(Progress test No. 3)
APPENDIX C

LESSONS CONTAINING ALL 36 CODE CHARACTERS

These 20 lessons may be used for advancing speed of code recognition or for basic code practice.
### LESSON 4

#### Doubles

| 6 | 6 | E | E | S | S | 8 | 8 | 4 | 4 | 3 | 3 | P | P | 2 | 2 | T | T | 7 | 7 | V | V | Y | Y | Z | Z | X |
| X | H | J | J | Q | Q | N | N | M | M | Q | Q | A | A | 7 | 7 | R | R | G | G | L | L | K | K | I |
| D | D | X | X | H | H | F | F | 1 | 1 | 6 | 6 | 9 | 9 | 0 | 0 | W | W | Z | Z | P | P | M | M | C |

#### Singles

| Y | B | 2 | 5 | E | G | S | V | N | O | L | D | M | X | 9 | 8 | G | C | 9 | 6 | L | B | 3 | T | D | 9 |
| B | D | T | T | E | B | S | J | O | F | 1 | A | M | B | W | M | 5 | 9 | U | M | K | 4 | Q | J | Z |
| O | J | W | 3 | 5 | F | A | 8 | F | V | 8 | D | P | H | 7 | 3 | 0 | 6 | D | 7 | H | 6 | 2 | 6 | U |
| K | Z | 9 | F | 5 | N | P | E | I | A | H | P | 4 | 6 | U | O | I | R | 5 | 4 | 2 | J | J |

#### 5 GPM

| A | N | E | C | Z | T | N | 5 | M | G | 6 | D | 2 | I | 9 | H | S | 8 | 4 | K | N | Q | V | 5 | T |
| Y | M | X | 7 | 3 | O | B | S | E | 7 | V | J | U | 2 | F | 2 | T | W | R | Q | N | O | 3 |

### LESSON 5

#### Doubles

| D | D | T | T | J | J | 3 | 3 | 5 | 5 | Y | Y | 8 | 8 | E | E | S | S | V | V | N | N | O | O | 2 |
| 2 | B | B | U | U | 4 | 4 | M | M | 4 | 4 | 1 | 1 | L | L | G | G | Z | Z | I | I | J | J | U | U |
| V | V | D | D | D | 9 | 9 | 6 | 6 | H | H | C | C | A | A | Q | Q | W | W | 8 | 8 | P | P | 3 | 3 |
| 2 | X | X | T | T | 8 | 8 | S | S | B | B | 5 | 5 | R | R | 7 | 7 | N | N | E | E | P | P | F | F | 9 | 9 |

#### Singles

| Z | S | 3 | 8 | C | H | Q | K | S | T | R | Q | G | Q | G | 3 | G | C | J | U | I | G | C | L | H | T | 9 |
| S | 9 | Q | Q | S | V | 1 | I | K | W | U | K | 4 | 4 | 9 | C | Z | 0 | F | Z | Y | K | D | L | S | 9 |
| N | H | H | W | S | T | A | C | B | Q | X | V | Q | Q | 4 | R | M | N | P | F | R | E | M | F | 9 |
| G | Y | T | 3 | W | 3 | P | V | L | K | E | 4 | 0 | D | O | T | P | 5 | E | W | I | V | A | 2 |

#### 5 GPM

| B | Y | 2 | 7 | W | 6 | M | J | 5 | T | 6 | 8 | 4 | N | I | G | L | Z | S | E | B | H | D | P |
| 5 | N | Y | R | V | 9 | X | Q | 9 | T | 2 | A | W | P | P | U | 9 | 0 | D | 9 | Q | M | C | H | O | 8 |
| 1 | X | X | 1 | I | C | 4 | 4 | U | D | 6 | F | 8 | H | E | J | 3 | K | 9 | F | 9 | F | A | W | 4 | L |
| 0 | 1 | Z | R | 3 | G | 8 | K | M | 5 | U | 7 | 5 | A | I | C | G | Y | Z | S | 7 | T | S | E | K |

### LESSON 6

#### Doubles

| O | O | Y | Y | P | P | 8 | 8 | I | I | 1 | 1 | 0 | 0 | 6 | 6 | R | R | F | F | L | L | Y | Y | V |
| V | C | C | D | D | S | S | 2 | 2 | K | K | 9 | 9 | T | T | E | E | W | W | 9 | 9 | 9 | 9 | N | N | B | B |
| J | J | H | H | Q | Q | 4 | 4 | M | M | 3 | 3 | Z | Z | X | X | U | U | 7 | 7 | G | G | 5 | 5 | A |
| A | F | F | F | 9 | 9 | R | R | X | X | 8 | 8 | W | W | Q | Q | 6 | 6 | J | J | N | N | 1 | 1 | L | L |

#### Singles

| P | H | J | 2 | O | G | R | K | 5 | T | P | 1 | U | 7 | A | C | Y | F | 7 | 6 | 5 | N | V | 7 |
| U | 2 | B | 2 | N | J | G | C | Q | W | Y | G | I | U | T | 5 | V | M | 6 | E | 4 | E | A | I |
| N | B | 3 | Q | 1 | 6 | 4 | 4 | K | K | 3 | 3 | 1 | 7 | S | 4 | 8 | 8 | K | L | 0 | R |
| M | O | B | 5 | X | B | T | M | 9 | W | 2 | S | 1 | 0 | F | L | H | C | 9 | L | 1 | 2 | 4 | P |

#### 5 GPM

| B | 5 | 3 | E | Q | 4 | S | 9 | K | 1 | A | W | C | W | 4 | 3 | 7 | O | S | L | P | 9 | 8 | P | N |
| X | 1 | 2 | Z | O | 2 | Q | 6 | N | T | 7 | 5 | Q | B | 1 | A | N | 9 | S | L | A | D | R | 9 | 7 |
| F | Q | S | R | 6 | O | F | D | 2 | T | L | 9 | T | C | 5 | 2 | H | U | Z | G | H | E | M | 0 | G |
| J | R | K | B | C | X | I | N | W | D | K | U | G | 2 | 9 | S | H | 6 | F | 9 | V | E | 1 | Y | M |

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### LESSON 10

#### Doubles

| J | 2 | 2 | R | Y | Y | 5 | 5 | A | A | W | W | O | O | 8 | 8 | K | K | B | B | T | T | M |
| M | 1 | I | Z | Z | 6 | 6 | X | X | V | V | M | M | L | L | Y | Y | A | A | D | D | N | N | 5 |
| I | 1 | 7 | 7 | P | P | Z | Z | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | J | J | B | B | H | H | X | X | W |
| W | 9 | 9 | R | R | Q | Q | 8 | 8 | D | D | K | K | 1 | 1 | U | U | O | O | C | C | 6 | 6 | T | T | |

#### Singles

| R | Q | B | C | A | T | S | W | H | N | O | D | O | E | K | L | V | P | 3 | 5 | 1 | 0 |
| I | U | J | C | G | 3 | Z | G | L | D | K | Y | F | F | Z | V | S | Q | 9 | 7 | 7 | F | M | E |
| 5 | T | T | D | B | U | 6 | 2 | 6 | 8 | A | F | 7 | 5 | 8 | W | J | 4 | H | P | A | E | P | N |
| Y | 2 | 7 | R | 3 | I | V | W | 6 | 9 | C | G | 8 | X | M | J | Q | 4 | K | M | U | 9 |

#### 5 GPM

| M | 3 | P | B | 6 | 3 | 0 | 4 | 5 | G | Q | D | O | A | U | 7 | I | 1 | 6 | Z | L | X | Z | 9 |
| W | A | T | 7 | G | 5 | M | T | F | D | I | H | U | 9 | G | 3 | F | Q | 0 | I | 8 | V | 2 | R | E |
| W | T | Y | 9 | 1 | W | 2 | C | V | F | Z | S | 4 | K | M | K | Q | S | E | B | 0 | D | C | J |
| K | A | 4 | N | N | C | B | S | H | U | 3 | X | P | J | H | X | S | J | L | Y | 7 | L | N | R |

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### LESSON 11

#### Doubles

| E | E | V | V | G | G | F | F | M | K | K | B | B | H | H | 5 | 5 | L | L | S | S | J | J | R |
| R | 9 | 9 | X | X | C | C | Z | Z | W | W | U | U | Q | Q | 8 | 8 | E | E | 7 | 7 | 5 | 6 | V | V |
| 1 | I | T | T | N | N | O | O | D | D | X | X | M | M | E | E | 4 | 4 | P | P | F | F | 3 | 3 | |
| I | Y | Y | G | G | A | A | H | H | X | X | 7 | 7 | 7 | 7 | P | P | N | N | Q | Q | R | R | |

#### Singles

| S | G | I | F | U | 3 | Z | H | Q | 1 | R | Q | 1 | 5 | B | X | F | J | X | Y | D | U | S | X |
| Q | O | J | C | P | L | O | F | C | S | H | V | D | 5 | T | 3 | B | R | Z | E | 2 | 3 | S | K | J |
| R | N | D | 6 | 0 | S | F | I | Y | 7 | P | W | M | C | B | 2 | T | 4 | Y | K | X | O | 2 | 4 |
| 4 | R | 7 | B | H | Z | D | T | T | 1 | K | N | Z | W | B | 6 | G | 9 | N | 1 | 5 | 0 | 5 | |

#### 5 GPM

| X | S | U | D | Y | X | J | F | X | B | 5 | 1 | Q | R | 1 | U | Q | H | Z | 3 | U | F | 1 | G | 8 |
| Y | T | P | C | E | K | L | 7 | A | W | 5 | 9 | U | I | X | 3 | Q | T | A | K | W | W | M | 4 |
| 3 | A | 2 | S | D | M | 6 | X | 2 | D | 0 | V | L | O | Y | 4 | H | H | N | 7 | O | U | 6 | G |
| 1 | 5 | Z | 8 | B | 1 | 6 | Y | J | 6 | F | Z | 8 | L | L | G | 9 | J | 1 | 8 | J | V |

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### LESSON 12

#### Doubles

| K | K | 2 | 2 | Y | Y | 8 | 8 | B | B | L | L | C | C | 3 | 3 | G | G | 6 | 6 | 1 | 1 | W | W | I |
| I | V | V | D | D | O | O | T | T | 4 | 4 | F | F | 9 | 9 | S | S | Z | Z | 3 | 3 | 0 | 5 | 5 |
| U | U | J | J | U | U | A | A | 1 | 1 | Y | Y | F | F | M | M | K | K | 2 | 2 | L | L | D | D | B |
| B | C | C | O | O | X | X | 8 | 8 | 4 | 4 | 9 | 9 | 9 | 9 | S | S | 6 | 6 | Z | Z | E | E | 3 | 3 | 0 | 0 |

#### Singles

| 4 | M | W | W | K | A | T | Q | 3 | X | I | U | 9 | 5 | W | A | 7 | L | K | E | C | P | T | Y | 1 |
| 4 | I | 5 | 9 | 3 | V | S | Z | R | C | J | E | 9 | E | U | 2 | C | B | W | C | Q | T | G | O |
| G | 6 | U | 0 | 7 | N | H | H | 4 | Y | O | L | V | 0 | D | 2 | X | 6 | M | D | S | 2 | A | 3 |
| V | 8 | 0 | 1 | J | G | L | 8 | S | Z | F | 6 | J | 6 | I | E | B | 8 | Z | 5 | 1 |

#### 5 GPM

| 2 | S | Q | A | 1 | 8 | V | H | A | P | 3 | 1 | D | E | 8 | 1 | F | F | K | X | R | N | H | M | 3 | U |
| P | 1 | R | 8 | P | 9 | Y | A | A | G | K | J | L | 7 | P | 4 | 9 | O | M | M | G | 7 | N |
| K | W | W | 5 | 2 | S | X | L | C | 4 | S | F | 3 | 3 | Q | T | A | Y | T | P | P |
| W | M | B | N | 9 | 2 | M | Q | E | 3 | B | 7 | R | 4 | N | 9 | G | J | 9 | A | S | X |

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**10**

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**36**
### Lesson 13

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**5 GPM**

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### Lesson 14

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### Lesson 15

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**5 GPM**

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**11**

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**TM 459-98**

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**32**
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**TM 459-99**
LESSON 19

Doubles

8 8  U  O  O  L  L  B  B  3 3  D  D  J  J  V  V  S  S  M  M  G  G
E  X  X  I  I  P  P  Y  Y  W  W  Z  Z  6  6  7  7  5  5  0  0  F  F  4
I  I  T  T  Q  Q  2  2  A  A  9  9  R  R  H  H  C  C  K  K  9  9  4  4
G  V  V  D  D  P  P  7  7  A  A  N  N  S  S  8  8  0  0  W  W  E  E  Q  Q

Singles

L 9  G  Y  7  D  C  1  A  Z  I  V  Q  P  J  Q  H  9  P  E  C  U  6  5  5
9  W  Z  E  S  N  M  B  X  Q  5  P  8  T  0  Q  K  V  J  X  M  4  S  L  E
B  D  0  7  C  G  5  F  O  P  Q  P  T  3  M  R  T  F  S  4  0  8
O  I  E  X  6  K  N  K  A  6  0  F  Y  O  1  8  G  F  2  4  F  W  P  J

5 GPM

M 5  6  U  C  E  P  9  H  Q  J  P  Q  V  I  Z  A  I  C  D  6  Y  G  9
K  L  S  4  M  X  J  V  K  Q  0  T  8  P  Q  Q  X  B  M  N  S  E  Z  W
8  8  0  4  S  F  Y  T  R  M  3  T  X  P  Q  P  O  F  5  G  C  7  0  1
J  J  P  W  F  4  2  F  G  S  0  Y  F  0  6  A  K  N  K  6  X  E  I

LESSON 20

Doubles

X  X  H  H  R  R  J  J  I  I  M  M  U  U  B  B  3  3  2  2  K  K  Z  Z
T  6  6  1  1  5  5  F  F  O  O  L  L  Y  Y  C  C  W  W  D  D  7  7  1
S  8  2  2  T  T  Q  Q  C  C  V  V  3  3  Y  Y  I  I  5  5  H  H  R  R
B  F  F  U  U  Z  Z  K  K  X  X  6  6  M  M  J  J  G  G  A  A  L  L  P

Singles

I 7  4  E  A  O  9  H  E  Y  R  H  L  6  V  8  W  D  H  8  7  K  W  W
R  U  3  T  Y  5  L  9  B  3  O  4  N  V  Q  D  S  Z  6  3  1  2  G  W
1  B  J  T  7  R  D  C  C  X  X  7  U  6  K  M  1  V  J  S  H  N  A  G  B
H  0  T  Z  Z  2  R  I  5  Y  2  T  U  Q  L  0  B  S  G  A  Z  G  N  9

5 GPM

5  W  W  K  7  8  H  D  8  W  V  6  L  H  R  Y  E  H  9  0  A  E  4  7
H  W  G  2  I  3  6  Z  S  D  Q  V  N  4  O  3  B  9  L  5  T  Y  3  U
1  B  G  A  N  H  S  J  V  1  M  K  6  U  7  X  C  C  D  R  7  T  J  B
2  9  N  G  Z  A  G  8  B  0  L  Q  U  T  2  Y  5  I  R  2  Z  Z  T  0
APPENDIX D

RECEIVING PRACTICE, 7 THROUGH 18 GPM

Use the following lessons to correct your code practice exercises. This will give you prompt reinforcement of your response so that you will be able to determine your progress.
7 GPM RECEIVING PRACTICE

SERIES 1

5 GPM

W4B DE 7YS NR3 310124R GR 23 BT
JKNRB GSDBQ CEHLT DIXUK QJRSO
ZTGVF YADGE KTWSI FIDPW HYOEZ
ENZOF GRGKO NVBJN BT K

6 GPM

XT6 DE D7C NR5 242301R GR28 BT
WHKTR IJIFQ UUYME IOAXE 91842
67305 GEBDR QQFGZ STLHF CEUMY
TZJWI WOKBG FMCKL 49536 ZJPNH
TCAJO EGDBS NVMOQ BT K

7 GPM

RK4 DE S2Q NR8 311827R GR31 BT
CJNOQ RZTHE FIUVA KXLWI AUMYJ
HWSDK BGKOR WCFMV 54971 AZVPG
HEUJX Ø6823 AFESW DJYRB OJYTH
MCUNV BT K

TM459-15
7 GPM RECEIVING PRACTICE
SERIES 1

7 GPM

5BU DE VE2 NR9 19Ø723R GR31 BT
BGWCH KLOQR 34Ø72 VRJBN QIKEO
JLMOV YETFY DQCV WRBTH MCUPA
EOHKQ MULZ ODBNJ ZKVLR GDFIA
28136 BT K

XIKRG PHYZS BZADT UVAIF HWTDS
FRKWX 59186 WFMXA SVPGN YHBJS
YILES ZNTUY IQEIJ WRNEK GDKAD

8 GPM

WYG4 DE HS12 NR13 312358R GR35 BT
JKLST HCFIM VYAZP DGOQFWEUM
OQCXU RZSHW JILYB 2Ø817 FVSJT
VAFES TWXOM QGKF LQNDJ RVZBY
JOICU AYWPD 52941 QLFMU PZFGY
28136 BT K
7 GPM RECEIVING PRACTICE

SERIES 2

5 GPM

J3N DE 8SY NR1 Ø1Ø231R GR23 BT
NBRKJ SBDQG HTLEC MKUXI JSORQ AVFZP MXJRN AUCYQ BNVHL 14789
GEVZT AEGDY TISWK DWPIF OZZYH 17536 HCFLQ DJPAR VSKWG DHPZY
ZFOEN GOKRG BNJNV BT K

6 GPM

6TX DE 7DC NR4 131415R GR28 BT
WRKTH IJQFI UMEYU IOXEA 91842 ZAJOV TKHNS CWGPB KNLXJ ISRVM
673Ø5 GERBD GZFQQ SHFLT CMYUE QMOVA NUDAL WUIFX KYOER FHYBD
WUZJT GKWG MCKFL 49536 HNPJZ TVXUC BSGDE NMVOQ BT K

7 GPM

lZO DE 5U8 NR22 Ø12112R GR31 BT
CQOMJ REH2T FAJIU KIWXL AMYYU KSRLT VIFHE 271Ø8 RZWBP YDSAD
DSKWH GROKG VWMFC 54971 AGPVZ NMFLQ BZNCU DKIRG UYKJL LZNST
HXUET Ø6823 AWFES BRDJY HTYJO IPEAK MOVTX ZDJSN WAXME FGOLP
MCVNE BT K

3
7 GPM RECEIVING PRACTICE
SERIES 2

7 GPM

5BU DE VE2 NR9 19Ø723R GR31 BT
BGWHC KLOQR 34Ø72 VRJBN QIKEO XIKRG PHYSZS BAZDT UVIFA TDSWH
JQULM ETYFY DVCQD WRHTB MAPUC RKWXF 86915 FWXAM GNPVS YJSHB
KQOHE MLTZU JBDON KVZLR AIGDF ESLOY ZTUYN IQJIE WLREN KADGD
13862 BT K

8 GPM

DCJ2 DE COW9 NR8 212356R GR35 BT
JSKLT GFIMC VYAPZ LQODG FWUME TKEIX Ø9475 HVBPN RONZG YUMBW
UXCOQ WHSZR LYBIJ 718Ø2 PTJSV BGPFW MIOHT CVMPY CWTOS LJDPH
ESFVA MOWTX UEFKE LDJNQ RZVBY GRQNK UIZHE XBNUA KGRDZ 59364
CUTJO ADPWY 41952 QUMFL CYZFP BT K

TM459-18
7 GPM RECEIVING PRACTICE
SERIES 4

8 GPM
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JKLST HCFIM VYAZP DGQQL FWEUM XITKE 579Ø4 HNPBV ZGNOR WBYUM
QCXU RZSHW JILYB 2Ø817 FVSJT WSPGB OTHIM CYVMF GWTSO LJDHP
41879 HNBZA GKIWX LOQCS BDGJW ZOTIX PDOTF KUVFE RTYLW AFTJM
QCXAU LCTWQ NJGBH VDGRS KIWLX BT K

7 GPM
KLM3 DE TOA8 NR3 2Ø724R GR31 BT
KYWJL XIONU 3Ø687 SQLGB WHERS FXIM SRVYZ JNQB G TKACI EHNBV
AKRED TDKY PSJMD JUSR ILAYC HZQME 93256 RWFK VUHAE HNVJG
89714 ZABHN XWIKG LOCQI WJGBD TIXZO FTQDP KUBFE RTLWY FTJMA
XAUOQ BT K

7 GPM
5ZU DE 1ZO NR6 131623R GR31 BT
SKLTJ ICMFG YPZAV DLGOQ MUEWF TXIEK Ø5479 BHPNV GROZG WYBUM
COUXQ RZSWH YILJB 7Ø21 VSFTJ WBPSG TMOIH MVYCF TOSCW HLPHJ
SAPEV TXOMW KUEFE NLJQD VZRYB HEIQU NABXU RDGZK 54639 KNRQG
JOUTC BT K

TM459-21
7 GPM RECEIVING PRACTICE
SERIES 4

6 GPM

GL5 DE R3X NR1 Ø7Ø514R GR28 BT
ZAKJF ZWBHE OBMPR UIBLJ DUNTN
679Ø8 RADDM XNCPM VRZFW Ø7328
XYZGF CJTHG HBRAB UJLFZ XITZB
QAYNG DQSEI BIAOG LRFKM TWCV

5 GPM

6BX DE CV5 NR8 312345Z GR23 BT
YOBNM ULFXG ZWTEW CRQGT RFWEI.
YDDLAD SUKRM CNCKH BJNIZ BQSIT
ODASH VAPOQ 12789 CIYYK 3645Ø
XZJVF IHUVD OCVUV CZIWE GREQC
BIPZY SLJUK PFAMH BT K

8

TM459-22
5 GPM

8WS DE X5S NR7 18183ØR GR23 BT
MOTOR AFTER HOURS UNDER LIGHT INPUT METER AUDIO POUND CORPS
SPRAY WHICH TOTAL AREAS BARED METAL STEEL ENTER CAUSE PARTS
TOUCH PAINT APPLY BT K

6 GPM

X9Z DE RL4 NR8 26Ø936R GR28 BT
SENSE HUMOR MINDS WOMEN THOSE OUGHT OFTEN NIGHT PHONE MADAM
ALONG SHALL FRONT THINK WHERE AWOKE WOULD ASKED DOING WORLD
 GIRLS DRESS REELS TAKES GOING STAND SILLY SOUND BT K

7 GPM

IC6 DE J4A NR12 Ø7Ø329R GR31 BT
SWEAR SWUNG PLACE EARLY HOUSE DOORS SMELL SCARF LEAPS STOOD
FRANK BLANK SPRIG THERE ALERT EVERY NIGHT RIGHT STORY BOOKS
BEING SHIFT MIGHT ASIDE COULD ENTER TAKEN SWEET YOUNG THING
HELLO BT K

TM459-23
7 GPM RECEIVING PRACTICE

SERIES 5

7 GPM

7GY DE B9K NR11 131757R GR31 BT
NIECE KITTY FREAK CHAIR LUCKY CRAZY KNOWS THREE OFFER EXACT
COUNT PARTY YEARS SILLY THANK MAYBE ITALY HELPS DRINK TIGHT
LITHE WHOLE HOURS WATCH WHILE READY LYING DRAWN WRONG NEVER
AGAIN BT K

8 GPM

T5X DE 6PL NR4 19Ø216R GR35 BT
CRAZY SPINE SMALL STOVE STAIR WOMAN FIGHT BRIEF FIRST YEARS
READY ASKED FINAL SCORE WATCH OTHER PARTY SKIRT ALLEY BREAK
FRAME ABOUT STAND MIGHT RACED WIDER FRONT STOLE PANTS EARLY
DRESS HURRY AWAIT ORDER FOUND BT K
7 GPM RECEIVING PRACTICE
SERIES 6

8 GPM

TB3 DE 1YO NR12 212223R GR35 BT

KMRGB LDGX WITTE 26174 HUMCD NVLOJ FMVYL WBRBQ CYPTY AVFZO
QXKCG Ø3958 UJDEP ARHFL NTDMZ SBPGH SAEWQ BSJOZ XIUKN RVIKX
23154 RMOGT VEWFZ DGKW CMYLJ QUMFC VLATO BEYPM ICKMH YEDGK
FTXUJ GBMRK DXDL LOVNJ MYLFV BT K

7 GPM

F3S DE V4M NR2 Ø21454R GR31 BT

PHASP SROBO DZLBI WZNNS 9786Ø JUZAK WOQAX PDACH BIZLJ DNSJN
IMEUJK HSPJB UKSBJ EGXRT CLYYN TVORW 4Ø369 VZMAU TQGPF 28147
YXIVH WGVEQ LPRDG IZMK PUCBJ OHMFR IEQVN Ø6451 TQOAB YXFD
IVKGH BT K

7 GPM

PH7 DE 19C NR7 1121Ø7R GR31 BT

29783 LYXGK EYGCW LHPRM JDMNU ATIQS LZFER BWUSP ZXBDNS SKNBJ
MEBRO UESTL MJNDY HCWXY GLRID KVGFNMR WRZOC VFOTV VOIUA XCLHK
68Ø24 57913 GHEYCT AFBSZ NIZKJ OQBJO XNSWB QDFUP QSEUA LPAON
TCQWZ BT K
7 GPM RECEIVING PRACTICE
SERIES 6

6 GPM

BA1 DE 4KZ NR9 Ø9Ø859R GR28 BT
ICDHG ZADFJ RPHEO MULMK WTRBZ
VQEMK FOATV VNYPL CIKYX SEDGH
34Ø96 KVHGØ DQGIC TWAIC LUMZP

5 GPM

8WS DE X5S NR4 3Ø1926R GR23 BT
DFJLU MPHRS AOPBT ZBNWX NJUIS
421Ø7 VWZQT POAC E OBEQT VEOYL
SQWJL SBITB SNZHØ BT K
10 GPM RECEIVING PRACTICE
SERIES 1

8 GPM

SR2 DE WGH NR12 2321\(\theta\)2R GR35 BT
YZVRP JGDBN OTQHF IKAEN PBZEO MYUGK 5867\(\theta\) ZJTMV FKXYB ORHPA
DWWYS \(\theta\)4872 JLAPHT QNZTW ECMFU JOQME YXFZO VRPGD BNQHI KUNBZ
61953 GDERS ULWIT BJOZC IXAZP NTICU HVDEK OXKMU EFJWH KKVGS
DWNPB 79248 NSGJ DBKWH LTRMA BT K

9 GPM

NZ4 DE 7FG NR4 212157R GR39 BT
RTVYE UYMLK IFOSG AXRFY ZSJNT GLQZC FMEXM NVDEK JOYUA BJOWR
EIVCA 53061 DYPNV KWHBA SGORD ZPTBQ GFRSH LTHKX LIWQU IMFUV
294\(\theta\)3 BQWIM XAEUQ JHTSB FJPZA NYWGD HBOLO TNREG TFWCL KQODS
NKVGS IREUF MLXO VAMYI RZYHU 58716 GZJNQ LWUAC GRNH BT K

10 GPM

8HS DE ZXS NR8 161114R GR32 BT
KQZHF MXAZR DFKEU PVAPS TJLQY 98\(\theta\)13 DJYLW SBINPO DGSBE RTOWK
CTEIH EMIVO 54726 MYIBZ GBSDP VJNYH LDWCF IMXQ TFAEU OJKRG
VSKBW GPRNZ BAOJQ FDREO TNHTL IWEXK MYUQV ILMUC YHVGD 72348
BERSW 56923 BT K

13

TM459-27
10 GPM RECEIVING PRACTICE
SERIES 1

10 GPM

P2B DE Q9H NR11 241Ø28R GR42 BT
HONTC ITEFK UAYCX MLIHU MUGOQ
DQZEU XAVJT 21947 KTCVZ RLCUN
ZDGRJ OMDKQ ISQAN RQBSM RTCP5
UCZED 6Ø593 WYJFZ IHABK MWDZV
DWVZJ LAHGO BT K

BSMYW NIEUL ISFVH YPBHA Ø4817
PAEKW XQYIT JLNOR WHFSG DFKMB
635Ø MGLRU PLEB K YJNTV CHUVT
CEFYN WOIHA FGEJX 84172 YTZFL

11 GPM

MAC4 DE JWE9 NR6 3Ø2158R GR46 BT
JBHXW GHCNE 34962 GKCXY DFIEP
5Ø718 RSPQZ TUMWI TADJK YIZTQ
JSVLU BFJKR XVGHE LTYSF VFXRU
EKPMN JUCOE XYZUS BKWZ RQERP
RZTMY 5Ø418 GOKFD FAIWJ SIBKD

RQLEA SBKUB SMNFM OIROM VKYKU
NBHOA DOMZQ CNAIM CQUWT EDPWY
Ø4734 98126 ZARBI SLWPN JKCH
LHXXW PTUBS OLCSV JLVHK QNEGA
29673 BT K
### 10 GPM RECEIVING PRACTICE

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**TM459-29**
10 GPM RECEIVING PRACTICE
SERIES 2

10 GPM

B2P DE H9Q NR3 250947R GR42 BT
NCTHO TKEFI YXCUA LHIMU GUMQO
ZUQED AJVTX 42197 VTCZK CNLUR
GJRDZ OMKQD SANIQ RMMSQ TSPCR
ZODEU 36095 JYFZW HKABI WVZDM
VJWNDZ HOGAL BT K

SMYB LEIJUN SHFIV PABHY 17804
AWKEP QTIYX LRONJ HSFGW FBKDB
30856 GULRM LKBEP JTNVY HUTGV
FNYEC HAWIO GXJEF 21784 LTZFY

11 GPM

IN8 DE S43 NR17 081812R GR46 BT
XHJJB NECGH 23649 KVCYG FPIED
18057 PZQRS WIMUT DXJAT TIYZQ
LUVSJ KFJRB VEHGX SYDTL VUXRF
KMFEN COEIJ SXYUS WZVBK QPRER
TYMZH 14508 DOGKF WIFAJ BDISK

LAERQ BBUKS MNFMS RMOOI KKUYV
BOHAN MQZOD AMNIC QTWUG PYDWE
35704 16298 RIABZ LNWPS KHOCJ
SXHWL BUTSP CVLOC HKVLJ NAGEQ
63297 BT K

707-25

TM459-30
10 GPM RECEIVING PRACTICE
SERIES 3

8 GPM

R2S DE G5M NR6 Ø41317R GR35 BT
VPRZY DNBGJ THFOQ NAEKI BPZOE
SDVYW 7Ø42Ø HJAPL WZNTQ MEFUC
19536 RSEKG TULIW DJBOZ PIZAX
NWBDP 37489 SJNGK WHDKB MATLR

9 GPM

Z4N DE FG7 NR5 161827R GR39 BT
VEYTR UKLMU FGSOI FAYRZ JSTZN
ACIVE 15Ø36 PDYNV BKHAW DORGS
94Ø23 MIBWQ XAQUE TBSHJ FAJZP
GKNSV FIREU OLMXK YAIVM HUZRY

10 GPM

H8S DE 52U NR1Ø 12Ø425R GR42 BT
ZFQKH XZAM FUEKD SAPVF YTJLQ
CETIH VEOIM 72456 NIBYZ BDGPS
WBKSV ZGRPN QOJBA REODF LNTHT
SNJZF YSMVZ PBQLT AHPEI RFGAK
RWBES 25963 BT K

17
1Ø GPM RECEIVING PRACTICE
SERIES 3

1Ø GPM
B2P DE H9Q NR3 250947R GR42 BT
NCTHO TKEFi YXCUA H1UML MOGQU
ZEDUQ TAJVX 94172 ZVCTK NRLUC
OGRZJ MDKOQ NQAIS MSMRQ SRPCT
DUEOZ 5369Ø YJWZF KIHAB VDMZW
VJWDZ HOCAL BT K

11 GPM
1N8 DE S43 NR17 Ø81812R GR46 BT
XWHJB NECGH 23649 VGCYK PEDIF
51807 RPZSQ T1WUM JTXDA ZITQY
SULVJ RKJBF GEXHV TYDL5 RUFXV
EMNFK UOCJE 2SUYX BWZK PRERQ
ZTMHY 48Ø15 GFDOK FWAJI DKSIB
RELÄQ BKUSB NSMFM OROMI KVYUK
HONAB DMOZQ MINCA WGUTQ YEWDP
45Ø37 21869 IZBAR NSWPL HJCOK
SLHSX TUPSñ VOCCL KJHLV GAQEN
63297 BT K

TM459-32
10 GPM RECEIVING PRACTICE
SERIES 4

11 GPM

5ZU DE JW9 NR2 291827R GR46 BT
RMNIF TAGMB NZMYV 24659 31708
YPHIDH IOKRE ZJFNW QLIFW GIGPJ
BDICO IANDQ EVRBK PDMGR SFXVP
EROHN SXTLX AUOME QHUTFD UDKZF
XVJOF 74301 HVFIO UMJTCA VYSQG

10 GPM

L12 DE JW7 NR14 151201R GR42 BT
FRNIM GBMAT MZYMN 46259 18073
HDPPH KIREO JWZMN FLTFQP GQJGE
DDCIB NQDAI VBKRE DMGP FPVSK
HOREH SXLTS UMGOA PHUTQ UFQDK
FVJOX 01374 BT K

10 GPM

L09 DE P3D NR7 121050R GR42 BT
KNSBK BEHMP YCXSQ 21570 VMFRR
LROJA VETQF 69438 RMHBK ORPLV
WBQOZ SPUYA EGXCS 87564 KMLXB
NAYEK VOBEN BTZCQ DQYXK 06324
YLXRF CWGTH BT K

19
1Ø GPM RECEIVING PRACTICE

SERIES 4

9 GPM
T5X DE 6PL NR5 31Ø956R GR39 BT
DHSEO 75198 QPRUT WASJZ XBMUP
XJUPT OQBSB HESHK GBIXE YCONJ
GWIQW QRCDH GKMVY FSXRL JSBNX
XGECX QOBWS LTJFZ IDTKU UHMVR

COAFY EDFBG ARMPL JNIBK NAIZW
32789 MUAPY LVZPO 1564Ø TVTCE
ASPAF IDIHO OMNYU DICGW YLJKG
LAYJP TWRTZ VFECQ FRQNM BT K

8 GPM
1ZR DE YX3 NR3 Ø71615R GR35 BT
JERKD ARTSE XEYSA RPYFL GYUXD
HKHOQ CGLYI 89543 KVMTC 72896
SWQKL CHWGW YXLIQ 97865 15275
OUBPS VOFWQ XFJBL NUKJZ NEDPZ

NJBOZ AOVQC HWMRD ZNSJD LTIBB
QWLVX XGLFN PZQKH HRALS MOXGR
UMFKV GDTZR NMYVO YBGCJ MSKDD
BT K
10 GPM RECEIVING PRACTICE

SERIES 5

8 GPM

F5L DE DC6 NR4 Ø9Ø8Ø7R GR35 BT
STATE THREW SOUTH SHORT LIVED
RIGHT ALONG COULD POWER RIVAL
HOPES STORM COAST FLOOD DEATH
NORTH HEAVY THEIR HOMES WATER BT K

9 GPM

72K DE V4Ø NR8 131645R GR39 BT
THERE SWING BEACH THREE WHILE
MIDST WINDS ROUTE HOURS THROW
NIGHT BUDGE CLOSE CORPS PLANS
UNDER JOINT GATES STAFF YEARS
ETHEL ABOUT POINT FORCE DRAMA
REBEL AFTER MARCH UNITY FIRED
AMONG PLANE PLAIN LOYAL TROOP
WROTE WORKS QUOTE SMITH BT K

10 GPM

KW9 DE 3BA NR3 192325R GR42 BT
VOTED OFFER SENSE CENTS BEING
GUARD CHECK PRIDE AIDES FALLS
MEDIC STORE EVERY TODAY BIRTH
WHICH TOWNS SHARE LIVED QUIET
UNTIL WOUND BT K

21

TM459-35
10 GPM REceiving Practice
Series 5

10 GPM

R8T DE E12 NR1 311837R GR42 BT
TRUCK ALIKE ROOST GLASS STEAD
GREEK ROOMS PAPER CLERK WHOLE
MILES STEPS BROWN MONEY LEASE
STOCK YOUNG DROVE SEVEN EIGHT
FLOOD GAMES BT K

11 GPM

OX6 DE 9LB NR9 101957R GR46 BT
HOMER FIFTH WATCH RIVER MILES
MIGHT METAL WHEEL MEDAL BLOCK
BASES NINTH WHITE GREEN COLOR
FORCE PITCH DELTA DRUMS STICK
SMOKE PEPSI RIGHT WRITE FIELD

Below found small bring shirt
Quart sixth third tenth basic
tiger bears start pinch moved
thing motor carry sarge shoes
short BT K
10 GPM RECEIVING PRACTICE
SERIES 6

11 GPM
LO9 DE P3D NR7 121Ø5ØR GR46 BT
KNSBX BEHMP YCXGI 7Ø215 MFRKV
JLARO TVEFQ 6Ø348 VLOPR EMBRH
BQOWZ PYSAU EXCGS 57846 MKKLV
MXEYA NBOEV BXTQT YDQIK 346Ø2
YLXRF CWGHF BXSNK HEMPB XIGGY

1Ø GPM

T5X DE 6PL NR5 31Ø956R GR46 BT
HSEOD QFRUT 75198 SJWAZ XMUBP
TUPJX BQESO HEKHS EBXGI JYONC
GWQIW CHDQR KYVMG XSRIF JSEBXN
CXEGX BQOWS FZJLT UIKZD RUVMH
5Ø486 BVKMP BT K

1Ø GPM

1ZR DE YX3 NR3 Ø71615R GR42 BT
JOBNZ CQVAO DWHRH SZDNJ ITBLB
IQVWU XNGLF PQHIX LCRAH TAMQZ
UFVMK DXTGR VYOMN YBGCR MSPDK
SUBPO VWFOQ FJBRXL UZNKJ ZDPNE
LURPM KNSBA BT K

JERKF ARTSE XEYSA YUFPP XUYGD
OHKQH GCCLI 4Ø135 TVKMC 96827
RISAT WHCGW XLYIQ 315Ø9 46782
134Ø5 JLFOX GDSON ITZNX FJDZS

23

TM459-37
13 GPM RECEIVING PRACTICE
SERIES 1

11 GPM

D3H DE 5AB NR1 19230R GR46 BT
GJKDB NLQTC FIMVX AZSPB 32579 OLMEZ HPDGR SWHIM QGFLQ YUOCJ
XEBRS JAWVB NYRVH ZWQKT QAUIE UITFN BGKNO ZHTIU YZVJR Ø1486
NTHIM CURPB AGRKI JOMYU DJLOS RTWCF MVXAY WSPGD BOQLF AENVZ
DFEST 35918 27Ø46 WXLQK HZGVZ AJQDE ROWTI WFIKO QCYUA YDWBS
LPDGS BRNSK HLCHJ FILMV 73168 YEMAU BT K

12 GPM

7HJ DE Q6B NR13 20Ø73R GR5Ø BT
BJKNO TZEMU RNPVF GKTEN YNWJS ZPOGE NZQTL EFXKU AMEAU BH2DG
PVKRA 4Ø952 DSBRO WTIHF BVLNJ 39821 FDRGQ TSKHW CIJOL QCYXY
UMIVD BWVNJ GTOKC FXUMY HNJSP OAGDE ZQTEL HWIKA 57Ø46 YZGPV
BKLRTZ DFTIL UVOJH RBFSQ NSMÆQ UYECK MIRDY HCSBQ ZSWNK ULFTO
XAIJB Ø7428 39165 BZHJO IWJXO QCYEU MKETZ GFDAP VRLNS DEGRW
BT K

25

TM459-39
13 GPM RECEIVING PRACTICE

SERIES 1

14 GPM

PY3 DE GFD8 NR9 312219R GR55 BT
OKUIX DWVDN WIFUV ACEUQ ITSQR HBPSJ ARSEO TZKLW XIMYA IECIQ
ONFZL GKVJZ 63195 RBGFDB GNHYH FJKMO XYMUT 74028 JTMGCU HPWNA
GRNH BRCJ XAYUK OLITF 25801 67394 GNZFS EORZH DJKLO QTEVX
AYVSG BDKSL FMKIE UYUWI DZVBN TPKWQ AULJI ECRBG OLVDY BZQGE
KTLIW 15370 RDFKM QCIXY EUWF'T YAOMU XPHHS OZNSJ DANSR 69482
VJWGP ZHBRD PVAGS 28071 CIVAM BT K

TM459-41
13 GPM RECEIVING PRACTICE
SERIES 2

11 GPM

H7D DE A2D NR1 182221R GR46 BT

KDJGB LTOCN MIVXF ZSPDA 57932
BRSEX WJAVB YRHVN KIQZW AUJEQ
MIHTN HPBCU GRKIA OMYUJ LOJDS
ES1FD 35981 70642 XLQKW HZVZG
PKGSL BRNSK CHJLJ IMVIF 73618

OLZEM DGRPH HWSIM FLOGQ CJJUY
TFNIU BKONG ZHTIU VRZYJ Ø1864
WCFTR VXYHA PSWGQ QBLFO NVZEA
JQAED OWTIR KIOWF YUACQ YDBSW
EYAUM BT K

12 GPM

JH7 DE Q18 NR12 20730R GR5 Ø BT

KNOJB TZEMU RVFPN KGTEX YWJSN
KRAVP 90542 DBROS WIHTF BVLNJ
MIVDU VNJWB TOKCG XYUMF JSPNH
ZRLBK TIFDL UOJHV FSQRB WNSMQ
XAIBJ Ø7482 56139 HJZBO JXOWI

BT K

POGZE NZQTL FXUKE MEAUA HBDGZ
39218 RFDQG SKWHT CJOLJ QXYXC
GDEAO ZQTLW WIKAH 5764 Ø VFGZY
UEYCX IRMDY SBCQH SNKWZ FTOUL
QCYEU KETZM FDAPG VRLNS GRWED

TM459-42
13 GPM RECEIVING PRACTICE
SERIES 2

14 GPM

VPY3 DE GFGI NR13 270612R GR55 BT
YXIKO WNNDDV VUFWI CQUEA TRQSI
PLZON VJZKG YQET BBGFR GHYND
NHKRG RJCPB KYAXU LIFT0 51082
SAYVG DLSKB MIKEF YIWUU ABVZD
TIWLK 53071 DKMFR CXYIQ FTUME
JPGWV HRDBZ VGASP 07182 VMAIC

BJSPH REOSA ZLWKI SAYMX CQEIH
JOMKF MYETX 48207 MUTCJ PAWNN
FZNSG 34796 REOZH KLOJD VEXTQ
KWPQT UIJLA CBGRE LYDVO ZEGQO
OUMAY FHSX 25JNO NSARD 42896

BT K

30
13 GPM RECEIVING PRACTICE

SERIES 3

11 GPM

D3H DE 5AB NR1 1923ØR GR46 BT
GJKDB NLOT C FIMVX SAPDZ 29735
BEKS R AWVJB YRHVN ZQWTK QIEAQ
THNIM UPHCB GTAIIK OMYUJ JDSLO
DEFTS 98153 2Ø674 XLQKW ZVZGH
GLPSD RSKBN JHLCH FILMV 73165

12 GPM

7HJ DE Q6B NR13 2Ø739R GR5Ø BT
BJKNO TZEMU RNPVF KEXTC NWSJY
RAPKV 9Ø524 SORB D TFHW NJLBV
MDVIU WJNVB TCKOG FYXUM NSPJH
RKLZB FLITD JHOUV SFBRO MNWSQ
JIBAX 2847Ø 63195 HOJZB XOIWJ

BT K

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TM459-45
13 GPM RECEIVING PRACTICE

SERIES 3

13 GPM

A4MO DE PZ9K NR14 Ø71453R GR52 BT
GVRNT QHKLF IUVMY PQSAM TRLSZ FIOWH NEDBR Ø5318 46792 VOAMU
XEIFL YUMKC POVZW DHNJB GAJPY LVZBR NDQSK CTFKG WITJM XGUAQ
12493 WEHNY LPGSN REDQZ Ø7865 GDBQN HITWK YEUAM JAZUW JUBVQ
LOXVF SOGJH RPKG SDYSH ROTCK MOFEI LITMC SNVYY KWFZH YAU E
NKGBR CODEY XTFUV RGZNS Ø5714 POLKI COQUA BGTHD JLWKB 36289
IMEXJ IRASV BT K

13 GPM

WH8 DE OXZ NR4 23Ø6Ø5R GR52 BT
ZWVDS THFMP 34962 MGKBQ HIOAD RADPO WSBNH FULHT EXYMA LJSCI
FQMG R VZDPJ CUXYV IKWMF 51Ø87 UOMQE 63Ø54 SZBGR NQWEK YZTJV
ZLTJB OTXMU IWCZF BDMFH YCGUA ROHOL WVRZB GSDQV KYSNP DNAFJ
TRGEK 91728 IHLTW INFJE UVXKL MARQY D MKQG VZBAU 4Ø867 CPHBN
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<td>LUBSX 8Ø624 WQGHG OETDC CEYXG</td>
</tr>
<tr>
<td>RZUJK VLYNI BT K</td>
</tr>
</tbody>
</table>

**34**
13 GPM RECEIVING PRACTICE
SERIES 4

11 GPM

9SD DE C4P NR2 -0- Ø81317R GR46 BT
XZIBF DAZKN 36489 TNHJS JAUFD
HESDK EIHGB JYXON YMVLC 98463
GKVHY FXLMR AUKZN NFDSJ 2IXJB
YNCYJ 63894 ULVAM FRZOP TCEWV
YMRGG HGVKD 5172Ø CWGQI WVETQ

NJUKS BIFNJ LTZXW RBPUA SQPOM
URAPU VTW2F QTECG 25Ø71 QCIWD
WPTLB ASRUP QDSOM KBEHG OXIEH
GWGTI 725Ø1 DCHGQ XKLYV FRLXM
FROZA BT K

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TM459-50
13 GPM RECEIVING PRACTICE

SERIES 5

11 GPM

CD5 DE R1L NR3 -R- 232136R GR46 BT
MAJOR DOING GOALS TOUCH LIONS AGAIN GAMMA DRIFT LEAVE QUEST
SQUAD STACK GRASS DRUGS NEVER HANDY RULES RANKS ARMED VERBS
TABLE REACH ARISE ENTRY GIVEN

12 GPM

X60 DE ØBY NR7 -Ø- 170929R GR5Ø BT
SLAIN SAITH GLUEY STAID GRAND GOOSE WILLY PRINT CHAIR SPOON
KNIFE SILLY ADDED GLASS MOLAR BRAIN WATCH WRIST PANTS SOCKS
BLACK ALARM BOGIE CHOCK BEBOP BOOBY BRASS CYCLE BRIEF VOWEL
SHALL ICILY MERCY FOGGY WINDY BRIDE GROOM MARRY NEVER WOFUL
TRULY DRYLY SHILY GAYER GAINS DAILY NOUNS GLAND GREEK OCEAN
BT K
13 GPM RECEIVING PRACTICE
SERIES 5

13 GPM

9PU DE P9K NR4 -Z- Ø12348R GR52 BT
BILLY TOOTH HEART SUCKS NOTES
STAFF DANCE CHAOS LABOR EATEN
GERMS ARMOR AUDIO LIGHT LASER
TRACK HEDGE IDEAL MESON PILOT
ROTOR VIDEO TOTAL ABASH TOKEN
LOVER MATCH BT K

WHITE BAKED HEARD SIGHT ADMIT
VOTED ALERT CARRY CLOCK DRONE
LORAN WHEEL GRIPE NISEI NYLON
PURGE SNAFU SCOPE REEVE RACON
SONIC ABHOR ABEAM DAILY DAIRY

13 GPM

02D DE WX3 NR9 -M- 301846R GR52 BT
USHER LIKEN FLUID POOCH CLASS
TUBER JEWEL HELLO LURID NAKED
YUCCA JOULE ROBOT RAZER SONAR
CURSE LUNGE LUCID MATIN SLATE
HONEY SWEET FORTY DOILY CHANT
PENNY PENCE BT K

PIANO MUSIC MOUNT TEXAS UNCLE
ORBIT PERIL SINEW ALLOY SWIPE
ABBY ADDER DAISY DAVIT CYNIC
URBAN FLOSS SHOVE URINE IMAGE
BALKY POUCH SHRUB PRUDE TERSE
14 GPM

GJ7 DE 8RM NR11 -P- Ø91123R GR55 BT
FOLIO CHIEF CROSS CHINA EXTRA POWER ORDER NAVAL TIGER RAVEN
SCREW HERON LUNAR NUDGE ODlUM JETTY OPTIC BOOZE KODAK DOUGH
UNDUE SUMAC PRISM PRIVY FAULT Flier COBRA POSSE KNAVE LABEL
DIPSY HYMEN DONOR SPECK UPSET CANAL SHALL DINGY BRICK ACTOR
TIMID OASIS LOATH TAUNT NERVE TALLY REACH KNOLL ETHER PETRO
MANGE WITCH WHISK ZEBRA DOGMA BT K

13 GPM RECEIVING PRACTICE
SERIES 5

14 GPM

TM459-53
13 GPM RECEIVING PRACTICE

SERIES 6

14 GPM

1EZ DE Q4B NR5 -Y- 13Ø255R GR55 BT
ZOFRU MASPV JNYOC YXBIK EHGED HSPMS AROQB ULWTP JBZXF NIASD
JULNZ KJAUA ZFSZD JZXIB ARWTL PSBOR PSQDM BHGKE IEOXH NMOCY
LVJAU 9Ø572 ZROPF VCWET 81346 TGQWQ CFIVK GYDHM XRLFL MGXRY
148Ø2 HVIKC GWDQC TEFQV WRTOZ FNULM JVAOY 95736 YICKX EKGS
DPHEM PRUAS BLQTØ JXWFZ BSSIN NJAKU KJSZN ANUDI FZJNX WKITIU
ZOTPO QSMRD FITLC MLWNA CHFMN BT K

13 GPM

T12 DE H7H NR3 -Y- Ø8Ø937R GR52 BT
YLXVK MFRKN NSDAZ BIUJF ZJXLJU RTPWA PSQOB MSBHDD EKIXG IYBOC
JNMVY PURLA OZTFW 64389 ETQVC GCIQW 1257Ø GYDHM VKFRMN XCYXG
JAUBH TQCGV ICHWD UAPRT BSIDF NJUAN KCSXJW BLQZO MSPSD EKEHI
5472Ø FZROB MNWOY TQVKE GMLFY 19368 LZBP¶D HÖKIO MARLN 2674Ø
IWYCH LXCQX CETGW OJCYU EHGMS PDSSX BULJN TXFMS UYAZP JBKER
51839 RZVTF BT K

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TM459–54
13 GPM RECEIVING PRACTICE

SERIES 6

13 GPM

D5B DE 8CW NR9 -Z- 271938R GR52 BT
MVKFP IWVQO OFCEQ WBGIC YLHXG FRVKM Ø2754 36981 TZRVW PTAUL
MJEBO IKVYN XYEGC QDSOM HSHPQ BTHAU RPNZL BUSIN FXJ2D AKYPJ
OCUAZ EFBTQ BDPEK WRMXG JSZND IKUBN LTUJA BAZQO 82415 LFIXCK
MVGYR IDHQW TGCYW MEHOV SMSXG 6739Ø INJHR QAOLS TVFWO CINF MK
ZBULS 2684Ø HQGWG COEDT XECGY BEMHP TZXBU SDKAF ZUINJ JHRPN
KURZJ IYVLM BT K

12 GPM

2BQ DE 09R NR13 -P- Ø31323R GR5Ø BT
MAPDY 15937 RLQVF QKBAU MJNVU QWEC D2TIC WVRKM XHVAR MSDH
EYOIC XPYEL BZFXD NIJSN KZBAU POPRS GTLJW QGLFY 1275Ø 98634
TATQO LOZON GEKHX YCQPS UKSN 49617 YFLRX VCGH TDGW EWTNV
WBZIO FVJUM EIYEH SPDAT LXBDF NQAZM 83952 57643 MVZPO COESX
JRXIW FKMYL GCDHG QEWHQ TBTWC NAURF YOUIQ LJKB DNGSH PQHRA
BT K
13 GPM RECEIVING PRACTICE
SERIES 6

11 GPM

O1K DE 3WB NR8 -M- 302146R GR46 BT
SBZXJ NFAKU ZNDCK 38Ø19 LXTHR CVRAQ YXKIB MJOCN SCHEQ HMSDE
Ø2357 DGMV WQGFI FTOVW ZLYPU UPROA JTLZX PIWNB SJFBA DKUNZ
14789 WQGTE NZAKD IBSFN LJUXZ BWJUT PRAQS PDMOS BGHEK ICOXE
YNMVJ UPRYL FWOZA TCVQE DHGIC VYXLX Ø1257 34689 FRMXH LMGKY
VDHRF WGOIC ECZVT ROUWQ MJNVA LYCOPT K
14 GPM

8WFM DE U6C NR7 3Ø15Ø2R GR55 BT
PJGBN WHTEC IUMLJ HTSEG LSVWD 79486 RQKGB NSZFM VYZVR YTFAC
EMQHO XKWIR KFDAP NWVLN JOGKL FMUVY UQXJI SREBR DQPZB DHYNZ
156Ø3 JKGPB ADGSF SNOTZ WKTCH WHETF 87429 ILKMO CZXAI XYAMD
POZFX YZVDT KEFFS JKBQ WIYSB LMUVG XXMGS HMRZN HAHZA 6Ø279
ETLYJ RCWPD OECND RLOKL TEVJI WXQGS CVZJQ ICDFK LAYRE XWGDK
FRCIO 81453 UBBT FVDLM UVEIQ BT K

15 GPM

KY2 DE 7YBD NR8 312159R GR59 BT
DLNQ ZWHIM UAHNZ ADRSW JXMBD GJKLN OQSRT ZWHCE 32519 PIMUV
XYAYZ WVSRP JGDNB OQTLLH Ø1486 HFIMK ACEUH NPBVZ ADFGE RSKTI
WJXLO QMYUB DGJKL NOQSR TZWHC EFIMU VXYAY ZWRSR PJGBD NOQTL
HFIMK 32518 97463 ACEUH NPBVZ ADFGE RSKTI WJXLO QMYUB DGJKL
NOQSR TZWHC UYMQO LZJIW TLRSE GFDAY VBPNH UECAM KIFHL TQONB
DGJS RVWZY AYXVU MIFEL Ø9362 BAYDG XJVKU LMNIO 57648 BT K
15 GPM REceiving Practice
SERIES 1

15 GPM

8PQ DE R35 NR5 221435R GR59 BT
FQECH WYHZN 684Ø3 WPVBS VRZPA JDGFG DBENR OSQKT LITHW JFICK
LMOQA CMEYU UTZRS UHNYP MBVQZ AOLDF GCXER UAEXC XVAMU KMFIIH
LECTH QWZON BYDZG WJVKS LRNPO 92572 12584 JQGDS RBTWI KSTHC
BXWIL OMYUR AHYNX PVBUM ZAIDF GECRK WTRJX LONMY UEMAO KXFWL
KORBG 79364 DJLOS TWDFM VYZSP GBOTh IMCUN BZDGR KIQLQ MUPJA
1Ø279 HTKRF AKPDY BVZUM FIKVZ DBKHC EFBPH 52648 GPQFR BT K

16 GPM

RS2Y DE K7CL NR3 181946R GR62 BT
GEDAB XPSRH HXNVO 56482 UQOMK JFCEY PWTRN IHEFEL BKDJL ZVSTQ
ZCMWU 179Ø3 WCTGZ CABQY ZOJSX USJDM BPFWG GMVWK 14173 VQENA
TRLFT OTIJH CLRYB ZORCZ ZSCQA MEXRJ HDOHU WEVWP FRISH PKKMD
VNTGA LQTNG 61193 CIXVL FYZOY JAABU 4Ø473 RMMZM FEVYQ HTODD
RSKJT KFIWO HWLVU CPGXN LBQBN FZUIX 61725 QHAXP YRBHV TOLCL
CUNZ SVJIF EJBWU OUYCK TPGSA ZIMNK JPTRK NMQWD UCBDG EYBQK
Ø7143 OAFL BT K

44
15 GPM RECEIVING PRACTICE
SERIES 1.

17 GPM

JW6 DE D2N NR11 Ø81614R CR66 BT
NIFMP OSQSL PAUHN 249Ø3 PSYLE JRXEB GVPI M VCAMC GILLH YFZEC
OSTDA TSRRU HVAZO ADRQF GWTSQ ZWYXU NFKOP XSJCD 2468Ø JIKUV
WGEBS 43124 AZXWY MAUGO TOMRQ VDJHU XQZAD PUKFO ZAVDY FASCO
IQDAN DCKOS IWFQA KDMNG UWZJT OMHHR PJPLX Ø9218 BVELX NYOXZ
TAIKW TARBE GDVUK BFVET ERFQM JHGIL RSXDU NCCAD GNHOJ 6789Ø
LWMCZ XPWUV PRYV XHKRZ 13457 FPRTZ EDCVA QPONM FGHRQ PZYBC
UPJIL KNMXW GFHIJ SSOLD EAXWV UTYNV BT K

45

TM459-59
15 GPM RECEIVING PRACTICE
SERIES 2

14 GPM

8WF DE U6C NR13 1421Ø6R GR55 BT
PJGBN TGHEW UJLMI GETSH WVSID 76498 GBKRQ FNMSZ VYVRZ FATCY
HOMEQ RIKWX PADKF WNVLN OKLGJ VUFYM QIJXU REBSR BZQDP NHYZD
3Ø165 KPGBF DAGFD TONZS KHTCW TEFHW 29487 LOMKII XIAZC MADYX
FOXPZ DATVY FEBSK BUJQK SIBWY MUGVL GKMSX ZNRMH HAZAH 2Ø796
TELJY PUWCR FODNC LOKIR JETVI GXWQS VQZJC DIPFK JELRY DWWXD
TOEBG 13548 FBTJU VMJDI VEOIU BT K

15 GPM

KY2 DE 7YB NR9 26Ø719R GR59 BT
DLNOQ WIMHZ HANZU DARWS XBDMJ JNLKC ROTSQ HEZWC 75293 MUVF
ZAYYX VPSRW DNBGJ HOTLQ 6Ø814 HIMKF HACEU PZBVN GADEI SITKR
LOWJX MUBYQ GLKJD SONQR HWZTC JUFIE XAYVY WRSVZ JDBGP N0TLQ
KIMFH 21853 CEAUH 43697 PZVBN FEGDA SIKTR LOGXW MUBYQ DLJKD
QRSON HTGWZ MOYQU JIZLW REKST DAFZG PHNBV CAMEU FILHK NOBTQ
JSGFD VYZWR YUAXV FIMEL 32Ø69 DAGYB VUKJX NILMO 68574 BT K
15 GPM RECEIVING PRACTICE
SERIES 2

15 GPM

8PQ DE R25 NR4 Ø91733R GR59 BT
CEHQF HYNZW Ø8436 BVSPW RAPVZ GGDFJ NEDBR SOTKQ HITWL CIKFJ
LAMQO YECMU RUTZS HYNPY BZMQV LODFA XRECG CEYAU MAXUV HIMFK
THECL NOWZQ DGYZB VSKJQ ROPNL 22759 GDSQJ 41528 BITWR SCTHK
LIBXW YOURM HANXY MUPVB DAZIF REGCK TXJRW MONLY MUOAE WXLK
RGBOK 34679 SODLJ WMFCT YSPZV HOCTB MUNCI ZGRDB JILKQ PAMJU
71Ø92 RHKTG PADKY BUMVZ KIVZK DHKBC PEBHF 42168 FPQGR BT K

16 GPM

R2Y DE K7C NR31 1Ø1632R GR62 BT
BADEG SHRPX NOHVX 62854 OKMUQ JECFJ TNRWP FILHE JKLDB VQSTZ
MAWCU 31Ø79 GGTZW QADYB SOXJZ SUMDJ PGWFB MKVWG 11374 VANEQ
GANTV TGNQL 12169 VILCX YOFYZ BAUJA 44Ø37 ZERMN YEVOQ TDODH
STJKR WOFIK LUWWH GNXFC BBNQL XIFZU 12576 HAPXQ BVRYH TCOLL
NYCEZ JVSIF BWEJW GOYUK PAGTQ MIKXZ TKPJR MWQDN BUDCY YNBEQ
134Ø7 FALOV GEBDA RXSH HXVNO 56428 MKUOQ FYEJC RPWNT LEFIH
KBDLJ STQVZ BT K

47
17 GPM

JW6 DE D2N NR12 Ø9Ø427R GR66 BT
PINMF SOSLQ HANUP 3Ø429 LEPSY BERXJ GIPMV MACCV LILHG CEFZY
TADSO RUTSR HAVZO DAFRQ WSQTG YUWXZ FOPNK SDCJX 6Ø482 KUMVJ
GEGSW 12344 ZAYXW GAMUO ROTHQ DUHJV DAQZX FOPUK VADYZ SOFCA
DIQAN DOCKS FAWQI DMNKG JWZTU HMMOR JXLPP 1Ø829 LEXVB OYZXN
KITAW BETAR KUVDG FETVB REFMQ LIJGH SUDXR CADNC JOGNH 76Ø98
MLWZC WUPVX RVVYP HRZXX 41735 RFPZT VEDCA NOPMQ GRHFQ ZBCYP
LIPJU XNMWK FIGHJ LOSDS WAVEX NUTYV BT K
15 GPM RECEIVING PRACTICE

SERIES 3

14 GPM

8WFN DE U6C NR7 3Ø15Ø2R GR55 BT
PEJGN WHTEC IULMJ EGTSH WSVDL
HEMOQ RIWXK ADPKF WLNVM OLGJM
36Ø51 PKGVJ GAFSD OSTOP CKTHW
FPXOZ DAVYT EFSKB U6CJ SWBYI
JEYTL OUCWR NOCFD OLIR JKETS
TBOEO 83154 U6KTF YVDM U6EIQ

15 GPM

KY2 DE 7YBD NR8 312159R GR59 BT
DLNOQ ZWHIM UAHNZ SAWRD BXJDH
XYXAZ VPWSR DJNGB QLTHO 18Ø65
JLWXO MBYQA KDJL SLRQN WTCJ
IHMFK 51832 49376 UCAEH PVZBN
NRQSO ZHCWT YQOM W6L1J RTEDS
GPSJD VZRYW YVUXA IEMFL 6Ø239

8WFN DE U6C NR7 3Ø15Ø2R GR55 BT
PEJGN WHTEC IULMJ EGTSH WSVDL
HEMOQ RIWXK ADPKF WLNVM OLGJM
36Ø51 PKGVJ GAFSD OSTOP CKTHW
FPXOZ DAVYT EFSKB U6CJ SWBYI
JEYTL OUCWR NOCFD OLIR JKETS
TBOEO 83154 U6KTF YVDM U6EIQ

15 GPM

KY2 DE 7YBD NR8 312159R GR59 BT
DLNOQ ZWHIM UAHNZ SAWRD BXJDH
XYXAZ VPWSR DJNGB QLTHO 18Ø65
JLWXO MBYQA KDJL SLRQN WTCJ
IHMFK 51832 49376 UCAEH PVZBN
NRQSO ZHCWT YQOM W6L1J RTEDS
GPSJD VZRYW YVUXA IEMFL 6Ø239

49
15 GPM RECEIVING PRACTICE

SERIES 3

15 GPM

8PQ DE R35 NR5 221435R GR59 BT
FQECH WYHZN 684Ø3 BPSWV PRAVZ
QMALO MUEYC SZTUR HPYNU BQZMV
TEHCL WOQNZ ZYDGB WSKJV PROLN
ILXWB MUORY AYXNH UVBPM AFZDI
BOEGK 96437 OJSLD WFTMC YPZVS
Ø7921 RTFK KDAYP UBVMZ IVZKF

16 GPM

RS2Y DE K7CL NR3 181946R GR62 BT
GEDAB XPSRH HXNVO 56483 LUQMO
MAWCU 7Ø931 GWZGT YABQD OSXJZ
FILIR JOTHI LBCYR COYZR SQCZA
TAGNV QCTLN 19216 VILCK YOZYM
KTJRS FWOKI VWLH CNGXP QNBLB
UZECN VFJSTI WBWJE GOUKY QPTAG
Ø7143 OVAFI BT K
15 GPM RECEIVING PRACTICE

SERIES 3

17 GPM

JW6 DE D2N NR11 ø81614R GR66 BT

NIFMP OSQSL PAUHN 92Ø43 LSYEP
SADOT RUSRT VZAOH RFQDA WQS GT
WSGBE 24143 WZXAY GAUOM TRQ MO
QDINA ODCSK IAQWF GMKND JWU TZ
KAWIT ABTER UDVKG EFVBT MFQ RE
WCZLM UPWXF YYVPR HRKZX 41375
IPJLU NWMKX PHNGJ SSOLD EAXWV

XBEJR VIPMG VCACM LHILG FCEYZ
XUZYW OKPFN JDSCX Ø1846 UJVMK
HDJUJ AØ2DX UOF PK VZAYD CFAOS
OHMRH LPXPJ 92Ø81 LEXBV OZXYN
IGHLJ SUDRX CNCDA OGJNH Ø6987
TFPZR VDAEC NPMQO FQRGH ZBPYC
UTYNV BT K

TM459-65
15 GPM RECEIVING PRACTICE

SERIES 4

17 GPM

BAØ DE T4G NR6 -0- 281315R -FM 6S3 -TO FP2 GR66 BT
SECKG BIXHE YVNC JALOM VOPFW PETUZ 3657Ø WGCQT IHDCQ 28149
XVLKG MFXRY KGRYF MXHVL GIDQW VETWC RZFQT 457Ø9 U'VO LJNMY
DGIÊB XOYEC 16382 SHPMD OHRAS TEBWQ XJULZ SNIBD DJUNA JSDZK
AUNKZ ZNIIB JWXPJ BULSO REGHA MGSKE HIYDP XNBJC AVPLY UMFRO
ZVOTW CWEGQ DCTIØ 48963 KVMVH Ø1275 FRXLG SFNMA JNZDX JTIUK
ZBPLW SQODR PMEAÚ SEIHG XOHKB YANLC VPJUY Ø5763 FWVRO CQMET
ZGQTI WCHKV TLBCW FNALK TOUNL FKQPT BT K

16 GPM

XY31 DE 9BO NR13 -Y- 14213ØZ -FM T8C -TO 7RH GR62 BT
81429 DGULX MFRLY GDRKX HVCMF GWCIQ 824Ø3 TVWEQ FVAOT RULPZ
YMONJ XBCIY HSDKE ESMFG QAROH 56971 WLTPU XFBZJ DISNB NUJKA
SDNAZ UJBNK JBFTZ WLIZX RPSAU ODOQ GMKES HIYEC JOHNB MURAY
FWZLV 48Ø93 VTCOP GIWEQ CHDQT 12576 KFYVG RFLMF GYNXL RKDVH
WCIGC 4Ø517 WZRTQ FEQOT LMAVU JNVOP XEKXY NHNIB SSPED 28639
UAPOR LWJQB IZFTX SDSZN NJBKA GNUKH SNJZA FZJIB LWXTD BOQAP
RUSPD HSKEM BT K

52

TM459-66
15 GPM REceiving Practice
Series 4

15 GPM

SW1 DE C1Ø NR1 -M- Ø8Ø25ØR -FM B03 -TO IB2 GR59 BT
HGIXO BENCY JMVYO PZAUL TVWRF 39Ø76 CGETQ DWQIC 42158 CKHYG
KLMRF KNSUA FJNZD BITZX LAUXW PERSO PDHDN EKKCS HHOXC BXYJI
UPLMN 93486 TZVWA ROQCF TWG EQ 172Ø5 CKVIY DGMLH XMLRF YVGFK
RDHCX 3Ø647 WTGQI VWZEC RVL TQ APUOF YCJMN BKOYI 15298 KEGER
PDOSN RPSH LITWUA FIXZJ NSBSK NZDUG BZUA DZNZB SITNJ FOULW
BSPAR DQMP GIKEY YNBCE HYOKJ OPAML 13Ø58 RWUVF JVCTZ BT K

15 GPM

RF6 DE JPØ NR16 -R- 18Ø713R -FM TG8 -TO K9G GR59 BT
YKVML XFRQA LVIDG CRFX Y GHKMW 1872Ø CTVWQ ZOTEQ RLALF MNJYV
CBYIO HOMSE KSHDE RPABQ OTLPW JZIBU DSJXF NNUKZ NXS DZ FKANJ
JIBUZ TOURP WDALS PDAMQ GDKES BOJCH YXLN1 YAPVM 89143 RZUFO
45962 WTVCP TGQEC DCIWQ Ø7526 HYFKR LMGX SKUD BJVFN XWLTI
JAPZN SMDQH LOGSU HIDEB CYEOB Ø5893 LN VYJ MPUAR XWZF VTCOEP
WGQQT 41267 CVIDH LYMKG FMXRH YGGCV DLIXF RQECG 97185 BT K
15 GPM RECEIVING PRACTICE
SERIES 4

14 GPM

6JB DE BC1 NR3 -R- 30165ØZ -FM L3N -TO GM61 GR55 BT

SQASP JXBUG ZUSIF KJDAN 8ZTWB  NODMR GEIHX NHJOK MFEUR VKITP

KNZCZ SEHED WUTIQ BSNIJ LXZFD  BOAPR JPMGS BIYCH XVANO LYMJP

RFWOU 4Ø369 ZTCEV ITGQQ 21785  WCGXL YRGFH KKVUM CJOY GKKXIB

DSHYE LARVM PMIOU SOPAE BPRUP  NIULX JSANZ BFJAZ WFVZT LYTXW

CTEQG RICFW 936Ø1 KHVGM 24875  DKQXM IDHCY LGVFR VHHMY 215Ø7

TQCGW 0ERF VUWAT LOIXP BEQCY  BT K

54

TM459-68
15 GPM RECEIVING PRACTICE

SERIES 5

14 GPM

M3J DE FW2 NR4 -M- Ø21725R -FM SV3 -TO LH3 GR55 BT
MATCH BRUSH CHAIN BLITZ GIDDY
SLANT MUSTY HENCE MURDY LINKS
OPTIC RIGID REVEL TOTEM TORCH
WROTE SCALD WORTH OBESE NYMPH
STOVE BLOWN CATER DETER SNEER
ENACT EMPTY GIANT GELEE GALOP

15 GPM

AF9 DE JVØ NR5 -M- Ø31823R -FM RB6 -TO XQ8 GR59 BT
OPERA OUNCE PEDAL DIRTY LUCKY
WORSE GAUDY VEERY YEARN RAPID
XRAYS GAVEL SKIVE GAUZE SLAKE
UNFIT SOUND SWORD CLEAR SOLVE
PAPAL VENUS LABOR RUCHE ROUSE
ARRAY SPOUT BOARD SPICE ROUND

55

TM459-69
95
M3J DE FW1 NR2 -M- Ø5Ø625Z -FM SV1 -TO LH2 GR59 BT
AWARE BATON SATEN DEVIL JESUS
DROLL EJECT TREAT GIVEN VOCAL
VOICE STEAM LATIN GUARD FARCE
STAFF SHOCK NIGHT QUACK TIMES
FANCY BUCHE REACT CLOWN BLIND
CHIME SPINE SCALE CHOIR CHOPS

16 GPM
E32 DE HG26 NR7 -R- 21Ø415R -FM SC18 -TO PY8 GR62 BT
MOUNT PATCH NEVER LOYAL JOINT
DODGE DOUGH PASTE FRIED FLINT
OCEAN FAMED DUMPS COURT DITTO
SPURT CHEEK JIFFY JOIST BONES
ELDER WHIRL EASEL ELEGY HERON
BEAST DRIED CHASM LOFTY HAVEN
SHRUB AHEAD BT K
15 GPM RECEIVING PRACTICE
SERIES 6

17 GPM

UT5 DE 1GQ NR1 -R- 1Q0345Z -FM NW7 -TO LAI GR66 BT
ECFPY GRNEH MSVKC UVGAT 9Q24
IQLVK MOSYH QDTZV RUXSE CWFTH
KNLTI BLOYU PZNGH SFBCA 26148
JRHTL INJAU VXOQD UYDTS MWAEK
QTGIY VMRLF EXXOB ZMWKG 9Q753
QAPBZ NXSBE TCAVD NJFH M FWQI
PNWUI OISYQ MWLR EXQDG KRLYM
359Q FZWOJ KHGTR SAZUL DJOXB
KCUTh PYCGA 27614 FHYKX RMLVG
DNUZB KJSFZ ILJXN KQCIW PYJXV
MGSHE WRQDP TUSPA K0HEB CMILY
URANE 43752 OYETE CGFTW 96801
QVAJ ZKFJH NTKLE JEBAM TNSQ
IGEOP BT K

16 GPM

MC22 DE BA19 NR16 -M- 292118R -FM CR1 -TO TP6 GR62 BT
JRMGN SDNFV KHDIB TBJCI WQXW
POSNL QTGEW VZPOL TMARC UASRB
PKXHQ GJBE VCHNU E0YEY 97835
6Q421 XQJUD KSRFX NZUML QBEXY
PCGSO VYADK 58371 CHTWQ UZJBH
LRSPI FBNAJ VLNOE WETIM AROTG
KYOQ FMWFD 2649Q HVCLM XFUZD
KYSJN GKIJD NXUFO BKWNZ CPTVL
PLJSA PIARB HQBIX EJPOS GQCTW
HMGDY EYCVM 43287 EVHOZ WRUPA
9Q561 XLRAP SDM6K UABZW LXKQ
DQTIG YHGK MVGCW EBHUR FDJSM
JIVOP SQBEJ BT K

58

TM459-72
15 GPM RECEIVING PRACTICE

SERIES 6

15 GPM

BAØ DE T4G NR6 -O- 281315R -FM 583 -TO FP2 GR59 BT
SEHKG BIXHE YVYNC MJLOA WFVOR ZPTUE 7Ø365 QCWGT IÖCHD 92481
LVZKG MYFRX KRGYF LVXMH WQDGI TVEC TFZRQ 974Ø5 UVOPA LYNMJ
DIEGB X YEOC 26138 SHMPD OARSH TBPWQ LXZUJ SBNIF NJUDA KZDSJ
KZUAN BZNII FWPXJ UOBSL AHQRE MKSEG DHIYP XJBNC PVLAY CFMUR
ZOTVW CGWEO QTIDC 39648 KVMYH Ø2817 FLXRG SANFB XZDJN KUITJ
ZLPWB RDOQS UPAEM GHISE BKOXH CLYAN YJPVU 356Ø7 OMFRT BT K

15 GPM

XY31 DE 9BO NR13 -Y- 14213ØZ -FM T8C -TO 7RH GR59 BT
81429 DGYLX MFRLY DGKRX MHVCF INCGQ Ø8432 ETWVQ FOVAT ZPRLIJ
NYOMJ XIYCB EKHD EPMSG HQROA 17956 WTLPU XBFZJ NDBSI KUNAJ
AZNDS JUNKB TJZBF WZILX PRUAS OQPDM SGKŽE EIJHC OBJHN MAYUR
LZFVW 394Ø Ø PVCOT QGWEI TQDHG 17265 KYVFG MRXFL LNGXY DHVRK
WGCIC 1Ø547 TQRWZ TOFEQ VLUMA VNOJP XEXKY BHYNI EPSDS 23986
PRUAO BLJQW TIXFZ NSUDZ KNAJB HGNJU DJNSX GBXSX LYFCW BT K
14 GPM

SW1 DE C10 NR1 -M- Ø8025ØR -FM BO3 -TO IB2 GR55 BT

HGIXO BENCY JMVO Y LPAZU TRWVF
FXRML KUSNA F2NJD BIZTJ LXWAU
UPLMN 63849 TAZWV FOQRC ETQWC
RXHCD Ø6347 WQGIT EWVCZ RQLTV
DNOPS RSQPH UAWLT XZFIJ SNKBS
RBPSA DPQSM HIGKE EBNYC XYJOH

96703 TCQEG DWIQC 58441 VKHGY
SPROB PNQDH EKSEG HVXO BJIVY
Ø2715 CIVYK HLDGM FXRLM KPVGY
OUPAF MNYJC YOBIX 95821 KGEHE
JZNUD ABKUZ DNXZB SITNJ LOUFW

BT K
18 GPM RECEIVING PRACTICE

SERIES 1

16 GPM

6C5 DE V4T NR7 -M- 150949R -FM TC4 -TO VG5 GR62 BT
46821 CHKNS BEMPY WZTUI LQRXA FDOIJ VCKRT HFDUW XLENB PZYQM
AGLOJ 37509 SBNQU XYIGH FEDOS TVKJZ WRLCM APOQC KMYZE GHSVA
JWBIK DLRNU PFYJL CZMSI VGPPR DOHUE WUXAQ NUJOF 37205 MGWCQ
LKRSD UXJHY ZIVET NPABO 91648 LVOZX HSUIN JRTWK GPEQB YMFCA
JQGTB ZLVFW RIPDM YHUCO AEKNS XYZWI PJUVM XSTGK RADNH QPFC
LBQG 93064 LQWSJ YVKNK CIVEF ADHMP TZWX RPOLB AFIQS CZUKO
HMCGT JORVZ BT K

17 GPM

PD3 DE SM1 NR2 -R- 011011Z -FM SF7 -TO YQ3 GR66 BT
XTGIC BAFKQ WSDLH EMNPU 07369 52418 ZYJCD HMORK BWUNJ FEAPI
CQVTY XSLCG 27659 MOJDA BFQTW ZXUNG LELRS PKYCD HNPWR ZXKJE
BISUO VUTQL GFAJQ 18304 07629 MAEIS LVUWP HNOGB DGYT SRKFA
ILORG FSJNY VZTST BHMOK QWEC CGJMO EHSVU BILKN QADFR YTCWX
15853 PAJNY XUSRO DFIKC BEHRM LHGTW PZYVC XQOLI BFHJK NSTMD
ECGPR UTJHA DBFLP RMQY VONGI ZCESX 84260 UDCNT 93517 AILER
ZQPMJ FCHOV XBUYV AJMOW ZQIF CXSRP BT K

TM459-75
18 GPM RECEIVING PRACTICE

SERIES 1

18 GPM

CY4 DE ID5 NR1 -P- 071420Z -FM HF6 -TO VE5 CR72 BT

NDHLK VTEBU GFMPU ZJGDB CHAIL RTOWX YVQEK NSDIX 05146 97382

CBFSO NAEHR VZQJL KYUWT PMZUJ CEHNIK AQSPL GDWYR XTMIF BOUPL

BEHNR 62918 53047 ZDIMJ KQTX SYWOG FVADH MPRIE VYOKB AZWSN

QXUJJL GFCTF XTQOI ALNPJ ZUKJG EBRVD CWSMX JWYT BRGIC NLOKQ

FSURH PADMV YLJGO 57420 18396 SPKEK YUQIB AZTFM NHCDR WVZJK

BMPHO WRQLY UXTIC EGDON FSQZ OYUIG BJLJS VXWIM DNECT PWAZO

13569 80742 DENTQ YPJGB AISRU WMVHL DFYQMB BPADU XVLJ FHICG

TWZKI EMFKU BT K

18 GPM

LP6 DE ZR1 NR13 -Y- 191345R -FM XY9 -TO DP2 CR72 BT

CIMPG YRZWX VSOKE ABDHL NTBFQ 26497 01538 NZXTO KCYUP JRWIE

DGLHM SVACP ZWJME BHNOQ GDKTV RXLYL ASUQN YDVZS FBCGA HJILLR

UXWTM IOPFJ SWZFX QYDCH VILGB AEOPM NRWLU AHOPS RDGFJ KIEBQ

GZNV MUTRO JZWSF CBIGE ZTILKA HPGDM YUNX9 93681 72045 DHJOC

YVTZN LTQIF WROMG BESXK CFJHO VXQPL UZSID BAGNR WMYE KJOTD

WQMHP IVXSM CPABG LKEUZ NYCHJ VUSQP ZWKFB DEAIM RONCL UTXOD

BJLPP UVSEH ZWTYQ RXNIM GCAK W PZLGX XUQNI YOIRMT VSKEG FHACJ

PMQZA WYRDG BT K

62

TM459-76
18 GPM RECEIVING PRACTICE

SERIES 1

19 GPM

WS6 DE FT2 NR17 -0- 061803Z-FM TW 3 -TO AB9 GR76 BT

29837 51604 KJQ0E BHAPM WZRC5 TUXVN ULIQG DF1JC WUTRO LXXWZ

SQKAG HDBNP MLUYR 02795 16438 OZWSH BIJKG QMPFD AECNT XVVCA

53746 82091 IER5U YQPFL ZOGDB HJNMR WXRDN KIGEC TPKFZ ZWWTS

JDAFM UQPXU OLBKD ZRXVD USMIJ ACGLH ENQKB 65931 70482 AUKJL

HBHEQ BGXVY UCKDU BYBGB SHNKG YMNPB IWTUZ ARLXQ JHFOD TKVRC

WDFUH NEXBI MUPQZ GSAVH EYKZM COAQ0 WLMCR TLJZV FDB0S XIGHY

P1NCG RWXZV OKESV BADLH TFPBN 64792 10385 ZTOKN CUPYK WRELJ

GHNLD CAPVS MEJZW H0QNB KTDGV LIXYR BT K
18 GPM RECEIVING PRACTICE

SERIES 2

16 GPM
AB2 DE 5U4 NR3 -Z- 021558R -FM BT1 -TO YH6 GR62 BT
JAFCH BKVES TRYMO BGJTQ KTJWR BEGQP AFYCM WVZFL MPRDI OUYCH
SKANE IZXWY MUPVJ KTXVS HDRNA EFOCQ GOULI 40963 LWLSQ KRYNV
FEVIC PHAND XYTWZ BORLP SIAQF DUVKG TCHGN ZRJVO CGXIT QFBKA
HLWDS UNEPN 93067 84512 DJZCY KOHRN JUBNW IAFPE YVGTU GLXCS
96297 AJMDO WQBTF HUZNX SLIRE DYPCK WPHRN EKZJX OSBUI LTGVY
QAQFJ 83104 96027 SEMIA PULWV BOHCN TDCYG AKXFR GORIL YJFND
DNAGT 86841 BT K

17 GPM
PQ3 DE LF9 NR13 -M- 170930Z -FM MJ3 -TO QB1 GR66 BT
TZVSR QKDHN CWXEU OJCMC USEVH NLBLKI IOXLQ CYPBC WGLTH BHBRE
CIDKF OXFRU YJFNA 38155 XCYWT RDQJA KHBGF XCWT DTNMS RGETC
UJAHT PFDLD LKRWM INBOG XZFGL 02864 TGUND UEVB BT KNLH PSRX
FQZIK WMAMJ WUXYD VFOHOC JPNQ RLAERI 75913 IQXNU DOPGC QAGKC
UMGPB BCGZDK LACIH XROWT QKYEV XDMIS 61054 23987 OFCSB RENHA
DOXTY GLONR MIDE BFKWZ PQDUSV HJYCN ZULK BEPAC XSRVI HFQMW
JOTDK MEYWT GNBRD DISUQ QPVLX XOLZV BT K
18 GPM RECEIVING PRACTICE
SERIES 2

18 GPM
RP8 DE WT1 NR1 -R- 091745Z -FM GI2 -TO XE7 GR72 BT
JFHOE KSERX GRUMW FTQIL NTVZY XNVTX RTMJO WSSFJ QIECB TLAKZ
GDPML NUHYA 68139 24057 JHDOC WXUTM PIOFJ WGGSK DYQCH LIBGB
MPAE WUNR POAHS CRDJF KIQEB LIHJR QBJAF VSZDY QASN YXIBL
TDGQV OHBNQ MWZJE CVSSP GDLNH PICMG WRYZX JSVIE HBDL FTMNBQ
96247 31058 TZNXD UCKYP IRJWE KNEFU WTVIZ OHEGR LNSJS DPBAU
QFDYM HMWVL RXASU GPYJT TECNQ LKUTC OGEDN QSFZK IYOSG LFJS
MSBRH CNVEC ZWPAO 63159 40872 LRWQY HMBPY JUVWK DNNCR MFZAT
BUYQI EPSKG BT K

18 GPM
5Y3 DE 2AX NR5 -P- 151430Z -FM GT3 -TOKL7 GR72 BT
OTXQY LPANH JUZKG VBERD MWXSC YZJW TCEBG CLNOQ RSPUH MAFDV
UPNED XSLKW ZHBOG YRQIA VTMF CENRW ZPJDK Y0IFB VQLGC TSHMA
XUEJR ZOFETC VUKHG YSIMA DLWQP TNEQV 86302 GNUTM YCBP 74197
SLLFA XWZRO TKIH PXRME CJSJQ ONFAD BHLQT ZWUVO DSKWZ BXQJM
TLEAB HPFUE YVNC 09783 56214 MSDKH HIOUY ZPGVN VRCA EJKTX
MAFLJ XTYQP KECLS UVWHG DBNOR XYSX ZJLE ABNC GWHRO PKFUV
MZKGF 65480 33179 YOPKI ADMTV WZKJ SRHCB EUUCG KJRXZ WYTSP
98136 27540 BT K

65

TM459-79
18 GPM RECEIVING PRACTICE
SERIES 2

19 GPM

UKQ DE IMD NR6 -0- 290929R -FM MT7 -TO HD2 GR76 ET
MUKHD ABEOQ VLIFB YUVWZ FLPOR TSEIA GHKNM QOJHZ 95678 04132
VUKDA FHOSX ZYOPB ZGEMN LJCPF LNVXZ ADJKT QWGLK HKMBC OSEPRW
FTUFB OLSDD ZMQC YXJHE ANPVR 45671 TNVNL XRJFQ ZSHGU AKPWI
32867 JUSTW CRYH AGMPV COVVR DBKQX DFINQ ZUMID AFRKX BLSWZ
VTGMJ CEJOP QUSOK ANSZN HUEC WIPVF GDSEL RTYMS 69032 XJZLW
IEMNO WCJPJ XSLKF UZQHA DBTUC VZXPL IFVQG NAEOU QTJHB DLSMW
URIDN 02471 95286 YOGKB VLN0X XQHEA TSXZM FPYCJ VX1GK TOKFU
MRBHI SPAZE QWNVI HSET0 JRGNC GLYJO ET K

66
18 GPM RECEIVING PRACTICE
SERIES 3

16 GPM
WM9 DE JR7 NR6 -Y- 011515R -FM JR7 -TO WM9 GR62 BT
BLNUY ZQPKA DFMCN 04682 13579 KHUYG ZSMEF PRIBA XLDOT JQVWH
WSOQT BMUXY JLDRV ZQPIF ACGKN ZNHDP TISEA 27531 46890 LMQRB
CGFOK JUYXV WDELM YCRSA UJPQW ZIGHB FKNQ TVDHTN YCVJK GQXMU
OPRWF ABEHI KLMRD SKMGF ZQNHIB ACIJL XVOPY UTWEM REPUN YCGTA
CDKSW XJZIIH BLONP ZAYBX ZWDVE UFTGS HRIQP JOKNL MCAIB MCOID
EPFKG RHXIS WJVKU LIJVT 37931 08654 58672 LKVWU 09142 XAYDX
CTRSD IENHQB BT K

17 GPM
8CK DE 9EX NR7 -Z- 101214R GR66 BT
PBOCN KWZIJ MGLQY BKPTG 94351 62708 QJCEA SMLXV WOIUH YXUMB
POIUY GRDWA QSEFT HUKOM NGVDZ ZECTB NYVRE PLJUV DAMFV USRPH
PLIJB TREWQ ASDFG HJKLM NBVCX QAZXS WEDCV FRGTB NYUJ MCIOL
OLKNQ GECBI WZYT SWMXC 93751 02846 RBVED KUJZG NLPAH QTOXY
WRYDZ SLQPA HKZNE ZJMUP YTKWU MLTHW JKYGP OEDGS 42769 05742
EQPLX GBRNA HIVRX BLWHT IDZLF URXUS JYNTA XXXYT ERQFA LNSKI
JOFGM WCXEW MBQHK ZTVBY JYFBY PFQGY BT K
18 GPM RECEIVING PRACTICE

SERIES 3

19 GPM

G84 DE G85 NR14 -R- 091415R -FM GX5 -TO 8LX -INFO 4SL CR76 BT

XKVPZ RGIVF EUNOA JBQHT SWDML INYER 41072 36985 GKYBO WUVJL

HAXEQ CMTZS YJFCP LDVGH KUTFO BIMHR ZASAP NIQVW EOHTS WCJGR

NYBUL PAZLQ MNDXF 62084 59173 UGKYH MFZES IAPBR DTXOL VHJWA

OTEQS UYBMX DVJRL PFZIW GNAKO HYZDN SATEI 51237 KHMUO ZEEZB

BNREY UPSRH IPYLJ GBECl 02684 QLKNO MFBVA JPLDU ERVYN EPBCZ

VZNDG ERFSQ SAWRG ILKMO HJYNU RBTGF DBECW SQAZX VXCGN LKJMlN

DAFSB RQWET OYUIP UBYMX OHUWI GQLYN WJZKI BNZPO FABHX DSETU

MYSLB JAECQ 62870 39154 KGTBT JUOSQ BT K
19 GPM

1XO DE 8CK NR8 -M- 070413R GR76 BT
FGYPO EQNAI TDRSC YZABX 90142 KMWLU 65387 50846 93127 ILPVJ
KWJVU RXSXI PFGKE NOZDM AMBZY KLYJO PHQRI TSUFG DCVEW BAZXY
OPBLO HJZIX KWZDX GATQI FRVUR WMPUD OUXVP ILAZJ HZQWN GWKFN
DKLRN EHIBA FOWPR XGDTQ VKYJZ DXSNB KTFNO VIHZG PUWKJ RYAXS
DMYLD YXDUJ GKFCO KBLMQ 84069 51237 SATAI HPZON GANKZ PFZIQ
DBJRL UYBXM OTEQS VHJWK DTXLO RIVPA MFZES UGKY 51739 62084
MNDPC PZSKQ NUBLJ WZRGJ ETSOH NQIWB ZASEP VIRHR QTUFO LDVGX
YJFCP ZTSNO HAXEQ WUVLJ GKDOG GPBNZ BT K

18 GPM

PX1 DE CL2 NR13 -R- 122317R -FM G84 -TO 1XO -INFO VO5 GR72 BT
36985 70214 INYER SWBML JKBTC EUNOA RGIYF XKVPZ TZPBY FKLXS
CGPWG NONEI RZYOB IKWAF HZUSG RKQSG ELTVN 61475 02693 PDYMR
DJGLP PFIWV KZUIE NMASZ XQKYJ JAEOT NGHTU ZUEKH MZNSA QOKXY
EOJEZ HBNGB ZDLSW XRFKA DIMUZ AJCFX RTMOY QUUNK LDXDP AWZKJ
NXIRT SHVEU LPZFU XDTOY NLOGR AMIBE KSWFZ SBUQB ZYHN EKZUL
AGPZE SRVXI MFQNW OJDTK METYW GRANB SDZIU QLXPL JOFAZ SKBEX
URGMW QFLLT GNVZY JZHOD 05247 61389 NAUXY GMDH LATKZ IEBQZ
XPLQL REWIJ BT K

70

TM459-84
18 GPM RECEIVING PRACTICE
SERIES 4

18 GPM
RW2 DE CL4 NR3 -T- EWB -R- 171900Z -FM PX1 -TO 8CU GR72 BT
WFZSJ TOURN XBJNG EQIBK CJDFR OSKBA ULRWN OMEPA LBIGB DHYCQ
ZXWSF TJFOI WMXPU IRJKH CABGF VSFFZ NUSKA KVTGH NOHOB JEWMZ
AEDZX LNHGB WERLI YFZUK XOZTN 58130 47692 DQPFN DLBHA OESJV
ZXRWY MGIPZ FUNEK ZHIKT ZRHOF SJVLX AUPDU YNFQD VLMHW SUYPW
JBPQY NQETC 72048 69361 AOWZP ETNCP RXMV JSBLF UGYIO KZSQF
BNGOE TCXIU QYRLW PVMHV ZKBWV TMZFA QBUITY KXPES 36981 40725
JOLGY DVAMF UHSRP OQLKN GIECV WTCYJ SXWMC RDVBE KJSZU NHPA
MEJEZ YIGUO BT K

17 GPM
1Z05 DE FB88 NR9 -Y- 262329R GR66 BT
QITOX QFTFG ULXJK WNZSA OBYKV REPTM AHVDF WGUOS CXPZK IJVPZ
07345 89216 HRENV ULOPV MFIX WRBYG SLQPA HKENC ZJKUM QLZJV
81296 HREND ULOPB MFTIX YRVYQ SLQPA HKENK ZJMUP UTYWK ZJLVQ
ERAHN ZOSDC 32897 16540 DXSIN QKVEY OWTXR ALHIR GDZJD MUFTG
EUTVB HKDLN SPXRC QFKIZ NWAON UWyVX HOVCF TQJMQ ZRLER 57319
FTENU 20468 EXCSZ NIQOV WMQUR FTDBL JATHU GRCPE EDSEM HFSKA
OXIQL YCZVP GWHTL HMRBE ICFKD PIREM BT K

71

TM459-85
111
18 GPM RECEIVING PRACTICE
SERIES 4

16 GPM

1202 DE AL82 NR4 -T- FB84 -M- 011550R GR62 BT
SORXU JYANP 83515 CXPWY DRFQA LNKIB UVSHE OMYGC CEWUX KQAMB
PSZTB JUDNF OGIRL KARFX ZTGYD OBNZH UPVWL ESAIN 69720 40382
AQFGH TLYQB SOIBK EXPWN YBKZP LSERI UHXNZ QWFTB JAIDM 69752
LGSXC VYQTG AIEPF UJWNB OFNRH JDXZ 48215 39760 NUFNE LHSDW
FQA KB GCTIX RZOJ V CTNHG UDZKV ISFKA OBRPL YXZWP HDPMA RKVMU
WJKSL 04369 OGVUL FEQZO BHRSA TKSGH UVMFH KSEM A UOCHY PMIDR
PEMAO BQSUB BT K

72

TM459-86
18 GPM RECEIVING PRACTICE
SERIES 5

16 GPM
BD6 DE 8QB NR8 -R- 282021R GR62 BT
THREE SEVEN TIMES NEVER STRIP STRAP PARTS SHAPE PHONE RIGHT
WRONG GROUP BLIND CHEST RULER STEAK QUIET SMITE SMOKE KNIFE
VERGE FLING BLADE SNAKE BASIC FIEND SEWER SLIMY FEWER STORM
STORE CADET TRAIN DRILL AGENT SPIES ERROR LISTS MAJOR RANGE
MINOR STATE RADIO PETTY SIGHT GOING MOTOR FIRST THIRD WHICH
ARMOR AGAIN UNTIL SIGNS SWORD SWAYS SENSE POWER WORLD UNITÉ
TWICE WOULD BT K

17 GPM
1XO DE FB81 NR5 -O- 280409R GR66 BT
QUICK SHARP AVOID REACH EVERY EXERT FORCE WRIST THUMB SPACE
MEANS LEVER SWIMS SCREW SEINE ABOUT CLOSE SLANT SLIDE CLEAR
FORGE STARS METER MOUTH TAPES MATCH WORTH BRUSH OBESE BALMY
GAUDY RIGID MUSTY LIMIT GLIDE REFIT YOURS BEACH DETER WROTE
STOLE SCALD HENCE LINKS SNAKE PAINT GAINT OLIVE RELAY BIRCH
NYMPH BLOWN ENACT OPTIC TOTEM BLITZ TORCH CLOTH SLAVE LILAC
GEese EMPTy CATER GIDDy NAveL NEEDS BT K
18 GPM RECEIVING PRACTICE
SERIES 5

18 GPM

120 DE 5ZU6 NR1 -F-R- 261335R -FM AL8 -TO BC6 GR72 BT

OPERA WORSE XRAYS UNFIT PAPAL ARRAY OUNCE GAVEL SOUND VENUS
SPOUT PETAL VEERS SKIVE SWORD LABOR BOARD BORED WEARY DIRTY
YEARN GOULS CLEAR RUCHE SPICE LUCKY RAPID S LAKE SOLVE ROUSE
ROUND KEMPT SWIFT PETRY TRUNK WALTZ OUTER SHELF UPPER POLKA
STEEL STEAL LOOSE GAUNT HEAVY DECAY WASTE WAIST USUAL VAPOR
ISSUE FRUIT ROSIN WAIVE VENAL YIELD SALAD ELITE ROOMY STOLE
STAIR CHAIR STOOL TYPES SNIDE SWEAR THREE FEWER CADET STORM
PHONE RULER BT AR

18 GPM

J66 DE D2N NR18 -M- 231714R -FM 1X0 -TO FB81 -INFO 8QB GR72 BT

THERE MIDST NOVEL UNDER SWING WINGS BULGE JOINT BEACH ROUTE
CLOSE GATES THREE HOURS CORPS STAFF WHILE THROW PLANS YEARS
ETHEL REBEL AMONG WROTE ABOUT AFTER PLANE WORKS POINT MARCH
PLAIN QUOTE FORCE UNITY LOYAL SMITH DRAMA FIRED TROOP VOTED
GUARD MEDIC WHICH UNTIL OFFER CHECK STORE TOWNS WOUND SENSE
PRIDE EVERY SHARE CENTS AIDES TODAY LIVED BEING FALLS BIRTH
QUIET USUAL QUINT PARTY LEAST EVENT BLOWS UNITE SUNNY WORST
FIRST STATE BT K

74

TM459-88
19 GPM

1206 DE AL8 NR27 -0- 151624R GR76 BT

READY HORSE WARTS JAMES DEATH GROUP MAGIC WORLD OTHER TRUCK
GREEK MILES STOCK FLOOD ALIKE ROOMS STEPS YOUNG GAMES ROOST
PAPER BROWN DROVE GLASS CLERK MONEY SEVEN STEAD WHOLE LEASE
EIGHT PRESS LIKES KNOWN POWER LIGHT SHORT BLOWN LEWIS RUMOR
NEVER DAMES SCORE WEEKS PLANS FLOAT GLOAT STUDY STUCK RAISE
EVILS HOMER NIGHT BASES FORCE SMOKE FIFTH METAL NINTH PITCH
PEPSI WATCH WHEEL WHITE DELTA ROGER ROMEO ALPHA BRAVO GREEN
ERUPT MILES BLOCK COLOR STICK FIELD BT K
18 GPM RECEIVING PRACTICE

SERIES 6

19 GPM

PS4 DE 9ND NR3 -M- 272315Z -FM PL5 -TO HK4 GR76 BT

BWMFZ GYQM AFMCY EDPQG TKR WK UNISH OXZL 68149 ADBPN VPIEZ

XYJHU RDL SK WCGQM 25703 FKT ON XQFMA OWXQA MIZSA YLFJP RUNLD

WXBID SAHV G YEMZK OCPQA LCRWN KZVJT DSOEF IGYHX NUBQ 59703

LJGOA YMZQP ENIBX DWF UH KVTC HJDOF RAQSL TIZUW NYVTB KSHNC

81624 QBEIK JFCDE SPOHA LWURN MPOEA BGLIV HCDYQ XFWZS JFWKI

OCJHD 54027 18639 AXNUY MPGPH LKSTV QJAFG VOHCF EITRM XEKPS

81624 JGLOA XIWBJ DSLDG BUBL ORGMCH JWNUS WRMHP BGYZD RAFDA

KFJHB 73159 UFPNG LZJQV 73405 OLYJ BT K

18 GPM

4SL DE XL6 NR1 -Y- 081145Z -FM DU8 -TO 4SN GR72 BT

MTXWU BZMXU NVZTY FUHMW PJFLS HVESU RVSXI FTIWL OURT M JOKTI

QCVAS XRWXY BTGJY NGODE 67245 HLPNA JDNIZ TYWUK VJDGE RIELA

DSIMP XTWZY ARFKX EXJDX LEPAF ZOVRJ 43609 WOLPZ YJHUX ULN RV

97053 SHNKZ YPEMV UVQNS LFJYP PIVEZ MIPDR JQSWL CTIXG YQTVG

OISVG VLROI 35852 RCPVJ LHIAC JUNCT XCTUK ZUJKZ 68931 UIRSS

ESJOV EKNJZ XWFGS OITUE GPBAZ WQHUK MINKR ZUKEL KEXSB EBQIC

HYCDQ QHONV LBHSA LMMHV GYI UO XPEKS BVRE GYBES KEMHC XTWO

XCITU QETNZ BT K
18 GPM RECEIVING PRACTICE
SERIES 6

18 GPM
AN6 DE P2N NR21 -G-R- 2721482 -FM FV3 -TO P7X -INFO RA6 CR72 BT
VCOHF ATHJU YANJP YDNJF LYTKV GSCBX QAKUD OHCUY VEDRH ISMCH
GHIXL IZUTY AXRLK SEOVF RGFTV 86419 SENKA FIEBC VSHLW 97562
QFGAJ ORSUX PVLF D VYYUX DFIEN QSPA1 XWMCV VUYQ SBLJD MFQYD
QTFBN VDTKG VIGL V ATLV OPFHCJ YHCN WCKAS DLGLP PUQSV LCPQV
MEPOA LXYIR 76942 UPDAV PUBAD HXMRV MZFTA TCYWJ EPIBN RDYWG
XSIDS WJONA UMWQR CFKID QHMKD 48031 80467 UMPNE IRYKD XVZOL
UOUHD ZVJKT JDDHF TCRKV MRZLW QBAXW NSIUM MJUPI 97630 WFTQB
GIPNC MCHLD BT K

17 GPM
CD4 DE OW6 NR7 -M- 041526Z -FM 4SN -TO 89L -INFO 8MD GR66 BT
97260 CUEWX MERHD LOGNV FKI1Z 65410 VYKOV IECGB RHDCN PNZEK
JVL5X 85130 NSQHZ LRWUN AUNXY DZISU VWFKA INUDX TONRY MERID
13869 SHVOA SDZBI OXPXN RAOZF OWZAP AVJ2Z QLFON NZSWA LVPOU
27839 PXRSC SESCZ EHTGL OGNLZ SALEM HXNUZ 82145 BPLOR KSGTX
KRW7J FTONK CPQOA WOFDH NIBEX EMZIM 57023 BPQEG HANDF SRQIA
BUCKZ SERLI TVWUL UHVSE XZVUP 04628 KDLHN OBSNB RENHB RXLGH
VMHPV 93651 IKTZW PZUYK ABCGF JDFCR BT K
18 GPM RECEIVING PRACTICE

SERIES 6

16 GPM

8PL DE AJ2 NR3 -Y- 211405Z GR62 BT

JACAJ DPXOU DJTOK CHOJD QIBEK RJLIH ERIWJ UNKFE 40478 YIRKL

VAKWF CFTGF 12986 RAHEN UTVEV EDNGU IQLOX NILKD DNCOA DKCUP

KNROH DZJOV EKQFO AMCFU CGQWM AHVSG MZQUP NXSID GRDYW METRI

BPJFL UHVSE ZQWPU RMXIN WGGAX DBPXG LXNUQ TYNOR DVESK JFCHA

DYOTX LRGON MDIEA DZWFK PVQS5 JHNHC ZLUYK RISVX RWHQM DKPOH

OXTPL SRDVG QLASD CHIKT STUDZ SEPXX MTRU FVCOH GKFDE VLPKS

52407 EPYMW BT K

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END

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APPENDIX E

IMC SENDING PRACTICE EXERCISES

Follow the exercises as they appear in this manual. Do not start on another exercise until you feel certain that you can send each character in the preceding exercise correctly. The basic drills and exercises go from easy to more difficult and should be followed in this sequence to develop a good sending ability.
BASIC EXERCISE #1 - CHARACTERS E, I, S, H, 5, T, M, O, Ø

SHEET SEEMS SITES MISTS MOTTO THEME 5Ø55 TIMES TEEMS THESE
HOMES STEMS MOSES 5Ø55Ø MOIST HOSTS SHOTS EMITS SHIMS SHOOT
Ø5Ø55 MEETS MOOSE MITES HOSES TOMES MOTHS 555ØØ THOSE SHIES
TEETH HOSTS SHOES TOOTH Ø55Ø5 HOIST OMTS ITEMS TOOTS Ø505Ø
MOSES MISSED THE MOTH. HIS SHOE HIT THE HOSTESS.

THE MOTTO MISSES THE THEME. HIS THESIS IS 5ØØ SHEETS.

THE SHOTS HE SHOOTS MISS THE MOOSE, HIT THE HOSTS HOME SITE.

THE ITEMS HE MISSES I SEEM TO OMIT. THE HOE HIT HIS TEETH.

THE HOSTS MOIST SHOES SOMETIMES SEEM TO EMIT HOT MISTS.

BASIC EXERCISE #2 - CHARACTERS A, R, L, W, J, P, 1

REAPS STEER PLATE TRIAL HORSE WEEPS Ø5151 POOLS WAITS JESTS
SOAPS TOPER POLAR 11Ø15 ALERT SOLAR LAPEL LASSO TAPIR JEWEL
Ø151Ø SHAPE PATER LISTS WALLS MATER ROWEL 51Ø15 LATER TOWEL
JOWLS HOWLS TAPER SOARS 1Ø15Ø LOOPS RESTS REELS TWIST APPLE

THE SLIM HEMP ROPE LASSO APPEARS APT TO SPLIT.

THE JESTER WALLOPS THE HORSE AS HE TROTS. THE HORSE WAS LAME.

HIS JAW SHOWS THE PALE PALLOR AS THE ARTIST SEES IT.

TWIST THAT REEL WHILE I WRAP THIS ROPE AT THE LAST LOOP.

A TAPIR WILL RESIST TO AWAIT THE SHOOTER.
BASIC EXERCISE #3 - CHARACTERS U, F, V, 2, 3, 4

SEVER SPORT VAPOR SHORT 21Ø51 TEPEE MOUSE SHAFT GRUFF HOUSE.
TRIPE 35125 STEAM WHEEL SPERM FEVER STEEL LIVER 42Ø53 LIFTS
PEARS FAVOR FRUIT SAVOR VERSE 53412 SIEVE SPLIT STAFF STOVE
HURLS VOTES 54533 PEARL FURLS PETER TRAIL SHIFT FRAIL 4554Ø

HIS PIPE HAD A SMELL LIKE THAT OF SHOE SOLES AFIRE.
THE RURAL HOME HAS LOTS OF FULL APPLE TREES THIS TIME.
THE GIVER OF THE LIVER SHOWED US HOW TO PREPARE IT TO EAT.
ALL WHEELS MUST MOVE FOR THE MOTIVE POWER OF THE AUTO.
WE MUST FIRST SEVER THE FLESH FROM THE OUTSIDE OF THE WHALE.

BASIC EXERCISE #4 - CHARACTERS N, D, B, X, 6, 8, 9

DROOP NINTH 35621 NASAL DINNER EDITS EXERT ABATE DEBIT 2Ø813
DETER BIPED EXILE BEAUX BREAD PLANT Ø9826 STINT THIRD BINDS
ADEPT SIXTH EXPEL 813Ø5 BUXOM FIRST BURNT TOAST DRAPE BURST
12963 DANES FIFTH DONOR DUPED MIXED 88266 BLEND FIXED WAXEN

THE FIRST BURST OF FIRE EXPANDED THE BARREL OF THE RIFLE.
PAT STOOPED AS THE HAMMER SAILED ON OVER HIS BALDING HEAD.
WE MUST EXERT OUR FULL AND EARNEST EFFORTS IN ALL PRACTICE.
WE WERE TO EXPAND OUR PRESENT LINES AS THE NEED AROSE.
ALL OF THE DAMSELS WERE FAIR AND BUXOM BUT MOST WERE TIMID.
BASIC EXERCISE #5 - CHARACTER G, Q, Z, K, C, Y, 7

QUART CRACK GRAIN LANKY QUICK 86327 HAUNT GROPE CROCK CRAZY
BISON CREEK CRANK 51Ω74 KNOCK TEXTS GREEK STAGE JONAS STICK
66778 TODDY CODEZ QUIET INDEX YACHT GOOSE QUIRK 10345 GAZES
TODAY QUAIL TOUCH GRAZE CARRY 76531 QUEEN GRAVY GRIPE TOPAZ

SIXTY SIZZLING STEER STEAKS SAVORY AND SALTED TO SATISFY ALL.
THE VISITOR HAVING NEVER SEEN A BISON CALLED IT A MOOSE.
WE QUICKLY GRABBED THE GOOSE AND TWISTED ITS NECK CRAZILY.
THEY INSISTED THEY BLISTERED WHEN EXPOSED TO THE TORRID SUN.
THE MAVERICK JUMPED THE CREEK BUT MIRED KNEE DEEP IN THE OOZE.

PRACTICE ON LESSON ONE CHARACTERS

SAMWE NTOIM ISAMW ENTOA OTNEW IOTNE SWNTI IMAOT OSMAI TWEENT
OSEIM TIAOS NWENA TSMEO NOSTI MAWES NOSME TIAWM OSMET IAWMO
SMETI OSMIA METWN TIAWE TNAMI SMOET EIWAN MOSTE MEAWI NOTSM
MEWOW WANTS SOMES SMIAT OWENS MIATO OWNSM IATOE WNSMI OEWNI
MIAEW TNLEM OTWIE TOAWI SINAW ASTNA MASNT WMTS EWSMO ENEOM

MEN WET SIN NET SON NEW TEN SOW TAN OAT TIE WIN MET WAS SAT NOW
WAIT TIME WEST TINT EAST SNOW MASS MEAT TOSS SOME WANT MOAT
I SAW TEN STONE MASTS.
SAM SWINT WANTS SOME NEW SETS.
I WANT TO TOSS A SNOW MAN ONE TIME.
PRACTICE ON LESSON TWO CHARACTERS

WBECT GDXIO NZMØS QAYWB TCEBW GCBET TOGEC TCIDO DIOXG ODNXI
DINZX MXZN SMNOZ ØSZQM AMSØQ YSØAQ AWSØQ QAWBY EYABW
CWYEB ZNXID AQSM DOGTC MZNXI CWQMX EYSZI BZØND WQMXO YSZIG
TQNØA CWQMX EGIZS BDNTØ WCOXM OGTDI GTCDO XIZND MZNSØ AQWSY
AWEBY SQYAº ZNMX DTGIO NZYBC GDSEA TIIXN SAZØX YZING TØSGA

CAST GAME DINE CENT IDEA MANY BOAT DOME ITEM DEAD SNOB STAG
BINØ CITY NICE COZY STAY TOYS DICE GATE ADAM BOYS GENT GOAT
NOISE YEAST WASTE MEANT TEASE BEAST TOXIC BOAST TODAY SENSE
TEN COZY TOTS TEASED NINE TINY BABES.
DAN, SAM, MAGGIE AND BOB DANCED TODAY.
SIX NICE NEW BOATS WAITED TWO DAYS TOO MANY.

PRACTICE

APEOD CHRDL XUNZR JRRFL RKDCT YDDNX NFYWK SCPLA ALPRO WYKCU
DLPIU UHQJD MKCPR HIZPN ASKBI UTVJO PXIMC COGHS BNNXA MENCY
KANOF DLFUJ FTUUK EJRDC WUBBK LEMGI HGIAY ZVCHC HDSQP NATNI
BCMPY TNRDV APEIL CUOEM GTLHN OAOAL PNTRX ERTNB PTRNB MEXTND
DSFNO PFCJL FRTHL HLLRA BFBLB GPVAR HISAP JAWRL PKNRY ONXCT

IMMEDIATE DELIVERY OF RADIO EQUIPMENT IS NECESSARY AT THIS TIME.
CONCENTRATED PRACTICE WILL MATERIALLY AFFECT PROFICIENCY.
THE RADIO OPERATOR IS SOMETIMES RESPONSIBLE FOR MANY LIVES.
CHECK YOUR KEY ADJUSTMENT TO INSURE MAXIMUM EFFICIENCY.
BEARDED AND GRIZZLED PROSPECTORS GATHERED TO STAKE THEIR CLAIMS.
THE COMPOSITION OF THE SYSTEM EXISTED IN THE ORIGINAL STATE. RADIO COMMUNICATIONS REQUIRE WELL TRAINED OPERATORS. MANUAL DEXTERITY AND MENTAL COORDINATION ARE SENDING REQUISITES. THE CONVOY PASSED THE INSPECTION POINT AT THE APPOINTED TIME. SEVENTY BUSY BEES BUZZED ABOUT THE BUZZARDS ROOST IN THE TREE.

THE TRAINING YOU RECEIVE IN THIS SCHOOL WILL BE AN ASSET LATER. YOUR TRAINING CAN BE ADAPTED TO MANY SIMILAR CIVILIAN OCCUPATIONS. THE QUIZZES CONSISTED OF MANY DIAGRAMS AND RELATED SCHEMATICS. CONTACT WAS SPEEDILY ESTABLISHED BETWEEN UNITS BY THE RADIO OPERATORS. YOUR FOREARM SHOULD BE MOVING DOWNWARD FOR EACH ELEMENT OF THE CHARACTER.
IT WAS NOTED THAT THE BLOATERS FLOATED WHEN DROPPED INTO THE BUCKET.

MANY BASS WERE SEEN LEAPING FROM THE WATER FOR EARLY FLIES.

ALL MEMBERS OF THE TANK CREW PRAISED THE ABILITY OF THE RADIO OPERATOR.

HIS WAS THE JOB TO GET A MESSAGE THROUGH FOR BARELY NEEDED SUPPLIES.

A COMMUNICATIONS CENTER CAN BE COMPARED TO A TELEPHONE EXCHANGE.

THE COMPANY REQUESTED 25 RIFLES TO BE SENT FORWARD BY 1400 HOURS.

THE PRESENT STRENGTH IS 85 ENLISTED MEN AND 4 OFFICERS.

THE CLUB MEMBERSHIP SHOWED 532 MEN, 164 WOMEN, AND 223 CHILDREN.

HIS DOCTOR PRESCRIBED WINE, SO HE ORDERED 10 BARRELS OF EACH COLOR.

HE HAD 5 NIECES, 8 NEPHEWS, 9 BROTHERS, AND 4 SISTERS AT LAST COUNT.
A hole was dug 25 feet by 6 feet to make sure that he stayed down.

The truck had 14 wheels and traveled at 70 miles per hour.

At 2300 hours you will be relieved and you can sleep until 0530 hours.

This school is situated 12 miles from Augusta and 90 from Columbia.

A yard contains 3 feet and a foot contains 12 inches. Check contacts.
EXAMPLE OF A BASIC SENDING TEST CARD

JPLZE CVGQU MBNAO LWSRI PMCNF CONXS HJKRS TQIFC LKOPR ADFSG
LGFHW NCBZQ PABLTKVJFX 38634 NRYCM PKLTR JZSWE BCCSA BLPAR

1. Correct all errors made during your transmission.

2. Allow the proper spacing intervals between your characters and groups.

3. You will be required to copy back your own tape; send slowly and accurately and you should have no difficulty.

METHOD OF CORRECTING ERRORS

1. During your basic sending test you may make an error in sending which must be corrected.

2. The following procedure will be used to correct all errors made during any transmission. Note example below:

   KRGBV PLKED QZXSW RGSMI PJAXC FKHEEEEEEE PJAXC FKSRD
   1 2 3 4 5 6 5 6

3. While sending group #6 you send "H" instead of "S". You would then send a series of 8E's (EEEEEEEE), then repeat group #5, send group #6 correctly, and continue with your transmission.

4. When copying back your tape, the transmission should read as shown below:

   KRGBV PLKED QZXSW RGSMI PJAXC PHEFKSRD

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<th>86736 75624 75614 04836 90163</th>
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<td>43759 02847 83748 01837 54728</td>
<td>81622 54756 88766 99254 33421</td>
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<tr>
<td></td>
<td>00778 88564 55332 11232 66554</td>
<td>67566 33422 88665 77445 44433</td>
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<td></td>
<td>33221 22335 55664 77556 44332</td>
<td>97719 43445 45454 43432 67566</td>
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<td></td>
<td>75632 21123 10324 26547 27534</td>
<td>38561 62839 81093 53840 71980</td>
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<td>68388 30331 31000 76548 28464</td>
<td>43655 66751 10396 41870 47632</td>
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<td>03759 17322 47755 23144 55566</td>
<td>77554 55544 87224 56375 86754</td>
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<td>98508 35476 59780 41656 78560</td>
<td>46588 77654 98074 23754 81233</td>
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<td>85674 09576 25437 95732 33222</td>
<td>11332 55446 77645 99876 04327</td>
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<td>23485 72643 86574 91426 55344</td>
<td>76853 94322 64578 46832 23422</td>
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<th>23810 38926 86721 09167 23809</th>
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<td>62967 23107 89398 16182 00182</td>
<td>19327 13008 97692 80662 71769</td>
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<tr>
<td></td>
<td>0791 07810 69382 83622 01928</td>
<td>60373 97016 32728 19689 82760</td>
</tr>
<tr>
<td></td>
<td>06373 97016 32728 13736 01699</td>
<td>48672 29061 40253 84937 56190</td>
</tr>
<tr>
<td></td>
<td>10373 20394 30571 40612 50231</td>
<td>49466 99221 32321 43345 14253</td>
</tr>
<tr>
<td></td>
<td>01927 98798 87678 76576 54543</td>
<td>67584 09121 23984 45362 01856</td>
</tr>
<tr>
<td></td>
<td>01928 58492 46507 23456 39521</td>
<td>78543 54096 90664 44655 73322</td>
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<tr>
<td></td>
<td>67744 31812 31845 04387 63970</td>
<td>98235 76576 23412 22113 55446</td>
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<tr>
<td></td>
<td>84957 37562 29496 19360 75926</td>
<td>42869 81945 96625 02658 73628</td>
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<tr>
<td></td>
<td>84629 01835 84629 36154 75538</td>
<td>84623 72957 93638 83512 01836</td>
</tr>
</tbody>
</table>

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ADVANCED DRILLS AND EXERCISES

This part of the manual is designed to help overcome various difficulties that you might have in your hand sending and to prepare you for higher speeds.

Practice on the "dit" characters and numberals found on the first several pages should help you to further develop the smooth wrist movement and consistent "dit" formation so necessary to good, rhythmic characters.

The drills on "dah" characters and numberals are calculated to assist you in making "dahs" of equal length and consistent spacing, another requisite of rhythmic characters.

The random code groups and clear text will help you to combine the different types of characters, and to perfect character, group, and word spacing.

Your instructor will assign the type of practice needed to help you overcome your particular difficulties.

PRACTICE ON DIT CHARACTERS

ISHBDUV

SHDBU IUlSV BVDIU VHBIU DSIUV
HDIBU SVBD UUVDH SDHUB VUIBV
HDHSD BVUSI DBHVS SHHIU VVDBI
DBULB UDDHI HSBUV SBDDL IUlVS
HIUHS BVDBI HUIDS VIDUV BHVDI
SUIHBD UVIHB UDUBI SHUBD HIVDU
IHsUB DSIvU SUIHDB DIHBS VSVDH
BUSIH DVVIS BDHIV SBHDI SUHBV
DIBDS HUBHI VDIHU SBVID BHDSU
IVSBD UIHBS DVUBS HUDVI SDBVU
SBHUD ISBHD VHISB DSHUI UDBSV
BBUHD SDLEM DVSHH ISVBU DUBID
HUSID VHISV DSHBI SIVHD UIDBS
UIVHD DSITHV VDIUV BDUHI SBDDV
DBHIS UVSSB DUHV BUDSH IDBIU
VBSDU BSHIU BHUDS VUSDV SHIBD
UDSIU HIVSD BHDIS UUIVB UBHID
HBUSV IDUBD SIUVB ISDHI HBDIS
BHSSD VHVSU ISHSD BHDBS SIVUI
HVDUI HVBDI SBDBU UBVIS VBHDI
PRACTICE ON DIT CHARACTERS

ISHBDUV

BJUDS ISVHB VBJSI SIVDB BVDUH HBUVU DSUHV UBHIB SVUDH UDHVU
BUSVD VSUHD UBDIV DBHUS UVSIS IUDSV ISDIH VHSIH SBDUB IHVUD SISHB
BHIBV DVBVI DVBHD USVIU SIBUV BUSHI IVUHV DUISH VSUIS SHSBD
VIHUD BVHSU BUVSI BUVDI UDVUI HSVDH VUBHI DUBHI UBHIV HBDIS
DHVUS VUDUB UDHIH VISHB HUDVI SHVID UIUBV HISUD BVHIB UIDBH
ISDHI VBISV ISVDB HDUDS UIVBH SBIDI HBSHS IUBVD BVSII DUVI H
VISHV SUDBH SSVIB USHVI IIHVH BDISB UDDBV SHUID DBVHI IDUVS
VUDUB BVSIU USVUD DHSSB HBSDB HSIVD/VISHB HDIVU SHIVD HUUSH
BVHSIBVUS DBVIU DBHSV IIVHS IIVHUB SBDUV SBDHV SHVD IUVHS IUBV
UIDHI VHVSBS ISVDB BSISU VUVSH BBHSI UVHIV BDUBV UVSH IUDSV

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PRACTICE ON DAH CHARACTERS

CYXQFLZKGJP

CLFXP KGZXY LGXJC JXCYQ FXJZY GFKYG XLFGX LZGGK FCLGP YJXGZ
CPYCK GLJCK LKJP KFXYJ FGJZC ZLFYJ YKGCX QXCPF LXJLQ FYCPJL
XJQYF QOLJG CPYJP GYJCK ZQCYL FZFGJL PCPZJ GJKJG CPCGJ LXQJLZ
CJGJZ YJXGF LGXJL GXJLX YFCJX CKPKG FJZGC YKJGZ GJPCX XYFYP
CQLFQ GJLQF GKJXQ QJYXF FZGLJ CGPKJ XJGYS YGJLF ZGZJP JJKCJ
PYCLG XZJXK YCLZG CPYXJ QJFLG XJLFC YCZGK KKKZP FQJQX LXYGC
PYXJY YJFXZ CYYPF JZCPC KGJCX CGJKP JCYXQ FJLXY LFLJZ JLZKG
LPPKL JQCPK XCXYX JXJXF PJGZF QLCTJ XJYJP CZLJC LLFCP JGFKG
JPCYP FZLJG CQXYP LFGLX XKJCX CYQLJ FLJFZ XZGJ KGPCR PJLFC
XCYCL GZJKP JKYXC CGCLF CGXKY JZLJK PPCYJ XQXQF JQFFC ZJCLJ

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PRACTICE ON SHORT CHARACTERS

A E M N O R T W

EANMO RTAWE MNRWO TENAM WROTA
WTAME RONTW AEMNO RTWAEN NAMEM
NRTWO TRWAM ENORT WAEMN ROTAW
OWAMN TREOW AMNOR ETTEA WMWEO
MORTW ARTME WOEMA NMAAO ERWTE
MTMNO AEWTO RTMEO NTRRO MTRWA
MTWON ROMWT WAEOT NRWMA EOARR
NMNNO RMOAO TWJOE AEANM NEMTA
ORAOE TORWA ORNEW NTWTO OWRAM
ENTMN RENTM ROAEO DTMWE RMNNT

A E M N W

TANWE RNEWR OWMEN WTRON RERTW
RTAWE NEMOR TWMEA NAORA WETAN
EAMRO EONMW NANTW TNEOM WMEAW
ERWTE AOWWR NTAAE WTORN RMNNE
ERMWN MNORT WAMOR TWATW
ERWTE ATONE AMMAE MNWTR EATRO
ROWAM EMABB ROTRE WATRA NENAW
MATWT EMNNW ORMEA MNRTO WERMA
WTROE AWONA ENMAE NRTNM OMOAW

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PRACTICE ON DIT NUMBERALS

3 4 5 6 7

35647 65734 37356 45346 73564 65437 54643 37653 74546 46437

57346 57434 57563 74543 76676 73654 75465 34665 45665 76465

37657 75657 34743 56434 64546 73643 75737 65564 37437 63476

37534 44375 77345 54356 74643 73547 67345 63576 46347 57356

37435 64337 56457 67436 75463 53475 36475 63737 56364 57463

57563 74537 46537 64573 45366 55743 34764 36753 47365 54763

67554 36743 64573 45376 73654 53376 64354 73657 35473 34357

64365 75374 46365 34576 43457 76563 37476 53736 43636 75546

67354 76375 45463 73765 45364 34567 73543 64375 73466 55374

PRACTICE ON DIT CHARACTERS AND NUMBERALS

I S H B D U V 3 4 5 6 7

14S5B 6B5HS 316B7 73R14 5HS6B 7DB6H 51S34 U3V4V 314SH 6VH7B

5V35H 1B35B D43U6 B5HVU 3S576 73V6H 51V64 UND4V 58431 B3V5U

4U6B7 5H4V3 14U6H S1513 B6D7H 13S4B V6V34 5U4V5 357HV 4UV6V

3H5V7 147D6 4H5VU S316B 51D3V 5SB7B 3D5V4 H61U7 H54V6 13V74

V4H5H 16B3V D3754 1U63B 7UV31 7456H BS1U4 53674 H5841 BVD3D

4U5VU DH4SB 43163 65HB1 3SHB5 D4V37 45VHB 65UD7 3V1S4 47B6H

6BDUV 57613 45V3U 541SV SH537 63DBH 74UV4 U513H S5H71 BVDUB

4V31S HSB6D D5H13 7UV31 31S5V 65HH6 B73V7 45UU1 54SHB H67D4

UV4B3 5V376 SV13D 7476D H1S4V 56BBV S36D7 D7UV3 IV434 S5H6B

S6HVD B73U1 DV3U4 5S4H1 657V7 B34B3 D45V5 UDS7D 1564H VB43S

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PRACTICE ON DAH NUMERALS

89018 22801 29028 91298 00182 91208 01892 09182 82912 90128
18080 90902 10928 89012 89101 92011 89218 82808 10901 92910 21810
80291 09028 12191 98028 12198 98219 82808 10901 92910 21810
19228 01298 22908 11989 29808 10912 20891 90202 80912 82298
90280 11819 19889 18921 90810 90202 02111 29189 12802 90188
12902 12991 91019 19290 19281 28189 89910 12200 99011 90280
21182 21900 12189 89089 18020 28012 90218 90101 28189 28290
28901 80919 02929 12099 92901 92818 11289 12809 91920 82912
12800 02118 20189 81289 01202 92910 90212 89080 91812 01920

PRACTICE ON DAH CHARACTERS AND NUMERALS

C Y X Q F L Z G K P J 1 2 8 9 Ø

CJYX 8209J FQ9XJ OJ1JZ Y2X1Q J91CØ CF012 ZLL2G 2J8GK 82YXJ
CØJ2L 118KQ JKK9P 9P01C PJC0C ØP912 XYJ22 YJ1Q0 1C02Q J98XF
X091L 8J0L0 LF12G L0P9Z OJ11Z Z1J8G 1GZJG 2881C Y2X1J CQ9XJ
Q8Y18 FØLJF Z2F18 G28ZJ K9PG1 PØJCX CY11J QJ8F0 28X0L 92JZI
PC18J FL121 8FG18 Z2GJL 8PGJY 2CØYZ ØF9K8 8XJ91 YØP9G 12X8K
8J21Q 1ØFL9 2JØY1 C2JX2 Y89Ø L18Q8 CØLFQ 8Y1QJ 19K11 9ØP2X
2Q1GJ 8GZ1L FZ1OL QN8FX 8J8Z2 L91XJ 21JFC FCC19 ZC22G 2ØJØJ
C2Y9J 8Y1QX X1L2F 9LFL1J G2K9P QÇØX1 8FY2J L81Ø2 YØZG1 8P8CØ9
ØXYJX FØL1LZ K8J9G 2GC8X Q29FØ L1JZ2G 8K9PØ CIY2X 8FQ9Ø Z1J2G
Y18C1 X8J9F ØL1Z2 8KP9G CØ1Y2 GX89F 1LZØ2 G8Y1C JXLQ9 1ZG82

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SENDING PRACTICE

YLTSG FDMVW RKWSO GHGCB UMPUJ YDAFT ZPCJA NESYH XQZKB OGBWQ
U0KIEI WFSAR DMULV NHIVT MCLDR XIGYE BVTFV A KSZO YRLYL NZWHC
DJQXV QHWPO WUCIA EBNGM USMF GDKRP XPAEL EJUZR XOZCM BHNSW
RYVLF BECQI VSTMJ JHFTO QKWBA DMUPC NXEZT ODML ADGMR WOXYR
HCQKV ULWFP JANTZ QUPJI HKFNS VBCDP SBCQZ PEANV ZIJPW CHOYU
SWOKI DJACQ RYULT XHEGP XSMVJ MRFBM MPBIL ASWNZ QHYME VGOYK
BHCOU DRGIT XSJEF NJWCP DPXZT UQMLK FBNCN AZQIF BOYWM WLHD
KTYMZ EOACW PXRSJ JHFEQ AUVN URVGB DJKLS PDYQZ ZUIDO MJWSZ
AJFPG UFBEL NQVXW WRMLK IKHCB RCHNT QTVXV AE0ZT PNKFV BLOEY
PLDZR TCJH DMSXW PIFCN RKSWE FMECQ URLPN JXXVG AHBOE BSZJI

SENDING PRACTICE

ECNYL LFAUX QMWHD YPKIV WCMSE TBUAK LQRHC ODMTC RJZFX PELVZ
WGSNY AHODT CKVMX ZQIBJ RXOYE FLMKI GQUN WHDRB SAUPT PJFZA
GOYUL CJHWW UPTYM FALDM QVIOQ SNXVI WEBGD NRSKT FKELP JCNI
ZRLGC AFJPV ZUNYI EFMTW YOHCO SQJGW RXKSK GBEQA UNBIM HTXTV
ZPERW WMDEU YHSLL BFOAJ XTPRK GECMY IQQVJ FOZWR KUXDA HFGNS
BKEMU WQRJ ICHTY SZLDV PXGT LHDQL DXUFBS MZEPE AKTJW VYOSR
MGLCS DOIZQ YFVBC TNJXE KXRZI PUL0J FBKAO TNWX LGHCN DKPOH
VRUSU YIAZY VGTKP EURQH BLSXJ FMTDW OCYIA ELPPU DJQWT Z0IVR
SXLYG MHNFA E8KCT UOZFE JCHXT YVQUL MGASY NZRKE KIPUX WPOKI
WSVMR QFCAE BJODF BZTUJ IACOY YRWID HANWV PLFGK BNLTR DGLXT

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### SENDING PRACTICE

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### SENDING PRACTICE

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TM 459-121
SENDING PRACTICE

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58148 37260 18639 24306 57363 84015 48391 73590 71265 26149
23129 56477 31059 25360 72682 19742 95273 84062 85296 30741
31697 79680 94003 68946 59985 46564 02170 27580 18493 71580
83547 26964 07071 12212 13573 78530 18291 44234 36925 66789
25048 86491 37953 08722 84196 15062 82251 13126 37675 39480
6138 78259 58362 09741 48029 47692 26547 06973 81350 35891

SENDING PRACTICE

75381 24718 96143 84021 08671 95204 29837 16053 93568 27359
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94162 56217 09537 19384 51048 36375 60842 93681 06273 84185
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SENDING PRACTICE

75381 24718 96143 84021 8671 95204 29837 16053 84021 08671 95204 29837 16053 93568 27359
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8493 57675 62131 15228 26051 69148 27370 35973 19468 84052
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SENDING PRACTICE

59014 24698 15304 56099 51372 46540 19285 18577 40248 18521
84326 79537 26901 35801 42568 39770 24681 34768 3527 96385
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14806 97525 32397 10843 76854 12906 08521 93646 47395 8261

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TM 459-123
PRACTICE MESSAGE

8CK DE 9EX NR7 -R- 1Ø1214R GR 36 BT
DRILL SGDBC AEIQN 59786 GHECI MORTU XKPLJ QSXYX VFBAD HMPTX
ZUWVL 856Ø4 DFKOB NSRQE ZAGCJ IPRTK IJLNO MGAEDE BCHFV XZWUB
HIORT VXYZL FDGCE AKJNP QMUWS CJMNI 95632 PTVXZ RSOLK FDGBH
AEUYW QAGIL ORSUY PZMJ 4Ø361 DEHKQ BT

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PRACTICE MESSAGE

4BD DE 8LX NR8 -M- 171Ø48Z GR 47 BT
DRILL CFHIL OPUWZ BECKD MRTNQ YXSAA BDFGI JCHECK OQUYX XWVRS
PMNL CGMPU WYQSR TJILH KEANB FOVXZ DCHJK EFBDA NTVXW QSRZY
UPGB IRBDA ECFGM QSRUV WYTX KLJH PONHJ PRLQS DFGAV WYUNO
TZKG EDFHI JLMQS VCTUZ NOKEA GCPRY BWEFI LNPDRD UWyKG HBDJO
QMTICX ZCAVE LJNSU WYZQP GHLBK AORMF VTXD BT

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PRACTICE MESSAGE

GX5 DE 5HB NR16 -P- 1712002 GR 41 BT
DRILL DLHNT UYXEB JCEGI KFHCD RSQLU 35924 VXYOP NTWZM BAJGH
IJMPR 96405 DCLFC VXZWT YUNOE ABCFG DBEIK MORSQ VWZA UTNL
DPHJI SLQRN VXZWI UPOMB DCAHI LNPCV YWXZU QSRK 54623 CEFGA
BCFIM ORSLU WXYZJ LGHDI 57098 BAPQN FIKMP UWXQS OHDCA GBEIR
NVXZJ BT

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PRACTICE MESSAGE

G84 DE G85 NR14 -R- 171415R - FM G85 - TO G84 GR 12 BT
DRILL TDGIJ MQNT WXYVZ URSKL HBEAF CDXY WXZT SVQTO PPLKH
MJFEN BGCJM BT.

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TM 459-125
PRACTICE MESSAGE

1XO DE 8CK NR3 -M- Ø7Ø413R GR 39 BT
DRILL ZWCDH NPRUX QYOQM 62185 IFDEA CBDFI JMPQV YUXQO OJNTW
LTGHC ABEZ0 RSTQV ZYNJG DFAEB CHILM KPWXU 52178 JGIQL MWXQT
NPSNH ECAEG 41Ø89 JMPQR TUVXY BFADC IHLFD BQOSZ YWEGI KLPQ
SUVT YBDAR HCJMO 16932 EHIJL MXQBY RTUX ZFGAC DMNBK BT

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PRACTICE MESSAGE

PX1 DE CL2 NR13 -R- 122317R GR 43 BT
DRILL BFNTW HKMQS 157Ø1 OPRTU XZJWF AYDCN LGIB FILOR UWZXY
VTQPS MKNHJ DEGBA CORTW YKICF DBAHI 72489 NPSUT XLZJE FHKMP
RUWYQ SOLNQ DEBCA JGIQV THJLN 71362 SVXYT UWOAD GKCPR IMPF
38654 FIJLP RTXVZ NOKGD IEACB USQWM HJKNR UWXYS TVQOM PLIFG
ZDEA CGLSQ VILIUR BT

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TM 459-126
PRACTICE MESSAGE
RW2 DE CL4 NR3 -T- 3WB -R- 171900Z - FM CL4 - TO 3WB GR 51 BT
DRILL EFGDA NZXMYD BEFCG HKMQD ZXVYW TRS NL IAJOP DFIKM BGJOP
AEJLQ RWXOY SVTUN CFKHK IALNP KJGSR UVQYZ XWTMO EHLPT BGJOU
VRSQN CFKIM ADWXX YDGKN AFQRS WYLLJ CHPBU ZXTM EDIHKL ONMTU
SYJLE BFPSR QVZX A CGDFH BMPUG JLITU ZKRSQ OKNAC VEFIN ADPVY
BGHDL RSXK CEOJW YXZQS AHJLM DNKVW YAIHJ HMQSR GTUVW ZDPM
EF JL BT

IZ05 DE FB88 NR9 -Y- 262329R - FM FB88 - TO IZ05 GRNC BT
DRILL ADVISE PARENTS CADET MARTIN MILLER CONFINED STATION HOSPITAL
POSSIBLE PNEUMONIA DRILL BT

PRACTICE MESSAGE
1XO DE AL8 NR1 -Z- GRNC BT
DRILL CONTRACTORS CANNOT FURNISH QUOTATIONS AIRPLANE SMOKE ELIMINATOR
ASSEMBLY BEFORE FEBRUARY TENTH DRILL BT

TM 459-127
PRACTICE MESSAGE

1Z04 DE AL82 NR4 -T- FB84 -M- Ø1155ØR - FM AL82 - TO 1Z04 - INFO FB84 GRNC ÒT

DRILL TEN CARLOADS NORTHERN STANDARDS DUE QUARTERMASTER

SUBSISTENCE AGENT NOT RECEIVED DRILL ÒT

J66 DE 6WO NR5 -P- 131456R - FM 6WO - TO J66 - XMT 5TE GRNC ÒT

DRILL RERAD TWELFTH RAYMOND WALLING ENROLLEE REQUESTS TRUE

COPY PROCEEDINGS SUBMITTED THIS OFFICE UPON COMPLETION DRILL ÒT

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PRACTICE MESSAGE

BC6 DE 8QB NR8 -R- 282921R GRNC ÒT

DRILL OUR CASUALTY LISTS DELAYED BY ERROR OF MESSENGER BUT WILL

ARRIVE BEFORE MIDNIGHT DRILL ÒT

AL8 DE AL2 NR6 -P- 18Ø229 GRNC ÒT

DRILL REPORT ARRIVAL OF MAJOR RINELAND BY TELEPHONE UPON

ARRIVAL AT YOUR GP DRILL ÒT
PRACTICE MESSAGE

1X0 DE FB81 NR5 -0- 280489R - FM FB81 - TO 1ZO GRNC BT

DRILL RECONSTRUCTION OF FLORIDA KEYS RAILROAD WILL BE UNDERTAKEN JOINTLY WITH STATE ADMINISTRATION DRILL BT

1ZO DE 5ZU6 NR1 -F-R- 222120R - FM 5ZU6 - TO 1ZO GRNC BT

DRILL HOSPITAL BILoxI RADIOS REQUEST STATUS SAMUEL F SMITH RELATIVE CASE REQUIREMENTS DRILL BT AR

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PRACTICE MESSAGE

J66 DE D2N NR13 -M- 231714R GRNC BT

DRILL RERAD DATE SPREADER ASSEMBLY GOING FORWARD BY EXPRESS TOMORROW DRILL BT

1206 DE AL8 NR27 -0- 221120R - FM AL8 - TO 1206 GRNC BT

DRILL TEMPORARY APPOINTMENT HARTFORD A KILLAN MOTOR EXPERT JANUARY FIRST APPROVED DRILL BT

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PRACTICE ON CLEAR TEXT

PSA DE 9ND NR3 -M- 272315Z - FM PL5 - TO HK 4 GR57 BT

INTELLIGENCE IS AN OFFENSIVE WEAPON ONE WHICH SEARCHES OUT THE VULNERABLE POINTS IN A NATIONS ARMOR AND ATTACKS STRONG POINTS AGAIN AND AGAIN UNTIL THEY ARE MADE WEAK. THE ONLY DEFENSE AGAINST INTELLIGENCE IS SECURITY AND NO FORM OF SECURITY IS MORE IMPORTANT OR MORE EFFECTIVE THAN COMMUNICATION SECURITY.

PRACTICE ON CLEAR TEXT

4SL DE XL6 NR1 -Y- 0811452 - FM DU8 - TO 4SN GR82 BT

PRACTICE ON CLEAR TEXT

AN6 DE P2N NR21 -M- 272148Z - FM FB3 - TO P7X - INFO RA6 GR87 BT

STRIKE THE KEYS WITH QUICK CMM SHARP STROKES CMM BUT AVOID
HAMMERING OR POUNDING THE KEYS PD REACH FOR THE KEYS WITH THE
FINGERS CMM AND EXERT FORCE FROM THE WRIST CMM NOT FROM THE
SHOULDERS PD USE THE THUMB OF THE RIGHT HAND TO OPERATE THE
SPACE BAR PD AT THE END OF EACH LINE CMM RETURN THE CARRIAGE
TO THE RIGHT BY MEANS OF THE CARRIAGE LEVER PD USING THE
LEFT HAND CMM PUSH THE CARRIAGE LEVER ALL THE WAY TO THE
MARGIN STOP PD BT K

PRACTICE ON CLEAR TEXT

CD4 DE LB5 NR7 -M- Ø41526Z - FM 4SN - TO 89L - INFO 8MD GR79 BT

THE GAP BETWEEN THE CONTACTS CMM REGULATED BY THE SPACE
ADJUSTING SCREW AT THE BACK OF THE KEY CMM SHOULD BE ABOUT
THE THICKNESS OF A POSTCARD PD THIS MEASUREMENT APPLIES
TO EVERY KEY CMM AND IS NOT A MATTER OF PERSONAL PREFERENCE
PD CONTACTS THAT ARE TOO CLOSE TOGETHER HAVE AN EFFECT
SIMILAR TO WEAK SPRING TENSION CMM AND CONTACTS THAT ARE
SPACED TOO FAR APART HAVE THE SAME EFFECT ON SENDING AS TOO
MUCH SPRING TENSION PD BT K
NO PERSON IS ENTITLED TO KNOWLEDGE OR POSSESSION OF CLASSIFIED DEFENSE INFORMATION SOLELY BY VIRTUE OF HIS RANK CMM OFFICE CMM POSITION CMM OR SECURITY CLEARANCE PD SUCH MATTER WILL BE ENTRUSTED ONLY TO INDIVIDUALS WHOSE OFFICIAL DUTIES REQUIRE KNOWLEDGE OR POSSESSION AND WHO HAVE BEEN PROPERLY CLEARED PD RESPONSIBILITY FOR DETERMINING WHETHER THE OFFICIAL DUTIES OF A PERSON REQUIRE THAT HE HAVE ACCESS TO ANY ITEM OF CLASSIFIED DEFENSE INFORMATION RESTS UPON EACH INDIVIDUAL WHO HAS POSSESSION CMM KNOWLEDGE CMM OR COMMAND CONTROL OF THE INFORMATION INVOLVED AND NOT UPON THE PROSPECTIVE RECIPIENT PD BT K

ONE OF THE WORLD'S MOST SUCCESSFUL EXPERIMENTS IN COLLECTIVE SECURITY BEGAN ON 4 APRIL 1949 CMM WHEN REPRESENTATIVES OF THE UNITED STATES AND 11 OTHER NATIONS OF THE FREE WORLD CMM MEETING AT WASHINGTON CMM SIGNED THE DEFENSIVE ALLIANCE KNOWN AS THE NORTH ATLANTIC TREATY ORGANIZATION PD SINCE THEN TWO ADDITIONAL COUNTRIES CMM GREECE AND TURKEY CMM HAVE JOINED THE ALLIANCE BRINGING THE TOTAL NUMBER TO 14 PD THE LONG HYPHEN DISCUSSED PRINCIPLE OF COLLECTIVE SECURITY HAS AT LAST BECOME A WORKING REALITY IN NATO PD BT K
PRACTICE ON CLEAR TEXT

4SN DE 8MD NR6 -M- 0412422 GR89 BT

A TYPEWRITER CONTAINS 1800 TO 2000 PARTS PD AN OPERATOR TYPING AT THE RATE OF 60 WORDS PER MINUTE ACTUATES 10000 TO 12000 PARTS PER MINUTE PD OTHER FACTORS BEING EQUAL CMM IF THE TYPIST MAINTAINS AN EVEN TOUCH THE TYPEWRITER RESPONDS PERFECTLY PD UNEVEN TOUCH CMM HOWEVER CMM WILL CAUSE THE MOST WELL HYphen ADJUSTED TYPEWRITER TO SKIP SPACES CMM PILE UP TYPE BARS IN A TANGLE CMM CROWD LETTERS TOO CLOSE TOGETHER CMM DEVELOP RIBBON FEED TROUBLES CMM AND OTHERWISE BEHAVE AS THOUGH IT WERE MAL- ADJUSTED PD BT K

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PRACTICE ON CLEAR TEXT

BD77 DE PH4 NR16 -M- 2307102 GR80 BT

AN OPERATOR WHO TRIES TO SEND TOO FAST ON THE HAND KEY HAS A TENDENCY TO FORM SHORT DAHS AND SPACE CHARACTERS TOO CLOSE TOGETHER PD SENDING TOO FAST FOR A CONSIDERABLE LENGTH OF TIME RESULTS IN A QUOTE GLASS ARM PD UNQUOTE THIS CONDITION IS CHARACTERIZED BY AN UNNATURAL TIGHTENING OF THE MUSCLES OF THE ARM AND A GENERAL LOSS OF CONTROL PD SEND AT A SPEED WHICH YOU CAN CONTROL PD REMEMBER ACCURACY FIRST CMM SPEED LATER PD BT K

73
By Order of the Secretary of the Army:

Official:
KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

Distribution:
Active Army:
USASA (5)
DCSLOG (10)
ACSI (10)
DCSPER (2)
ACSFOR (10)
CORC (10)
CRD (5)
COA (5)
CINFO (10)
CNGB (10)
TSG (5)
TIG (2)
USACDCCEA (10)
USACDC (10)
USCONARC (25)
ARADCOM (10)
ARADCOM Rgn (2)
LOGCOMD (5)
Armies (25)
Corps (15)
Div (10)
USAECFB (25)
Instl (2)
USAINTC (5)
Br Svc Sch (2) except
TJAGSA (5)
MFSS (12)
USAADS (50)
USAAMS (50)
USAARMS (50)
USACHS (5)
USACMLCS (5)
USAES (50)
USAINTS (25)
USAIS (50)

USAMPS (50)
USASCs (50)
USAOC&S (50)
USATSCH (5)
USASWS (10)
PMGS (4)
USAECOM (10)
USASTRATCOM (5)
DASA (6)
MDW (1)
USATCFLW (2)
USATC Inf (2)
Svc Colleges (2)
AFIP (1)
WRAMC (1)
USAMECOM (1)
POE (1)
AMS (1)
Sig FLDMS (2)
Army Pic Cen (2)
JBUSMC (2)

Units org under fol TOE:
(2 copies each UNOINDC)
11-7
11-16
11-57
11-98
11-117
11-155
11-500 (AA-AE) (4)
11-557
11-587
11-592
11-597
USARV (10)

NG: State AG (3); Units—same as active Army except allowance is one copy to each unit.

USAR: Same as active Army except allowance is one copy to each unit.

For explanation of abbreviations used, see AR 320–50.

HAROLD K. JOHNSON,
General, United States Army,
Chief of Staff.