



## ABC Network Follows Byrd Expedition By Recordings

Lee Van Atta, INS Writer, Reports For Web From Antarctic Task Force

By plentiful use and reliance on recording, the American Broadcasting Company has been able to air a series of several interesting and newsworthy broadcasts direct from the Byrd Antarctic Expedition on its news programs throughout the last month. Differences in time plus uncertainties of atmospheric conditions have made it necessary that the network protect itself against program failure by use of recordings on these spots.

Since the Byrd Expedition sailed from Norfolk, Va., early in December, there have been eight pick-ups broadcast over ABC, with Lee Van Atta, International News Service correspondent, representing the network. Several of these broadcasts were in the nature of regular newscasts, while others might be classed as having definite entertainment value. On Christmas Day, for example, the American web played a recording of a broadcast from Van Atta in which the Navy Choir was heard in a program of carols and a benediction by the Chaplain on board the U.S.S. Mount Olympus, flagship of the Byrd fleet, was also heard. These broadcasts, picked up early in the morning of Christmas Day, were played back to the nationwide radio audience several hours later, thus enabling the network to fit this timely program into a round-the-world Christmas Day celebration show.

Van Atta's broadcasts have described the departure from Norfolk, interviews with Admiral Cruzen, an excellent word picture of the arrival at Balboa, an interview with Dr. Siple, former Eagle Scout who accompanied Byrd on his first Expedition into Antarctica, and other informative interviews with various experts and crew members attached to the present expedition.

A singularly colorful broadcast by the  
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Lee Van Atta



Here, NBC's new system of auditioning talent, a plan which makes extensive use of recording, is shown in operation. A group of the network's directors hear and make notes of a disc on which a "staged" program had been cut. Called Actor's Audition Showcase, the new system means a better opportunity for aspiring radio actors.

## NBC Introduces New Auditioning Procedure; Discs, Index To Talents of Radio Hopefuls

A file of recordings likely to determine the future of many a young radio actor is being built up in the Radio City studios of the National Broadcasting Company in New York—an ever-expanding index to the talents of actors and singers who aspire to fame on the air.

### NOW, YOU TELL ONE

Ever heard of a sponsor who cancelled his air time because his announcer had done such a good selling job that he couldn't satisfy the demands of anxious customers? Well it happened. Here's how: Maurice Hart, KFWB's ultra smooth disc jockey, on his "Start the Day Right" show, played several recorded tunes, unannounced. Those listeners who guessed the correct title were to be awarded a free portrait by the sponsor, Amos Carr Photo Studios of Hollywood. Within 24 hours over 500 letters had poured into the station. At the end of the week, the rather awesome amount of 3,638 had piled up in the KFWB mail room. Mr. Carr had had enough. Expecting at the most a few hundred leads, he was forced to cancel his 1 minute spot and his offer.

The file is the result of NBC's newly-inaugurated Actor's Audition Showcase, in which auditioning actors are given scripts, extensive direction and coaching and finally—backed up by sound effects and organ music for bridges in the script—a record is cut as if the show were on the air.

These sessions are held each Tuesday evening, and on Thursday afternoons NBC's national production manager, Robert K. Adams, calls the 25 directors on his staff together to hear the production of the week. The 30 minute record is played, and when the final cue has been given, the directors hold a round table discussion of the actors on the show. Some applicants are considered good enough for parts on forthcoming productions, and others are ruled out as not yet ready for the air. The record is

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# audio record

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## Use of Classroom-Radio Taught Capitol Teachers

### Educational Importance of Recording One of the Key Subjects in Course

Recently, through the cooperation of WTOP Washington, CBS and the Washington, D. C., Public School System, a new course of study for teachers in the use of radio in the classroom was opened at Wilson Teachers College in the capitol city.



Hazel Kenyon Markel  
Harris & Ewing Photo

Under the direction of Miss Hazel Kenyon Markel, Director of Community Service for WTOP, the course, open to teachers and others interested in making use of radio in education, will give college credit for the weekly two-hour lectures.

In a special letter to *Audio Record*, Miss Markel advised that since the objective of her classes was to train teachers in the effective use of radio in the classroom, recording will be taken up as a closely allied aid in this field. "The problem of transcription uses," Miss Markel said, "will be treated from the following standpoints:

- Brief history of the recording field.
- Advantages of recordings for the teacher.
- Limitations in the use of recordings.
- Available sources of information on recordings for classroom use.
- Methods of effective utilization in the classroom.
- Important developments in the recording and transcription field."

"Under 'b' (advantages)", Miss Markel continued, "will be considered the possible flexibility in use and lasting quality of recordings, the ability to pre-audit the program and therefore prepare effectively for its use, the ability to repeat a program if desirable or to interrupt it for discussion by the class, and the ability to retain the program for use from time to time.

"Under 'c' (limitations) will be noted lack of adequate equipment in schools, the cost of such equipment, and the limited life of recordings.

"Under 'e' (methods) for effective use will be suggested good equipment, current and good quality recordings, careful selection of the program and effective preparation for its use, close correlation with classroom work and with students' previous experiences, immediate and carefully planned follow-up procedures. The specific techniques, of course, depend on the type of program and the teacher's motives in its use, but good methods for the use of classroom aids in general apply to the use of recordings.

"Under 'f' (trends) we will consider late types of recording equipment, wire and film recordings, possibility of schools buying equipment with both transcription and playback facilities, teachers being trained in the use of both audio and visual aids and the possibility of transcription services for education programs."

In announcing the special course, Dr. Clyde M. Huber, Wilson College Registrar, and also Chairman of the Radio Committee for the public schools of the District of Columbia, stated that it is the first direct effort to acquaint teachers of the Washington schools with the techniques of utilizing radio as an educational aid.

Dr. Hobart M. Corning, Washington's Superintendent of Schools, also urged teachers to take advantage of this opportunity for intensive study of a medium from which children get a large part of their education. "Teachers should know how to use radio programs in their classrooms, just as they are familiar with the techniques of using visual aids such as charts and motion pictures," Dr. Corning emphasized. "Through hearing good programs in school, experiments have shown that children's out of school listening habits can be greatly improved."

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acc INS writer told the story of the crossing of the Equator, with the customary hazing of the "neophytes" by the veteran "mossbacks"—those who have made the crossing before. This broadcast was even more colorful and remarkable in that it contained an exclusive interview with King Neptune himself, possibly the first time that the omnipotent "Monarch" has ever been heard by an American radio audience.

Throughout the course of the Expedition, ABC will continue to record Van Atta's stories, interviews and newscasts, and will replay them for radio listeners on many of their news programs.



By Ernest W. Franck, Research Engineer

## Tips On Increasing Disc Life

Lacquer discs are often used to record material of sentimental or historical value, particularly personal or home recordings. It is usually desirable to play these from time to time without fear that too frequent use will wear them out. With reasonable handling

lacquer discs can be played hundreds of times without any marked wearing, but with careless handling or poor playback equipment they may be badly worn in a dozen playings.



Ernest W. Franck

To get the greatest use from lacquer records, treat them after recording as if they were still new blanks. Handle them by the edges to avoid making finger marks, and keep them in envelopes or album. Remember, only one to an envelope. This prevents scratching one disc with another, and makes it easier to find the one you want. Store them standing on edge in racks or on a shelf and be sure no dust can get to them. Shelves close to the floor are bad for dust unless they are enclosed. Don't store records near a radiator.

If your turntable is velvet covered, brush out the accumulated dust with a good clothes brush or vacuum cleaner from time to time. Make it a habit to keep the lid on the machine closed when not in use. This keeps dust off the turntable. If there is no lid use a cloth cover.

See that the pick-up arm moves freely. If your pick-up is heavy, don't worry too much; you can still get hundreds of good playings from your records if you use a good playback point. With lighter pick-ups the record life will be even longer. If your pick-up does not have a permanent point, always use a new shadowgraphed needle when you play the first lacquer disc. After that, as long as you are playing lacquer discs, the steel needle will be good for about 30 mins. playing time, but if you play even one pressing, then change to a new needle before playing another lacquer disc.

Many people like to use sapphire playback points. They give good results and save the worry about needle changing. However, if you use a sapphire playback, and play a lot of pressings, keep in mind that in time pressings will wear away the sapphire, sometimes leaving sharp edges which could damage the lacquer grooves. Be on guard for a graying of the grooves or an accumulation of powder on the tip of the needle. Careful broadcast engineers who use pick-ups with permanent sapphire points never play lacquers with the same pick-up they use for pressings. This is because the pressings are likely to damage the sapphire stylus and the damaged stylus would not fit the grooves properly.

When finger marks, dust, heavy needle pressures and damaged styli are avoided, it is amazing how a lacquer disc will stand up after many repeated playings. A little attention to these points will pay dividends—you can enjoy your records and have them too.

## PLAYBACK SYSTEMS for DUBBING

By Harold J. McCambridge

Supervisor of Audio Maintenance & Construction, WHOM—New York

(This is the sixth in a series of articles by leading figures in the recording field.)

Every recording engineer in an active broadcast or recording studio daily faces the problem of making "dubbed" or re-recorded discs that sound "as good as, or better than" the original. This is a task that requires all the techniques of making an original recording (with the exception of microphone handling), plus a number of new ones that spring up when the playback system is brought into the recording line.



Dubbing is now used so extensively in the production of commercial records that it can be considered a regular part of the production process in most of the industry. In a broadcast studio its principal uses are as follows:

1. Preparation of transcribed program material; using recorded music from various sources for background or primary material.

2. Assembly of interview-type material from spot recordings made at the convenience of the participants.

3. Furnishing to clients and artists of permanent records of program material by production of copies from the original program transcription.

Obviously it is necessary to have good recording equipment in order to make a good dubbing. What is often overlooked is that dubbing imposes very strict requirements on the playback system. From the point of view of the broadcast engineer, the most essential characteristics of a playback system for dubbing are the following:

1. Harmonic distortion and, especially, intermodulation distortion, must be at extremely low levels in every part of the playback system, including the pickup, equalizer, and pre-amplifier. A distortion level that may be tolerable in the reproduction of records can be quite unallowable in a playback system used for dubbing. The final product suffers from the distortion of three main sources added together: the original record, the playback system, and the recording system.

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"The smallest of the small." That's how many people have sized up Mr. J. T. Martin's Hollywood Recording Studio in Los Angeles. And, from the picture above, most of us will agree with that description.

## "Space Isn't Everything In Recording" Proves Proprietor of California's Smallest Studio

What is probably one of the smallest recording studios in the world, if not the smallest, is located at 350 North Main Street in downtown Los Angeles. Owned and operated by Mr. J. T. Martin, this smallest of small studios, known as the Hollywood Recording Studio, is the home of the Hollywood Recording and Music Publishers.

Measuring 9' x 9' overall, Mr. Martin's workshop, strange as it may seem, is divided into individual rooms: the control room and business office, occupying a 6' x 9' portion of the precious space, and the actual recording room, operating in an area only 3' x 9' . . . hardly room for half 'n elbow.

Although small in structure, it has never been said, that the Hollywood Recording Studio is a small time proposition. No siree, for all the latest, up-to-the-minute recording devices are in the 9' x 9' square.

Let's look inside Mr. Martin's haven and see what all he has packed into this king-size Corona-Corona receptacle. First of all, the recording room is equipped with 2 crystal microphones and a studio type bi-directional mike. There is also a loud speaker in this room allowing for a private playback of a finished recording. Sometimes the loud speaker is used to carry (recorded) music from the control room to the microphones. This music is used for background for certain types of musical recordings. In the control room, we see 2 Radiotones,

1 Federal, 1 Wilcox Gay; two of these being 16" turntables. Three loud speakers are in use. Over in one corner is a small assorted file of commercial records and a business desk. Somewhere (only heaven knows . . . just where) Mr. Martin finds space for the stock of blank discs. Where do the customers stand or sit? Well, if the number of patrons exceed the space, Mr. Martin ushers them outside and they transact their business through the structure's large windows.

Hollywood Recording Studio is the third stage in Mr. Martin's rapidly growing business. Only three years ago he entered the recording field with only one 12" turntable recorder and a booth hardly big enough to hold him, the machines, a microphone and one customer. What's more, two months later he bought another machine and moved everything, lock-stock-and-barrel, into more spacious quarters; this time a 5' x 8' emporium. And, then, after 6 months, as is always the case, there comes a time when a fellow just needs more room. So, Mr. Martin, realizing the necessity for additional space, and a great believer in the theory that good things come in small packages, shifted his belongings to his present site.



Andre Baruch, noted announcer and his singer-wife Bea Wain utilize original recording techniques which give their "Mr. & Mrs. Music" show (top recordings, pre-releases and interviews with disc stars), an up-to-the-minute live quality. The program is heard daily over WMCA-New York.

### Playback Systems For Dubbing (Continued from Page 3)

tem. The playback distortion, therefore, does not stand alone as in the reproduction of records but has a cumulative effect with that of the other elements in the dubbing system. Unless the playback system distortion is rigidly controlled the result will be a transcription with high intermodulation distortion. This is a vital matter to a broadcast engineer since an increase in intermodulation distortion is soon reflected in loss of "ear acceptability" and listener approval.

2. The pickup used must cause negligible record wear, since it is often necessary to play "acetate" records many times in preparing transcribed material. An increase in surface noise or a loss of definition between the first and last playings of an original acetate are highly inconvenient, to say the least. Low record wear means, in general, that the pickup used must have high mechanical compliance, both horizontal and vertical, with the accompanying low stylus pressure. One incidental advantage of using a pickup of highly refined moving system is that it makes possible "spot cueing" on records used for program material or dubbing, without ruining the records. A heavier pickup, "spotted" on a still record which is put in motion at the proper cue, will produce a minute depression in the record surface which is heard as a "tick" the next time the record is played. Records which have been spot-cued a number of times develop so many ticks that they are unplayable. A truly low-wear pickup does not produce an audible depression in the record surface.

3. The adjustable equalizer system, necessary in every modern broadcast studio playback system, must introduce no distortion, as mentioned above, and in addition, must be stable in its characteristics and accurately calibrated. To

achieve such an equalizer set-up, beginning with a pickup which itself must be equalized to produce a flat "starting" characteristic, is difficult if not impossible. By the time two or more of the commoner varieties of equalizer have been piled on top of each other, calibration is easily lost, and more important, a high level of distortion has been added to the system. These difficulties can be avoided by starting with a pickup which is inherently flat, and adding an equalizer system which has been carefully designed as a single unit, to operate with the particular pickup chosen. A pickup with a basic flat characteristic is highly desirable, of course, for other reasons: it produces less surface noise, and is free of the distortion characteristic of transducers which have serious peaks within the operating range, a distortion which is not removed by electrical equalization of the peaks.

A satisfactory solution of the pickup problem at WHOM was finally reached after we had tested several commercial pickups. It was found that the Pickering Pickup and Equalizer for lateral playback, and the Western Electric Pickup and Equalizer for vertical playback, gave us all of the necessary dubbing characteristics.

Other dubbing problems could be discussed but it is believed that the ones outlined are those that need the most emphasis from the point of view of the broadcast engineer.

### New NBC Auditioning Procedure Fresh Hope For Radio Aspirants

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filed, and directors seeking a certain type of voice or character for some later production can run through a card file, get the disc for a re-play, and choose the particular type his show needs.

Before actors and actresses finally go before the mike for their recording of a program, they are interviewed and "screened" by Edward King, NBC's director of dramatic auditions. King talks to his callers, reviews their previous experience in radio, Broadway shows, summer stock or college dramatics.

Each is told that only the best talent will go on the air, yet every help is given youngsters who hope to make radio their career.

After the screening, they are told to stand by for calls, and when a director takes his turn for the week's production, he studies the card files and five-minute records made of applicants' voices on "mad, sad and glad" readings. A cast is drawn to fit the script, calls are made, and the show is on its way to the disc.

"These records are among our most valuable files, and as the Actor's Audition Showcase goes on, they will become increasingly important in our casting," Mr. Adams said.



Bob Hille, quizmaster of KXOK—St. Louis' popular recorded program "Food Store Quiz," interviews a group of shoppers in one of the Missouri city's busy food centers. Hille conducts the novel feature on Thursday and Friday of each week from three food stores in the St. Louis area. As the programs are not broadcast until Monday, Wednesday and Friday of the following week, quiz participants are able to hear themselves. Sponsored by a local coffee manufacturer, "Food Store Quiz" gives a cash award to shoppers who answer questions correctly; to those who fail, a pound of coffee. Questions for the quiz are contributed by the radio audience; special prizes going to contributors of questions used.