

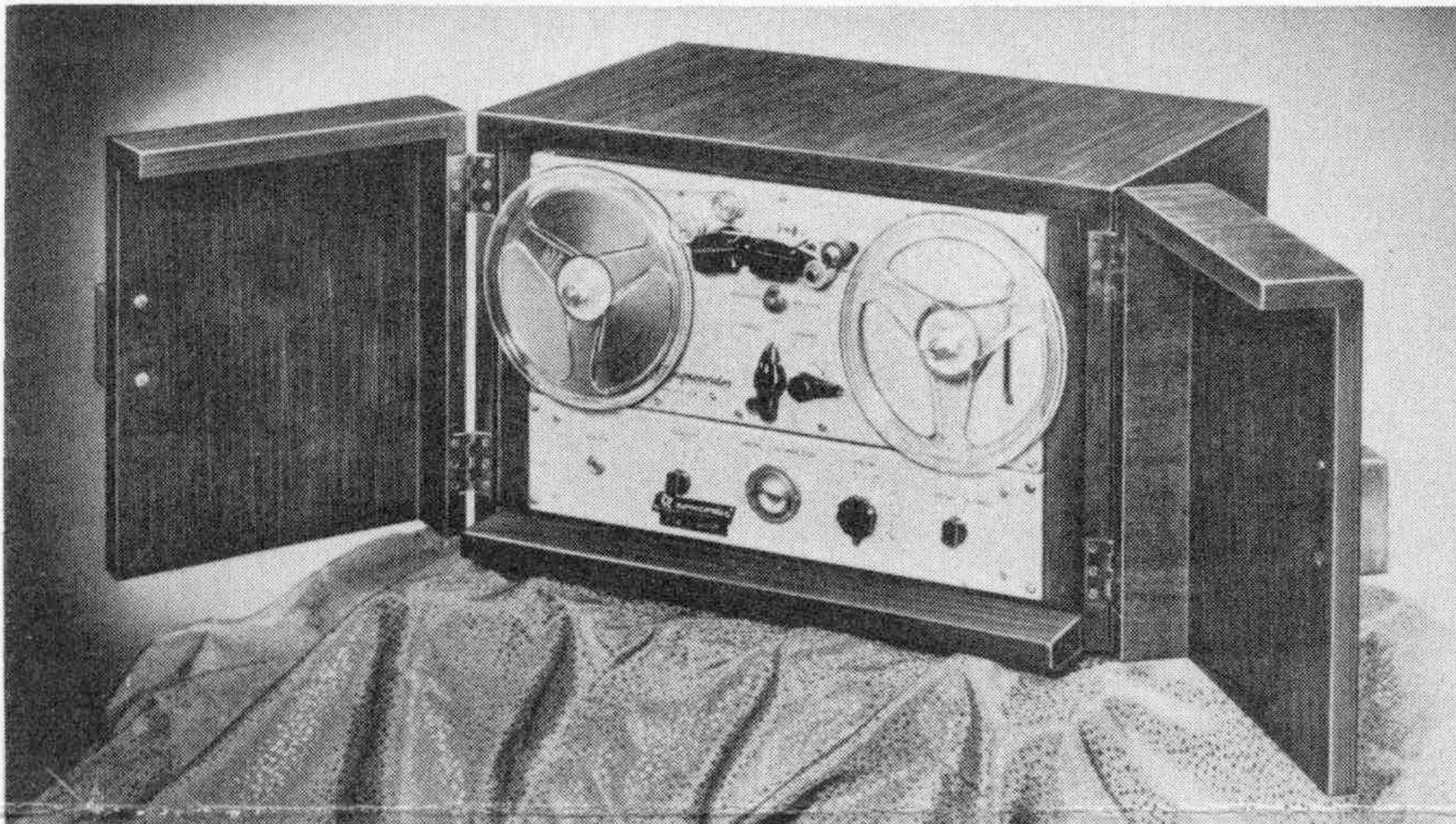
Magnecord Inc

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Magnecord Tops Chicago Audio Fair May 23-24



WELCOME VISITORS IN HILTON TOWERS

Plans are underway to make the May 23-24 Audio Fair in the Hilton Hotel, Chicago, the biggest and best Fair ever held, and Magnecord is set to literally "Top the Show."

That's not just a "catch" phrase we dreamed up. Magnecord will present the first public demonstration of binaural recording in Chicago and the Midwest in the Hilton Towers, atop the Hotel. Pages of preceding issues have been devoted to the technical aspects of binaural or "third dimension" recording, but actually it defies description. You have to hear it to appreciate it, and that's what we invite you and your friends to do.

Hourly shows will be scheduled in the Upper Tower seating 350 persons. Space and show time will be shared with the Jensen Manufacturing company, loud speaker manufacturers. The Jensen people will present a "Panorama of Progress" showing development of today's high fidelity speakers, and will unveil for the first time the "Reproducer of the Future."

The complete line of Magnecord and Jensen equipment will be displayed in the large, comfortable Lower Tower where visitors can meet and relax. We'll have the complete line of PT-6, PT-63, and PT-7 equipment for you to see and inspect, as well as accessories and specialty items like the continuous player and the Magnecordette.

Gather your friends and come on down to the Hilton. You'll like binaural, and the view is terrific. On a clear day you can see Michigan and Indiana across the Lake, the boats in the Harbor and the entire Loop. At night there are the city lights. Besides, it's free!

Introduce New MagneCordette

An attractively-styled tape recorder for use with radio or amplifier systems has been introduced by Magnecord.

The unit—the MagneCordette—features a "custom" amplifier and the same, quality mechanical unit and recording mechanism used in Magnecord's broadcasting and professional models in either blond or dark mahogany cabinets. It is designed for home, office, school and church use, but meets performance standards of the NARTB.

The Cordette permits recording from AM or FM radio or other sound source through the "custom" amplifier. Playback is from the mechanical unit and "custom" amplifier through the radio amplifier and speaker combination.

The standard PT6-AH mechanical part of the unit has separate erase and record-reproduce heads (either full or half track), and includes 7½" and 15" per second tape speed capstans for either speed with a frequency response of 15,000 cycles plus or minus 2 db. It is equipped with standard 7-inch reels, but may be easily adapted to 10½-inch reels.

Rewind speed is 1800 feet per second.

The "custom" amplifier has two high-impedance inputs; one for microphone, the other for pick-up from radio tuner or custom receiving equipment. The high impedance output feeds into any power amplifier, control pre-amplifier, phono input or public address system. An earphone jack is provided on the front panel for monitoring during both record and playback.

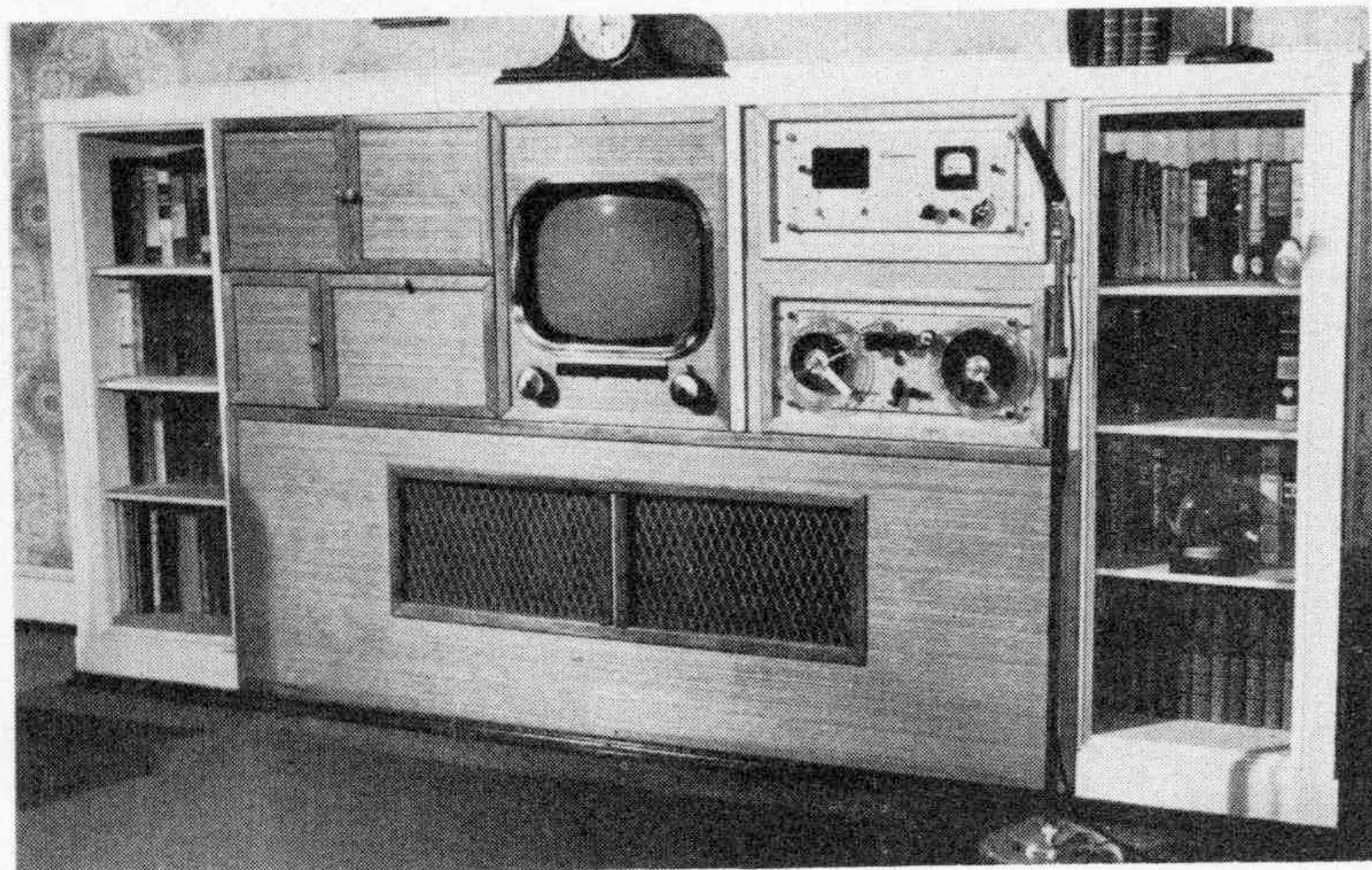
ILLINOIS BELL EDUCATES PUBLIC BY MAGNECORDERERS

Marriane Nord, our pleasant switchboard operator, is a very smart girl. She doesn't make many mistakes. Once in a while, she dials a wrong number, but that doesn't make anyone angry.

You see, everytime the "Voice" says "You have dialed the wrong exchange. For local numbers dial the first two letters and the proper figure and then the proper figure," it's music to our ears.

The message is recorded and played on a Magnecorder.

Builds 'Home Entertainment Center' for \$18.92



To paraphrase a beer commercial that has been plaguing Chicagoans for the past months, "I'm no carpenter, but I can wield a saw and hammer a nail." Then in dulcet tones, "Yes, Stan Gordon is no carpenter. He's a star of radio and television. Also, he likes good music, so he built a fine home installation. Let Stan tell you about it." . . .—

If you're living in the gramophone age, you can do something about it, take it from a guy who knows nothing about it. I know as much about electronics as a new-born aborigine knows of differential calculus, but I built the installation pictured here all alone, without help, advice, example, suggestion, or experience.

The materials, excluding the electronic components, cost \$18.82 for the wood, hardware and finish. My tools? Just what you'll find in any household.

We had a monstrosity of an old-fashioned, synthetic fireplace replete with mantle, bookcases, etc. It was a useless gas-log affair that was a decorating headache. We never used it, either. Out it came!

My architectural plans were strictly from the seat of my pants. If you're one who likes a bedtime snack, you can understand my progress. The darnedest sandwiches are invented at bed-time. You just take what comes natural. I'm not particularly recommending this procedure—merely confessing it.

The two pieces of bread for my "Dagwood" home entertainment center were the two bookcases at either end of the mantle. The filling eventually comprised a television set, AM, FM and short-wave radio, a three-speed record changer, a speaker, a Magnecorder, and a panel-control switchboard to govern the alternate or simultaneous interplay of these units.

My solution was panelling. I chose the new combed plywood. It comes in 4x8 foot sheets. Two were required for my job. I found 1/4-inch thickness just what I wanted. For the framework around the cut out panels I used "back-bend." It is cheap and ideal, being machine cut with an inset groove.

For accurate cutting and fitting of corners, a mitre-box is a must. If you don't have one, make it. Just nail two 1"x3" pieces to the sides of a 2"x4".

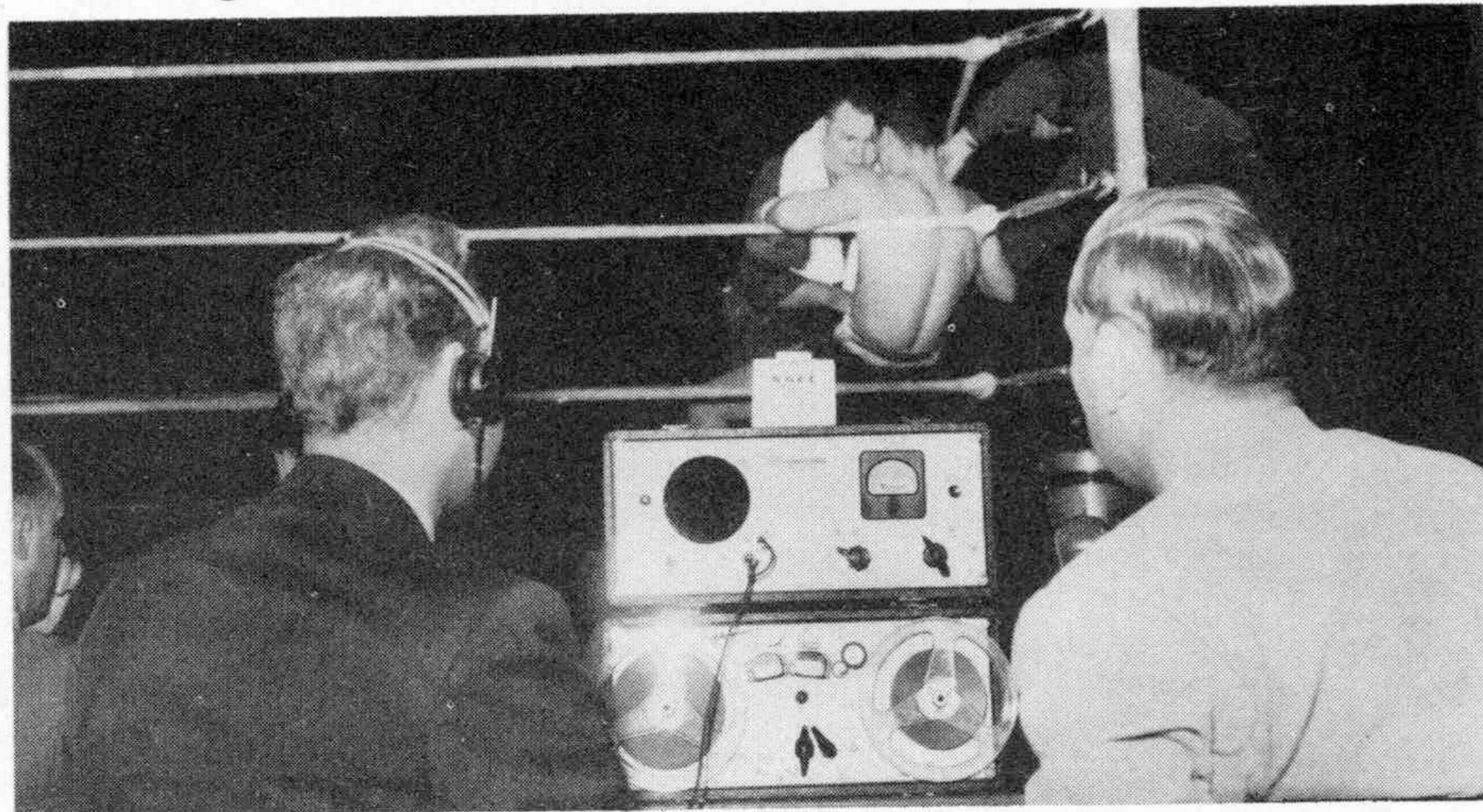
Other purchases will be for brass round-head screws for surfaces that show, assorted plain flat-head wood screws, brads, nails, hinges. You may latch the doors any way you choose, but I found a magnetic catch consisting of a flat steel strike plate and a magnetized cube with adjustable screw slots. It keeps the panel snug-fitting and rattle-proof.

For the record changer, you can get a pair of metal motor-board slide-outs, plain for \$1.18, or heavier ball-bearing ones for \$4.60. The motor-board itself can also be bought ready-cut in either wood or metal. I made my own from a piece of 7/8-inch plywood.

For the racks and supports behind the panels and platforms, I used lumber which had been cluttering my garage for years. For the main platforms, I used slats of 1x3-inch hardwood, spacing them an inch apart for ventilation since the various units generate considerable heat.

The metal grill and grass cloth masking can be purchased in radio parts stores. A piece of metal grill 12x12 cost \$1.76 and a 12x18 piece of grass cloth only 29 cents.—And there you have it.

Magnecord 1952 Golden Gloves



Something new has been added in sportscasting! Station KGFL, Roswell, New Mexico, sponsored a Golden Gloves Tournament for the first time this year. The winners then moved on to Chicago to compete with champions from 39 other sections and cities.

The local tournament had drawn great interest, and G. S. "Jud Roberts, station director, (right, above) wanted to follow the progress of the Roswell boxers. A chief problem was the fact that as much as an hour might elapse between bouts involving Roswell boxers, and leasing 1,600 miles of line for the the three-night event was financially out of the question.

The solution was a Magnecorder PT6-JAH. Blow-by-blow accounts of each fight were taped by Roberts and returned to KGFL by special delivery air mail for playback on Station Magnecorders.



The New MagneCordette

The MagneCordette is designed for use in the home and will permit the user to make tape recordings technically comparable to those made in the Broadcasting and Professional Sound Industry.

The MagneCordette unit consists of a standard Magnecord mechanical unit assembled with a small amplifier designed for particular usefulness in custom installations. This mechanical unit, designated type PT6-AH, is virtually the standard tape recorder mechanism by which all others are judged, since it is the backbone of the tape recorder installations now in use in the majority of radio stations in this country.

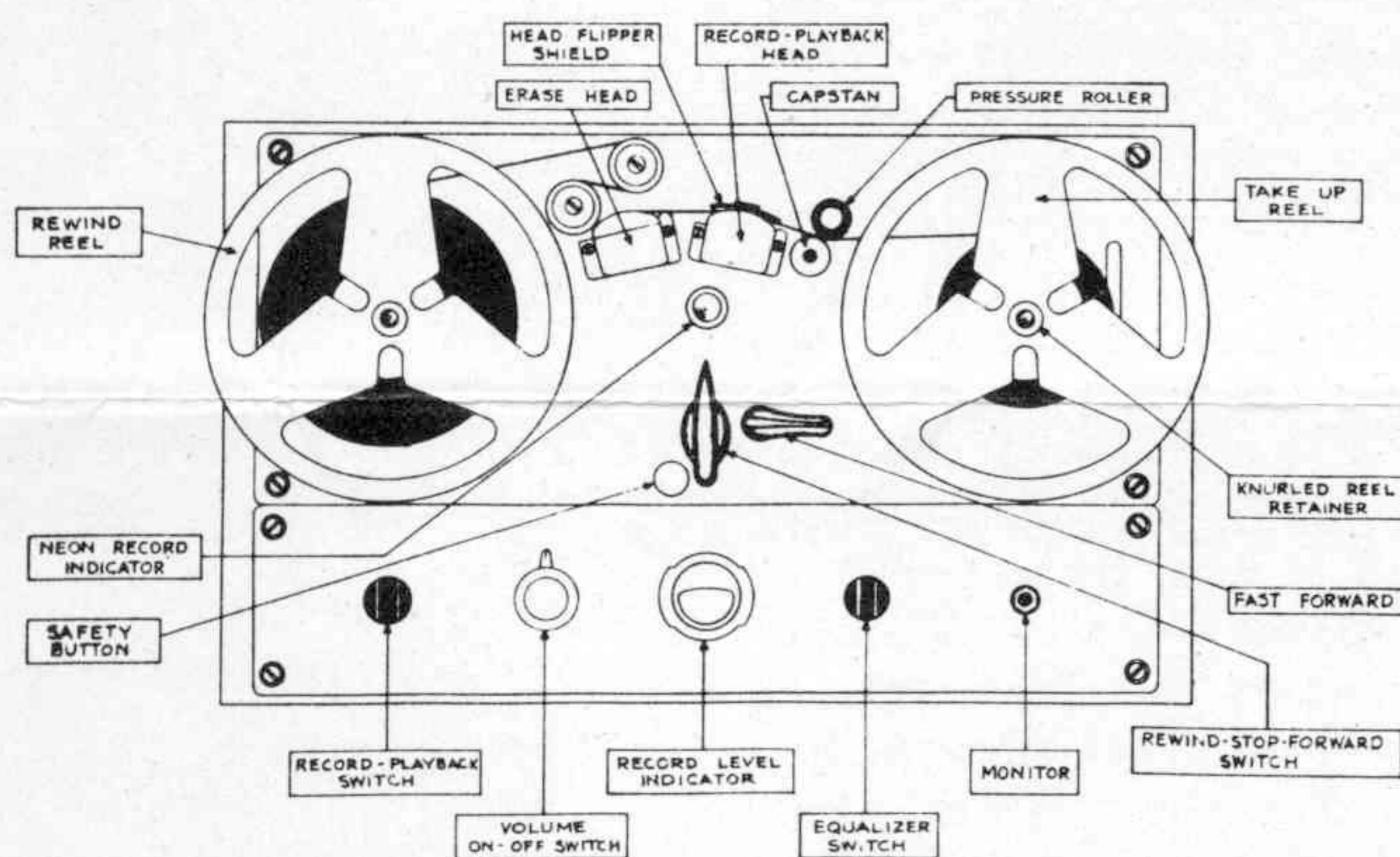
The MagneCordette amplifier, type PT6-G, is designed to permit recordings to be made from a microphone or from the output of a radio tuner or crystal pickup.

The first half of a 12AU7 is used for the output and monitor connections, and for driving the volume indicating tube. The second half of this 12AU7 is used as the output tube for recording. The recording equalization circuit is located in the cathode of this stage.

The volume indicating tube, type 6E5, is fed through a crystal diode and frequency weighting circuit which assures optimum indication on audio signals.

Connecting A Microphone

The MagneCordette unit may be used to record direct from a microphone or may be connected to a tuner or phonograph to permit the recording from radio programs or phonograph records. If a microphone is to be used, it should be high impedance.



Using this same amplifier, the recordings may be played back into any custom amplifier-speaker installation or into the "phono" connection of any radio or public address system.

Amplifier Circuitry

This amplifier utilizes recently developed miniature tubes. All audio tubes are supplied with direct current for the filaments, which reduces the hum level to a great extent and tends to make operation of the unit quite stable.

The preamplifier section consists of one half of a 12AX7. This tube is used as a preamplifier for the microphone when recording and the playback head when playing back tape. It should be noted that since all Magnecord heads are low impedance a triple shielded high quality input transformer is used for tape playback. The second half of the 12AX7 is used as a voltage amplifier.

Connecting A Tuner

If it is desired to make recordings from a radio tuner, this unit should be connected to the "phono" input on the MagneCordette. It will be noted that the connector in this case is the RTMA pin type, which is the industry standard for this type of connection. If the tuner used has several output connections, the one marked "detector" should be used. Well shielded low capacity cable should be used to connect the tuner to the MagneCordette and the pin plugs should be well soldered to the cable. (Many tuners have an output cord which may be plugged directly into the MagneCordette.)

Connecting A Radio

If it is desired to make recordings from a standard radio, the connection is quite simple. The voice coil leads at the loudspeaker should be connected to the "phono" input of the MagneCordette. This will re-

quire someone slightly familiar with the interior of the radio in order to properly attach leads to the voice coil connection. It should be noted that in the average radio one side of the voice coil circuit is frequently grounded, and it may be necessary to reverse this connection once in order to obtain proper operation.

An alternative method of connecting the unit to a radio for recording, is to connect the MagneCordette "phono" input directly across the volume control of the radio. On some types of radios this connection will be more satisfactory than the voice coil method outlined above. This connection (which may be left attached at all times) should be made by your serviceman.

Connecting The Output

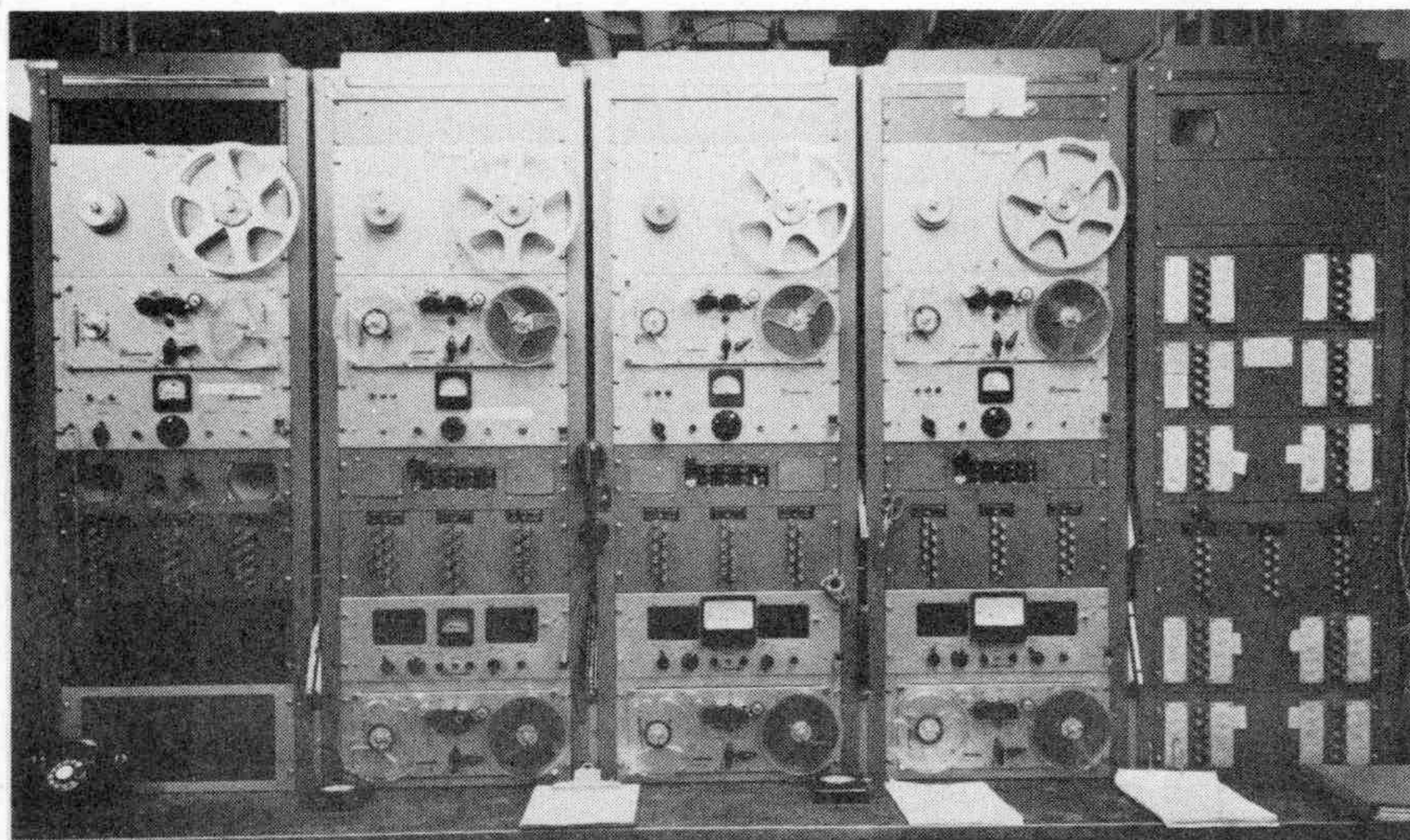
The output from the MagneCordette amplifier may be connected to the phono input on any radio or p.a. system, or to a "tuner" or high level phono input on most custom preamplifiers.

Most radio receivers are provided with a phonograph input connection. This is sometimes labeled "phono," "Television," or even "FM-Phono-Television." The output of the MagneCordette should be attached to this connector.

In many cases there will be a switch on the front (or back) of the radio which must be placed in a certain position to permit operation of this connection. This may be a position on the bandswitch, the tone control switch, or an independent control. When using this connection the volume control on the radio may not control the volume, but the MagneCordette volume control will always be effective.

The unit may also be connected directly to the input of a power amplifier if desired. The output connector of the MagneCordette is the standard RTMA pin type A card equipped with a pin connector on one end, and a connector suitable for the power amplifier or other unit to be connected should be prepared.

The MagneCordette output impedance is approximately 100,000 ohms and the output voltage is sufficient to drive any custom amplifier. It should be noted when preparing to connect this unit that the output of the Magnecord amplifier is always in operation, whether the machine is recording or playing back. Thus the output connection may be used for monitoring a recording while it is being made as well as for playing back the recording.



WHA, U. OF WISCONSIN RADIO, DESCRIBES MAGNECORDER USES

In nearly every operating department at WHA (Madison, Wisconsin) Magnetic tape recording has become an indispensable tool of effective radio communication.

WHA is located on the campus of the University and is also the key station for a network of two AM and eight FM stations owned by the State of Wisconsin. The network is on the air 16 hours daily—and to fulfill the needs of such an extensive schedule, WHA has established a Recording Service as a separate department. Its nerve center is the recently constructed Recording Room (see picture). Rack-mounted with easy access to the adjoining studio are eight MagneCorders, four of them with hour spooling mechanisms. In addition, several portable MagneCorders are in frequent use.

The portability of the PT-6 has brought unlimited scope to the WHA program schedule, both in established formats and in making possible new series of programs, utilizing resources and materials throughout the state. Two daily farm programs reap the benefits of handy recording in-the-field; Maury White, who conducts one of them, has a generator built into his car, and can literally get into the woods and fields to do his recording. Similarly, the daily **HOMEMAKERS** program obtains material not otherwise available.

WHA production teams have also gone into the field with portable MagneCorders—a producer and writer visited cities and towns throughout the state to tell community stories in Wisconsin Profiles. Spending three to five days in the

community, they've recorded interviews with old-timers, civic leaders, the town's outstanding musical groups, the sounds of the community—and blending those on-the-spot recordings with dramatic narrative, told the stories behind communities in the voices of the people who live there.

The production teams have gone into flood-ravaged areas to bring to state listeners the story of disaster victims in their own words; they have reported at first hand the winter driving experiments at Clintonville, conducted by the University of Wisconsin; they've taken their microphones into schoolrooms throughout the state to record stories of special training programs.

Musically, portable tape recorders have delivered a state-wide audience for many outstanding instrumental and vocal groups. In dozens of ways, MagneCorders have extended WHA facilities to the most remote corners of the state.

In studio-produced programs, the tape-recorder has brought about changes in technique and procedures that have resulted in improved performance and economy of effort. Discussion programs take on greater freedom, informality, and spontaneity when they are tape-recorded in advance, without the pressure of a live broadcast and with all the advantages of editing to delete errors and to select the best portions of the discussion.

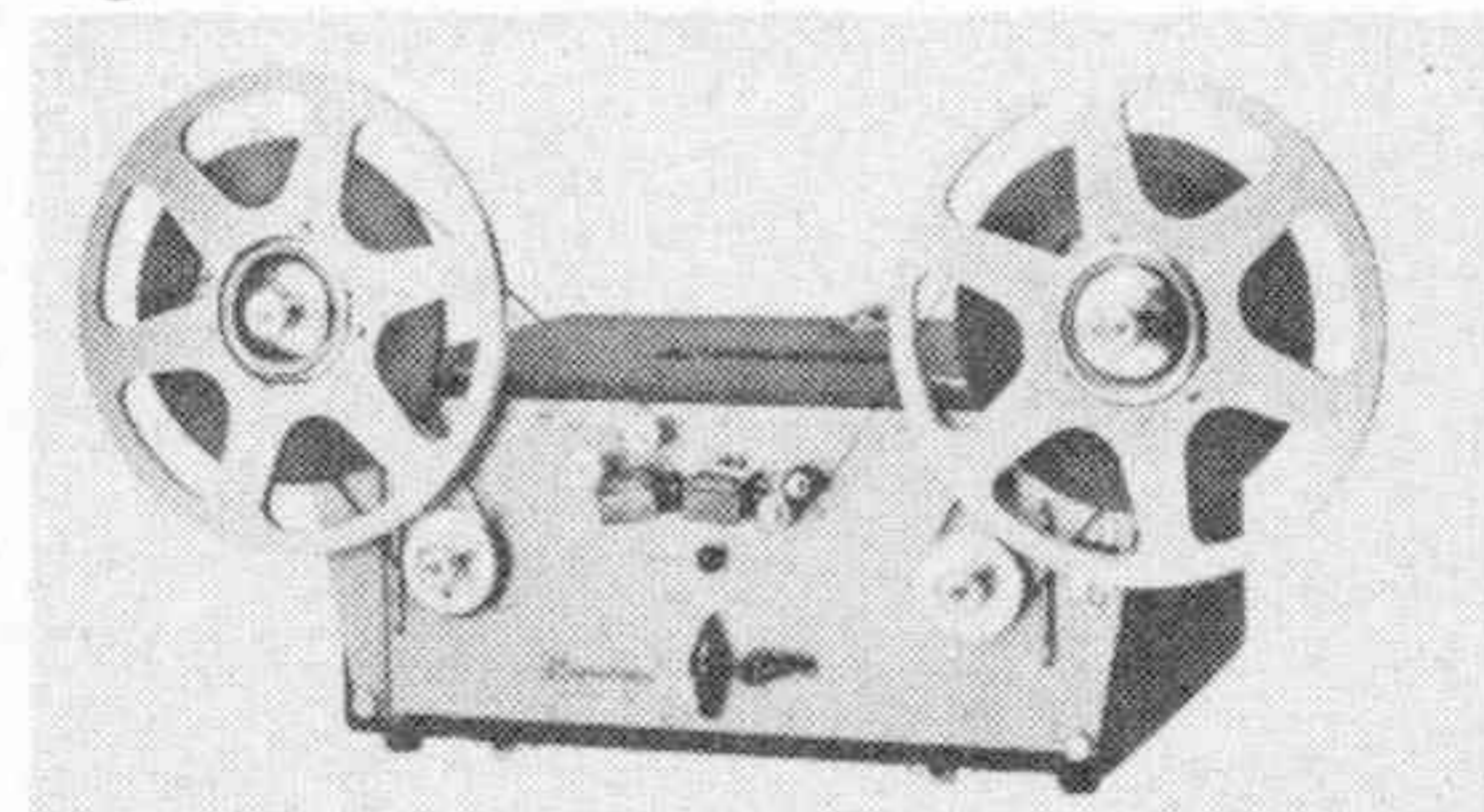
The WHA Recording Service also performs many non-broadcast services for University and State groups. During a recent International Land Tenure Conference on campus, more

than 200 conference hours were tape-recorded for the U. S. State Department and to facilitate the making of stenographic transcripts of the proceedings. Each week, as many as 30 copies of programs are made for distribution to other radio stations in the state. Nearly ten percent of the Recording Service business consists of making single dubbings of broadcast and non-broadcast events for use by University classes and other study groups. And currently the service is being expanded to coordinate with the development of a tape recording library of educational programs to be made available to all Wisconsin schools, at inexpensive rental rates.

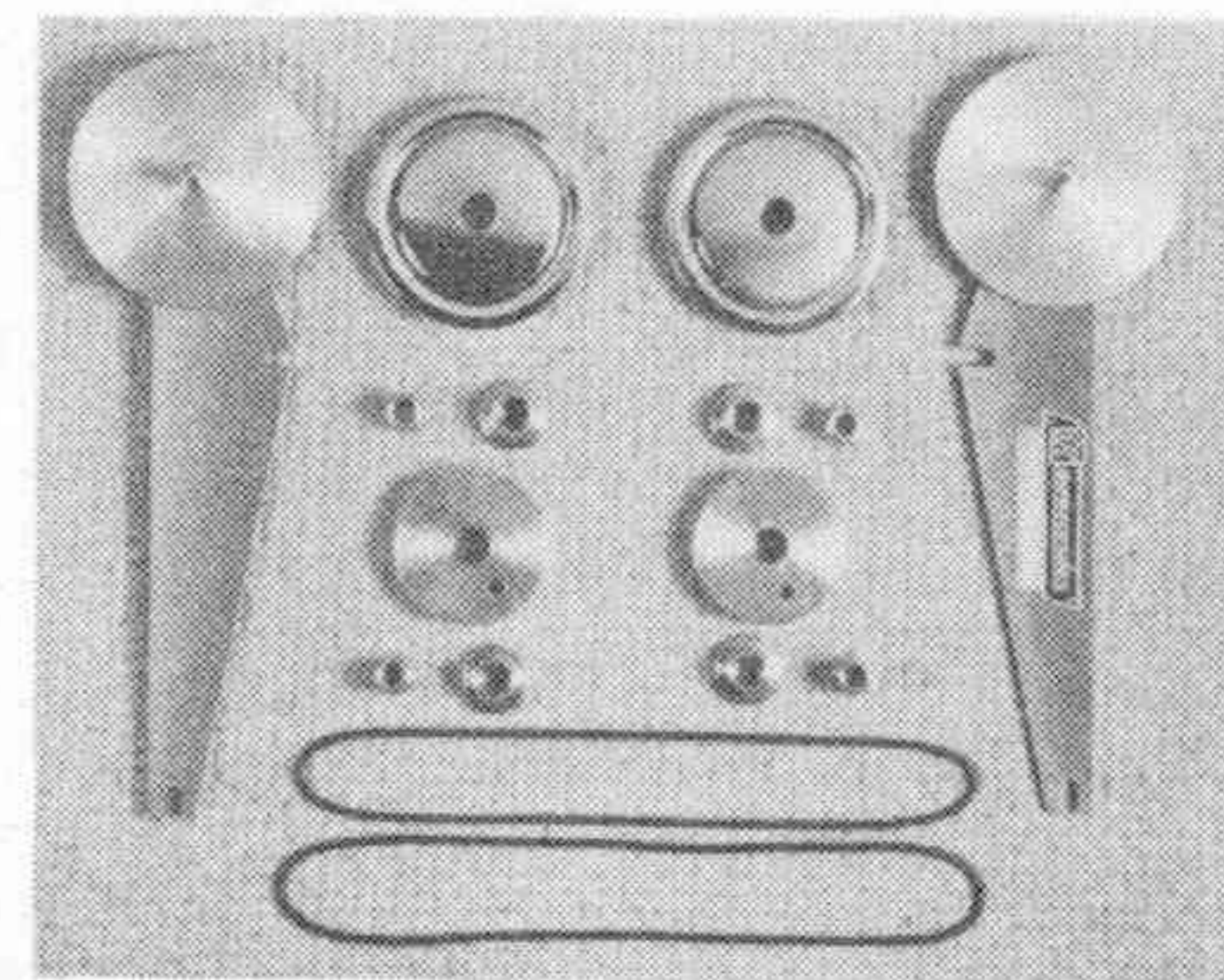
Because of magnetic tape recorders, it has been possible to eliminate studios and program staff at 7 transmitters in the Wisconsin State Network—thus effecting further economy in the operation of the network.

DEVELOP ADAPTERS FOR LARGER REELS

The greatest boon to MagneCorder users is the development of inexpensive extension arms to adapt units for use with 10½-inch reels, doubling the material which may be taped on a single reel without reel change.



The arms fit under mounting bolts securing the front panel. Simple belts drive the adapters from pulleys which snap on the spool arbors for existing 7½-inch reels. With the adapters, complete record-playback, high speed forward, rewind and stop is possible with the larger reels. No motor adjustments are required.



The arms may be used with either portable or rack-mounted units and require no lubrication.