



ABS Sets Sights As Major Web

Recording "Saves Day" For Newscaster

A streamlined, major market network reaching twenty-five of the country's leading distributing centers thumbnails the framework of the Associated Broadcasting System, the nation's newest radio chain

Off To Good Start

ABS, boasting a metropolitan coverage of forty million potential customers, launched

its sixteen-hour daily, coast to coast schedule last September. In the web's inaugural ceremonies, FCC Chairman Paul Porter, principal speaker, hailed the birth of Associated as a "symbol of the American determination to face the post-war period, not timidly, but with the courage to push on to new goals of achievement."

Net's Family Grows

With nineteen affiliates and four stations who cooperate in the clearance of time, ABS offers its listeners a variety of programs. It takes particular pride in the number of outstanding news programs currently being aired.

Travel Limitations Ignored

The importance of instantaneous recordings in the new network's makeup is told in a report received from Mr. Tom Dunn, ABS Publicity Director. "Recently," Mr. Dunn relates, "John B. Hughes, one of our chain's leading newscasters, went on a lecture tour. Due to uncertain travel conditions which might have prevented him from reaching a network station, his program was transcribed and shipped to the nearest originating affiliate for a playback. This arrangement, I'm happy to say, proved highly successful."

Leonard Versluis, himself owner of a Grand Rapids, Mich., radio station, WLAV, and for many years identified with the phonograph business in Michigan, is president of ABS.



John B. Hughes



Student director, engineer and turntable operator learn their duties at WNYE studios in Brooklyn Technical High School.

WNYE Trains N. Y. High School Engineers, Recordists

Radio Courses Offered by Board of Education

New York City high school students are currently being given intensive training in all phases of radio production at the Board of Education FM Station WNYE, located in the Brooklyn Technical High School building.

Tele Instruction Also Given

In conjunction with helping to operate FM Station and producing 20 broadcasts a week for classroom listening, students study theory of radio, broadcast station operation, sound recording, script writing, radio acting and production. They even study the rudiments of television production by appearing at CBS Station WCBW on "There Ought To Be a Law."

Many Get First Class Licenses

While the courses in script writing, radio acting, and radio production are open to students from all of New York's eighty high schools, engineering courses are open only to boys from Brooklyn Technical High School because of the very intensive and thorough pre-requisite training which is required for admission to these advanced classes. The

(Continued on Page 4)

WOR and AUDIODISCS

"On the Ball"

Only ten minutes after the conclusion of ex-Prime Minister Churchill's press interview with reporters and newsreel men upon his arrival a few weeks ago on the Queen Elizabeth, WOR (New York's Mutual Outlet) was on the air with a 15-minute transcribed broadcast of the occasion.

Dave Driscoll, News and Special Features director, during the 30 minute press interview, repeated reporters' questions into a portable mike and Churchill's replies were recorded. Simultaneously, the entire proceedings were being recorded on Audiodiscs at the WOR studios and then edited for broadcast.



Raymond Massey and Canada Lee during a recording of "Two Men On a Raft."

Recorded Skits Popular "Y" Feature

Pressings Gain Favor
Over "Live" Shows

The Young Men's Christian Association, largest user of electrical transcriptions in the field of Youth-serving agencies, also was first to utilize them on large scale.

Only Quality Programs Given

According to Henriette K. Harrison, National Radio Director for the Y. M. C. A., a number of 'Y's' have weekly live programs, but the majority of them prefer the transcriptions because of a large acceptance by radio stations who by now are accustomed to the high standard of recording, performance and writing set by the organization. Approximately 359 'Y's' now feature recorded radio programs, locally.

Casts and Writers "Tops"

The best writers are used at all times as well as the finest professional actors and musicians available. Such personalities as Raymond Massey, Frederick March, Canada Lee, Paul Robson, Constance Collier and Edmund Gwenn have appeared in dramatic roles.

Recordings Aid Public Forums

Miss Harrison also states that while 'Y' recorded programs always interpret the aims of the organization, it is recognized that entertainment is a prime requisite. Many of these recorded programs are used on playbacks and made the basis for discussion and forums in Y.M.C.A.'s having Public Affairs programs.

Miss Harrison says further that the Y.M.C.A. is now planning a new series of thirteen transcriptions for early release.

"Der Bingle" Disc Booster

Recorded Shows Would
Permit "Time Off"

The recent court action of the Kraft Food Co. against Bing Crosby for his failure to appear on the Kraft Music Hall radio program was highlighted by the crooner's statement that he preferred to do future programs by means of transcription, making three or four in advance so that he "can get away a little bit."

AFRS' Record Sighted

Bing contended that the Armed Forces Radio Service with its thousands of transcribed programs, more than proved that discs are the coming thing, chiefly because with them it is possible to edit, change or revise a program before it hits the air.



KFAB Farm Service Editor Bill MacDonald in Chicago's Stevens Hotel "Studio."

Audi discs Aid KFAB Scoop Neb.-Iowa Press Highlights of 4-H Club Congress Recorded

Audi discs brought the top stories and "voices in the news" back to the midwest listeners of KFAB (Omaha-Lincoln) when Farm Service Editor, Bill MacDonald, covered the recent National 4-H Club Congress in Chicago.

Winners in the various classes and the delegates were interviewed in the "studio" set up in the Stevens Hotel, center of activities for the 4-H Club Congress.

"First"

All stories covered at the Congress were put on Audi discs and expressed to the Lincoln studios for "airing" each morning on the regular farm hour and play backs during the day. Thus, with Audi discs and air express, KFAB beat the daily presses in Nebraska-Iowa rural area by several hours.



Tests Used in Recording Lacquer Research

By E. Franck, Research Engineer

A good recording lacquer is one that has been developed expressly for that purpose and none other. Experimental development work on this product includes a continuous process of testing each production run and, more important, a thorough study of other types of materials. This work requires careful tests of many different factors.

Some requirements are quite obvious. A smooth mirror-like surface, strong color and lack of unpleasant odor are basic essentials. There must also be good permanent adherence to the flat base material—usually aluminum or glass.

Cutting qualities are next tested. The coating material should offer low resistance to the cutting action of the stylus. At the same time, the material must be tough enough to reproduce the full range of audible sound frequencies throughout many playings. As the grooves are cut, there must also be a consistent, positive thread throw and the thread must be free from any annoying static charge. The grooves cut must be shiny and the material should not cause undue wear of the stylus.

Playback tests are next in order. Good tracking, low noise level (background scratch) and high frequency response, after many playings, should be evident. While tests for noise level and high frequency response can be made, to some extent, simply by listening, adequate results can only be obtained by precise measuring equipment.

Another major item to be considered is that the lacquer should "behave well" when processed for making pressings—either by the silver deposit or gold sputtering method.

For some applications of recording discs, one of the slowest tests is of major importance. That is the aging behavior of the grooves with regard to noise level and distortion. No "short-cuts" can be employed here. Careful, methodical, routine testing over a long period of time is required to see that initial noise level and distortion do not climb with age.

Other factors are also considered such as behavior with an advance ball, true groove contours and grease resistance.

Finally a good recording lacquer must stand up under varying degrees of temperature and humidity. The importance of such qualities was particularly emphasized during the war when discs were subjected to sub-zero shipping conditions and were used in the heat and humidity of tropical areas.

Rickenbacker Records "Air History" Series

Famed Aviator Contributes Salary
to AAF Aid Society

A significant new trend toward transcribed radio presentations featuring outstanding name personalities is seen in the new Longines' "World's Most Honored Flights" series with Capt. Eddie Rickenbacker as host and commentator.



Eddie Rickenbacker

The business commitments against Capt. Rickenbacker's time were such that it would be impossible for him to appear on a live show on a certain day every week for several months. He could however adjust himself to the more flexible schedule of dramatized recordings.

America's Number One Voice of Aviation will be heard weekly starting February 2nd on a series of 13 coast-to-coast half-hour programs. The plays are rich in brand new dramatic personal-history material about American air pioneers.

AAF Needy To Benefit

The sponsor, at the request of Captain Rickenbacker, pays the fees he would ordinarily get to the AAF Aid Society to swell the fund for needy AAF widows and orphans as well as AAF men and women disabled in line of duty.

All recordings for the new series were made by the Columbia Recording Corp.

Martin Block's "Record Shop" Gains Large Audience

Martin Block, creator of Radio's famous "Make Believe Ballroom" is hitting the air "jack pot" again with his new CBS transcribed program, "Martin Block's Record Shop."

Block interviews the artists whose recordings he plays on the program, and each week gives back-stage information about the leading figures in the world of popular music.

Recordings for Insomnia Victims

Recordings for helping people who cannot sleep or who are under a nervous strain were aired in New York recently on WNEW's "Music Hall" program. The recordings were from hypnotist Ralph Slater's new DeLuxe Album.



A group of Wing Scouts visit a recording studio.

Glossary of Disc-Recording Terms

(Editor's Note We wish to thank the publishers of "The Proceedings of the I. R. E." for their cooperation in allowing us to re-print "Glossary of Disc-Recording Terms" (prepared by Recording and Reproducing Standards Committee of the National Association of Broadcasters) in this, and subsequent issues of Audio Record.)

Abrasive: The grinding material sometimes incorporated in record stock for the purpose of shaping the needle point to fit the groove properly.

Acetate disc: Various acetate compounds used for solid and laminated (which see) discs. The term is often erroneously used to describe cellulose-nitrate discs (which see).

Advance ball: A rounded support (often sapphire) attached to the recording head which rides on the discs to maintain a uniform mean depth of cut by correcting for small variations in the plane of the disc surface.

Angle of Groove: The angle from wall to wall of an unmodulated groove in a radial plane perpendicular to the surface of the disc.

Backed stampers: A thin, metal matrix (which see) which is attached to a backing material, generally a metal sheet $\frac{1}{8}$ inch to $\frac{1}{4}$ inch thick.

Binder: A resinous material which causes the various materials of a record compound to adhere to one another.

Biscuit: A small slab of the stock material, from which records are pressed, as it is prepared for use in the presses.

Blank groove: A groove upon which no modulation is inscribed.

Burnishing surface (of cutting stylus): The portion of the cutting stylus di-

Girl Scouts Map '46 Recording Plans

New Series To Be Cut Soon

The Girl Scout national organization, which has used radio-recordings successfully in the past, has two other transcription series on the books for 1946, according to Mrs. Inez Kimball, radio director. Cutting on both series will start at an early date.

Radio and Screen Represented

One series—"The Girl Scouts Present"—will consist of six $3\frac{1}{2}$ -minute "acts" by name stars of radio and screen, three on each side of a 16-inch disc. Each act will be strictly "entertaining," and will not be merely an appeal for support of Girl Scouting by the artists.

All Troops To Receive Pressings

Vinylite pressings will be used and the records distributed to local Girl Scout councils throughout the country. The series is designed to give local radio chairmen a better approach to their radio stations, and to help improve local Girl Scout radio shows.

Spots Flexible

Each one of the $3\frac{1}{2}$ -minute spots can be used in many different ways—either in a five-minute spot, with the local announcer giving the opening and closing, with an advance build-up of the star being presented, or as a part of a 15-minute program, featuring local Girl Scout activities.

The other series will consist of a set of four ten-minute recordings, produced especially for educational radio stations. These four will feature Girl Scout national leaders and Girl Scout promotional material.

(Continued on Page 4)

(Continued on Page 4)

Glossary of Disc Recording Terms

(Continued from Page 3)

rectly behind the cutting edge which smoothes the groove.

Burnishing tool: The stylus sometimes used to smooth the groove of a recording.

Cake Wax: A thick disc of wax (which sec) upon which an original recording is inscribed.

Capacitor pickup: A phonograph pickup which depends for its operation upon the variation of its capacitance.

Carbon-contact pickup: A phonograph pickup which depends for its operation upon the variation in the resistance of carbon contacts.

Cellulose-nitrate Discs: See Lacquer discs.

Center hold: The hole in the center of the record, which fits the center pin of the turntable.

Center pin: The shaft protruding from the center of the turntable used for centering the record.

Chip: The material removed from the disc by the recording stylus in cutting the groove.

Christmas-tree pattern: A term sometimes used in referring to the optical pattern (which see).

Condenser Pickup: See Capacitor pickup.

(Glossary of Disc-Recording Terms will be continued in the March issue of Audio Record.)

WNYE Trains Engineers, Recordists

(Continued from Page 1)

boys take the FCC License for Radio Telephone Operator, First Class, at the conclusion of the term's work, and so far an average of 90% of them qualify. All of them secure the Second Class License with apparent ease.

Only Professional Work Accepted

Students in the class in sound recording are trained to record every program as it goes on the air, and these professional recordings are used for re-broadcasts at a later date. The boys use a Scully Recorder with an RCA cutting-head and Audiodiscs. Their work must be of professional quality since it is to be used in actual broadcast. In addition the recordings serve a valuable purpose in the analysis of their own work by student actors and writers, as well as in providing models for study by elementary classes in radio techniques.

Equipment Maintenance Emphasized

The recording laboratory is conducted by Mr. Lester Levy, of the Brooklyn Technical High School faculty and the

WNYE staff, who insists upon holding the boys to the highest possible level of performance. Mr. Levy stresses that they must not necessarily be able to operate the equipment but must be able to maintain and repair it, conduct tests, understand the theory and possibly conduct the measurements of the apparatus.

Recording Instruction Necessary

J. F. Macandrew, Radio Coordinator for the Board of Education, states that recording is an indispensable part of the operation of an educational radio station.

Girl Scouts Map '46 Recording Plans

(Continued from Page 3)

Radio Education Stressed

The Girl Scouts also recorded a Girl Scout NBC program featuring Helen Hayes, "Continued Story," and made the records available for local Girl Scout councils. Radio activities are stressed in all Girl Scout age levels—from the 7-year-old Brownies to the 18-year-old Seniors.

audiopoints with audiodiscs

Insure Truly Fine Sound Recording



However excellent a recording disc may be, the quality of sound obtainable from it can be no better than the points used in its cutting and playing. Thus, AUDIPOINTS together with AUDIODISCS combine to make truly fine sound recording possible.

Made by skilled craftsmen, AUDIPOINTS are available in three types of cutting styli and three types of playback points.

Recording Points

SAPPHIRE—Produces the best possible recording. Each point disc-tested on a recording machine. Low recording cost, since the point may be resharpened time and time again.

STELLITE—A favorite with many professional and non-professional recordists. Also disc-tested. Low initial cost and may be repeatedly resharpened.

STEEL—A diamond-lapped stylus particularly adapted for use by non-professional recordists. Cuts a shiny, quiet groove and gives from 15 to 30 minutes actual recording time.

Playback Points

SAPPHIRE—Perfectly matched to Audio cutting styli, the materials, workmanship and design make this playback point the very finest obtainable.

STEEL—Straight-Shank for normal weight pickups—Bent-Shank for heavy pickups. 100% shadowgraphed. These are the most practical playback points for general use.

Consult your dealer or write

AUDIO DEVICES, INC., 444 Madison Avenue, New York 22, N. Y.



they speak for themselves audiodiscs