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WINNERS ANNOUNCED in Radio Script Contests

Scholastic Magazines and AER Name Prize Winners in Nation-wide Contests for High School and College Students

The two big student competitions in radio script writing — Scholastic Magazines' 1950 Radio Script Writing Competition for high school students, and the Association for Education by Radio's National Radio Script Contest for college students—have announced their respective winners. The awards have been presented, and the talented young writers have achieved national recognition for outstanding ability in the radio field. To the winners — and to the hundreds of other contestants who submitted such excellent scripts — we extend our sincere congratulations.

Both of these contests, which were co-sponsored by Audio Devices for the third consecutive year, drew an all-time record of entries — making the job of final selection a more difficult one than ever before.

(Continued on Page 2, Col. 1)

WINNERS OF SCHOLASTIC MAGAZINES' RADIO SCRIPT WRITING COMPETITION

First Prize—Original Radio Drama. Richard O. Justa, Orange, N. J.

First Prize—Radio Drama Adaptation. Richard Green, Oak Park, Ill.

First Prize—General Radio Script. Bernard H. Merems, New York, N. Y.

WINNERS OF CLASSIFICATION 5 IN A E R CONTEST

First Prize—John Suchy, Missoula, Mont.

Second Prize — Janaan Noonan, Dubuque, Iowa.

Third Prize—Robert Lee, New York, N. Y.

How Sound Engineering Helped "Showboat" Win Grand Prize

By Ernest C. Knight
Diacoustic Laboratory
Pasadena, California

The 1950 Pasadena Tournament of Roses theme, "Our American Heritage", was a well chosen one and opened the way for great beauty and imagination in float design. But, in the float that took Grand Prize, this beauty was more than skin deep. It could be *heard* as well as seen.

The Southern California Edison Company's Grand Prize winner, the "Showboat", portrayed life down along the Mississippi and was the largest float to be entered in any Rose Parade. As this rose-studded replica of an old-fashioned Mississippi side-wheeler rolled down the parade

(Continued on Page 3, Col. 1)

The "Showboat"—Southern California Edison Company's Grand Prize Winning float in the 1950 Pasadena Tournaments of Roses. Life-like sound effects, reproduced from Audiodiscs and Audiotape contributed much to the realism of this beautiful exhibit.

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VOL. 6, NO. 5 MAY, 1950

Winners Announced

(*Continued from Page* 1, *Col.* 1)

Mr. William D. Boutwell, of Scholastic Magazines, reports that high-school students from all over the country entered a total of 569 scripts in the national contest alone — not counting the hundreds of scripts that were submitted for the many regional preliminaries throughout the country.

In the AER contest, too, the trend was upward — indicating greatly increased interest in radio work among the students of the nation's colleges and universities.

Following is a list of the national winners of the Classifications sponsored by Audio Devices in both the Scholastic Magazines and AER Contests.

SCHOLASTIC MAGAZINES' Radio Script Writing Contest (High School Students)

Judges: Leon Levine, Columbia Broadcasting System; Olive McHugh, Chairman of AER Committee on Script Writing; Gertrude Broderick, U. S. Office of Education Script Exchange; Wade Arnold, National Broadcasting Company; Lucile Fletcher, radio writer; and Eric Barnouw, instructor in radio and television at Columbia University.

Award Winners:

Original Radio Drama

FIRST PRIZE — $25.00; **Richard O. Justa**
Orange High School, Orange, N. J.
"Of Sand and Stars"
Teachers— Muriel E. Pons* and Florence J. Leonard

SECOND PRIZE — $15.00; **Ann Keller**
Edwin Denby High School,
Detroit, Mich.
"Your Loving Sister Madeline"
Teacher — Mrs. Ethel Tincher

THIRD PRIZE — $10.00; **Pattie Ann Lewis**
Johnson City High School,
Johnson City, N. Y.
"It Happens Every Day"
Teacher — Mrs. Rose Sullivan

FOURTH PRIZES — $5.00:
Roger Lee Paulson
Elkhart Senior High School,
Elkhart, Indiana
"Escape From Libby"
Teacher — Galen L. Wenger

Ronald Wolfe
St. Wendelin High School,
Pittsburgh, Pa.
"The Best Things in Life"
Teacher — Sister Mary Bernarda

Joy Longworth
Buchanan High School,
Buchanan, Mich.
"The Fallen Angel"
Teacher — Mrs. Velma E. Dunbar

Robert McGowan
Walla Walla High School,
Walla Walla, Wash.
"The Perfect Likeness"
Teacher — Marshall Alexander

Karl Allen Lamb
Centennial High School,
Pueblo, Colorado
"Greater Love Has No Man"
Teacher — Miss G. C. Knoop

Radio Drama Adaptation

FIRST PRIZE — $25.00; **Richard Green**
Oak Park and River Forest High School,
Oak Park, Ill.
"Station Q-E-D"
Teacher — Mildred Linden*

SECOND PRIZE — $15.00;
Enid F. Karetnick
Wecquahic High School, Newark, N. J.
"Especially Father"
Teacher — Marie E. O'Connor

THIRD PRIZE — $10.00; **Bill Rollins**
Richard J. Reynolds High School,
Winston Salem, N. C.
"Lucius and the Child of Bethlehem"
Teacher — Mrs. Elizabeth Ritter

FOURTH PRIZES — $5.00;
Monica F. Kelly
St. Vincent Academy, Newark, N. J.
"The Long Exile"
Teacher — Sister Josephine Marie

Clare Marie Murphy
Collingwood High School,
Cleveland, Ohio.
"Mammon and the Archer"
Teacher — Mrs. Finley

Sharon Kyle
Edwin Denby High School,
Detroit, Mich.
"Cupid on the Loose"
Teacher — Mrs. Ethel Tincher

Stanley Phillips
South High School, Denver, Colorado
"Almos' A Man"
Teacher — Harold Keables

Karl Allen Lamb
Centennial High School,
Pueblo, Colorado
"A Municipal Report"
Teacher — Miss G. C. Knoop

General Radio Scripts

FIRST PRIZE — $25.00;
Bernard H. Merems
Stuyvesant High School,
New York, N. Y.
"Atomic Era One"
Teacher — Irving Robbins*

SECOND PRIZE — $15.00;
Janice Anne Chaskes
Brockton High School, Brockton, Mass.
"Raising of the Dead"
Teacher — Ruth T. Cosgrove

THIRD PRIZE — $10.00; **Morton Hytner**
Scott High School, Toledo, Ohio
"The Voice of Tomorrow"
Teacher — Roberta B. Shine

FOURTH PRIZES — $5.00;
Barbara Halladay
Cheyenne High School
Cheyenne, Wyoming
"Exploring the Mayas"
Teacher — Mildred U. Beck

Barbara Ann Black
Brockton High School, Brockton, Mass.
"An Interview with Hopalong Cassidy's Dad"
Teacher — Ruth T. Cosgrove

Ellen Van Dusen
Union-Endicott High School,
Endicott, N. Y.
"The Teen-Age Bookshelf"
Teacher — Mrs. Edna A. Finch

William T. Reedy, Jr.
Reading Senior High School,
Reading, Pa.
"Red and Black on the Air"
Teacher — Joseph G. Plank, Jr.

Gene L. Walker
Edwin Denby High School,
Detroit, Mich.
"Roving Reporter"
Teacher — Mrs. Ethel C. Tincher

AER National Radio Script Contest (College Students)

Judges: Virginia Edwards, St. Louis Public Schools; Helen Kinsella, Chicago Public Schools; Martha Boyer, Lindenwood College; Jesse Burkett, Oklahoma School of Air.

Classification No. 5. Scripts for Home and School Recording

FIRST PRIZE — $100.00;
John Suchy
Montana State University,
Missoula, Montana
"Runaway Christmas Bus"
Teacher — Ansel Resler*

SECOND PRIZE — $60.00;
Miss Janaan Noonan
Clarke College, Dubuque, Iowa
"Life of William Blake"
Teacher — Sister Mary Aquin

THIRD PRIZE — $40.00;
Robert Lee
New York University, New York, N. Y.
"My Last Duchess"
Teacher — Dr. Robert S. Emerson

***Received 25 Audiodiscs, 3 Sapphire Recording Audiopoints and 3 Sapphire Playback Audiopoints.**

Showboat (*Continued from Page 1*)

line, the multitude of spectators was enthralled to hear the nostalgic strains of a steam calliope playing such familiar favorites as, "Here Comes the Showboat", "Waiting for the Robert E. Lee" and "Cruising Down the River"— punctuated by the deep-throated note of a river-boat whistle.

Actually, there was no steam calliope on the float, and no boat whistle either. Despite the startling realism, it was all done with recorded sound — on Audiodiscs and Audiotape!

How best to make this music sound alive had a great deal to do with the construction of the float. The total dimensions of the structure were 50 feet long, 20 feet wide and 17 feet high. It had three decks and, when completed, weighed 12½ tons, so the added weight of any live band, or of a real steam calliope, was out of the question.

Mr. Lee Stratton in charge of float building for the Walter Garbett Company, consulted with us here at the Diacoustic Laboratory in Pasadena, to determine the most effective way to handle the sound and music on the float. Since we have for years been well acquainted with sound recording in both radio and the motion picture fields, our suggested solution to the problem was to record all music and necessary sound effects on Audiodiscs and then to edit the music and sound on Audiotape.

A great deal of technical checking and rechecking had to be done as the calliope music, sound effects and the whistle of the river-boats had to sound as real and live as possible with full level recording and no distortion. The music was first recorded on 12" Red Label Audiodiscs, for approval by the Edison Company Float Committee. After the most suitable music and sound effects had been selected, these were then transposed onto Red Oxide, Plastic Base Audiotape, making a half hour reel at 7½ inches per second. This then was the parade reel and was played almost continuously over the entire 7 mile parade route.

Then for the Post Parade! After the big parade, all the floats (this year there were 67) were assembled in the post parade area. This gave the visiting public a chance to view the floats at close range and to see how magnificent they really were. The "Showboat" contained over 1,200,000 blossoms.

For this post parade even a special reel of Stephen Foster's melodies was made on Red Oxide, Plastic Base Audiotape. This reel played continuously for thirteen hours, except for one minute rewind every half hour. No break occurred in the tape either during the parade or post parade playing of the reels and no loss of level or quality was noticed.

All tape recordings were made and played back on a Magnecorder No. PT6R Rack job, driven by Audio Pacific Company's Model No. 3 Amplifiers and reproduced by four multi-speaker units; a total of sixty-eight speakers which were mounted inside the float. The volume and tone of both the music and sound effects were controlled from duplicate sets of Magnecorders — operated by myself and my technician, Mr. Hubert P. Starke of Hollywood.

A smoke-making machine provided the smoke for the stacks of the "Showboat" and a 5 kw electric generating plant, operated by its own gasoline engine, provided power for the sound equipment and the motors which turned over the paddle wheels. There was even an engineer for the main power plant which drove the float, and a driver, located thirty feet forward, to steer the massive structure along its way.

Despite the great artistic beauty of the "Showboat", it is safe to say that the realistic atmosphere created by the extremely life-like recording was a big factor in awarding the coveted Grand Prize.

University of Tennessee's WUOT Uses Tape and Discs Extensively

From a two year program of groundwork in which disc recordings played a major role, the University of Tennessee began FM broadcasting on October 27, 1949, with WUOT, 3000 watt outlet. A series of eight weekly programs, most of them disced with Rek-O-Cut heads on Audiodiscs, was started in the fall of 1947 when Kenneth D. Wright came to the University from ten years in commercial radio. Wright organized a student Radio Workshop and produced the eight shows weekly on various subjects of adult information. Usually the programs were recorded and mailed to out of town stations in Tennessee. In 1948 the series was expanded to ten programs weekly, one of which was awarded an honorable mention in the Ohio State Exhibition of Educational Radio Programs. This show, "Songs of the People," was recorded on Audiodiscs and broadcast on WBIR in Knoxville, Tennessee.

UNIVERSITY OF TENNESSEE RADIO WORKSHOP students transcribing "Make Believe Party" for broadcast on WUOT Fridays, 6:30 P.M.

WUOT, UNIVERSITY OF TENNESSEE FM VOICE, uses Fairchild Recorder for many shows each week.

With the heightened interest in radio and the growth of the Radio Workshop, the University constructed WUOT this year. Operating five and a half hours daily, Monday through Friday, the station offers fine music, drama, news, discussions, documentaries, and popular music. One of the major principles behind the station is to experiment with in-school listening programs for elementary and high schools of East Tennessee with a view to expanding this phase later. The station is operated with student personnel, directed by two professionals.

WUOT now has two Brush Soundmirror tape recorders, used primarily for student training and occasional remote spots, two Rek-O Cut cutting heads, M-5, used for auditions and rehearsals, and a Fairchild Unit 539-G for discs to be used on WUOT and commercial stations.

All of the informational programs on commercial stations in the state, now numbering seventeen periods weekly, are grouped under the general title of the University of Tennessee "Campus of the Air." With the four-fold purpose of AM extension programs, operating WUOT, student training, and experimentation in classroom listening, the Radio Department of the General Extension Division has undertaken a full program of bringing more mature radio from the campus of the state university.

by C. J. LeBel, Vice President,
Audio Devices, Inc.

AN IMPROVED LACQUER FORMULATION

C. J. LeBel

Shortly after the end of the war, a number of our best customers began clamoring for a better lacquer formulation especially designed for use as a master. This would have noise level at the inside diameters as low as at the outside, but the wear resistance could be slight.

Work on this project began in 1946 and was carried on intensively. By 1948 prewar microgroove development had been revived, and the pressure for *something* became still more intense. A considerable number of master formulae were developed and tested, but they all had one fault or another. Perhaps the worst was a tendency for the cut groove to become noisy in time. The more miraculous the groove quietness, the worse this effect became.

Emphasis finally shifted to a reproportioning of our standard formula as our faith in the magic of any one new ingredient dropped to zero. As is well known, a recording lacquer contains many ingredients, and the optimum proportions are found by experiment rather than by theory. Hundreds of tests were made, and in the summer of last year the reproportioning led to an interesting master formula. It was as quiet at the inside as at the outside, and it had none of the bad habits which the radically new developments had been cursed with. Particularly, there was no tendency for the cut groove to become noisier with time. The groove would withstand only three playings, but this was no fault in a master.

When we began to think of production we ran into an obstacle: It is not easy to change lacquers in our coating system, for the pipes have to be emptied of lacquer, then cleaned thoroughly. Since the demand for masters is small, this would have involved shutting one lacquer system down for a day to permit a day's run on masters, or else installing an additional fabulously expensive stainless steel pipe system to be used a small part of the time. Either method would have led to very high costs.

At that point it occurred to us that most of the improvement might be incorporated in our regular formulation. Tests were made, and it appeared that most of the master quietness could be incorporated in a general purpose lacquer without sacrificing wear resistance or any of the other good properties. Pilot runs were made and the results tested successfully by a number of leading recording organizations, so in the late fall we started to modify the production formulation slightly in the direction indicated. As everyone seemed pleased, and the complaints were nil, more and more modification was used, with a field test of each change before it was put into production. By mid-January we had gone over completely to the new version.

The present formulation has been used continuously since then, and any discs in your stock will be of the latest type, or within 90% of it.

Figure 1 shows the noise characteristic of the modified lacquer, for a standard transcription groove. Since it is very easy to keep a groove quiet at diameters of 12 to 16 inches, we have started our graph at 11 inches. For comparison, data on two other makes of disc is included, with all three tests run with the same stylus.

Figure 2 shows the result of a test under microgroove conditions, using a micogroove stylus instead of the standard model used in figure 1.

In both graphs the reference velocity is 8 cm per second, and the speed of rotation 33.3 rpm. Standard NAB test conditions were observed, except that the reproducing stylus radius was in accord with the type of groove to be reproduced.

The tests show that a standard transcription groove in AUDIODISC is practically as quiet at 7" diameter as at the outside. Other makes have not done as well. In microgroove the problem is more difficult, but here, also we have succeeded in greatly reducing the increase. So, the signal to noise ratio is better than 50 db from 5 inch diameter out, and better than 55 db from 6½ inches out. As the curves show, this is a significant improvement. In other respects — long wear, good thread-throw, stability of noise level with time, foolproof processing, and humidity proofing, the characteristics are unchanged.

While touching on the subject of microgroove noise, it might be well to mention something noticed on many discs sent in for criticism: The average newcomer to microgroove work cuts much too fine a groove. Whereas 70:30 groove:land ratio is considered necessary, these brave souls are cutting 40:60 groove:land. Apart from the serious increase in noise which results, such a groove will not be tracked reliably in many home reproducers. So, avoid an excessively fine groove. The added recording level which it would permit only causes excessive tracing distortion, which is responsible for the fuzzy sound (on peaks) of so many microgroove discs.

If we may be permitted to moralize, it is interesting to note that the result was obtained by using Buckner Speed's old "method of the 10%" — by pyramiding many small improvements — after the trial of "miracle ingredients" and radically new materials had wasted much time with no success.

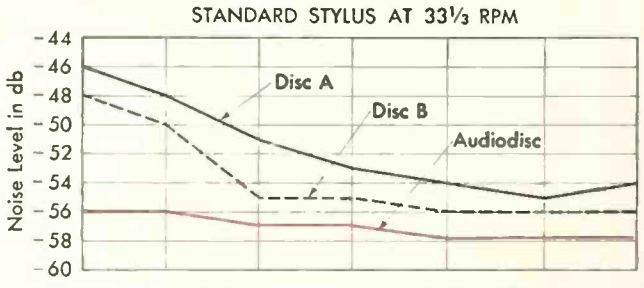

Fig. 1—Noise level vs. diameter, for various makes of discs using a standard transcription groove. All cuts made with same stylus. Reference velocity, 8 cm per second.

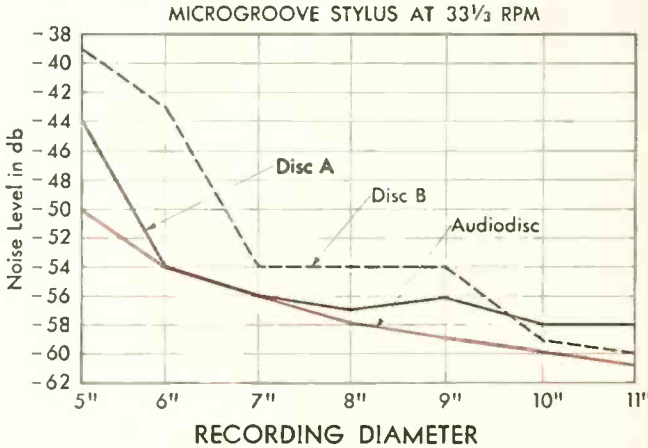

Fig. 2—Noise level vs. diameter, for various discs, using a microgroove. All cuts made with same stylus. Reference velocity 8 cm per second.