

"Listen In"

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UNITED STATES RADIO INSTITUTE' INC.
DES MOINES, IOWA

"LISTEN IN"

THE gossip of the world is in the air. A radio set will let you "listen in" on the party line of the universe. What wheat is bringing on the Chicago market; who won the world series game; the views of Washington on international affairs; grand opera; the best dance music, or a nation-shocking murder -all of these are only a few of the interesting and educational entertainment features that are brought to you through your own radio telephone.

R IGHT now every one who intends to put up a radio should "listen in" on the message printed here. It is better to be safe than sorry. It is far more economical to "shut the barn door before the horse is stolen." Here you will find a common sense discussion of the information necessary in creeting and installing your radio telephone which should save you a substantial amount of money and smooth your way of needless mistakes.

Pan Two

Another Step Up in Civilization

RECENT improvements in radio telephony have brought this Aladdin-like force to the door of every man whether he be farmer or business man, whether the butcher, the baker or the candlestick maker. Radio apparatus is not now excessive in



cost. It is also comparatively simple in operation. It efficiency is now similar to that of our everpresent companion, the telephone. With this recent impetus civilization has taken another step forward. Do you want to be in line? Then know the what, how and wherefore of radio before embarking, instead of stumbling along in the wake.

The time is undoubtedly not far off when the radio telephone will be employed as the usual means of commercial communication. It, therefore, behooves the young business man to know fully this new force.

Ten General Questions

- 1. What is radio?
 - Ten men were asked this question and no two answers were the same. Definite knowledge of what radio telephony comprises and what physical forces make it possible are the fundamentals upon which a clear understanding should be based.
- 2. Why has radio telephony burst into seemingly sudden and universal popularity?
- 3. How many and where are the Government broadcasting stations located?
- 4. Can any one operate a radio telephone and obtain clear, distinct messages?

- 5. How does one know where the music, reports and information is sent from?
- 6. What is the difference between radio and wireless?
- 7. Does not so many messages in the air at the same time produce a jumble of noise?
- 8. Can a conversation be carried on by radio?
- 9. Is radio a "plaything" or an economic business force?
- 10. Can there be obtained condensed, workable information?

Music, Drama, Business Secrets in the Air

HEN a question is in doubt its answer is first whispered through the air. If you have a radio telephone, the world comes to your door. Recreation, entertainment, business information are recited for your benefit. To obtain fullest value from every dollar invested in your radio outfit you should be able to answer correctly the questions enumerated on the following pages. In case you cannot, do not think of having a radio set until you do know the answers.

These questions point the way toward which your training in our Home Study Course progresses. At the first a broad foundation progressing into necessary technical details and principles which are made plain and easy as each lesson is learned.

Ten Personal Questions

- 1. Do you want to be entertained with the world's best music?
- Will business information, such as crop reports, stock prices, bond prices, weather forecasts, etc., be an advantage?
- 3. Do you want to share a hobby with your boy when both of you gain by so doing?
- Do you want to be among the first to have radio telephone concerts and dances?
- 5. Do you want to install a radio telephone in your home and be able to keep it in perfect operation at the lowest possible cost?

- 6. Will not a radio set, by giving pleasure to the whole family, give you more enjoyment?
- 7. Could you explain what the radio is and how it is built to your boy, or to your friends?
- 8. Do you know how much should be PAID and what make of radio apparatus is BEST?
- 9. Do you know how to install a radio set so that 100% protection against fire is given?
- 10. What should you know before buying a radio outfit?

Ten Fundamental Questions

- What is the antenna and why is one needed? The detailed construction need not be given but just what function the antenna performs and in what succession it fits in receiving radio messages.
- 2. How many different designs of tuning coils are there which have proved practical?
- 3. Why do you need a condenser?
- 4. Do you need batteries and, if so, how many and what kind?
- 5. How do you measure the receiving range of a radio set?

- 6. Will a crystal detector set give results when voices or music is wanted?
- 7. What is a vacuum tube amplifier? The function of the vacuum tube, its development, and its other uses besides that of receiving radio vibrations should be given.
- 8. How many different types of aerials are there?
- 9. How do you measure the wave length and what constitutes the wave?
- 10. How do you cut out all sounds except the one you want to hear?

Can You Answer Every One of T

- 1. What is a damped wave?
- 2. How would you explain a C M in action of common physical objects?
- 3. What is a ground? Is one necessary?
- 4. Can you receive a C W, I C W, or radio telephony messages on the same receiving apparatus?
- 5. What is the most important improvement or invention applied in radio work within the last few years?
- 6. How can you increase the range of your receiving station?

- 7. How do you go about it to listen to a radio concert sent from a certain broadcasting station?
- 8. How is an electron relay used?
- 9. How does a storm affect a radio telephone?
- 10. What is a "grid leak" in connection with an audion tube?
- 11. How much should a modern radio outfit cost?
- 12. What different types of detectors are there?

hese Twenty Questions Correctly?

- 13. Do you want to receive long distance messages or only those within a few miles?
- 11. Do you want to entertain with your radio or use it for private enjoyment only?
- 15. Where and how do you expect to learn the fundamentals of radio telephony?
- 16. Do you intend to develop your radio station after it is started and in so doing to grow with its building?

- 17. Why do you think radio is the greatest new force in modern civilization offering undreamed of fields for advancement?
- 18. As a hobby, do you believe radio telephony is too absorbingly interesting?
- 19. Would you like to invent new and better radio apparatus?
- 20. When are you going to start in obtaining a firm grasp of the underlying fundamentals of radio telephony?

Build and Operate a Radio Telephone from These Parts

VERY piece of apparatus needed for a radio telephone is shown here. But as it is no one can ever receive with it. Each part must be connected in its proper order. Leaks must be avoided. A considerable degree of knowledge is necessary to get clear messages from the start. In order to be able to install and operate a radio successfully, special training is needed. For the first time in the history of radio such training can be obtained for a nominal sum. Training in the United States Radio Institute, Inc., makes you competent for amateur radio work.

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Could You "Shoot 'Trouble"?

NOTHER advantage in United States Radio Institute, Inc., training is the ability gained to spot trouble and to correct it. This Home Study Course is compact. Only workable knowledge is taught. Tedious technicalities are omitted. The



basic fundamentals taught give the foundation upon which amateurs are able to develop faster and without false starts. The choice of apparatus, the size and power of each unit, the erection, installation and operation of the radio is laid out before your eyes.

This non-technical treatment of such an envolved and technical subject introduces the uninitiated beginner into the science of radio telephony with the least amount of concentration on his part. There is no "zero hour" of plunging into a detailed study of radio technicalities.

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Do You Like to Make Money?

A DOLLAR saved is a dollar earned. The training given in the Home Study Course enables you to save money in selecting apparatus. You cannot be duped by fictitious "bargains" in radio outfits. No expert must be called in when something goes wrong. In fact, students not only fix trouble on their own radios but also make extra money assisting amateurs who have not taken such training. Money alone is not the only reward, for the satisfaction of having your radio telephone always in "tune" and working properly is assured.

The United States Radio Institute, Inc., helps all its students to make money by saving it. This course is also a first step, and a necessary one, toward entering the more advanced work preparatory to becoming an expert commercial radio operator. It also is indispensable as a guide to the erection, operation and development for the amateur operator.

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Simplified Instruction

THE lessons given by the United States Radio Institute, Inc., are simplified for quick and thorough understanding. Each new technicality or basic principle is fully explained as every step is taken. These lessons furnish the most complete source of radio information in non-technical language ever assembled, forming as it



does a primer and elementary course in radio telephony. It is undoubtedly one of the most important additions to the library of the amateur radio operator. Complete diagrams together with full explanation of each assist the student in gaining a thorough understanding of all essential details. No amateur radio operator should be without the basic information and instruction given by the United States Radio Institute, Inc.

Have a Government Operator Train You

Students of the United States Radio Institute, Inc., course are under the direct supervision of Prof. Bay C. Hardin. Mr. Hardin is a radio expert and a United States Government licensed operator. Besides basic instruction you have the benefit of Prof. Hardin's advice on all matters pertaining to radio telephony for an indefinite period. The right start is two-thirds of your success as an amateur radio operator. You should know what you are doing before even buying a radio set. Look before you leap. Save money in buying your apparatus. Be certain of its perfect operation. Eliminate both danger and damage by knowing how to work with radio telephony.



Prof. Ray C. Hardin U. S. Government Licensed Operator,

Enroll Now in the Home Study Course of the United States Radio Institute, Inc.

N ENROLLMENT in the United States Radio Institute, Inc., will prove to be your "RADIO INSURANCE." It will insure you a correct knowledge of radio; an opportunity for economical purchasing of apparatus through the institute; and will qualify you later to take an advanced course to graduate as a commercial operator. In every way it will insure you successful radio operation and pleasing results.

The privilege of advising with the members of the faculty in regard to any matter pertaining to radio telephony or the apparatus used is a not to be despised feature of the Home Study Course. The tuition is very nominal when the training and resultant enjoyment and profit are considered.

UNITED STATES RADIO INSTITUTE, Inc.

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Des Moines, Iowa

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NLY students of the United States Radio Institute.
Inc., are entitled to wear the gold and blue pin shown on the next page. This emblem is your diploma. It is the insignia of those who have finished the course of training and are capable of operating a radio telephone.


