## INSTRUCTOR'S GUIDE

## For

RADIO CODE INSTRUCTIONAL RECORDINGS

## NAVPERS 11200 RA-11235RB



BUREAU OF NAVAL PERSONNEL

GENERAI DESCRIPTION

Radio Code Instructional Recordings, NAVPERS 11200RA-11235RB, consists of 36 records ( 72 sides of recordings). This Device is designed so it can be used for either group or individual instruction. The recordings themselves give complete information for learning of the International Morse Code as well as the radio telephone International Civil Aviation Organization phonetic alphabet.

## OPERATION

Use a 78 RPM turntable for playing the records. Group instruction can be obtained by feeding the output of the recording through an amplifier speaker system. To permit individual instruction each trainee must use a separate turntable amplifier whose output has been designed to permit use of headphones. In learning the code students should first play side number 1 , which contains the introduction and information on using the Device as well as practice in learning the letters T M O and numeral $\emptyset$ (zero). Letters, numerals and punctuation in subsequent recordings have been arranged in groupings for proper learning. Recordings, therefore, should be played in sequence rather than in a heterogeneous manner.

## RELATED INFORMATION AND RECOMMENDATIONS

Under actual operating conditions there are often two or more operators in a room receiving signals on different frequencies. Hence, headphones are used in lieu of a speaker system. Headphones also help to eliminate extraneous noises. If conditions permit under the learning situation, therefore, it is recommended that individual instruction be given by having each student use an individual 78 RPM amplifier designed to permit use of headphones.

## UTILIZATION

For most effective use of these recordings and for most rapid learning, the following is recommended:
a. Practice at least one hour every day.
b. Do not practice sending code until you come to the side of the record which introduces the correct sending procedure (Side 25).
c. Do not memorize the code without hearing it.
d. Type or print the letters as you hear the code sounds.

Students are aware of individual progress because of quizzes, which are administered by the recordings themselves. Characters are
transmitted from the first recording at a speed of 20 words per minute.

ANSWERS TO TEST AT 10 WPM (Side 48):
Charlie November Kilo Victor 4 Sierra Alfa Alfa
India Sierra Quebec Alfa Yankee 7 India Delta Quebec
Lima Tango Tango Tango Bravo Charlie Juliett Delta
Oscar Lima Whiskey 5 Tango Bravo Bravo Juliett Tango
Romeo Bravo Zulu 8 Juliett Echo Romeo Mike Uniform
Uniform Uniform Charlie Delta Kilo Echo Papa Mike
X-ray 6 Uniform Charlie Charlie Kilo Uniform Charlie
Sierra 19 Kilo Foxtrot Sierra November Victor Victor
Whiskey Delta Echo Lima Foxtrot Quebec November
Yankee 7 Victor Delta November Lima Victor Tango
Delta $2 \emptyset$ Zero Lima Golf Tango Oscar Oscar Whiskey
X-ray Echo Foxtrot Mike Golf Romeo Oscar Zulu 8
Whiskey Echo Oscar Mike Whiskey Uniform Echo 3
/ Slant Sign Mike Hotel Uniform Papa Papa X-ray Yankee Foxtrot Golf November Hotel Sierra Papa 19 X-ray

Foxtrot Papa November X-ray Victor Foxtrot 4 Alfa
November India Victor Quebec Quebec Yankee Zulu Golf
Hotel Oscar India Tango Quebec $2 \emptyset$ Zero Yankee

ANSWERS TO TEST AT 10 WPM (Side 48): (Cont'd.)
Golf Quebec Oscar Yankee Whiskey Golf 5 Bravo Oscar Juliett Whiskey Romeo Romeo Zulu Alfa Hotel India Papa Juliett Uniform Romeo 3 / Slant Sign Zulu Hotel Romeo

ANSWERS TO TEST AT 16 WPM (Side 72):
Tango Hotel Victor X-ray Papa 5 Alfa Golf Mike Sierra Mike November Whiskey Juliett Sierra Echo X-ray November Sierra Echo Alfa Whiskey Juliett Victor X-ray Tango 2 Mike Echo Oscar Romeo Golf 9 Delta Juliett Echo Kilo Kilo Tango Tango Golf Echo Bravo Foxtrot 1 7 Bravo Hotel November Tango Golf 3 November Foxtrot Yankee Hotel Foxtrot $\emptyset$ Zero Echo Kilo Foxtrot Lima Quebec Yankee Lima Tango Golf Hotel Golf 28 Charlie India Oscar Uniform Hotel Sierra Tango Golf Tango Foxtrot Echo India Victor Uniform Delta November Delta Echo Juliett Hotel 4 Bravo Whiskey Tango India Mike / Slant Sign Foxtrot Lima Charlie Bravo Hotel Uniform Hotel India Quebec Foxtrot Hotel 49 Delta Juliett Papa Victor Juliett Whiskey Juliett Juliett Uniform Charlie

ANSWERS TO TEST AT 16 WPM (Side 72): (Cont'd.)
Hotel Hotel Bravo Delta Foxtrot Quebec Lima Mike India Juliett 5 Victor Quebec Echo Hotel November Alfa Golf Mike Golf November India India November Echo Juliett Whiskey India 3 Zero Echo Kilo Quebec Whiskey Golf November Uniform Hotel November November India Bravo November Delta Hotel Sierra Echo November November Kilo 6 Charlie Romeo Foxtrot Yankee 7 Bravo Hotel November Hotel Mike Yankee Oscar Mike Uniform Hotel Echo Yankee 6 / Slant Sign Foxtrot Lima Romeo X-ray Whiskey X-ray Uniform India Mike Bravo Victor Mike Uniform Victor India Sierra Hotel Sierra Quebec Quebec Sierra Hotel Sierra India Victor Uniform Mike Victor Bravo Mike India Uniform X-ray Whiskey X-ray Romeo Lima Foxtrot / Slant Sign 6 Yankee Echo Hotel Uniform Mike Oscar Yankee Mike Hotel November Hotel Bravo 7 Yankee Foxtrot Romeo Charlie 6 Kilo November November Echo Sierra Hotel Delta November Bravo India November November Hotel Uniform November Golf Whiskey Quebec Kilo Echo $\emptyset$ Zero 3 India Whiskey Juliett Echo November India India November Golf Mike Golf Alfa November Hotel Echo Quebec Victor 5 Juliett

INTERFERENCE (Side 7l):
Code is sent for the three speeds and tones mentioned. All are sent at the same time. The code for the 10 words per minute is as follows:
Cushions on the sofa fireplace with oak panels covering
on the chair interesting look she glows radiates with
poise wrapped from the end scalp tingles
most sand dune not enough
mew school

The code for the 13 words per minute is as follows:
Glass Lower Level The Timber Large Eye Areas Fixed Some Room Around As Bricks Steel Built Face Both Views Wide Taper Wells Columns To Couches Living Table Slides Pocket Or Banquet Size Glasses Breakfast Kitchen Assure Supervision Interior Row Alternated Light Serves House Planned Most Major Ribbon Range

The code for the 16 words per minute is as follows:

| VDLT7 | GO9BJ | RlAIN | VDLTB | JQYHP | MUCLT | BJRZH |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| PXFMU | AEMU8 | HPøCK | S2BJO | JEMUC | KRZGO | NVDMU |
| CKSAI | QYGNV | WFNIA | IQ/DL | T3C9P | XFNVD | LSBJR |
| OWENV | DLTBJ | RZHOW | XGO2B | JRWEM | U4D $Q Q$ | YGOWE |

INTERFERENCE (Side 71): Cont'd.
The code for the 16 words per minute is as follows: (cont'd.)

| MTAIQ | PXFOW | EMUCK | SAIPX | YHP3C | KSXFN | V5E/R |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ZHPXF | NUCLT | QYGPX | FNVDL | TBJQY | ZIQ4D | LTYGO |
| W6FKS | AIQYG | OVDKS | RZHQY | GOWEM | UCKRZ | BJR5E |
| MUZHP | X7GLT | BJRTH |  |  |  |  |
| MAINTENANCE |  |  |  |  |  |  |

Because of the high vinyl content of these records, they sometimes pick up static charges causing lint and dust to adhere to them. Wiping the record with a damp cloth will eliminate this effect.

Keep the records in the containers and standing upright. Do not stack records one on top of the other. They are unbreakable but not unscratchable. Scratches will cause ticks, bats and surface noise.

Handle records by the edge only.
Check needle condition of your record player.
KEEP AWAY FROM HEAT.

## SUPPLEMENTARY INFORMATION

In the pronunciation guide for the sounds of the letters given below, the sounds are written out as euphoniously as possible. In the middle of a group the short sound "dit" actually takes on the sound of "di", the i being very short. The ICAO phonetic alphabet used in radio-
telephone procedure is included in parentheses after the letters.

## INTERNATIONAL MORSE CODE

LETTER ICAO PHONETIC ALPHABET EUPHONIC

| A | (ALPHA) | di-DAH |
| :---: | :---: | :---: |
| B | (BRAVO) | DAH-di-di-dit |
| C | (CHARLIE) | DAH-di-DAH-dit |
| D | (DELTA) | DAH-di-dit |
| E | (ECHO) | dit |
| F | (FOXTROT) | di-di-DAH-dit |
| G | (GOLF) | DAH-DAH-dit |
| H | (HOTEL) | di-di-di-dit |
| I | (INDIA) | di-dit |
| J | (JULIETT) | di-DAH-DAH-DAH |
| K | (KILO) | DAH-di-DAH |
| L | (LIMA) | di-DAH-di-dit |
| M | (MIKE) | DAH-DAH |
| N | (NOVEMBER) | DAH-dit |
| 0 | (OSCAR) | DAH-DAH-DAH |
| P | (PAPA) | di-DAH-DAH-dit |



INTERNATIONAL MORSE CODE Cont'd.

| NUMBER | PRONUNCIATION |
| :--- | :--- |
| 6 | DAH-di-di-di-dit |
| 7 | DAH-DAH-di-di-dit |
| 8 | DAH-DAH-DAH-di-dit |
| 9 | DAH-DAH-DAH-DAH-dit |
| $\emptyset$ | DAH-DAH-DAH-DAH-DAH |
| $/$ | DAH-di-di-DAH-dit |

NOTE: In naval communications it is the accepted practice to write the "Zero" as $\emptyset$ to avoid confusion with the letter O (OSCAR).

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