



The show is recorded as it "goes on the air" at Hunter College. Student assistants are responsible for timing and giving "cues" to cast. (Dr. Callahan, instructress, at recorder.)

## Hunter College Students Prepare for Radio Careers

### Popular Courses Given In Modern Radio Technique

Radio Broadcasting is receiving major attention these days at Hunter College of the City of New York. This famous woman's college, located in the swankiest section of New York's swank Park Avenue, is looking ahead, and according to the head of the Speech and Dramatics Department, Professor Marguerite E. Jones, students are eagerly exploring every department of radio, from engineering to acting.

Audiorecords play an important role in this educational program; original scripts are recorded; classes in radio dramatics record their plays; and the records are then played back for class criticism. Students in the technical courses handle the production of all transcriptions and thus a dual purpose is served.

A complete broadcasting studio is located in the college building, and the control room is a model of efficiency with

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### It Was Cool in Chicago!

The mellow, soothing baritone voice of Harry Cool had been heard over several network shows, and had been recorded on audition transcriptions for submission to several prospective sponsors. Finally a well known manufacturer of a certain famous brand of cigarettes was interested. Seated around a certain advertising agency's loud speaker while the discs were being played, representatives of the agency, the network and executives of the cigarette company were enjoying themselves—until the president of the sponsoring firm asked the name of the singer.

"Cool. Harry Cool," said the agency man, smugly.

"What!" The president yelled, "have a fellow named Cool on our show? Why we'd sell more cigarettes for Kool than we would for ourselves!"

The lad must be good!

## NBC Doubles Staff of Recording Division

### Plans Promotional Program on Lateral Recording Superiority

Throughout the war the Radio-Recording Division of the National Broadcasting Company worked unceasingly with the War, Navy and Treasury Departments, the Red Cross, the OWI, OIAA and other Government agencies in the production of thousands of records for re-broadcast both on the home front and all over the world. It was expected that when the war was over, the staff replacements for those called into military service would surrender their jobs when the boys came back—however, activity on the seventh floor of NBC in New York has been stepped up to such an extent that in addition to more than doubling its wartime engineering facilities, the recording division next month will have increased its sales staff by more than 100%.

While operations are being increased in all branch offices the greatest activity is taking place in New York where all productions emanate. The most important technical improvement the division will have achieved will be having its own processing department, hitherto taken care of by RCA's Camden, N. J., production department.

The syndicated programs now total 21 and the NBC Thesaurus recording library numbers 5,000 selections; the department is presently programming several new syndicated shows.

Many Radio Recording Division engineers are currently calling on station engineers throughout the country, proving by actual tests the superiority of lateral recording over the vertical; they are demonstrating that the lateral system is less prone to produce distortion, claiming a range up to 15,000 cycles. The Columbia Broadcasting System, Standard Radio and other producers of transcriptions are joining NBC in this extensive educational program, and it is felt that the change to lateral recording will greatly improve the quality of transmission, particularly over Frequency Modulation transmitters.



## Sumner Welles to Record New Program

Much interest is currently being displayed across the country in the forthcoming series of transcribed weekly talks by the former Undersecretary of State Sumner Welles. Welles has long been known as a stormy petrel, and his dismissal from his post by then Secretary Cordell Hull, is attributed to his penchant for speaking his mind. By recording his weekly talk, Welles hopes to avoid the censorship which he believes his talks may be subject to if delivered in person.

According to the William Morris agency, which made the deal, Welles will transcribe his comments on current affairs from wherever he may be each week, and the recordings will immediately be airtailed to subscribing stations.

Welles has had several previous offers to be heard on the air but has refused them heretofore as he felt that his comments might necessarily be such as to inspire censorship, and for this reason he would not be able to express himself. It was felt that transcriptions offered the best way of avoiding that possibility.



## Measuring Wear in Recording Blanks

By E. Franck, Research Engineer

Wear in recording blanks, like inebriation, is largely a matter of definition and both subjects are controversial.

Wear means different things to different people. A professional recordist will consider a recording worn beyond use as soon as he can notice an increase in noise level, a loss of high frequency response, or any form of distortion audible to his trained ear. A non-critical home recordist, with his less exacting equipment, would not be conscious of wear that would make a recording worthless professionally.

### Test Equipment Available

High frequency loss with repeated playing is perhaps the easiest way to attack the wear problem. A high frequency of substantial level is cut, preferably at the smallest groove diameter to be used. This groove is played back repeatedly and the level watched on a meter, the number of playings required for a given decrease being an index of wear. This method is good for comparative measurements but cannot be used over a long period unless the cutting and the playback styli are standardized. One advantage of this method is that the equipment required is usually available anywhere that blanks are cut.

### Measure Noise Level

Increase of noise level on repeated playings is another method of measurement. This requires a set-up capable of measuring noise level as described in our column last month. Unmodulated grooves are cut, the noise level is measured, and the grooves played repeatedly until the noise level increases an arbitrary amount. 6 db is a convenient increase. The number of playings required is reduced by weighting the pickup and we find that with 2 1/4-oz. weight at the playback point from 100 to 200 playings are required to "wear" a good lacquer. When many measurements must be made, it is a time

saver to position the pickup so there is no side pull, at the testing diameter so that when the end of a groove is reached, the pickup will slip back into the adjacent groove and repeat over and over in the last groove. A slight tilt to the turntable may be needed. Of course, when the pickup climbs over the wall there will be a terrific noise produced and the output meter needs to be protected at this instant. A telegraph key short circuiting the meter is a convenient way of doing this and with a little practice the noise can be measured over almost a complete revolution day after day with only an occasional accident to the meter.

### Another Method

One logical objection to the above method is the use of unmodulated grooves, although any rise in noise level is first detected where there is no modulation. A different method of measuring wear employs modulated grooves. A full level tone of from 70 to 90 cycles is cut, and played back through a high pass filter. The filter, if it is a very good one, will take out the fundamental and all the various harmonics, leaving the noise which can be measured. Wear is again taken as the number of playings which produces a 6 db increase. Tests made this way usually give readings from 60 to 80% of the unmodulated readings.

Temperature is a big factor in wear measurements, wear going down or up with temperature, except in the high frequency loss method where the loss may be faster at higher temperature.

Most lacquers have a good progressive wear characteristic but some will be found where the grooves become suddenly useless, as though they were breaking down completely instead of wearing gradually.

Our general experience has been that whatever method is used, the results are about the same. Five different lacquers measured by any of the three methods would keep their same relative positions.

## Zero Audition Gets Warm Greeting

AudiDisc Lacquer Saves Day

It gets hot down there in New Orleans—it gets cold up there in Chicago; but neither heat nor cold can destroy the efficiency of AudiDiscs according to a story told by J. D. Bloom, who is chief engineer of New Orleans' popular WWL.

Last winter the station's commercial manager, Larry Baird, developed a local program which he believed would be successful for a certain product he had in mind. Since the product was represented by a Chicago advertising agency, an audition recording of the show was made on a glass-base AudiDisc. Unwilling to trust the transcription to the mails or to the express company, Mr. Baird tucked his record under his arm and off he went to Chicago to deliver it personally.

Brrrr

It happened however that Chicago was enjoying one of the bitterest cold waves of the winter, so on his way to keep his audition appointment, Mr. Baird rode in a heated cab; but when he reached his destination, stepped out into the zero temperature and paid his fare, he was horrified to hear an ominous cracking sound in the box he had nursed so carefully under his arm, a sound that could mean only one thing.

The Show Goes On

Nevertheless the appointment must be kept and entering the agency he ruefully informed them that his trip was in vain; the sudden change in temperature between the heated cab and the sidewalk had caused the record to crack. After some discussion of the program, they decided to attempt to play the record anyway, and to everyone's surprise the reproduction was unharmed! The lacquer coating on the record had remained undamaged even though the glass-base had broken.

Mr. Bloom reports that WWL has been using AudiDiscs exclusively for about four years.

P. S. Mr. Baird sold his program!

Editor's Note: Yes, glass-base discs can crack and sometimes the story does not have the good ending Mr. Baird experienced. Yet, glass has proven a marvelous substitute for aluminum during the war. Now, many recording engineers tell us they prefer the glass-base to aluminum. We should be glad to hear from others on this subject. What type of base do you want, and why?

## Name Stars Record Educational Dramas

Stations and Schools

Welcome Program

The tenth series of broadcasts to be offered by the Institute for Democratic Education is now being made available to independent broadcasting stations throughout the United States, Alaska, Hawaii and Puerto Rico. The institute, which is a non-profit organization dedicated to the promotion of racial and religious unity, loans the transcribed series free to stations for broadcasting on a public service basis.

Thirteen programs have been recorded in this series, entitled "Lest We Forget These Great Americans," and based upon the success of the nine series which preceded it, this should be accorded an overwhelming reception. Featured on the series are Melvyn Douglas, Wendy Barrie, Myron McCormick, Sam Jaffe, and others. Personages whose lives are dramatized for the series include Franklin D. Roosevelt, Woodrow Wilson, Wendell Willkie, Alfred E. Smith, Jane Addams, and the late Justices Brandies and Holmes.

Under the direction of Dr. Howard M. Lesourd, Dean of the Boston University Graduate School, the Institute for Democratic Education has done much toward developing a higher appreciation of the democratic heritage and a whole-hearted support of free institutions. Working steadily and tirelessly for the past seven years, and realizing that radio is primarily an entertainment medium, it has presented its series of educational transcriptions in dramatized forms, featuring many of the most prominent stars of radio, stage, and screen. Each series of thirteen programs has been entitled "LEST WE FORGET," and more than four hundred stations throughout the country and its possessions have already broadcast the shows.

Schools throughout the nation have been quick to see the advantages of these programs, and at the present time over 1500 schools and school systems are using them in history and current events classes. They find that the dramatizations give added reality and meaning to historical episodes and periods, arousing interest and stimulating discussion among pupils. An eight page booklet "Portfolio of Freedom" is distributed without cost to schools for classroom distribution. Records and booklets are supplied without cost, to schools owning public address systems or playback machines.

Financial support for the institute is obtained through private contributions from liberal educational and civic organizations.



## ATC Vet Returns To Audio Devices

The manufacturers of AUDIODISCS, Audio Devices, Inc., 444 Madison Avenue, New York, proudly announce the return of Captain C. C. Pell, Jr., to their organization as national sales manager.

Captain Pell, during four years of service as an Army Transport Command pilot, completed fifty-five Atlantic and four Pacific crossings. Other flights carried him to South America, Africa, India, and the Middle East.

An outstanding athlete, Pell gained national fame by teaming with Bobby Grant to win the U. S. Amateur Racquets Doubles Championship in 1936. The pair retained the title through 1941. No tournaments have been held during the war years.

Mr. Pell's duties with Audio Devices will also include flying. Using his own plane, he will contact representatives and distributors in over 200 cities throughout the United States and Canada. Customers, such as radio stations, motion picture studios, professional recording studios, phonograph record manufacturers, schools and colleges, also, will be included in these cross-country jaunts.

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RCA equipment throughout. Classes in radio dramatics are held under the instructorship of Mrs. Harvay, Mrs. Callahan, and Mrs. Landeck, all of whom have had practical experience in radio in addition to a thorough grounding in educational theory.

### Kids Get Big Chance

One of the most ambitious courses which will be included in the Spring curriculum is Radio for Children, a course designed for students interested in children's radio programs; it includes the adaptation of scripts for children; the casting, directing and producing of programs with child actors. Students in this course will also be given instruction in control room technique and the syn-



During preliminary practice, this young actor, taking his part very seriously, studies the new personality.

chronizing of sound effects. Children from Hunter College Elementary School will comprise the repertory group of child actors.

### Grads Make Good

Graduates of the existing courses have been singularly successful since leaving school. Advertising agencies, radio stations, recording studios and other schools and colleges have been quick to recognize their talents.

Professor Jones is especially pleased with the use of transcriptions in many other ways in the College—in speech correction classes; in public speaking and oral interpretation courses; in voice and phonetics exercises; in the music department.

### Speech Handicaps Aided

Stammerers, and others with speech impediments are given corrective exercises with the use of both the "voice mirror" and recordings and a more rapid advancement has been noted when students are able to follow their own progress. The same is true of the other courses in the Speech department. In the music department of the College, under the direction of Dr. Walter Helfer, extensive use is made of the recording machines. The radio studio is also used by the Music Department for a course in broadcasting for singers.

Professor Jones predicts that an even broader use will be made of transcribing facilities at Hunter College in the very near future not only by the Speech and the Music Department, but by the many other departments that have already discovered its value.

## Reporters Wanted

You Can Qualify For  
This Exciting Position

The current issue of AUDIO RECORD is Volume I, Number 4—we hope it has brought you a measure of entertainment, that some of the information we have been able to bring you has been interesting and useful to you. We want this paper to be of even greater use, and this can be made possible through your own cooperation.

An exchange of information can be of mutual assistance in these times of rapidly changing techniques in all lines of endeavour, and this is particularly true

of the recording field. AUDIO RECORD can be a medium of such exchange and we will be only too happy to keep our columns open to our readers. The daily life of a recording engineer is filled with many incidents, some of them amusing—such incidents often make interesting reading. Perhaps you have a success story to tell which may be an inspiration to others.

In other words, AUDIO RECORD needs reporters; it can continue to be interesting only if you wish it to be. Send your letters to: THE EDITOR, AUDIO RECORD, 444 MADISON AVENUE, NEW YORK 22, N. Y. If you have interesting photographs, send them along, too! We'll print 'em!



See your dealer for our book "How To Make Good Recordings," 128 pages, generously illustrated. List price, \$1.25.

## Soon More Audiobiscs For Schools

Yellow Label and Blue Label Audiobiscs, 6½", 8", 10" and 12" diameters, are made of exactly the same materials used in the manufacture of professional Audiobiscs for radio broadcasting.

Soon, with our increased production facilities, more of these superior blanks will be available.

If there is any question as to what recording blank will give you the best results, why not consult the recording engineer in your local radio station? He knows Audiobiscs.

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