Magnecord Inc

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PUBLISHED BY MAGNECORD, INC. 225 W. OHIO ST., CHICAGO 10, ILL. SEPT. - OCT., 1952

Magnecord Shows New Products at Audio Fair

Magnecord Introduces Recorded Tape Library

The first full-range recorded tapes for commercial sale featuring major orchestras with noted conductors and soloists will be introduced by MaVo-Tape, Incorporated, at the October 29-November 1 Audio Fair in New York City.

A limited test distribution of the recordings, to be sold as "Magnecordings by Vox", will follow the New York introduction.

The "Magnecordings" will be recorded on half tracks of standard recording tape at 7½-inches per second tape speed, presenting a full hour program on a professional 7-inch reel. Special equalization in recording will give high fidelity reproduction of 15,000 cycles.

An important MaVoTape innovation is the lack of a standard or "flat" price per recording. "Magnecordings" will be sold by "time segments"; the length of the selection will determine the price of the tape. An hour program, 7-inch reel of 1200 feet (2400 feet of recorded program) will sell for $9.95. A half hour program will sell for $4.95. Other prices will range proportionally.

The "Magnecordings" will be made by Magnecord, the world's oldest and largest manufacturer of professional magnetic recording equipment for MaVoTape, Inc., from the "master" tapes of the Vox Productions, Inc., library, and will be distributed initially through Magnecord distributors.

Plans call for six releases per month. Initial releases will include *Shostakovich* - Fifth symphony by the Vienna Symphony Orchestra, Jascha Horenstein conductor; *Mahler* - Symphony No. 2 in C Minor, "The Resurrection," by the Vienna Symphony Orchestra, Otto Klemperer conductor with Ilona Steingruber soprano; and, *Tchaikovsky* - Piano Concerto in B Flat by Monique de la Brouchollerie and the Vienna Symphony Orchestra.

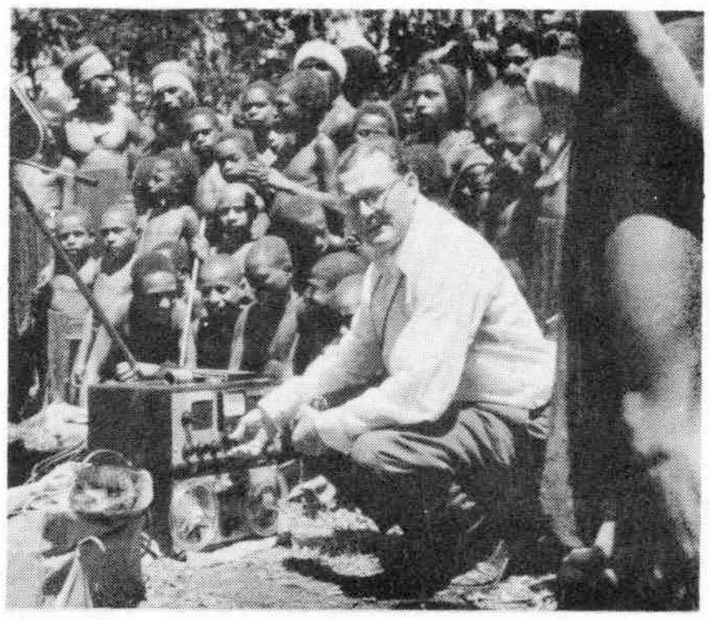
A. Lionel Whyte has been named sales manager of MaVoTape, 225 West Ohio Street, Chicago.

"Magnecordings by Vox" will offer all the advantages of tape recording: no surface noise, no loss of quality through wear, and the accurate liveness and range of full frequency reproduction, 50 to 15,000 cycles.

The Magnecorder operated by Paul Wickman, secretary of the General Conference of Seventh-day Adventists, in the picture above was soaked with water and wet plaster in a tropical hurricane in Fiji.

Wickman was on a five-month tour of the South Pacific, photographing and recording native ceremonies and sound effects. When the rain and 175-mile winds subsided, he cleaned the Magnecorder and it ran perfectly.

"I used this Magnecorder for the following four months," Wickman wrote, "and it never failed me the entire time. I think it is a wonderful tribute."



One-Case Portable, Tapes, Highlight New York Show

Magnecord will make a big "splash" at the Oct. 30-Nov. 1 New York Audio Fair in the Hotel New Yorker. Everyone in the audio industry expects it. So do Magnecord representatives and distributors, the industry press, and Magnecord friends.

Biggest splash will be on the One-Case Portable, the "Voyager" described in Tape Talk on Page 3. Another splash will feature the formation of MaVoTape for the manufacture and distribution of recorded tapes. This operation is described in a separate article on this page.

A smaller splash will be given the portable adaption of the Magnecordette. This unit will be the same 'Cordette in a portable carrying case. A feature of the new model is an optional 2 watt audio amplifier and 6x9-inch speaker built into the lid.

And then there is binaural . . .

Station WQXR will present a binaural broadcast October 29, the evening preceding the opening of the Fair. Unlike previous broadcasts, the WQXR program will not be entirely live, but will feature material played and recorded on a Magnecord binaural unit.

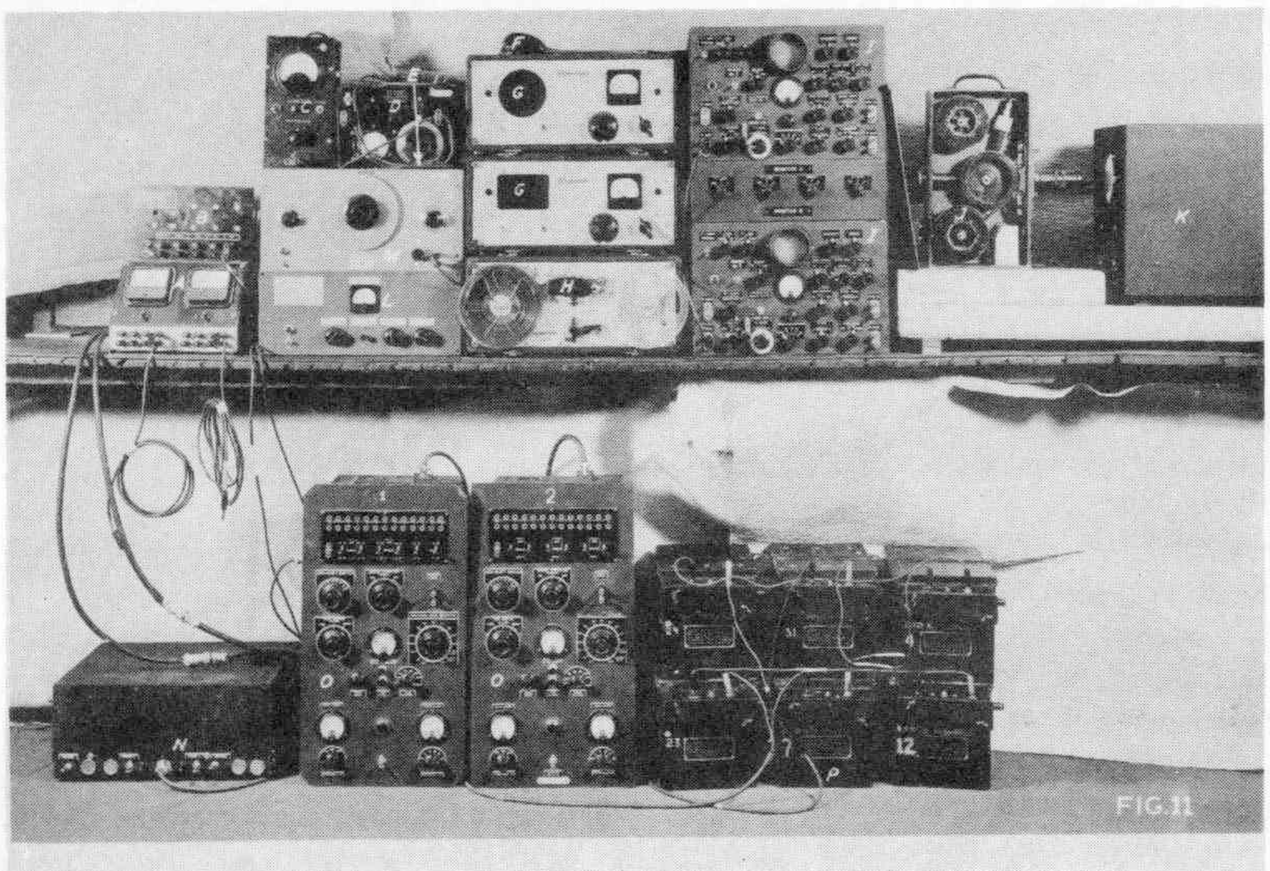
Seven hundred high fidelity enthusiasts will be invited to hear the broadcast in the Grand Ballroom of the Hotel New Yorker. Tickets may be obtained from WQXR or Magnecord distributors in the New York area.

WQXR will do another binaural broadcast at 9:05 p.m. the following night, October 30, repeating part of the previous evening's material and either live or recorded excerpts of the New York Philharmonic program in Carnegie Hall.

Binaural Magnecorder Used In Jet Instrumentation

We've often noted that magnetic tape recording is a new industry, and, as yet, its full potentialities have not been realized. Every day we learn of new applications. Many of these applications are themselves brought about by developments in other fields.

A case in point is the use of a binaural Magnecorder in the development of gas turbines for jet aircraft. The very newness of jet engines demanded new methods of test and analysis. Just how Magnecord's binaural recording equipment was utilized was recently described by R. E. Gorton and B. E. Miller of Pratt & Whitney Aircraft division of United Aircraft Corporation in a technical paper on "Instrumentation for Aircraft Gas Turbine Development", presented before the annual meeting of the Society of Automotive Engineers.



EQUIPMENT USED TO MEASURE AND RECORD HIGH FREQUENCY VIBRATORY STRAIN SIGNALS.

In their paper, Gorton and Miller reported, "The recording of some blade vibration signals requires special apparatus due to the extremely high frequency of the vibrations present. Appreciable stresses at frequencies as high as 30,000 cycles per second have been observed.

"Assume that recording apparatus to 30 kc is required, capable of resolving individual cycles as they may be counted to find the number of cycles of vibration per revolution of the rotor. All galvanometer-type oscillographs can be discarded as they cover only a small part of that frequency range.

"Cathode-ray oscillographs will resolve 30 kc easily, but no oscillograph camera is available with the necessary 1500 foot film transport mechanism."

It is possible to run an acceleration making visual observation of the cathode-ray oscilloscope to find speeds at which appreciable stresses occur, and then attempt to hold the speed constant long enough at each stress peak to permit taking a short record at high film speed but one is never certain that the stress was at peak value during the fraction of the second the film was taken.

Development in magnetic tape recording has provided instruments capable of doing the required recording job. A 30 inch per second tape speed will record 30 kc, and even the smallest standard reel will run continuously for 7½ minutes at 30 inches per second.

Ordinary equipment designed for audio-frequency range may be inadequate. A two channel tape recorder (Magnecord's standard binaural unit) has been satisfactorily used, both on the ground and in flight, to record two strain gages signals with engine-speed and time-marker signals superimposed.

Another advantage of the tape recorder appears in playing back the tape. The tape drive speed may be reduced by as much as an 8 to 1 ratio. The 30 kc signal then appears converted to a 3750 cycles per second signal, and may be rerecorded on a common oscillographic equipment.

"Some other uses for tape recorders may be mentioned," the authors concluded, "though somewhat outside the subject of instrumentation for mechanical problems. The recorder is very useful for study of noise generated by aircraft engines. The aircraft industry has standardized instrumentation and practices for noise measurement, this standard requires an octave-band frequency analysis.

"In many cases the noise may be transient, giving no time for such analysis. Or it may be inconvenient to conduct the frequency analysis at the time of test. The tape recorder is the best readily portable instrument with which noise can be stored without distortion for later analysis. Noises from various sources can also be put in sequence on the tape and taken to an engineering conference for auditory comparison."

Psychiatrist Uses Magnecorder To Quiet Ailing In Sleep

Messages of comfort and self assurance played on a Magnecorder and received under the pillows of sleeping patients free them from unendurable pain by Dr. Ernst Schmidhofer.

The new technique, called "therapeutic relaxation," was reported and demonstrated by Dr. Schmidhofer at the 112th annual meeting of the Illinois State Medical Society who said he has been employing it with good results for three years at Kennedy Veteran's Hospital, Memphis, where he is chief of the neuropsychiatry division.

Dr. Schmidhofer, who also teaches at the University of Tennessee, explained that his theory is based on using the brain to overcome the same nerve impulses which stimulate disease symptoms. Pain is a result of nerve stimuli which form pools of rotating energy within the brain much in the manner of "a dog chasing its tail."

When these vortices of nervous force become supercharged, he said, they frequently hurl out electrical-like missles which register discomfort when they strike the body's pain targets centered in two brain areas.

Dr. Schmidhofer said he believes that some of this excessive nerve force can be dissipated by inspirational messages which the Magnecorder drones throughout the night.

The technique, he says, cures nothing but has relieved many persons of such disturbances as depression, walking in their sleep, indigestion, and heart skips.

TAPE TALK ON

One-Case Portable

Radio station managers will no longer have to advertise for three-handed engineers. Magnecord engineers have developed a single case portable magnetic tape recorder for professional use.

The new unit, designated the PT6-VAL and named the "Voyager," consists of the standard PT6-AH recorder and a new small, lightweight amplifier in a portable carrying case.

The new amplifier has two inputs —a microphone input, balanced or unbalanced, with 30 ohm impedance (easily converted to 200 ohm where greater impedance is desired), and a high impedance unbalanced input. The output is 600 ohm, balanced or unbalanced, with a maximum output of 6 dbm. An earphone monitor jack on the front panel is connected during both record and playback.

Frequency response of the "Voyager" with tape is ± 2 db from 50 to 15,000 cycles per second at 15 inches per second tape speed.

The portable carrying case is designed to have the amplifier and recorder mechanism back-to-back when closed for transport. Interconnecting cables may be left connected.

The two components are hinged so that, for operation, the amplifier swings up and forward and rests on top the recorder, flush with the front of the recorder mechanism. The unit is joined by slide hinges and the amplifier may easily be detached and operated beside the mechanical unit.

Price of the "Voyager" has tentatively been set at $495. Production is scheduled for late October, and delivery is planned for November. It will be introduced at the Audio Fair October 30-November 1 in New York.

The new portable has been field tested by a Chicago network outlet and has met with enthusiastic approval. Upon recommendation of the station, the case was enlarged one inch to provide more storage space for tape and parts.

The unit weighs 42 pounds. Dimensions of the case are 19 x 7¾ x 17¾ inches.

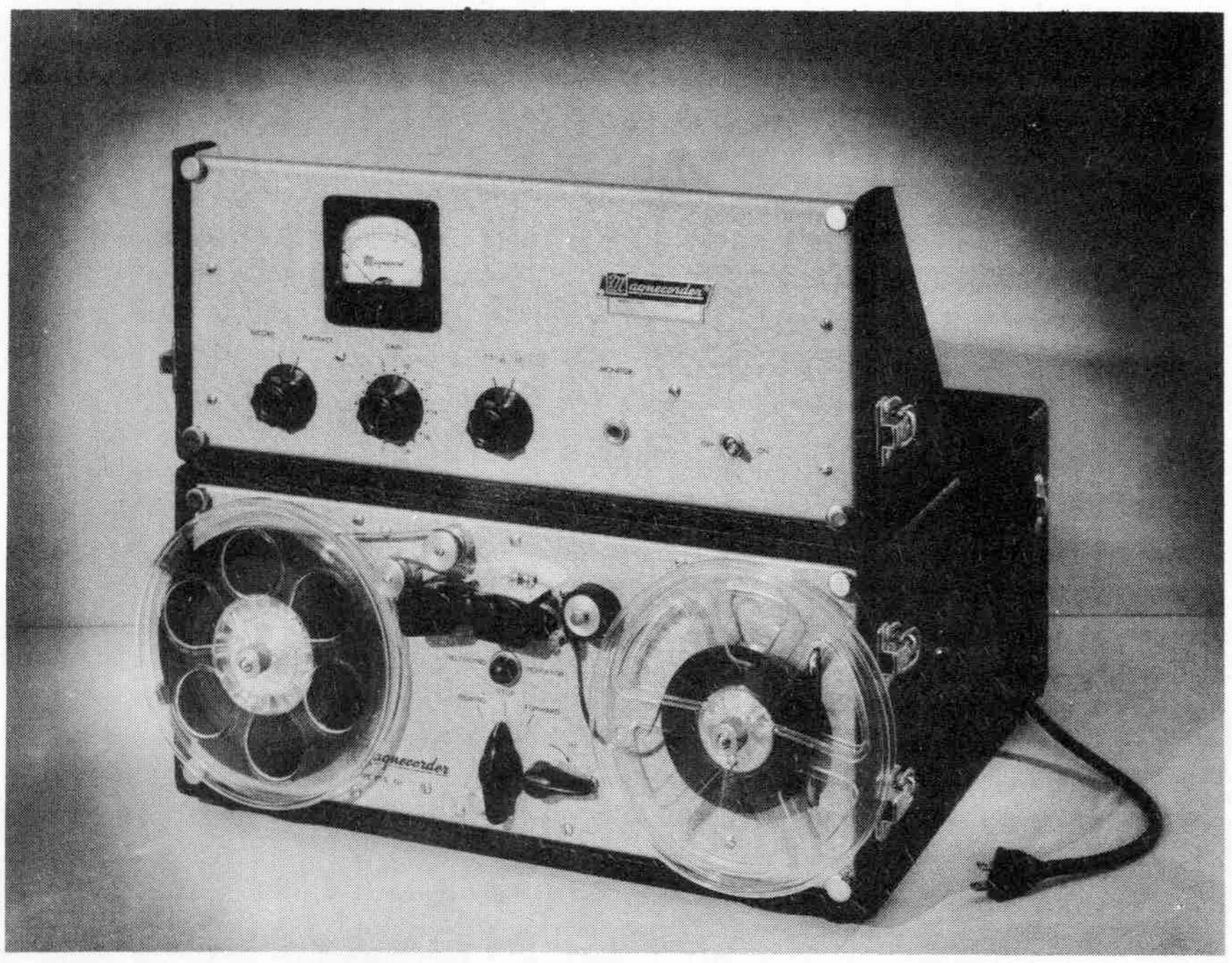


Photo above shows how the compact Magnecord "Voyager" amplifier folds forward on the recorder mechanism for easy on-the-spot operation.

Wisconsin State Medical Society Records "March"

People of Wisconsin can be healthier—thanks to Magnecord. The State Medical Society of Wisconsin is using Magnecorders to record their weekly program, "The March of Medicine," for broadcast on 34 outlets throughout the State.

The medical society has fifteen tapes which they alternate among the stations, sending a different one each week. The tapes are mailed in a special re-usable case resembling a miniature laundry case.

The programs consist of discussions about a common health problem of interest to the average family by Dr. Robert C. Parkin, of the University of Wisconsin Medical School and a questioner, "Your Medical Reporter."

The program has met with enthusiastic response and receives thousands of letters each year. Free copies of each broadcast are provided upon request, and Dr. Parkin answers health problems sent in by listeners.

An interesting observation of Mr. C. H. Crownhart, secretary of the medical society is, "We find that tapes are returned much faster from the stations than discs were due to the fact that they can be handled much more easily."

Announce Promotions in Sales Department

Changes in the Magnecord sales department have recently been announced. Del Hornbogen, sales service manager, has been named sales manager. Bill Blocki, former service department head, takes on Hornbogen's duties as sales service manager. A new service manager will be named soon.

C. G. Barker, vice president and sales manager, relinquished the sales manager title and becomes vice president in charge of sales where he will direct sales policy.

Richard S. McQueen had previously been named sales promotion head in addition to his responsibilities as advertising manager. Bert Whyte is director of the pre-recorded tape division and is no longer distributor sales coordinator.

Prize TV Drama Series Stars Happy PT6-AH

If ever a Magnecorder smiled it would be the smug little PT6-AH pictured above with Jack Webb, star of the prize-winning radio and TV mystery drama series "Dragnet."

Working in radio and TV is nothing unusual for a PT6. In fact, more than seventy per cent of the broadcasting stations in the country rely on Magnecorders. Their broadcast quality and reliable performance have made them vital behind-the-scenes performers. That's the catch! Our proud beauty above has appeared in several productions in an "on camera" role.

"Dragnet" has been honored for its accuracy. Jack Webb (Sgt. Joe Friday) doesn't solve crimes in an incidental manner between amorous escapades. With him, it's not a game, but a serious, often dully routine duty. "Dragnet", you see, is based on actual files of the Los Angeles police department and the episodes are graphic portrayals of modern police methods.

That's why the PT6! Magnecorders are used in crime detection work by the Los Angeles police as well as other police departments throughout the country. A recent program was based on police efforts to gain a confession. The confession was finally obtained by playing back recorded admissions. And while the TV cameras focussed on the reels whirling in playback, our joyful friend grinned from guide rollers to capstan as virtue and justice triumph, and "Dragnet" continues to receive aclaim as the finest in TV drama.

Arizona State College Students Build, Operate Unique Station

An outstanding example of what is often referred to as "American ingenuity" is the radio and recording installation at Arizona State College, Tempe, Arizona. It is also a tribute to the students of the College and Dr. Charles H. Merritt, head of the electronics and electricity division.

Dr. Merritt had long realized the need for such an installation as laboratory facilities in teaching the practical side of electricity and radio engineering. He saw it also as a valuable service to other departments and as a means of publicizing the work of the College throughout the State.

Funds were not available for buying the necessary equipment, for the College was in the midst of the growing pains that saw its enrollment skyrocket after World War II. However, release of men also meant release of material, and Dr. Merritt set about obtaining war surplus radio equipment.

In 1949, the electronics students were put to work assembling and installing the equipment. The studios, constructed in a classroom, became a student project from the soundproofing to the console control. Dr. Merritt gave up his office for the control room, and had to share an office with another instructor. Even the chairs in the control room and studio were made by students in the upholstery shops of the industrial arts department.

To their war surplus installation, they added a Magnecorder PT6-JAH. As the facilities have grown since that time, three more PT6-Js and four PT6-AHs have been added.

The main studios have been connected to all other buildings on the campus by more than 12 miles of telephone cable, also installed by the students. Often recordings are being made from one building, while another program was being fed to a class in another building.

The facilities are operated and manged by students. All programs are recorded on the Magnecorders and later line-fed to Station KTYL, Mesa. Recorded tapes are shipped to other stations in Arizona since most of them also have Magnecorders. Programs consist of music, athletic events, dramatic plays and series, and lectures by members of the College staff.

Additionally, all radio speech classes are held in the studios and are recorded for class study. Future plans call for development of a Magnecord library of lectures for circulation to Arizona schools.

View of University of Arizona radio and recording control room and studio. The entire installation including sound-proofing and furniture was assembled and constructed by students.

Published in Chicago by MAGNECORD, INC. 360 N. Michigan Ave., Chicago 1, Ill.