audio



record

AUDIO DEVICES, INC.

Vol. 7, No. 5

444 Madison Avenue, N. Y. C.

June-July, 1951

SCRIPT CONTESTS ANNOUNCE WINNERS

Scholastic Magazines and AER Pick Prize-Winning Radio Scripts in Audio-Sponsored Student Competitions

The top student script writers of 1951 have now taken their places in the literary hall of fame - and have collected well descrived cash awards in recognition of their efforts.

The Scholastic Magazines' National Radio Script Writing Contest has selected twenty-four prize winning entries written by High School Students in 16 states and the District of Columbia. And, in the higher fields of education, the National Radio Script Contest conducted by the Association for Education by Radio (AER) has announced the award-winning entries from the hundreds of scripts submitted by College Students throughout the country.

To the talented winners — to the many hundreds of other contestants who submitted such excellent scripts - and to the teachers who have done so much to develop the writing ability of these students,

(Continued on Page 2, Col. 1)



First Prize-Original Radio Drama. Galarno, Saginaw,



WINNERS OF SCHOLASTIC MAGAZINES' RADIO SCRIPT WRITING COMPETITION First Prize-Radio Drama Adaptation. Lila Kronstadt, Brooklyn,



First Prize-General Radio Script. Geraldine Heuermann, Louis, Mo.



First Prize-Meric L. Legnini, Havertown, Pa.



WINNERS OF CLASSIFICATION 12 IN A. E. R. CONTEST Second Prize-William H. Robinson, Jr., Brooklyn, N. Y.



Third Prize-William A Coffield, Brooklyn, N. Y.



Johnny Vadnal and his orchestra cutting a new Victor record at Schneider's Recording Studio Lab. At center (standing) is Alexander Bard, Victor International Music Head.

ARRANGED and **RECORDED** by Schneider

Unique Combination of Musical Science and Audio Engineering Enables Schneider Recording Studio Lab to Give Clients the "Full Treatment"

Musicians, composers and radio writers in the Cleveland area know Hank Schneider well, and have a healthy respect for both his musical talent and his engineering ability as a professional sound recordist. That's because the Schneider Recording Studio Lab at 1303 Prospect Avenue, Cleveland, has established a unique reputation as a source of both artistic and technical service in all kinds of musical

(Continued on Page 4, Col. 1)

audio 🤄 record

Published monthly by Audio Devices, Inc., 444 Madison Avenue, New York City, in the interests of better sound recording. Mailed without cost to radio stations, recording studios, motion picture studios, colleges, vocational schools and recording enthusiasts throughout the United States and Čanada.

VOL. 7, NO. 5

JUNE-JULY, 1951

Script Contest Winners (Continued from Page 1, Col. 1)

we extend our sincere congratulations for

a job well done.

Mr. William D. Boutwell, of Scholastic Magazines, reports that more than 525 scripts were entered in this year's Writing Awards competition, and that these entries showed greater variety of subject matter than ever before. Many of the scripts were in support of civic enterprises, such as the Red Cross, safety projects, better English in the schools, etc. Also, more scripts showed evidence of having been produced before being entered in the contest, which indicates wider school use of local radio stations. One TV script was entered this year, for the first time. Many of the scripts were from member schools of the National Scholastic Radio Guild.

Following is a list of the national winners in the Classifications sponsored by

Audio Devices.

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

Judges: Albert Crews, Promotion Director, Protestant Radio Commission; Irve Tunick, free lance radio writer; Olive McHugh, English Department, DeVil biss High School, Toledo; Gertrude Broderick, Radio Script Division, U. S. Office of Education; and Armand Hunter, Chairman, Radio-Speech-Theatre, Temple University, Philadelphia.

Original Radio Drama First Prize \$25.00;

William L. Galarno Arthur Hill Sr. High School, Saginaw, Mich.

"The End of the Journey" Teacher -- Mattie G. Crump*

SECOND PRIZE \$15.00;

Richard S. Reamer, Jr. Elkhart Senior High School, Elkhart, Ind.

"Emergency Assignment" Teacher - Galen Wenger

THIRD PRIZE \$10.00; Thomas J. Walsh Gonzaga High School, Washington, D. C. "The Emerald Flame"

Teacher -- Joseph Kerns, S.J.

FOURTH PRIZES \$5.00 Each Virginia Ann Mills

Nazareth Academy, Rochester, N. Y. "Jocy"

Teacher -- Sister Evelyn Carmie Amato

John Adams High School, Cleveland, Ohio

"Lefty"

Teacher Miss Agnes Lee

Richard O. Martin

Idaho Falls High School,

Idaho Falls, Idaho "The Invader"

Teacher - Miss Afton Bitton

Maurice McInerney

Cathedral High School, Denver, Col.

"Unheavenly Heaven'

Teacher — Sr. Therese Martin

John Gilmore Bansch

Helena High School, Helena, Mont. "Pug's Version of the 1950 Season"

Teacher — Mrs. Doris Marshall

Radio Drama Adaptation First Prize - \$25.00; Lila Kronstadt

James Madison High School, Brooklyn, N. Y.

"Salvador and the Goat"

Teacher — Mrs. E. Freilicher*

SECOND PRIZE \$15.00; Marilynn Hall Mackenzie High School, Detroit, Mich. "The Man Who Could Work Miracles"

Teacher — Benjamin Meckler

THIRD PRIZE -- \$10.00; Sue Wyche

Las Vegas High School, Las Vegas, New Mexico

"Champion Stock" Teacher -- Miss Nell Doherty

FOURTH PRIZES \$5.00 Each

Edward J. Golden

Boston Latin School, Boston, Mass.

"Great Expectations"

Teacher -- Gordon F. Irons

Barbara Smith

Laconia High School,

Laconia, New Hampshire

"A Punt for Billy"

Teacher - Mrs. Ruth P. Estes

Wesley M. Pollard

Helena High School, Helena, Montana

"The Monkey's Paw"

Teacher - Doris M. Marshall

Robert B. Yegge

East High School, Denver, Colorado

"A Christmas Carol"

Teacher — Thomas Gilligan

Betty Hall

Roosevelt High School, St. Louis, Mo.

"The Car"

Teacher - Olga Solfronk

General Radio Scripts

Central High School, St. Louis, Mo.

Miss Lorraine Lowry*

\$15.00; SECOND PRIZE

Mt. Vernon, N. Y.

"The First Performance of Hamlet"

Teacher - Roberta Fleming

THIRD PRIZE - \$10.00; Edward G. Field

Westfield Sr. High School, Westfield, New Jersey

"The Vision"

Teacher — Miss Bordner

FOURTH PRIZES - \$5.00 Each

Jerold B. Coburn

Edison High School, Miami, Florida

"Teeners, Tunes, and Topics"

Tanahar Mrs. Soubin Derby Mrs. Sophia Derbyshire Teacher

Robert Clein

Henry Grady High School,

Atlanta, Georgia

"Henry Grady"

Mrs. William F. Smith Teacher

Paul B. Hannon

East Denver High School,

Denver, Colorado

"The Red Cross Serves"

Teacher — Mr. Zarlengo

Nancy Rae Riley

Wethersfield High School,

Wethersfield, Conn.

"Junior's First Train Ride"

Teacher - Mrs. M. Windsor

Evelyn MacDongall

Cheyenne High School,

Cheyenne, Wyoming

"The Long Election"

Teacher Mildred U. Beck

AER

National Radio Script Contest (College Students)

Judges: John Bachman, Director of Radio, Baylor University; Thomas D. Rishworth, Director of Radio and Television, University of Texas; and Dr. Sherman P. Lawton, Coordinator of Broadcasting, University of Oklahoma.

Classification No. 12, Scripts for Home and School Recording

First Prize - \$100.00;

Meric L. Legnini

Temple University, Philadelphia, Pag

"History is My Beat"

Teacher — Mr. Romulo R. Soldevilla*

SECOND PRIZE: \$60.00;

William H. Robinson, Jr.

Washington Square College,

New York University, New York, N. Y. "When They Count the American

Dead' Teacher -- Mr. Irving Falk

THIRD PRIZE — \$40.00;

William A. Coffield

Washington Square College, New York University, New York, N. Y.

"The Scar" Mr. Irving Falk Teacher

*Received 25 Audiodiscs, 3 Sapphire Recording Audiopoints and 3 Sapphire Playback Audiopoints -- or equivalent value in reels of Audiotape.

First Prize \$25.00;

Geraldine G. Heuermann "The Stars Point The Way"

Teacher

James D. Stasheff A. B. Davis High School,



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

EVALUATION OF OXIDE

As our readers know, a magnetic recording tape consists of a layer of magnetic iron oxide on a non-magnetic paper or plastic base. The tape characteristics dependalmost entirely on the oxide itself what it is and how evenly it is



C. J. LeBel

applied. Since previous articles1 discussed the question of uniform application, we will in this paper discuss the oxide itself the material which gives a tape its personality.

Oxides of many different characteristics are possible, ranging from the high-coercive black, through the very popular medium-coercive red, to the old low-coercive red used by the Germans on their Magnetophone. In the course of a development project, the laboratory must evaluate the probable performance of hundreds of oxides on machines presently in wide use. No matter how interesting a material, it has little value if the customer must rebuild his machines to use it properly.

Practical Realities

We may assume at the start that the oxide has good frequency response, and that its modulation noise is low. Were either of these characteristics poor, the material would have been set aside long hefore.

In most magnetic recorders — both professional and home - noise level is fixed by the machine internal noise, and not by the tape, so maximum output produces the highest signal to noise ratio. The undistorted output limit is set by tape overload, and not by machine distortion, so we want an oxide with maximum undistorted out put. At the same time it must also have low distortion at lower outputs. We really need a tape which is inherently more linear in its characteristics. Furthermore, this must be attained in the normal bias range of machines in the field, for most machines have fixed hias, and the remainder can adjust their bias only over a limited range. We have much data on the bias of commercial machines in the field, as referred to our laboratory standard head, obtained by using a two tape technique previously described.2

Characteristics

As a convenient illustration, we will compare our standard red oxide (on plastic base) tape with a competitor's material for which strong claims are made. The upper graph of Figure 1 shows the relation between bias current and reproducing head output, with a fixed recording signal. Note that at currents below that corresponding to peak output, output increases rapidly with bias; at bias greater than the peak value, output decreases slowly with a large increase of bias.

The lower graph of Figure 1 shows that increase of bias reduces distortion. While these tests were made at the standard 400 cps. frequency, the curves have the same shape at other frequencies. At bias currents above a certain value, the distortion curve levels off at its minimum value.

Since the two graphs use the same bias current scale, a given bias point will be in the same position on both sets of axes. Correlating the two curves, it is clear that as we increase bias current, we first decrease distortion and raise output rapidly. When bias has increased enough to decrease output 2 to 3 db. below its peak value, the distortion curve first reaches a minimum. This is why manufacturers of machines with adjustable bias specify the 2 db. point in their instruction books.

Comparison

It is not easy to watch two graphs simultaneously, so in Figure 2 we have combined the data into a set of output-distortion curves taken at various bias currents.

Referring back to Figure 1, we see that tape O has more output that AUDIO TAPE only in a bias region which is useless because of high distortion. If we jump to Figure 2a, and compare the two oxides with each bias adjusted to peak output, we find that O has higher distortion at any point on the scale. Using the usual 2% point as an index, we find that AUDIO TAPE will give 3db. more output.

In Figure 2b, we find that the difference is 2 db. at the bias for 1 db. below peak output; and in 2c the output difference is 1.6 db. at the 2% point, with the bias for 2 db. below peak. In every case the AUDIOTAPE offers more output at lower distortion. A recheck of Figure 1a shows that AUDIOTAPE has higher senstivity in the bias region for low distor-

It would appear that tape O uses inferior oxide. We are inclined to blame the chemist for shifting the bias peak to too low a current, for our own laboratory has observed inferior performance whenever this is done. This probably results from in-

(Continued on Page 4, Col. 3)

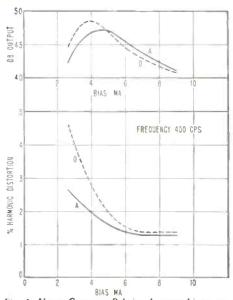
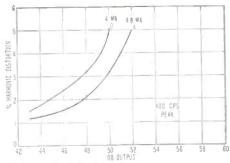
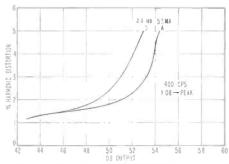


Fig. 1. Upper Curves - Reland output, with fixed input. - Relation between bias current Lower Curres - Relation between bias current and dis-

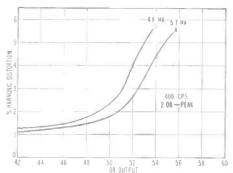
tortion, with fixed input.



(a) Bias current set for peak output.



(b) Bias increased enough to decrease output 1 db.



(c) Bias increased enough to decrease output 2 db.

Fig. 2. Relation between output and distortion at various bias currents.

Schneider Recording Studio

(Continued from Page 1, Col. 3)

recording work. Hank Schneider's unsual background of musical experience has contributed much to his success in the recording field.

Born and raised on the banks of the Mississippi at Quincy, Illinois, Hank took an early interest in music - an interest which was influenced largely by recordings which he heard on the family's Edison Cylinder phonograph. Deciding that music was to be his career, he devoted himself wholeheartedly to its study and practice. Later, he was literally launched on the first step of his professional career as a trombonist and arranger on the Mississippi excursion boats, where jazz was born and carried up the river from New Orleans. He has been extremely active in musical circles ever since - arranging for name bands and radio stations for more than 25 years.

During the early 40's, extensive Signal Corps sponsored radio training aroused a latent interest in the technical aspects of musical recording and reproduction. This led to the opening of a modest recording business as an avocation in 1945. But Cleveland's fame as a Polka Center soon changed this to a full-time vocation - and started Schneider's Recording Studio Lab on the road to recording fame

This Studio is currently making the original master recordings of Johnny Vadnal and Ernie Benedict for RCA Victor Records. Many other masters have been made here for Decca, Capitol, Mercury, Continental, etc. In addition to polkas and pop recordings, the Schneider Studios have recorded many unusual and interesting types of national and folk music, including



Attractive and talented Kay Schneider at the console, in the special organ studio at Schneider's Recording Studio Lab.

ELECTROPIC LANGUAGE ANOTHER

-designer

isc recordings



LOUISIANA STATE UNIVERSITY has pioneered in the use of audio equipment in teaching languages on a large scale. The present language lab, established in 1947, is one of the largest in existence, with semi-private facilities for 130 students. The individual booths are equipped with turntables, earphones, and microphones, so that students may hear either themselves or records. In addition to teaching Chinese, Russian, Italian, Portuguese, French and German, the lab is used to teach English to foreign students. Its recording facilities are also used to serve the high schools of the state. Teachers in the public school sytem submit material for their own teaching needs and laboratory personnel put it on record in authentic accents. Three soundproof booths provide facilities for making the language recordings used in the lab and elsewhere. Voices used in cutting foreign language discs are supplied by students from the country whose language is being studied.

Syrian, Serbian, Greek, Hungarian, German and Italian.

Writers of singing commercials like to bring their work to Schneider's as Hank's experience as an arranger can be very helpful in developing them. In fact you can walk into the studio, hum a new tune and walk out with the complete musical recording.

The running of Schneider's Recording Studio is a family affair, in which Hank gets a valuable assist from his wife, Kay. She has the personality and business ability that make the front office click. And, her musical talents - as organist, pianist, and

Part of the Schneider recording room, showing equip-ment for both tape and disc recording and reproduction.

are a real asset to the studio. vocalist -When a girl's voice is needed, in a singing commercial for example, Mrs. Kay Schneider is often heard in the transcrip-

The Schneider Recording Studio Lab is fully equipped with the finest precision equipment for both disc and tape recording. The main recording studio is of ample size to accommodate large orchestral groups, and a smaller studio, equipped with an electronic organ, is provided especially for the recording of organ and vocal selections.

Hank Schneider, now an active member of the Audio Engineering Society, finds that music and sound engineering are very closely related. His clients are glad that he has had so much experience in both.

Evaluation of Oxide (Continued from Page 3, Col. 2)

creased content of alpha form, instead of the desired gamma form of crystal structure. An extremely small alpha content leads to a poisoning type of effect, far more harmful than would be accounted for by the mere percentage of non magnetic alpha. It is this which sets a desirable lower limit to the bias peak.

References: 1. C. J. LeBel, Modulation Noise, Audio Record, December 1949 References: 2. C. J. LeBel, A New Method of Meas-ure Bêas, Audio Record, June-July, 1949