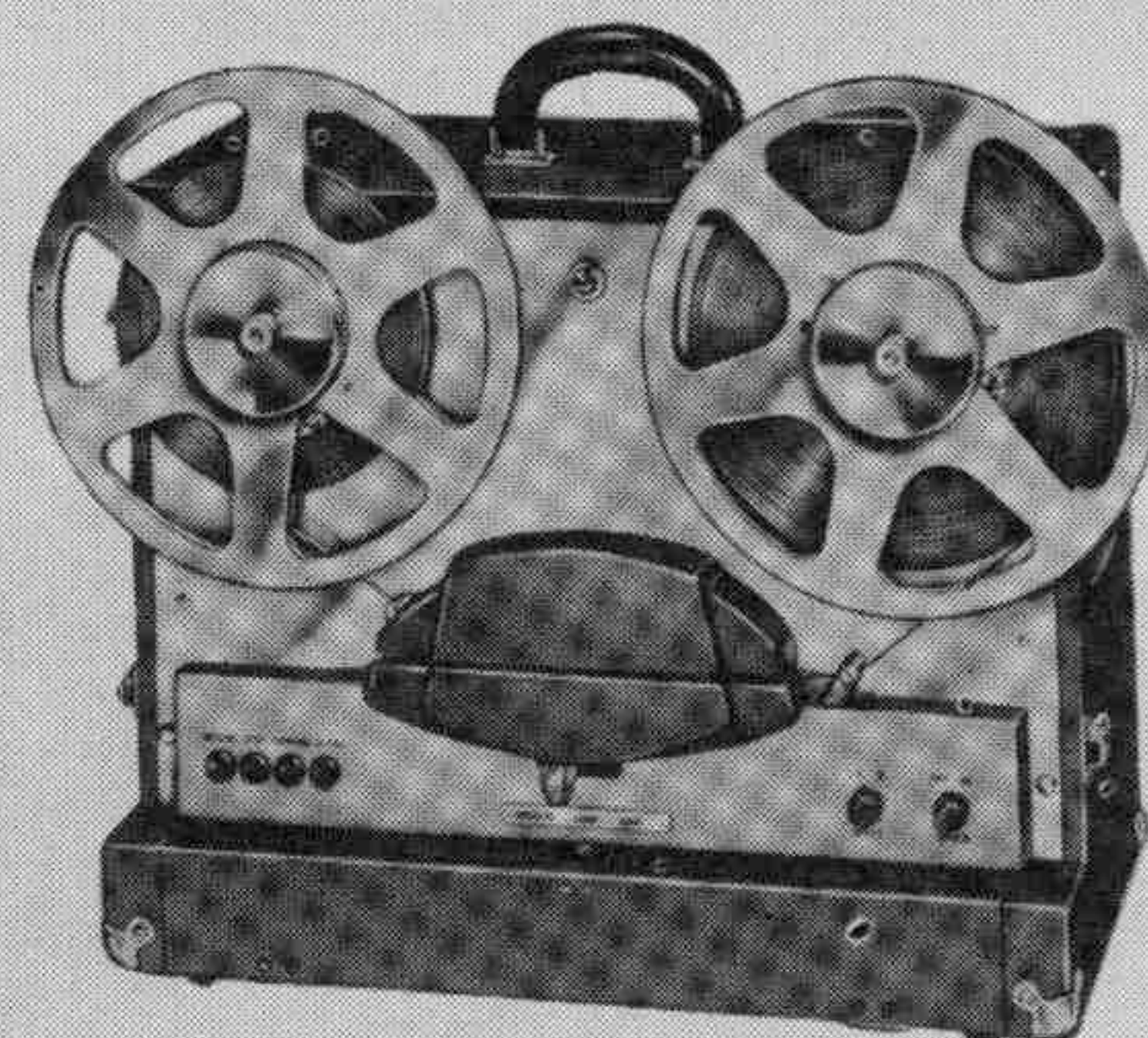




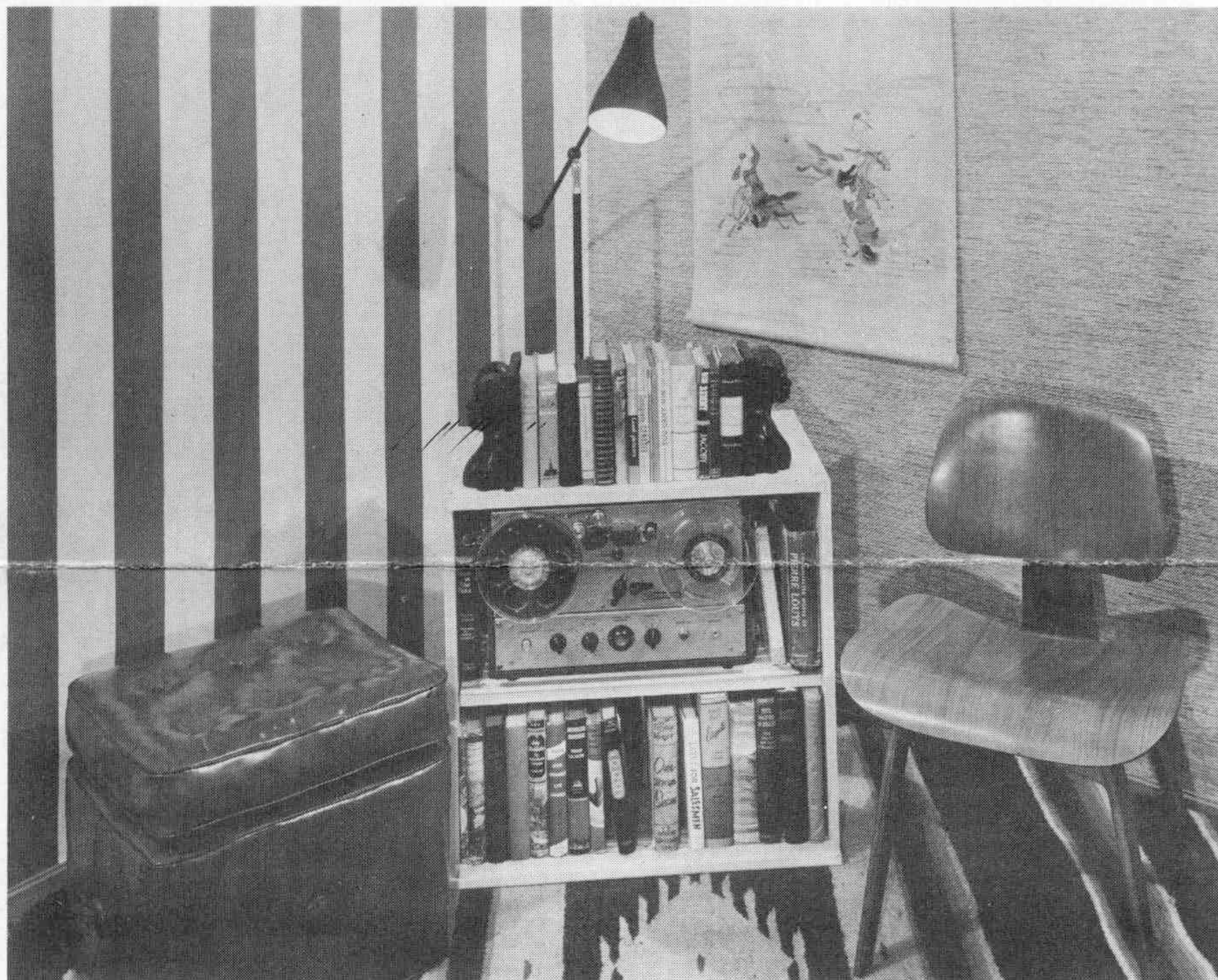
M80-A

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MAY-JUNE, 1954

Professional Hi-Fi For Non-Professionals



The New M-33 Portable Magne recorder Installed in a Ready Made Cabinet

Magnecord has entered the high-fidelity consumer market with the introduction of two portable magnetic tape recorder-playback machines to retail at \$299.00 and \$329.00 each. The decision to make Magnecord equipment for the general public was prompted by "increased demand for high fidelity recorders that are easy to operate, and the recent introduction of pre-recorded magnetic tape reels for general use," according to Wm. L. Dunn, Magnecord president.

Previously, Magnecord units ranged in price from \$499.00 to over \$5,000.00 each, for use primarily by professional musicians and radio sound technicians.

Ease of Operation

The two new portables, described as "professional high-fidelity equipment for non-professionals," will perform all the major functions of the higher priced units now in general use for radio and TV broadcast recording. Ease of operation, durability, and elimination of the previous need for technical knowledge of magnetic tape recording equipment are major features. Each machine has provision for a detachable microphone.

Different Sound Amplification

Basic difference between the two new units is in sound amplification. The M-30, listed at \$299.00, may be connected to any radio, phonograph or TV loud speaker for amplification. The M-33, at \$329.00, has a built-in power amplifier and speaker, and is furnished with a quality ceramic microphone.

The machines play, or record, the standard 1200 feet, 7 inch reels, at either $3\frac{3}{4}$ or $7\frac{1}{2}$ inches per second. Extension reels make it possible to double recording or playback time. Each portable is easily detached from carrying case for installation in standard or custom built cabinets.

The M-30 and M-33 units are being supplied with half-track heads, permitting two full recordings to be made on each tape, thus doubling the normal recording time. This allows as much as two hours to be recorded on a 7 inch reel. When the extension arms are used, four hours may be recorded on a 10-inch reel. Full track heads are available at no extra cost for those who prefer this method of recording.

A Very Phony Story

Almost anyone knows, nowadays, that when you dial for the correct time, or for a weather report, the voice that answers is disembodied. The information that you receive is from a transcribed message — usually delivered on a Magne recorder. The melodious voice of a woman is what you generally hear. Talking back, as usual will get you nowhere.

When the telephone company in Gary, Indiana, changed the dial system by adding a prefix number to all existing four digit numbers they expected a lot of wrong numbers for a while. They got them. The wear and tear on operators was avoided by installing a Magne recorder

tape transcriber which announced sweetly, via tape, that the system had been changed (you dope!)

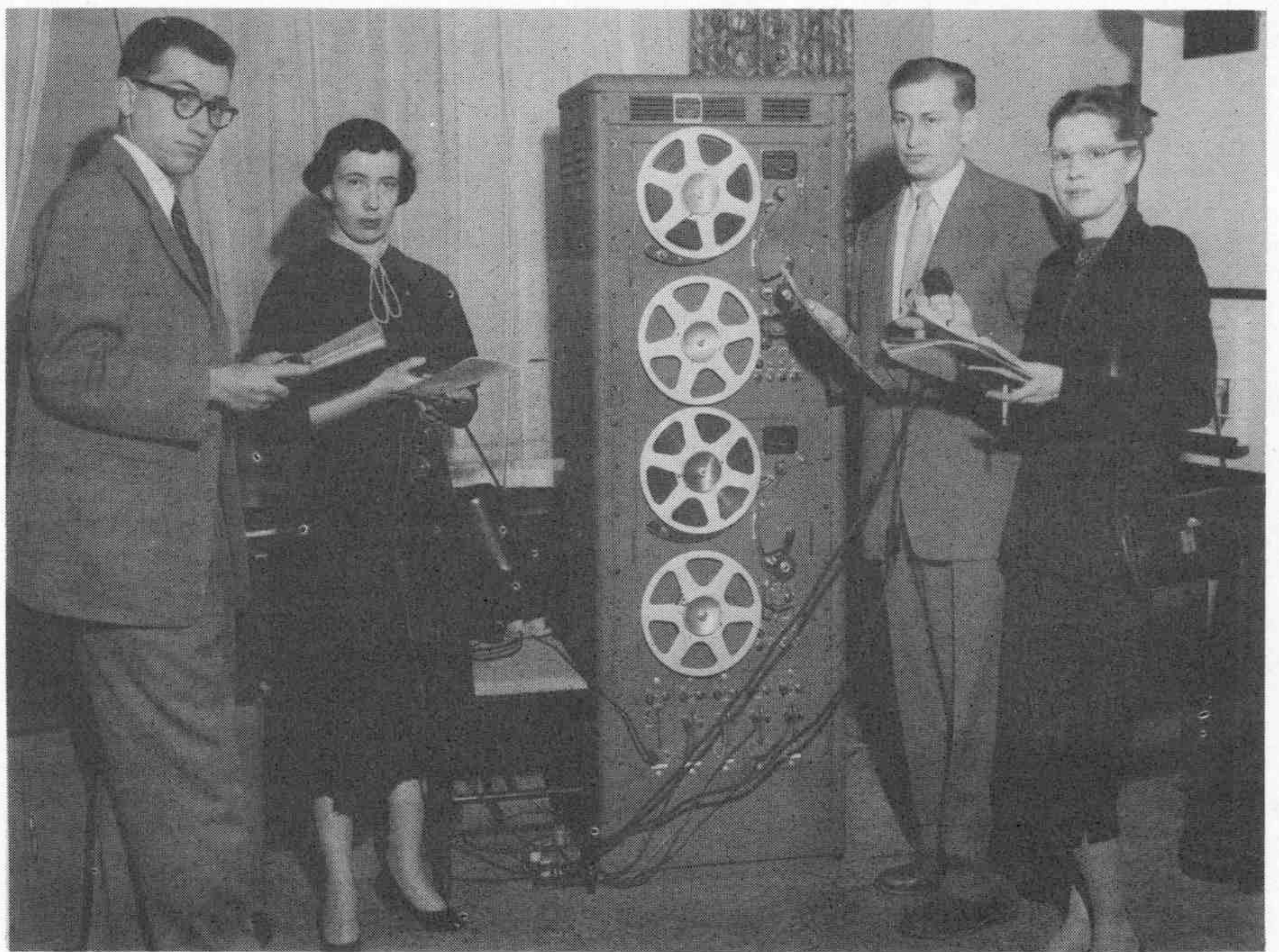
First public reaction was overwhelming. People apologized, complained, stuttered, stammered — and asked for their money back. Part for the course was about the beginning of the third repetition of the transcribed message. By then the misguided caller had surreptitiously fished his money out of the coin-return box, looked around to see if anyone was watching, and either tried again, or slammed the receiver down hard — sometimes slipping a finger again in the coin return box, just for luck.

Ladies Will Love This

A sound recorder that will register four conversations simultaneously on a single magnetic tape and automatically unscramble them so they can be played back individually or in pairs was unveiled by Magnecord, Inc., at The Institute of Radio Engineers annual meeting in New York, March 22-25.

The four-channel single-tape recorder, an adaptation of a similar exclusive Magnecord unit inaugurated last July by the Civil Aeronautics Administration, will be marketed at approximately \$5,000. Seventy-four of these multiple-channel recorders are now on 24 hour use for inter-communication between passenger planes and control towers at 22 airports across the U. S. At the Washington, D. C. airport, eight units are in use for directing air traffic, six are at LaGuardia Field, and three each in 20 other cities.

The new recorder is believed to have immeasurable value in the medical field. For the first time, an accurate on-the-spot account of a surgical operation is now possible by permitting up to four surgeons and attendants to record all oral observations by the use of lip microphones. Other immediate uses include the permanent recording of inter-communications between police, fire and similar civil safeguard bodies.



Shown above is the Magnecord four-channel single-tape recorder demonstrated at the Institute of Radio Engineers annual meeting in New York, March 22-25. The new recorder will be marketed at approximately \$5,000.

Dunn Receives IRE Grade of Fellow

Magnecord President William L. Dunn received the grade of Fellow in The Institute of Radio Engineers at the annual IRE banquet held at the Waldorf-Astoria, New York, March 24.



The citation which accompanied the honorary degree read: "For his contribution in the development of radio receivers."

Forecast: Brain Storm Brewing

What does cerebellum say to cerebrum? Brain specialists, scientists, and that esoteric group of humans who live by picking other people's brains, have pondered this question for ages.

The answers to this and similar questions as to what goes on within the human cranium may soon be neatly wrapped up in tape.

Experiments are now being conducted in several university research laboratories during which brain waves are electronically registered on magnetic tape by use of a Magnecorder.

Looking into a woman's eyes to fathom her innermost thoughts may soon be a thing of the past. The astute gentleman of tomorrow will tenderly clamp a Magnecord headset on the object of his affection and, depending on the tape reading, either take her to his bosom or take to his heels.

M80 Shown At IRE

The new high speed Magnecord M80, a sound recorder that will register at more than 66 times the rate of normal speech, was demonstrated at a press preview held recently in New York City during the Institute of Radio Engineers annual meeting.

This unit will record and reproduce at a frequency in excess of 200,000 cycles per second as compared with normal speech of 3,000 cycles and maximum frequency response of 15,000 cycles for most equipment now in use.

The M80 is a result of more than five years research. A survey of individuals and requirements in the professional recording field showed that while performance standards are of the greatest importance, certain purely operational features were very much in demand as well, such as ease of tape handling, precise and instant control of tape motion, good editing facilities, accurate timing, portability, and similar points.

Magnecord engineers claim that the new high-frequency recorder is being further developed to handle television electronic impulses. President William L. Dunn has stated that certain engineering refinements are still necessary before the equipment will be adaptable to television recordings and transcription. No date has been set as to when the unit will be officially released for television use, but present research indicates that it will be marketed at a substantially lower figure than previously published estimates for similar equipment.

The high speed M80 is also designed for research where simultaneous multiple recording is required of electronic registering instruments, as in experimental planes, submarines, automobiles, trains, meteorological observations, and the like.

The Stethoscope of Industry

Audio engineers refer to Magnecord recorders as "the stethoscope of industry," because they are often used to detect the internal pulsations and vibrations of motors, engines and other intricate power machinery encased in heavy metal casings. For recording or transcription purposes, Magnecord equipment has a multitude of other uses. These include:

1. The recording of heartbeats and brain waves.
2. For calming dogs and cats in a pound.
3. For research on fish (and fishing.)
4. To eliminate, by delay, feedback in PA systems.
5. For management communication.
6. The recording of fire and police department calls.
7. For calming the physically and emotionally ill.
8. For recording radio and TV sound effects.
9. To record minutes at meetings.
10. For recording, through interviews, matters of historical importance.
11. The recording of animal noises.
12. The recording of ceremonies, music and dialects of ethnic groups for anthropological study.
13. The recording of lessons for the blind.
14. For dance studio instruction.

Magnecorder Used To Fight Communism

From remote jungles, from outlying Asiatic areas, from the fringes of the Iron Curtain, from the brink of civilization comes a modern radio signal . . . the "Call of the Orient!" The Far East Broadcasting Co., a work of Christian Faith, nonprofit, noncommercial and interdenominational, operates the "Call of the Orient" stations.

Seven Outlets in Operation

The heart of the FEBC is Christian Radio City Manila. Here, the seven "Call of the Orient" stations and transmitters: DZAS, DZB2, DZH6, DZH7, DZH8, DZH0, and DZ16, are situated.

Not all of the programs originate here because many of them are tape-recorded out in the field. FEBC employs an unusual mobile remote transmitting unit in its field broadcasts — a four-wheel-drive Power-Wagon. The unit was chosen because of its ability to travel over rugged terrain, and to get in and out of inaccessible areas.

Completely Equipped

This mobile unit is fitted with its own power supply for transmitting, and is equipped with recording facilities, a public address system, first aid materials, photographic supplies, floodlights, and cooking and sleeping accommodations.

Another important function of the FEBC Power-Wagon is the placing and servicing of "portable missionaries." These are small battery-operated short-wave radio receivers, pre-tuned to receive only the "Call of the Orient" stations. Without the active "ears" of these "portable missionaries," the Christian word from Radio City Manila would fall on many "dead" receiving areas.

Reds Close Studios

The FEBC is a potent force fighting Communism, simply because the Reds are opposed to Christianity and freedom taught by these missionaries. This is substantiated by the fact that the Communists have closed the FEBC recording studios in Shanghai; and a subsidiary of the FEBC, The China Christian Broadcasting System, has likewise been liquidated. One of the most important operations of the Far East Broadcasting Co. is its work in the remote and semi-civilized areas. In the Philippine Islands, for instance, these missionaries go into Huk territories, such as Cabanatuan, and the foothills of Mt. Arayat and other sections of Northern Luzon to do their work.

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Witte, Boylan Promoted

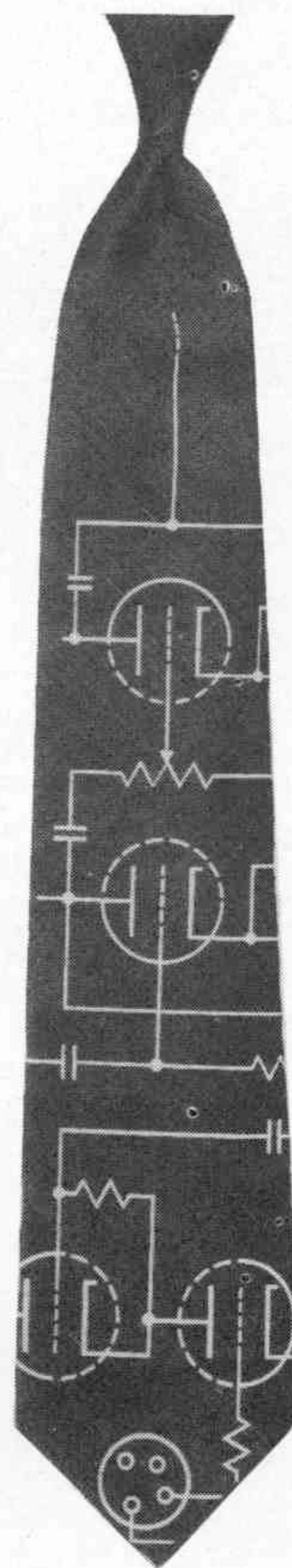
Two recent promotions at Magnecord, Inc. announced by President William L. Dunn, include Roy Witte as Chief Mechanical Engineer and William F. Boylan as Chief Electronic Engineer.

Witte joined Magnecord in December, 1953, as a project engineer. Previously he was with Hallicrafters Co., Chicago, as Chief Mechanical Engineer, and spent seven years with Motorola, Inc. as assistant engineering service manager.

Boylan joined Magnecord in 1950 as an electrical engineer, later becoming senior electrical engineer on commercial pro-

This Is A Tie?

Designed expressly for scheming engineers with a bold front, this is nothing more than a circuit drawing. It demonstrates the actual schematic of the revolutionary cascode stage in the amplifier of the Magnecord M80. It is also a white-on-gray necktie made expressly for Magnecord. Originally, selected broadcast station engineers got them free for expressing professional opinions of the M80. If you have no M80, or no opinion, but would like a tie, you can still get one the hard way. Send \$1.75 to the Magnecord Sales Department.



duction. He previously served as an instructor of electronics and mathematics at the DeForest Training School, Chicago.

This Sounds Fishy

Deep sea fishermen have known for a long time that fish make sounds. So who wants to hear a fish talk? Another fish, naturally. Scientific fishermen have determined that schools of foraging fish are guided to their prey of smaller fish by the sounds emanating from the small fry. By using Magnecord tape recorders modern deep sea fishing fleets are able to imitate the sounds of the little fish that the big ones are seeking. By the time the hungry school discovers that it is all a snare and delusion it is too late. The crew is hauling in the nets. And the Magnecord operator is now playing back "Asleep On The Deep."

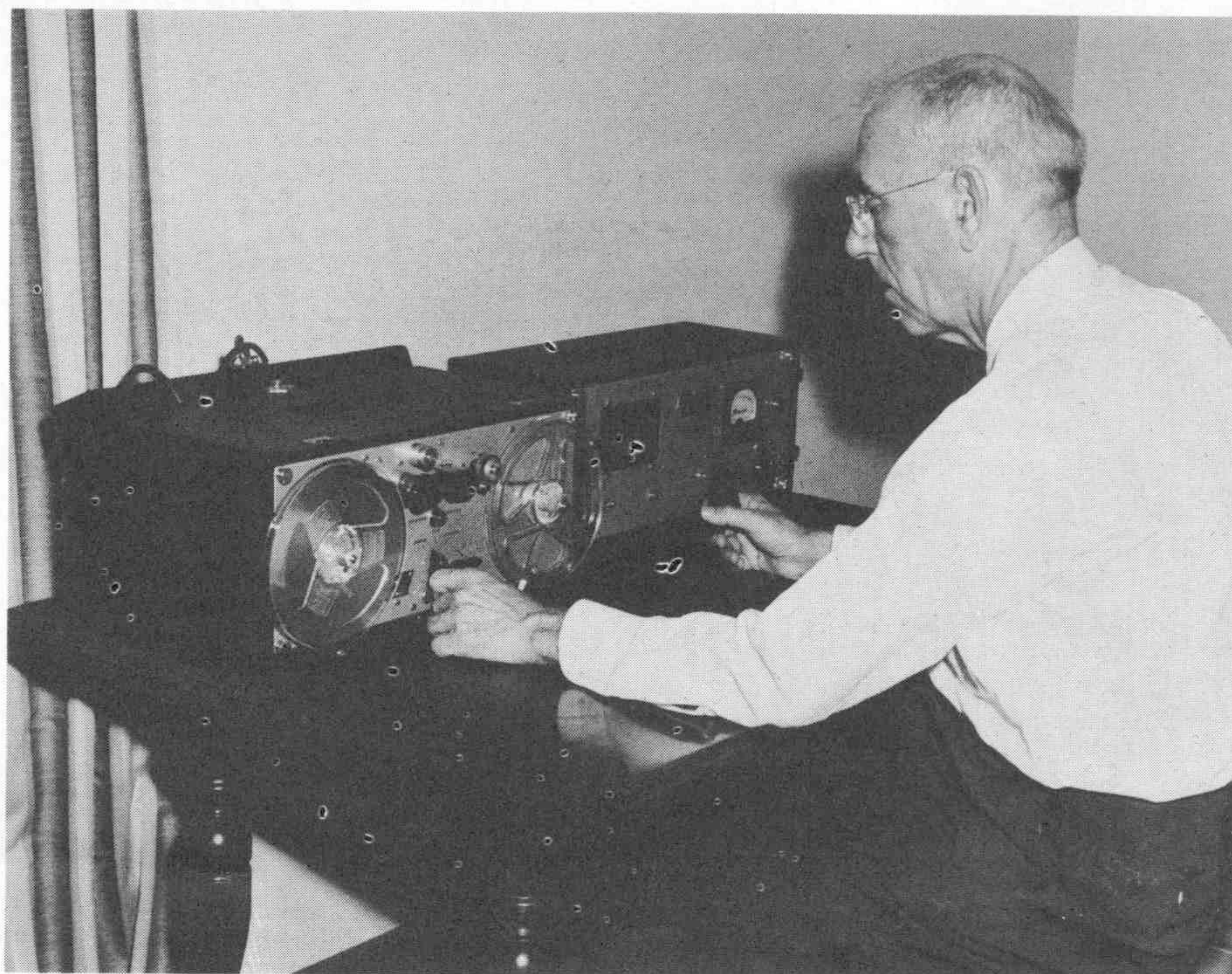
A Tall Texas Tale

Some of the tales that come out of Texas are unbelievable — except to a Texan. But Texans, even as mortal men, pass away from time to time, taking their tales with them. To record, for posterity, the fantastic history of the Texas oil fields, a project has been underway for some time, financed by an anonymous Texan.

Using a Magnecorder, Mr. Mody Boatright, of Austin, Texas, has been recording the facts and fancy of the oil fields by personal interviews with the men that were there.

One of the interviews, with Claude Witherspoon, now living on a ranch, describes how he discovered oil in 1894 near Corsicana. Other recorded interviews have been made with drillers, lease-holders, scouts, producers, bankers, roughnecks, tool-pushers, businessmen, peace officers, lawyers — and liars.

The project, when completed, will be a priceless history of the Texas oil industry, by the men who actually made it.



Historian Mody Boatright demonstrates the Magnecorder he is using to record history of the Texas oil industry.

How To Make A Safari Sound Simple



Douglas Geerds, sound technician of Pretoria, South Africa, Magnecords sound on a motion picture location in the Transvaal section of South Africa for Howard Cagle of New York. This machine functioned perfectly despite abuse from natives, stevedores and the elements. Mr. Cagle, a film producer, says that the Magnecord outperformed a sprocketed recorder costing three times as much as the Magnecord and stood up under the rough handling much better. In fact, the Magnecord required no servicing or maintenance care whatsoever.

M80 Accessories Accessible

Five new accessories for the Magnecord M80 recorder, and a case for carrying them in, are now available. There is also a separate case for the M80-M amplifier. The new accessories are:

1. A Remote Control Adaptor Kit (93X15) and Control Station (91X476) which permit complete control of M80 equipment from any place in the studio. Connects to wired-in terminals on standard M80 unit.
2. A High Level Mixer (M80-M) for three 50/150/250 ohm microphones mounts in rack or portable case.
3. A Throwover Switch (M80-T) provides selective switching of two M80 recorders with one amplifier for continuous recording. Mounts in rack or portable case.
4. A Low Level Mixer (M80-L) mounts

in rack or portable case, accommodating three 30/50 ohm microphones.

5. A Voice-Operated Relay (M80-VOR) permits sound source to start and stop recorder. Adjust for "threshold," "hold time," and "override." Mounts in rack or portable case.

The same standard panel kit (93X19) will rack-mount units 3, 4 or 5.

Aid To Star Gazers

At the Buhl Planetarium, Pittsburgh, a Magnecorder is used to produce the voice which follows the stars. The travels through the heavens of various stars are projected on a hemispheric screen. A Magnecorder playing background music accompanies the lecture.

Let's Dance—To Magnecord Music

The old adage, "He who dances must pay the fiddler," has been disproved by a Magnecord, Inc. unit. In fact, at the new Arthur Murray Dance Studio recently opened in Washington, D. C., the instructor need not turn a finger to have 320 individual numbers consecutively played without repetition and the unit provides the dancers with a 20 second rest period between numbers.

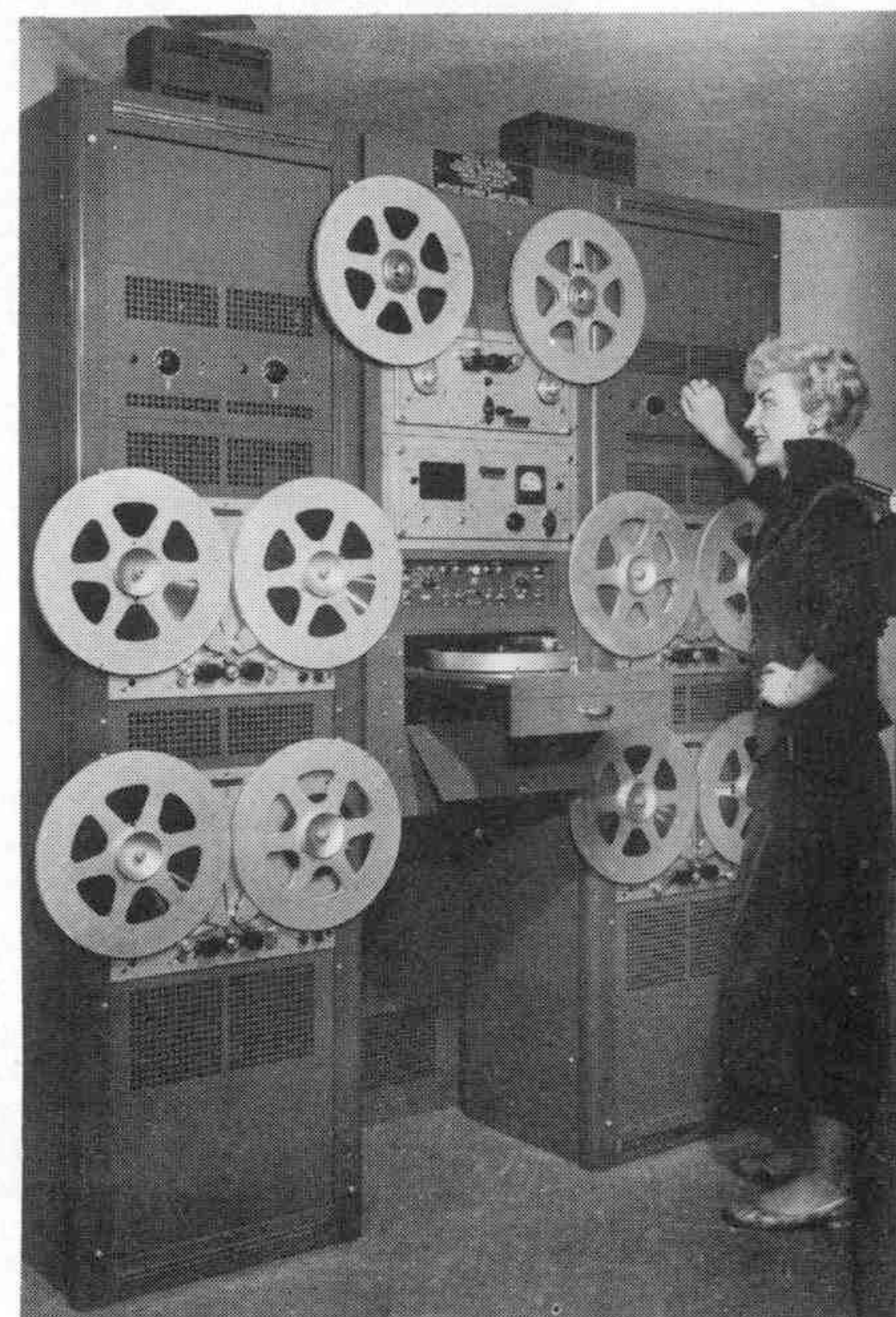
The four-channel music distribution system was designed and installed by the Coastal Corporation of Alexandria, Virginia. The central console consists of four Model 814 Magnecord continuous play tape players with 14 inch reels, four Stromberg-Carlson fifty-watt amplifiers and a Magnecord Model PT6AHX recorder and PT6-JX amplifier for transcribing special Arthur Murray disk records on twin track tape.

The turntable used for transcribing has a variable speed to permit modification of tempo to suit dance instruction requirements. An electric time clock automatically signals the end of half hour lessons and silences the music for five minutes each hour to allow class changes.

One of the problems with which many dance studios are confronted has been remedied here. To overcome the overlapping of sound between rooms where different rhythms are being taught, the generous use of recessed ceiling speakers permits adequate low level sound distribution without a disturbing interference.

This Arthur Murray Studio is the most elaborate of the Murray chain. The entire studio occupies 12,000 square feet of floor space and features a ballroom of 2,200 square feet, with two adjoining rooms of 600 square feet each, 14 interviewing rooms, a Latin room and a gold room.

The new Arthur Murray Studio is one of the latest to get in step with the users of our Magnecord Model 814.



An Arthur Murray dance instructor shown at the controls of the 4-channel music distribution system which utilizes the Magnecord 814, recently installed in the New Arthur Murray Studio in Washington, D. C.