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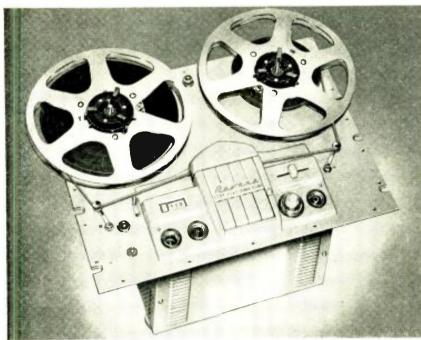
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HI-FI

TAPE RECORDING

VOL. 5 NO. 7

JUNE 1958

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Hi-Fi Tape Recording, Severna Park, Md.

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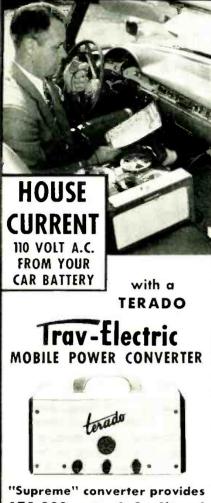
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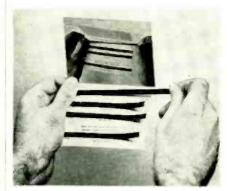
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NEW SCOTCH TAPE



Minnesota Mining and Manufacturing Company. 900 Bush Street, St. Paul 6, Minn., has introduced "Scotch" brand No. 200 double play tape which the manufacturer claims is twice as strong as other tapes of the double play type. No. 200 will withstand a pull of 3.6 pounds before stretching. An exclusive tensilizing process, which doubles the strength of the polyester back-ing, makes "Scotch" brand No. 200 tape usable on any tape recorder without the need for special handling. Strength test kits such as shown above have been made available to all "Scotch" brand magnetic tape dealers. For details and price, write to the manufacturer.

STEREO DOCUMENTOR



Toro Industries, Inc., 1193 Laurel Street, San Carlos, Calif., has introduced the Documentor, a tape recorder with decorator-designed cabinet and two removable hi-fi speaker-amplifiers. The Documentor offers stereophonic playback and monaural recording, It is fully transistorized, has revolurionary side-recessed reels, exclusive reelcaptivating lock lever, and one control for all mechanical operations. It also features concealed line cord and splicing materials and it is specially etched aluminum in simulated leather finishes. The specially designed cabinet for this unit is of genuine hardwood finishes and has storage space for extra reels and cables. The matching speaker-amplifiers may be used within the master cabinet or for remote stereo or monaural playback. For full details and price, contact the manufacturer.

WEBCOR CUSTOM 10



Webcor, Inc., has introduced a new console series. The new models include the Prelude "Custom 10" high fidelity fonograf and the stereo "Custom 10" stereofonic tape recorder. They are appropriately called the "Custom 10 Twins." A third model in the series, the Audio-Mate "Custom 10" high fidelity speaker and amplifier system is designed to serve as a second sound system for the stereo "Custom 10" stereo tape recordet. The "Custom 10" units are perfectly matched in cabinetry and component parts. All have 10 watt straight AC power amplifiers and 3 speakers; one 6" x 9" woofer and two 4" tweeters. The stereo "Custom 10" has a three speed tape recorder that will record and playback monaurally, plus play back stereo tape with perfect balance and fidelity. The Prelude fonograf can also serve as a second sound system for the stereo recorder in playback; or records can be played through the fonograf and tape recorder audio systems simultaneously. Write to Webcor. Inc., 5610 W. Bloomingdale Ave., Chicago. Ill. for complete details and prices.

ALLIED CATALOG

Allied Radio Corp., 100 N. Western Ave., Chicago 80, Ill. has available free upon request their 1958 general catalog. This catalog lists over 27,000 items and is the biggest catalog published by any electronics supply house. Some of the sections contained in this edition are: tape recording section, electronic kit section, public address section, amateur radio section, and a large book section. Write to Allied for your free copy.



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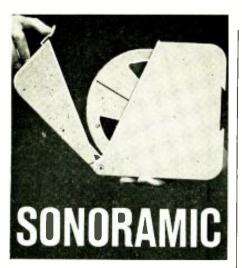
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*Du Pont manufactures ''Mylar'', not finished magnetic recording tape. ''Mylar'' is a registered trademark for Du Pont's brand of polyester film.







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TAPE CLUB NEWS

The mailman just brought us our copy of the latest issue of The Voicespondent. This active club continues to expand, and Charles and Melva Owen are doing their usual fine work. Congratulations Voicespondence Club—keep it up.

We have just read over the listing of tapes in the Voicespondence Tape Library, copies of which are available to club members free of charge, except for their own tape and postage, of course. The variety of recordings available is extremely good in our opinion. There are such listings as "The Haunted Vicarage," an eyewitness account of psychic phenomena in England; Songs of the Open Range; British Comedy Monologue: Thunderstorm; Organ Melodies; Poems; Recipes; etc. These have all been contributed by conscientious club members. While the club Librarian, L. E. Griffith, 103 Boulevard St., Sandwich, Illinois, is well pleased with this collection, he would, of course, like to see it continue to expand, and requests all members to take part in this worthwhile club project.

We wish the Voicespondence Club continued success in building up their library, and might suggest that other clubs take note of this kind of project.

Jerome W. Ciarrocchi, Secretary of Catholic Tape Recorders of America, International, writes of a desperate need for a good used tape recorder for language work in the college in India. Foreign exchange in India is very precious since they are now pushing their II Five-Year Plan. Father Francis Sales of India has informed the club of the need, and they would like to purchase a used recorder at the lowest price possible. If there is any reader who can help this club obtain a recorder, please contact Jerome W. Ciarrocchi, Catholic Tape Recorders of America, International, 26 South Mount Vernon Averue, Uniontown, Pennsylvania.

T. J. O'Dwyer, 142 West St., Rockhampton Qld., Australia, is the acting Australian representative of "The Catholic Tape Recorders of America International." Anyone interested in the club and its activities in that area may contact him at the above address.

Applications for membership in the British Amateur Tape Recording Society can be made through Tape-Respondents, International. New bulk data and directories of the Society are held by TR1 secretary, Jim Greene. In exchange, the B.A.T.R.S. can enroll members in the United Kingdom for TR1.

We have received a copy of the first issue of the B.A.T.R.S. Call Book, produced at and circulated from club headquarters, which looks quite good. The club has also been circulating tape bulletins, and the club's new bulletin editor, Jack Talling, has been doing a fine job.

A few months back this column ran an item on the "Club Du Ruban Sonore." At

that time the club was just getting organized and had about seven members. This has since increased to a membership of twentytwo, nineteen of whom live in the Province of Quebec, and three in the United States.

As the name of the club implies, correspondence on tape, in French, is the club's principal aim. This, however, is not meant to bar tapists from speaking other languages, and a special invitation for membership is extended. The annual subscription fee is two dollars, Canadian money.

The first list of members will be issued shortly. Further information is obtainable from: Club Du Ruban Sonore, 6383, Chambord St., Montreal 35, Canada.

The third annual Tapeland Variety Show. featuring the talents of various members of Tape-Respondents, International, is now being prepared, while the 1956 and 1957 T-R-I Talent Tapes still are circulating on a round robin basis. Forney C. Sprenkle of Detroit, Mich., has been named co-director of the talent tape program by secretary, Jim Greene. Forney will work along with Elmer J. Davis of Hawthorne, Calif., who originated the idea and produced the first two tapes. Any member desiring to hear either of the first two tapes, or who would like to contribute talent to the 1958 tape, may contact either of the directors.

Final report on awards at the Sixth International Amateur Recording Contest held in October in Brussels, has been received from WTP's representative there, M. Francfort of Couvet, Switzerland. WTP was well represented among the winners: Ru van Wezel, Holland, took first prize in Music as well as the prize for humorous recordings. Carlsen Flemming of Denmark won first award for montage recordings. The 1958 IARC will be held in Switzerland, Members interested are urged to begin planning their entries now.



TEEN TAPERS



BY JERRY HEISLER

S^{UMMERTIME} and graduation are rapidly approaching and graduation provides a school with many opportunities to utilize a recorder.

A very worthwhile project for a club would be to record the entire commencement exercises. The tape could be used as a permanent record of the graduation and it could also be duplicated in part for members of the graduating class. I'd speculate that many seniors, or their families certainly, would be very receptive to purchasing a recording of commencement including the point where the students name is read and he is presented with his diploma.

The use of the recorder need not commence with commencement by any means. Many schools present "Senior day" programs at which time the graduating class presents the class will, prophecy and numerous other features. A recording of such a presentation would also be a valuable piece of treasure for a school and a valued memento for a senior.

No doubt you can think of numerous applications of the recorder for skits connetted with senior day.

Letting our imagination wander, we can see a recording of a senior banquet and any other graduation function. A composite story recording of the entire graduation program would be the ultimate goal for a club.

We have often suggested as a project, the making of a yearbook in sound and graduation time is a very good time to work on such a project. Of course if you have let the years slip by without making any recordings your task will be harder now, but it need not be impossible.

f your recording is last minute, one of the best formats I can suggest is to follow the pattern of your yearbook. A group of students could work together on this. Going through the pages of the yearbook you can arrange narration and perhaps some simulated "live" recordings of events highlighting your four years in high school. It could provide an interesting program for the senior assembly.

If you are fortunate enough to have some recordings on hand of various events during your high school career, then it is a relatively simple matter to edit them into a complete "sound yearbook."

A note to Freshmen reading this column...

Now is the time to start planning on a four year sound yearbook. Make a schedule of events that will be memories in the future, and plan now to systematically record them. If your class has a historian, this is a natural job for him. When it comes time for your graduation you will have many valued recordings to choose from and you can come up with a finished product and a treasured recording. Another idea, before leaving the subject, and that is the fact that a tape recorder is a wonderful gift for a graduate and you might drop a few suggestions in the right places in time for the spring festivities. And on the more serious side of things, you can use your recorder to help you pass those final exams so necessary to be included in the graduation ceremonies.

Summertime brings forth many weddings and if you are on the lookout for some good opportunities to make your summer pay off, recording weddings is something to bear in mind. Scout your local paper now for engagement and wedding announcements and get in touch with the people involved so that you can line up jobs for the summertime. We have covered the exact techniques involved in wedding recordings in past issues, and let it suffice for now to merely suggest that you explore this money making opportunity.

We have heard of several teens who have made recordings of various types of dance music which they later rented along with a recorder to people having parties. If handled right this could develop into a nice business. Savings made from the rentals could be invested in additional recorders. We'd suggest a price in the neighborhood of \$5 for the recorder and \$1.50 or so for each hour tape. This is a fast and easy summer money-maker.

Ideas for making money with a recorder are unlimited and if you let your imagination work for a while you will no doubt come up with many ideas. Please let us hear from you if you have any suggestions that you would like to share with other teens.

Summertime is also a good time to have just plain fun with a recorder and with numerous parties coming up full use can be made of your recorder for games, stunts, and good dance music.

To record some of these events you might have to work away from a power source. In such a case we would recommend the use of an inverter and a storage battery to power the recorder. Rarher than run down the car battery, it is a good idea to rent a couple of batteries from a service station for a few hours and use those to power the inverter. If working indoors where there is plenty of power available be sure to use heavy extension cords if the recorder will be any considerable distance from the outlets.

These are just a few suggestions for graduation time recording. Let us know if you have put any of these ideas to use so that we can write about them in future issues.

One more note before closing and that's to mention that we have an invitation to see the \$15,000 recording studio of David Hersk who has been mentioned several times in Teen-Tapers. Look for a story on this in the future.



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Model	3A/N	$3\frac{3}{4} - 7$	¹ / ₂ ips	\$379.50
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CROSSTALK

from the Editors

SWITCHEROO with disc manufacturers jumping on the stereo bandwagon like fleas on a hound dog, Comcertapes, one of the pioneers in stereo tape comes out with a monaural hi-fi demonstration record called Re-Percussion. Disc is called a "Concert-Disc" and features more than 100 percussion instruments.

* * * * * * * * * * * *

BRITISH BROADCASTING COMPANY announces it has video recorder that is more economical to operate than Ampex unit. Called the Vision Electronic Recording Apparatus and nicknamed Vera, the unit uses half-inch regular magnetic tape rather than special 2 inch wide tape. Cost per hour is \$240, about onethird of Ampex recorder. Only two prototypes are available. Recorder records along length of tape rather than transversely. It is presumed that British system uses high tape speed such as were developed by RCA and Bing Crosby Enterprises but which did not go beyond lab stage.

* * * * * * * * * * *

AT IRE SHOW in New York, attended by 30,000 engineers, stereo set-up by Electro-Voice outpulled Sputnik in attendance. Stereo sessions were crowded but most remarkable of all was engineers who knew insides of giant computers avidly listening to simple explanations of how stereo works. E-V booth man was kept busy answering elementary questions!

* * * * * * * * * * * *

OVER 1100 Stereo tapes are now available according to latest count in Complete Catalog of Stereo Music put out by this magazine. New Edition also lists available stereo records as of press time.

* * * * * * * * * * * *

WITH ALL THE TALK going around about recession, etc., it is nice to see the figures coming in on the tape industry. Orradio (Irish Tape) just opened a spanking brand new half-million dollar plant in Opelika, Alabama; Reeves Soundcraft reports sales up 95% over last year and Audio Devices hits an all time high. Minnesota Mining likewise has its new plant in operation. Tape continues to grow and gain in popularity day by day.

* * * * * * * * * * * *

STEREO BROADCASTING is on the upswing. Two new stations have been added to those already doing stereo broadcasting. WAMP and WFMP, Pittsburgh will run a Monday through Friday series at 10:30 to 11 PM called "Nightline in Pitts-burgh." WNBF-AM and WNBF-FM in Binghampton, N. Y. has extended its schedule to seven days a week in stereo from 10:30 to 10:55 PM Monday through Saturday plus an hour long classical stereo program on Sundays from 10:00 to 11:00 P.M. On the west coast, KRFM and KFRE plans to up its schedule. Not only stations but ad agencies are starting to think in stereo. The MacManus. John and Adams Agency in New York has stereo taped commercials for Cadillac Motors and has backlog of stereo material suitable for stereo tape or record to go to buyers of Cadillacs.

* * * * * * * * * * * *

BEEP, BEEP will be heard on Mercury's new releases beginning with June. Beeps will be heard ahead of each number on tape when tape is run through in fast forward. When played at regular speed beeps will not be audible. Selections on tape can be spotted by listening for number of beeps as indicated on program on box.

TAPES TO THE EDITOR

When sending tapes to the editor please use the 3" reel and indicate the speed at which it was recorded and whether it is dual or single track. We will listen to your tape, make notes from it for use in this column and then reply on your tape. Please keep tapes reasonably brief.

If you do not own a recorder, a letter will be acceptable. Address tapes or letters to: The Editor, Hi-Fi TAPE RECORDING, Severna Park, Md.

To the Editor.

Four months ago it became possible to unglue my eyes from a picture screen and become aware of music via hi-fi sound. At the same time an introduction was made to tape recorders. There is such an utterly free feeling to be derived from music as compared to the screen that the changeover may soon be complete; except for the times when programs are to be taped from that medium. My personal leaning is to tape, self-recorded on a live mike or picked up from hi-fi, FM, etc. The first purchase was a V-M 710 portable recorder which is now on the "fritz"-along with a V-M 711, which helongs to a friend. In each case the trouble is in the driving mechanism of the mathinest belts, drivers, springs, and the like I was advised by several audio men to huy the V-M even tho none of them has that make for sale. Now I am wondering if perhaps machines in that price range could not he looked upon as more or less as being in the "plaything" class. How do you feel abilit it? Of course, I have no plans about going into tape professionally but I would like equipment that could be counted on to produce properly day in and day out for quite a while. Presently 1 am considering a trade on the Magnecord N-35B plus an ad. tional speaker of the Ampex A seriesboth in the monaural type. Since no manufacturer gives details on their various motor and drive systems, and which I would not understand if they did, will you please be kind enough to tell me, in your personal optition, just what the score really is with the inner workings and the heads of the Magnecord, the Ampex, and possibly the Viking Tape deck. It has just occurred to me that possibly a good tape deck, amplifier, and speakers might be something to consider. I'm sure I could house the deck and antolifier into a unit that would be portable with a little work out in the garage workship I have read and studied 14 or 15 issues of your publication, 7 of which 1 now own and judging by the answers you always give to those seeking information, whatever you have to say to me will be something that I can understand. For this serene ability of yours let me add my congratulations to the many, many, you've alrealy received .- C. M. H., Joliet, Ill.

A lot of folks are getting their eyeballs unclued from the TV screen these days and surching to music in one form or another.

We do not believe that the recorders in the \$200-\$300 class could be classed as plathings. There are more machines sold in this price bracket than in any other.

All recorders are electro-mechanical itents ana. as such, from the best to the worst, will require some maintenance to keep them in top condition. Likewise, there is little escape from the old adage—you get what you pay for—no one would expect a \$200 machine to do all that an \$800 machine would do. On the whole, the lower priced machines represent good value for the money and, if properly maintained, should give long, faithful service.

Neither the Ampex nor the Magnecord use pressure pads to hold the tape to the beads. depending upon finely regulated tape tension to do so. Both have a motor on each function rather than using one motor and belts and drive wheels as is done in less expensive machines. Obviously that is the best way to do it but, on the other hand, you must expect to pay more for the additional motors, etc.

A tape deck and associated equipment is a perfectly satisfactory way of setting up your equipment. Several companies make models that can be added to as the hudget permits, starting out with an inexpensive monaural outfit for playback only and working up to a full record/play stereo rig.

To the Editor:

I want you to know that we free-lance writers like your magazine very much. It is a big help in our work for most of us tape out manuscripts and plays. May all of your staff keep up the fine work for years to come. We are counting on you to give us the news and help.—Bill Chapin. Houston. Texas.

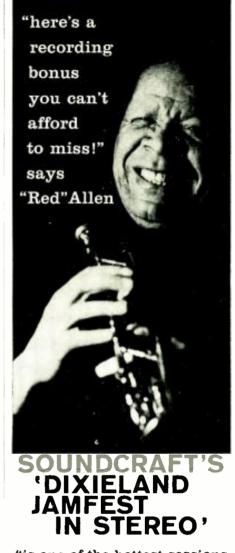
Thanks for the kind words, we'll do our best to keep the magazine lively and helpful. Using the recorder for writing we know can be a big help, not only in getting your thoughts down rapidly but in making sure that what you put down is the way you want it.

To the Editor:

As a subscriber to Hi-Fi Tape Recording I want to ask a little information. Now that everyone is going to stereo there should be some bargains in monaural tapes. Could you suggest some firms that I might write to about this?—Frank Lang. Milwaukee. Wis.

In the last issue Atlantic Sound had more or less of a close-out sale on monaural items. We don't know if there is any great quantity of monaural tape still on the market as it has been gradually replaced with stereo so there may not be the bargains around that you might at first think.

You might try contacting local dealers in your own city to see if they have monaural stocks that they might wish to unload at lower prices. While the suitch to stereo is positive and definite there is still some monaural material heing turned out by a number of firms.



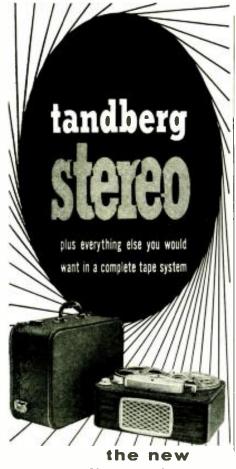
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QUESTIONS & ANSWERS

Questions for this department may be sont on tape or by means of a postcard or letter. Please address your queries to, "Questions and Answers," HI-FI TAPE RECORDING, Severna Park, Maryland. The most interesting and widely applicable questions will be used in this department and all inquiries will receive a tape or letter reply.

I have placed a good bit of confidence in the information published in Q & A Column in Hi-Fi Tape Recording. Now I have some questions. I recently listened to a stereo demo tape at a dealer who could not answer my apparently technical questions. I own a Webcor Model 2110. Everything I read today is about "stereo." I anticipated trading to stereo equipment, but first I want to know. With stereo equipment, will I be able to play-back my present library of "monaural" tapes on stereo equipment? If I do not purchase stereo equipment can I play-back stereophonic tapes on my present Webcor 2110 without modification of the machine? What is the difference between Binaural versus stereophonic tapes? Can I play binaural tapes on my machine? With an external speaker on my machine would I not have stereo effect? Please explain why or what the difference is in "stacked" or "staggered" head. I may have read a technical description of this somewhere but I'd prefer to have the explanation in a layman's language. Further, when the stereo tape was demonstrated to me-the sound was reproduced in the following order-1. as it would sound from the kitchen radio-2, as it sounds with high-fidelity-3. as it sounds with stereo equipment. Yet the sounds-all three different sounds were on stereo tape, and were being reproduced through stereo equipment with external amplifier speakers. I don't understand the technique of stereo well enough to describe the reaction I experienced when I encountered this illusion. Another thing-in order to appreciate the benefits of stereo-tape, must the volume be turned up to detect the advantages? I do believe a complete run-down on the "stereo story" is long overdue. I refuse to budge with any further purchases of tape (pre-recorded) until I become informed-at least to the extent that will protect my investment and library of tapes. If the tape manufacturers want to get anywhere with marketing stereo equipment and stereo tapes I feel it's their inherent responsibility to the consumer to get down to the level of talking the layman's language to "sell" stereo. The tape industry, I feel, will have a great future potential when the public is informed. Until then like myself-a lot of ground must be covered. The industry now perhaps needs a good "hypo." Your magazine is one means of creating this good customer relations, but I'm sure that your magazine is little known to persons who are potential tape recorder owners. I feel that if I'm confused (and I've been messing around tapes for two years or more), the other people who don't have tape recorders but who would have if they understood the techniques and details of operation most certainly need explanations .-D. J. C., Harrisburg, Pa.

A—Present stereo equipment will play back any monaural tape as the stereo is achieved by adding another head to the machine. All recorders with stereo playback will have all the features of a regular recorder—plus stereo playback.

A binaural tape and a stereo tape are the same thing. Strictly speaking the term binaural applies to recordings made with the microphones spaced apart the same distance as the ears and listened to through head phones. Stereo tapes are recorded with the microphones placed any distance apart and listened to through loud speakers. However, they may be used interchangeably.

An external speaker attached to your recorder will not give you stereo. All you will have is monaural sound through two speakers. To have stereo, it must be in the recording itself. A stacked head is one in which the two heads necessary for stereo pickup from the top and bottom tracks of the tape are placed one above the other and frequently combined into one unit with two pole faces. A staggered head is two separate heads spaced 1¼ inches apart, one playing the top track, the other playing the bottom. The industry is going to the stacked head type of machine.

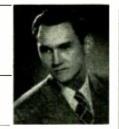
The stereo tape you heard was a demonstration tape that was put out by one of the manufacturers of stereo equipment. All of it was not stereo. The kitchen radio and high fidelity bits were monaural and then the second track on the tape was brought into play to demonstrate how stereo sounded. There is no need to turn the volume up to appreciate stereo, in fact, it can be better heard than "hi-fi" at low volume. Because you have two speakers, one for each of your ears, stereo produces an effect that is not dependent on volume at all.

D-Do you know of anyone who might have taped the operas "IAS Rheingold" and "Siegfield" off the air when they were broadcast from the stage of the Metropolitan Opera House early in 1957? -D. Dietz, 1571 Pauline Drive, Sunnyvale, Calif.

Sorry we do not but perhaps one of our readers made such a tape and would be willing to share it with you. Anyone who can help Mr. Dietz is invited to contact him directly.



TAPE IN EDUCATION



BY JOHN J. GRADY. JR.

PROCURING a tape recorder for school use when the budget is tight is sometimes a problem. In such cases it is often possible to turn to the PTA for help. Another place to turn for help is your local dealer who should be most happy to appear before the PTA and demonstrate a machine and explain what it can do for the school.

Just recently we reviewed a film which is perfect for the purpose of, not only selling a rape recorder to a school, but to help the teachers to grasp what can be done with a recorder.

The film has been put out by the Indiana University Audio Visual Center, Division of Adult Education and Public Services of Bloomington, Indiana. Its title is 'Tape Recording for Instruction" and was made under the supervision of George F. Siddons, Lecturer in Education, and Merlyn C. Herrick, Instructor in Education.

Its approach is very basic and all the steps in recording are simply explained so that a person unfamiliar with a recorder will be able to grasp the salient points easily.

Starting off with the use of a recorder f_0 dictation in typing classes, it moves through group discussions, choral groups, etc.

It quite graphically shows how a recorder $c_{a,1}$ free a teacher for personal guidance of pupils as the machine takes over the task of presenting the dictation for typing or shorthand practice.

In the group discussion segments the film shows the advantage of using multiple mikes to make an even pickup of sound from around the table and it also shows how to place a microphone to make an equal pickup of a chorus.

One of the clever suggestions in the film is the use of a blanket booth to cut down background noise when a pupil is making a recording. This is nothing more than a blanket supported on three sides and surrounding the recorder and pupil. As is appatent from the sound track, the trick is a very effective one and one which any recordist could put to good use.

How to maintain the machine and how to make simple splices using the scissors is shown.

As the film progresses, other topics are presented to the audience, such as how to use the recorder for school cafeteria music, in kindergatten and foreign language studies and other school activities,

It explains how radio programs may be re-orded and brought to the classroom for current events or similar studies and how teachers and principals may use it to add sound to slide shows. This use is a very important one and can be employed to help produce the school's own audio-visual matenials in cooperation with the school photography club.

The film is 16mm. black and white, sound, and can be obtained by either rental or purchase from the Circulation Department, Audio Visual Center, Indiana University, Bloomington, Illinois. The rental charge is only \$3.75 for five days and the purchase price is \$75.00.

For the dealers who are interested in selling recorders to schools, this film is something not to be overlooked. Shown to teacher or PTA groups it should engender enthusiasm for making a tape recorder part of the school equipment.

While we are on the other side of the fence, so to speak, we do feel that it might be a good investment for any dealer to buy a copy of the film and use it in his sales promotion.

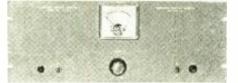
At a PTA meeting designed to whip up some enthusiasm for getting the school a recorder, there should be one or two machines on display which can be demonstrated in person to the parents. Most people are intrigued with the idea of hearing their own voices and they can easily picture what the acquisition of a recorder can mean to the school.

One entertaining way to make a presentation to such a group is to let the recorder do its own talking. To have this happen you must pre-record the material you want your audience to hear and then introduce the recorder as part of the program.

If the school does not own a recorder your dealer or an individual will surely he able to lend you one for the occasion.

Almost as thrilling to parents as hearing their own voices is hearing the voices of their children. Be sure to include some group singing on the tape.

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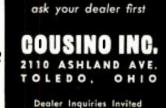
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Italy's big television quiz show featuring the now familiar Isolation Booth is called Lascia O Rad doppia," (Leave or Double), has a jackpot of 5 million lire, (\$8000). —Reprint courtesy RCA Broadcast News

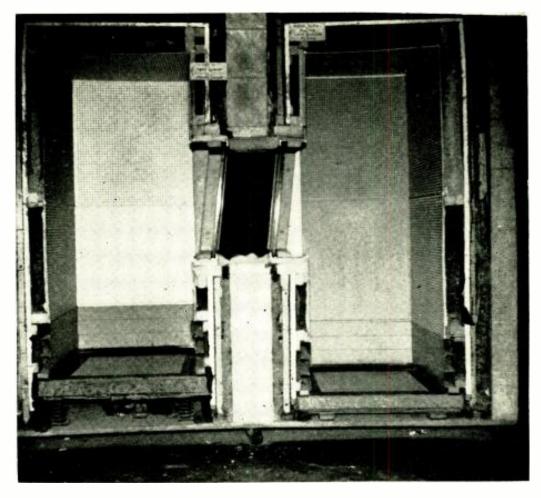
How to Build an Isolation Booth

by Sheldon O'Connell

... the principles of construction for an isolation booth or a studio are the same. Having one insures good recordings.

ENCYCLOPEDIA BRITANNICA, that often referred to source of quiz questions defines Isolation as "the separation of a group from others of their kind in such a manner as to prevent crossing, not depending on environment, separate seclude, sequester." Some of today's most fascinating quiz shows feature isolation somewhat strongly. It allows the contestant to think and speak free of distraction. The Isolation Booth offers a number of worthwhile uses for tape recordists. It can close off those unwanted noises that are sometimes not evident until playback.

Keeping extraneous sounds out, is not always as important as keeping sound in, isolated so it won't distract others. There are often times when a tape session must be cancelled out of consideration to others, nature of the material, lateness of the hour, perhaps an urge to blow a few riffs on the horn, or sing a chorus of the Installment Blues. There is a normal tendency to play down sections of a recording and maintain the good neighbor policy. When this happens, the recording can often miss the free wheeling sound it might have, had it been made under Cross section of a professional broadcast studio. The panels are backed with sound absorbing material. Note construction of floors which are of double thickness and some are even mounted on springs. Windows between rooms are double glass panes set with felt strips in channels. Windows are stanted to avoid reflection. Doors should be of the blind variety and heavy construction. If the recording equipment is placed outside the room there should be some means of controlling it from inside the studio or an operator will be required.



studio conditions. Toning down a recording during a rake is a lot like trying to hammer a nail without making 1 noise, a very special problem where spun sugar walls make it possible to follow the fights on a neighbor's television.

An isolation booth in the strictest sense may not be feasible, but with some friendly persuasion, it should be possible to liberate a closet or unused walk-in area for this purpose. A place set aside for tape recording, allowing you to record a variety of material without second thoughts to the din being created.

The project shouldn't be expensive. A seldom used closet or walk-in area can easily be converted to booth work. as many amateur photographers who do their own processing have discovered. Special treatment however, will be needed when converting to isolation for sound recording.

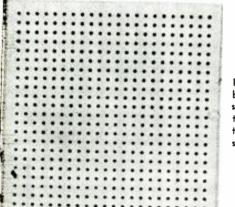
Assuming that a closet is to be used for this purpose, first comes the task of clearing out the accumulation of clothing, hangers, tennis anyones, back issues of parts catalogs and summer straws; then those soul searching decisions of what must go, and what must be parceled out into other available storage space. Next to come out is the hardware, hooks, pegs, suspension rod and shelf. At this point the closet should present a discouragingly bleak appearance, unless just by chance a box of fragile Xmas tree ornaments was on the shelf at the very moment it was upended.

The degree of soundproofing is a personal matter depending on the general nature of the recordings, material preference and time available for work. Though not as effective as some other means, the quickest and easiest way is to apply cardboard egg separators directly to the wall. They can be fitted evenly row upon row, tacked or glued in place, then sprayed with a quick dry paint. It takes a lot of them to do the job, and while the final effect is as pleasing to the eye as it is to the ear, it may require an all egg diet to get enough free material; eggs boiled, poached, fried and scrambled. At small cost the local dairy or packager will supply large numbers of the empty cartons. More professional applications will require greater time and effort. In effect we'll be putting a room within a room. A sound absorbing element will be sandwiched between perforated studio squares and the original wall. Sound waves as they enter, perforations in the panels are muted by the cushioning absorbency of Rock Wool pads or other material with sound deadening characteristics. Here is a partial list of materials ideally suited to sound conditioning: Echosorb, Kilnoise Squares, Sea Felt, Corkboard, Celboard, Transite Acoustical, Sanacoustic, Airacoustic, Donnacousti, Celtile, Pyracoustic, Permacoustic, Fibretone. Permacoustic tiles are made of fireproof mineral wool fibers held together with a binder, Sanacoustic consists of perforated metal with a baked enamel finish that also contains a mineral wool pad wrapped in flame resistant paper. Each hole in a perforated panel, when backed with mineral wool or other absorbent, is acting as a noise trap.

These materials can be applied in any of a variety of ways; one of the methods used to convert an area for sound isolation is to nail a series of wood strips of equal thickness to the wall, 1 by 2 inch laths should serve the

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Panels are fixed to wooden cross bars when broadheaded nail is driven into each of four corner perforations. Bars are spaced just under one panel width apart.



Each of these perforations backed by material with sound deadening characteristics, acts as a noise trap. Reduces escape of sound to a minimum.

In place of wooden supports, a thread spool can act as a spacer between panels and original wall. Spools must all be the same size, four to a panel.



Egg separators provide lowcost source of material and are easily attached by gluing them to wall. May be obtained in quantitios from egg wholesalers or, if you are a teacher, school class can bring them from home as eggs are used. purpose, they must be fixed at a distance just under a panel width apart. These act as spacers. When the panels are joined to the wood, there is a comfortable space left between the panel and the wall into which fiberwool or acoustical blankets can fit snugly, or loose fill tamped in place.

In dwellings that discourage nails in plaster the wooden laths may be fixed flush to the wall with a firm bonding and made secure. Panels are added in seconds by sinking one long shanked upholstery nail through each of the four corner perforations. A compromise can be made if it's preferred not to use wooden strips, since there may be problems in securing them, sawing, or ordering proper length. Their main function is to provide suitable space between panels and wall in which to sandwich soft absorbent material. Another method of doing this is to run a long broadheaded screw threw the perforation as before, then through a bushing or collar like a thread spool, and then into the wall. The spools need not fit the screw, they can have a larger inner circumference, but must all be the same size, otherwise the finished product will zig where the zag should be and look out of alignment.

The door and ceiling can be treated in the same way. perhaps with contrasting panels to add variety. Some careful measuring and the use of a small saw will help the ceiling panelboard fit about an overhead fixture. Weather stripping is useful for trimming off the base and sides of the door. As a functional extra attraction, a double glass window may be added into the door at about eye level. Guide lines are first mapped out on the door in a square, oblong, or circle, then a small hole drilled in the center to admit the point of a keyhole saw. In rough cutting, sawing is done a little away from the marking to allow the wood to be dressed smoothly to the line with a file. A single pane of sheet glass if sufficiently thick may be sufficient. It is set into the opening then held in place by glazier's points, those tiny metal triangles seen on the backs of picture frames, hardening putty is applied and beveled neatly with an old knife blade. When the putty surface is dry it can be painted.

If your booth is to be in the attic or similar location, the soundproofing might be mainly concerned with the floor. A fair job can be done by cushioning it with a fitted piece of 1" insulating board. A really soundproof floor can be had by placing over this insulating board, $1 \ge 2$ inch strips nailed through to the floor underneath. On top is laid regular flooring or another insulating board. This makes a barrier, an absorber, and a dead air space, all of which combine to reduce noise to a minimum.

Perforated panels, or peg boards as they're sometimes called, provide a handy storage area for bits and pieces of equipment, reels of tape, splicing gear, feed cords, even heavy equipment. Special "S" shaped hooks made for this purpose can be inserted into any of the perforations to suspend reels and other equipment in the work area.

For anyone who wishes to do some professional-type recordings and who is bothered by traffic or other noises, inside or outside the home, an Isolation Booth is practically a must.

Like its \$64,000 counterpart, an Isolation Booth for tape recording offers something for everyone, covering a wide variety of topics. Studio sound conditions, with no questions asked.

Tape Splicing—the Right Way

Ьу

Geoffrey A. Gass Chief Engineer KSRV

.... It's just as easy to make quiet, safe splices as it is to make the wrong kind. Here's how----

THERE have been a number of articles written on splicing techniques for editing and special purposes, but none written on splicing for the most common purpose in the world—getting two pieces of a busted tape back together. All these articles on splicing seem to have done is to have led people to believe that the butt-joint (90°) splice is the best thing for every purpose, and that splicing-gadgets are perfect.

(1) No splice is permanent. Some are more permanent and quieter than others. If you're primarily interested in rescuing the tape, and are willing to sacrifice a tenth of a second of program material now on the tape in order to assure that the next recording will be perfect, this method will provide you with the most permanent and quietest splice possible.

(2) There isn't a splicing-gadget on the market today that can make better, quieter splices than you can yourself with good splicing tape and a razor blade; they just make it more convenient. A bad splice can ruin two or three feet of tape on a 7" reel. A good splice is just as good as a new tape, unless you want to do some editing right where there is a splice. And a good splice is just as easy to make as a bad one. Here's how to make a good one.

First, get a brand-new, non-magnetized single-edge razor blade, a roll of Scotch #41 half-inch splicing tape (if you use transparent "Scotch" or "Texcel" tape to splice with, you might as well throw away this magazine—it's dedicated to the *furtherance* of the recording art) and a piece of smooth cardboard, such as a file-card. Hold the two ends to be spliced on the card with the first two fingers of the left hand, so that the ends overlap about $\frac{3}{4}$ ". Making sure that the two tapes are perfectly aligned, cut through them both at an angle of about 30° to the edge of the tape, cutting straight down with the razor blade, so that you get a perfect, straight-line cut. This long diagonal is important, to insure that even after the splice has pulled apart somewhat, there will be no gap in the recording medium.

Clean away the cut-off pieces, and make sure that the wo tape-ends join perfectly. If the tapes slipped out of alignment while you were starting to cut, one tape will appear wider than the other. If this happens, line 'em up again, overlapping perhaps $\frac{1}{8}$ ", and cut again, until the two ends match perfectly.

Then, holding the two ends with the same two fingers you used before, tear off about two inches of splicing tape, and holding it by the edges between the thumb and middle finger of the right hand (and making sure the two ends still are joined perfectly) put the splicing tape down over the splice, *parallel with the cut*, and press into place with the right forefinger. The torn ends of the splicing tape should be clear of the recording tape, since those torn ends will ooze.

Next, use the back of the razor blade or a fingernail, and press the splicing tape down with a rubbing motion until all air-bubbles are pressed out. Press the splicing tape down on the card, too, to keep the tape in place. Check the splice. If there are any white spots left, it probably means you got some dust or dirt on the splicing tape. If there is more than a very narrow white line at the splice itself, it means the tapes either overlapped (check the other side) or didn't quite meet—so do the splice over again.

If the splice seems all right, use a corner of the razor blade to cut away the excess splicing tape. To do this, start a long, convex cut, which meets the tape just above the edge of the splicing tape, and continues down through the splice region, cutting away about 1/32'' of the recording tape along with the splicing tape, "coming out," just below the edge of the splicing tape. Be sure not to leave any nicks or sharp angles in your cut, since these will start another tear. When both sides are trimmed, check the other side of the splice to make sure there is no overhang of splicing tape. If there is, trim it off carefully.

There's the splice. Here's the principle:

(1) You splice the shiny (non-coated) side. Why? Because anything between the coating and the recording head will "knock out" the recording as surely as if you were to patch a phonograph record with a band-aid.

(2) You make a diagonal cut. Why? So that even when the splice pulls apart (and all of 'em do, sooner or later, to some extent) there will always be some recording tape passing over that minute gap in the recording head. A 90° splice that pulls apart just a small part of an inch, will sound a "blip" as it passes over the head.

(3) You match the ends perfectly. Why? Because if you don't, some of the adhesive from the splicing tape will ooze through and stick to the next layer of tape. When the tape is played, it won't unwind smoothly, and your recording will be full of bobbles, skips, and squeaks.

(4) You add the splicing tape on a long diagonal. Why? First, to provide a maximum area of adhesion, to reduce separation of the splice. Second, to provide a gradual change in the flexibility of the tape. instead of an abrupt one. A (Continued on page 33)

SIX TRICKS

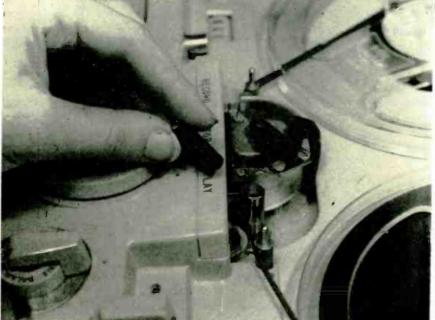
For Your

RECORDER

by

Marion Mitchell







NO PLACE TO HIDE?

Next time you want to conceal a microphone at a party, try hiding it behind the draperies. This gets it up in the air where it can pick up voices best, yet keeps it out of sight. Loose weave fabric is most acoustically transparent, but even lined draperies will work well. Recorder can go behind a chair or davenport.

NEED A CHANGE OF PACE?

For really "off-beat" special effects such as speeded up voices, music and other sounds, you can modify the speed of your tape recorder by slipping a short length of rubber tubing over the capstan of many machines, increasing its diameter. By recording normally, then slipping the tubing on during playback, a sound can be speeded up. Or by recording with the tubing on the capstan, then removing it during playback, it can be slowed down. You may encounter some wow, but this usually will not matter for special effects.

HERE'S ONE TO LATCH ON TO!

If your finger gets tired of holding the "pause" button on your tape recorder (such as on the Revere T-11 shown here) add a "latch" which will swing down over the button holding it in. The latch should be about 2" long by 1/2" wide and can be from 1/16" to 1/4" thick, can be metal, wood or plastic. (I used the top of a swizzle stick used for mixing drinks). Attach it to your recorder with a small sheet metal screw which requires no nut on the inside. A slot through the latch, rather than a single hole, allows the latch to slide on the screw, providing a much stronger fastening.

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HERE'S AN ANGLE FOR YOU!

In spite of the way this one looks, it's really on the level. When you're recording "live" it's usually a problem to see the neon indicator on your recorder without climbing all over it. Of course you can always cut off the table legs, or sit on a stepladder to get a good view of the indicator. But an easier way is simply to prop up the back of your machine with some books, reels of tape, or even that handy old waterproof ammunition case.





HANG THAT MIKE!

Slick way to stow the microphone on your portable recorder such as the one shown here is to cut and bend a hook out of thin brass and insert it between the two microphone halves, then tighten the screws. This makes it possible to hang the mike conveniently on the outside and to record without stopping to take off the cover.



HANDY FOR UNDERWATER RECORDINGS!

War surplus .50 caliber ammunition cases are still available and make excellent carrying cases for your recording accessories. They're even waterproof . . . just in case. The one shown here holds nine 5-inch reels of tape in their boxes, battery charger for the portable recorder, headphones, splicing tape, leader and timing tape and what have you. Seven-inch reels will fit inside if they are removed from boxes.

19

Three Home Recorders do Professional Job

by Jim Greene

Secretary, Tape Respondents International

.... all of the sound effects went on tape and not a cue was missed.

A PPLICATION of the home tape recorder to theatrical performances was demonstrated recently when a group of Tape-Respondents, International members in Little Rock, Ark., pooled their talents and equipment to provide the special sound requirements for a major production by the Greater Little Rock Community Theatre, Inc.

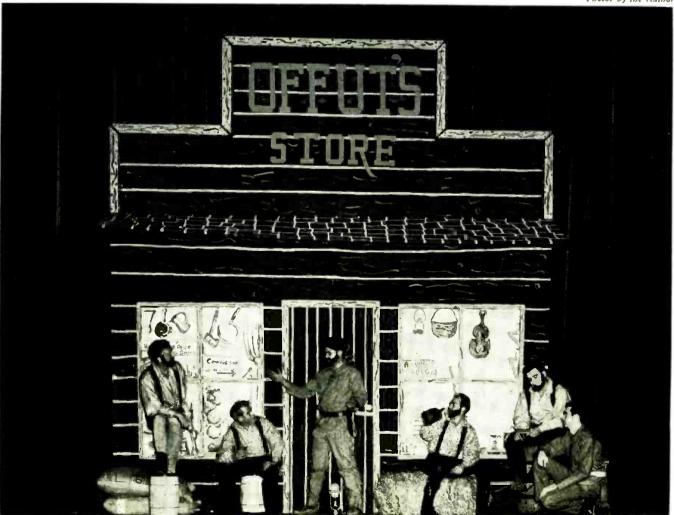
Jim Greene, T-R-I secretary, engineered the sound, assisted by Betty Anne Miller. Others who helped by furnishing and rigging some of the equipment included Jackie and Bowman Swartz, Gordon Turner, Robert Nichols, Kenneth Poteete and Allen Wiese.

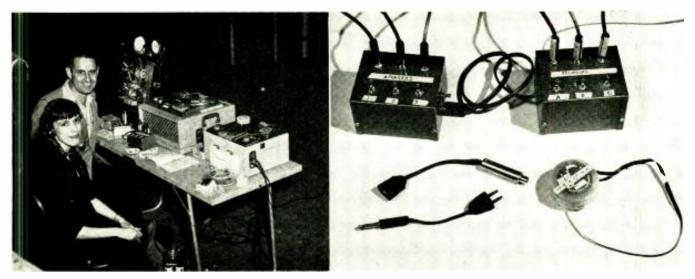
The entire project proved to be a success, and the

theatrical group is planning to use tape recorded sound in all of its future performances. The experiment was conducted at Robinson Memorial Auditorium during the group's production of "The Soul of Ann Rutledge," a threeact drama of the early love life of Abraham Lincoln.

Three recorders were used during the play, and a special switching box was used to pipe the sound to its proper destination. Speakers #1 and #3 were situated to the left and right of the proscenium. Speaker #2, primarily for background music, was suspended high above stage out of sight of the audience. As the script called for some rather unusual sound effects, the switching box made it

One of the more lighter moments in the play was this scene early in Act I, when Lincoln arrived in town to meet the male citizenry for the first time. Light, rollicking background music accompanied the entire scene. The musical selection chosen was so short it was re-cued twice while the tape was being made. Dress rehearsal proved that even this was inadequate, so an on-the-spot dub was made. This new piece of tape was spliced in before the final performance.





Left: Jim Greene and Betty Anne Miller operated three tape recorders from their control bench in the orchestra pit to provide the sound requirements for the recent Little Rock production of "The Soul of Ann Rutledge" at Robinson Memorial Auditorium. Right: Some of the special gedgets used for the show: (At top): The two-section switching box, used in mixing the sound from any combination of recorders and piping it to any combination of speakers. The sound was fed into the right-hand unit via patch cords from the respective recorders. It was distributed by the toggle switches on the left-hand unit. Tone and volume were maintained individually on each machine. (All background music was played at full bass, with one exception: the high strings selection from "Lohengrin" during the Epilogue.) (Lower left): These two adapters enabled the use of several regular AC extension cords to achieve distance between the control bench and one of the speakers 100 feet away. (Lower right): The loop tape cartridge which provided continuous cricket chirping during two of the outdoor scenes.

possible to mix any combination of sounds from the three recorders and then channel it to any combination of speakers.

While most of the 17 sound cues were music and thus were comparatively routine with the sound crew, the chronology of these cues necessitated the use of five different reels of tape—and at one point during the play three were spinning at the same time.

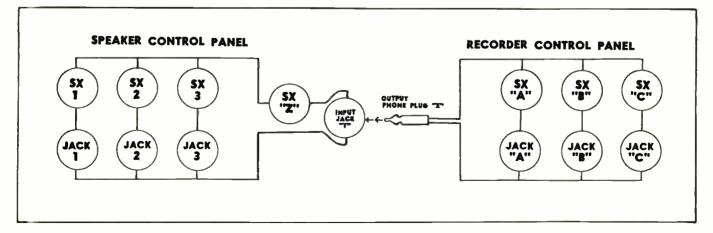
For instance, Machine "A" was piping music into Speakers #1 and #3, to bridge a 60-second blackout between scenes. The upcoming scene was to take place outdoors, at night, with Abe and Ann on stage. The script called for a segue from the full-volume blackout music to the background love theme on Speaker #2, and at the same time crickets were to be chirping behind the love theme.

The love theme reel was on Machine "B" and the crickets were on Machine "C". Five seconds before the blackout ended, the switch for Speaker #2 was turned on, Machines "B" and "C" were started, but the volume was kept to zero. As the lights came up, Jim faded the volume on the blackout music and cut out Speakers #1 and #3, as Betty Anne hrought up the volume on the love theme and crickets.

A two-way battery telephone connecting the sound crew in the orchestra pit to the musical director in the rear of the auditorium made it possible to maintain the background sound level below the performers' voices.

Sidney Palmer, former conductor of the Arkansas State Symphony Orchestra, served as musical director for the play and was in charge of choosing all of the music for the production. Audience reaction to the music was overwhelmingly favorable, especially at the more dramatic moments in the play, such as the death scene. Lincoln's cries pleading with God as Ann dies in his arms were dramatically climaxed with a musical crescendo from Verdi's "La Traviata."

Sound for one of the most dramatic scenes in the play was done entirely on tape. This occurs during the Epilogue, on a dimly lit stage, when Ann's apparition appears in the



Wiring diagram for the two units. The recorder control panel (RCP) is a collector and mixer for the three recorders. Three toggle switches controlled the inputs separately. The output of the Recorder Control Panel was fed into the Speaker Control Panel. This unit provided the proper sound distribution to any or all speakers. Toggle switch Z enabled the operator to kill all sound simultaneously with the one switch.



This was one of the scenes which called for cricket chirping. Young Abraham Lincoln was played by David Adams, and Ann Rutledge was played by Lillian Lee.

cemetery after Lincoln has spent three days there groping at Ann's grave pleading with her to return.

Since Ann could not move her lips during this scene, her closing lines were pre-recorded on tape through an echo chamber. This was channeled into Speaker #1, not too far from where she was standing. Background music (a section of the Prelude to Act I of W'agner's "Lohengrin," featuring high strings), which has been playing on Speaker #1 throughout the scene, continues during the apparition speech. Since the curtain was to be drawn after Ann's last word, the music had to build to an immediate climax. Timing this to a split second would have been practically impossible on the background tape for it had been spinning since early in the scene. Besides, the crescendo on the musical score didn't coincide with the script of the play.

The problem was solved by recording the desired crescendo (which featured the noble brasses) and splicing it to the echo tape, immediately following Ann's last word. When this word was spoken, the two other speakers were switched on booming the crescendo directly at the audience as the curtain closed.

The immediate transition (by cross fading) from the middle of the tune to the climax was perfect. Palmer said later he couldn't have done it better with a live orchestra.

In real life, Ann Rutledge was a talented singer, but Lillian Lee, who acted the part, did not wish to do her own singing. This problem also was remedied with the tape recorder. Jean McLauren, noted operatic soprano, supplied the voice.

In the Prologue, Lincoln hears Ann's voice for the first time. While walking through the woods he hears Ann singing his favorite hymn, "I'm a Pilgrim." The voice seems to approach from the east. It comes nearer, then moves to the west, and eventually fades into the distance.

Mechanically, this was accomplished by beginning on Speaker #3, later adding Speaker #2, cutting Speaker #3, adding Speaker #1, cutting Speaker #2, and finally fading the volume.

During this scene and also during the apparition scene in the Epilogue, stage mikes were cut to permit the sound to have proximity without general amplification through the auditorium speaker system.

The constant cricket chirping throughout two different

outdoor scenes was easily accomplished by using a loop tape cartridge. Designed to repeat itself every 3 minutes when used at $3\frac{3}{4}$ ips, the time was cut to $1\frac{1}{2}$ minutes by using $7\frac{1}{2}$. The crickets were recorded "live" near Spring Lake, 15 miles south of Little Rock. No dubbing was necessary, as the cartridge was taken to the actual spot. Three attempts were made before a full $1\frac{1}{2}$ minutes of constant chirping was obtained without interference from train whistles, jet planes and automobile horns. These certainly would have presented an anachronism, as the setting of the play was in the mid 1830's.

Perhaps you are asking: Why weren't the crickets and love theme pre-mixed on one reel for the previously described scene instead of mixing separate tapes during the performance?

The answer is simple: The crickets had to be cut at a split-second cue while the music continued. The tape could have been pre-recorded to the split second, but there was no guarantee that Ann and Abe could time their acting with as much accuracy.

T-R-I's participation wasn't entirely in the sound department. Two other members had parts in the play. David Adams was in the leading role as Abraham Lincoln, and Bowman Swartz played the minor part of Joe Kelsey, one of Lincoln's chums.

"The Soul of Ann Rutledge" was written by a Little Rock author, Mrs. Bernie Babcock. She adapted it to play form in 1934, basing it on her novel by the same name which first appeared in 1919, and since has seen 14 editions. The Little Rock presentation was directed by her granddaughter, Lucille Babcock, who in 1951 directed the off-Broadway performances in New York by the Star Productions, and two years later adapted the play for radio for the American Theatre Wing. The play is a favorite among high school and college dramatic groups throughout the country.

Since the first play was presented, we have done several other plays and of course had some new experiences.

The last play of the season called for a parrot on stage, with definite lines to speak at certain points in the play. This problem also was solved by tape-recording.

A real live parrot was used on stage, in a cage. Next to the cage was placed a small dummy radio. The radio served as a stage "prop" and of course was inconspicuous, but we had the speaker of this radio connected to the tape recorder sound booth. We had the parrot's lines already recorded on tape (a local talent imitator did the lines), and on cue we would pipe the parrot's lines to the radio which was close enough to the parrot's cage to make it seem as though the parrot was actually speaking.

(The fact that the parrot decided to do some "ad libbing" of his own during the play didn't affect the performance at all.)

This radio on stage also was put to another use. The setting of the play was in Boston, and the time was supposed to be 5:30 p.m. As the curtain rose, the radio was playing. A radio announcer's voice came in, gave a Boston station break and time signal. This helped to establish the time and setting for the benefit of the audience.

The sound for this particular bit was obtained through the help of one of our T-R-I members up in New England. He had recorded an actual Boston station break for us. (After the play, one lady from the audience came by the sound booth to congratulate us. She said she had once lived in Massachusetts, and this had helped give her a fect-(*Continued on page* 33)

NEW PRODUCT REPORT



Stancil-Hoffman Minitape

. . . . new model M-8 completely transistorized self-contained, battery operated.

THIS recorder is not only beautiful in appearance but is beautifully designed and made as well. It is compact, measuring only 9 x 12 x 5 inches and weighing 13 pounds.

Completely self-contained, its 12.5 volt nickel-cadmium battery drives both the electronics, which are completely transistorized, and the 3600 rpm motor which provides motive power for the tape transport.

The controls are complete and simple. One knob puts the recorder in play, record or rewind, with a safety interlock to prevent accidental recording. Erase is accomplished by running the tape in fast rewind past the permanent magnet erase head mounted above the recording head cover between the two reels.

On the right side of the deck is the make control switch which can be put in either high or low position. In high the mike will pick up from a wide radius. In low, it is intended to pick up a close voice and cut down the background noise. Recording level is kept constant by an automatic regulator. there is no magic eye or VU meter to watch.

The standard model records full track at $7\frac{1}{2}$ ips using a 5 inch reel. The bias is set to take the 1 mil Mylar tape but any tape may be used.

The unit may be powered by plugging it into the cigarette lighter outlet on the car, if the car has a twelve volt battery. The batteries in the recorder will operate it for two hours without recharging.

The microphone and the speaker/



Product: Minitape M-8

Price: Recorder, \$494 Battery Charger: \$58.95

Manufacturer: Stancil-Hoffman 921 N. Highland Ave. Hollywood 38, Calif.

remote control unit are plugged in jacks on either end of the carrying handle. Located under the carrying handle, in a convenient position is a push switch which can be used to operate the recorder while the cover is closed.

A red jewel light is also under the handle and this will flash if the tape breaks or the end runs through.

Next to the jewel light is another switch which controls the output to the speaker box. Because the machine has separate record and playback heads either the sound coming in from the mike or the recording on the tape may be monitored either through headphones plugged into the external speaker box or from the speaker itself it there is no danger of feedback.

The batteries must be filled and charged before the unit can be used. The deck is raised by applying thumb pressure to the middle of the right side where it meets the case and lifting. The deck can then be removed and the batteries connected and placed in their receptacle.

The recorder may be used in any



Left: the Minitape with case closed. Case is aluminum and weather resistant. Right: a canvas case holds the recorder, speaker and remote control unit and the mike and battery charger. Recorder can be operated in case.

RCA Sound Tape



... on "Load-Easy" reels for fast tape threading!

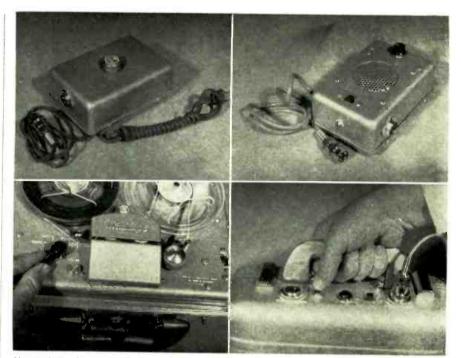
Now available wherever superior-quality magnetic tape is sold. On 5" and 7" Load-Easy Reels for fast, simplified threading. Excellent for low-noise, extended-range recording and playback!

OF AMERICA

RADIO CORPORATION







Upper left: the trickle battery charger for the nickel-cadmium cells in the recorder. Unit can be charged from 12 volt car battery or from 110 volt AC line. Upper right, speaker unit and remote control. Phones may be plugged in if desired. Lower left: hand shows function control, switch at far right is low-high mike control switch. Lower right: switch under thumb turns recorder on or off without opening case.

position while in motion or in any vehicle. The reels are held in place on the shafts by lifting and turning the splines on the shaft.

Tapes made on the Minitape may be played back on the unit or on any standard unit. The recorder is compatible to all professional units except for a 100 cycle rolloff deliberately incorporated to attenuate the low frequency rumble sounds so frequently encountered in portable and mobile work.

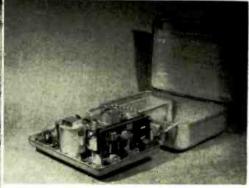
While the unit was not designed particularly for high quality music it was found that recorded music was extremely acceptable. If a bit of weight can be sacrificed, a heavier flywheel can be installed which will reduce the wow and flutter below the .2 obtained with the aluminum flywheel.

Our examination and tests revealed the Minitape to be a unit of professional caliber, light, easy to operate and attractive in appearance.

Both record and playback amplifier checked out at better than 10,000 cycles and the automatic record level worked well. Specifications call for a frequency response of 10,000 cycles at the $7\frac{1}{2}$ ips speed and the recorder will do it.

It is adequate for professional use and more than adequate for ordinary use. It is well worth your consideration.





Left: to erase tape run tape past permanent magnet erase head between reels. Threading is drop-in-slot. Right: deck removed from case. Battery is in case. Unit is precision built.

STEREO SECTION

NEW TAPES

CLASSICAL ORCHESTRAL

STRAUSS, Johann, Jr. Emperor Waltz On the Beautiful Blue Danube Chicago Symphony Orchestra Fritz Reiner, Conductor

RCA ACS-87 15 mins....\$6.95

Reiner gives these two lovely waltzes a graceful, lyrical reading which is brilliantly recorded by the RCA engineers. I do not see how anyone could resist trying a nimble step to the "Emperor Waltz" or attempt to sing a few lyrics to "Blue Danube." The magic Viennese flavor is captured in this recording.

IBERT

Divertissement Boston Pops Orchestra Arthur Fiedler, Conductor RCA ACS-54 (6.mins....\$6.95

For smart, diverting music that kids all processions, including Mendelssohn's Wedding March, no short orchestral work excels this one. The performance is "tops by Pops." You will find yourself playing this to demonstrate your stereo equipment when friends drop in, and your youngsters will devise their own marching-dancing-lolling about the house to its six short movements. Gallic wit and Parisian sophistication are combined uniquely in this attractive work.

The reproduction is very good.-D.S.W.

RICHARD STRAUSS

Suite from Le Bourgeois Gentilhomme Chicago Symphony Orchestra Fritz Reiner, Conductor RCA DCS-43 30 mins....\$12.95 The orchestral suite devised by Richard Strauss from the incidental music to the play, "Le Bourgeois Gentilhomme" is a delightful variation from the usual Strauss fare, in that it is scored for less than 40 players, and provides a light buoyant effect, almost Mozartian, while unmistakably Strauss. The performance here leaves nothing to be desired and the stereo recording technique preserves perfect orchestral balance. For anyone who has ever shunned Strauss as being "a little heavy" this recording is particularly recommended.—J.L.

MOZART

Quintet for Viola and Strings in B Flat Major, K.174 Budapest String Quartet, with Walter

Trampler, Viola COLUMBIA, JMB 5 24 mins....\$13.95

This excellent recording of an earlier work by this great composer would be a fine addition to any stereo library. Most listeners to chamber music admit the taste is acquired, principally through hearing fine performances in a small "chamber" as intended. Here is one of the world's greatest ensembles, expanded by addition of a second violist, in a well-spaced performance, that will fit your living room. You will like the informative program notes supplied by Columbia.—D.S.W.

PROKOFIEF

Suite from "The Love of Three Oranges" London Symphony Orchestra Antal Dorati, Conductor MERCURY MWS 5-18 16 mins....\$6.95

Satirical smartness is so characteristic of our times that we may take for granted the brittle wit of this fairytale score. This suite has been a symphonic novelty since its premiere in 1924, but unfortunately the origiBy Georgie Sigsbee

nal opera, like many other Russian operas, is known only by its excerpts.

The six numbers are readily identified from the informative album notes, and one will be recognized as the familiar theme of a former FBI TV series. The imaginative listener will recognize the satire and moral of the tale. One who seeks a bridge between classical and "progressive" trends in contemporary music will welcome this brilliant orchestration, the dry-line melodies in their dissonant harmonies, and the instrumental wisecracks which a gifted Russian voiced in his less regimented years. To say the recording is up to Mercury production standards is to assure you of top quality all the way from performer to your equipment .-DSW.

THE ORCHESTRA

Dukas: Fanfare from La Peri

Barber: Adagio for Strings

Strauss: Gavotte from Suite in B Flat for Winds, Op. 4

Faberman: Section 1 of Evolution

- Vaughn Williams: Scherzo alla Marcia from Symphony No. 8 in D Minor
- Persichetti: March from Divertimento for Band
- Tchaikovsky: Scherzo from Symphony No. 4 in F Minor
- Moussorgsky-Ravel: The Hut on Fowl's Legs and The Great Gate of Kiev from Pictures at an Exhibition

CAPITOL ZH-8

35:10 mins \$16.95

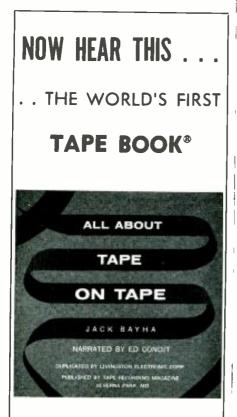
On this outstanding release Stokowski proceeds to demonstrate, through excerpts from various compositions, the sections of the orchestra and then the sections in combination. In my opinion, this is not only a "must" for the music lover but, as packaged and presented, should have great appeal and value for teachers and students alike. The large 24-page accompanying brochure is most capably written and should prove of great

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authored by Jack Bayha . . . book to which you listen . . , the first book specifically designed and produced on tape instead of the printed page. . . Now you can actually HEAR what good recording, overrecording, wow, flutter, distortion, wrong mike placement, etc., sound like. A test section allows you to adjust the head of your recorder for best results. Chapters include: How a Tape Recorder Works, A Demonstrated Glossary, Recorder Operation, Home Recording, Field Recording, Low Impedance, Microphones, Recorder Maintenance and Testing. Playing time of the Tapebook is one hour. Accompanying each reel is a 28 page booklet containing 80 illustrations to supplement the spoken word. It is unique, enjoyable and instructive.

7½ IPS, 7" Reel, Dual Track \$6.95 postpaid

3¾ IPS, 5″ Reel, Dual Track \$5.95 postpaid

Including a 28 page manual of Illustrations interest to both the erudite music listener as well as the musical novice. Such things as background on the conductor and the compositions, parts of the orchestra and some information on sound reproduction (mikes, sound levels, etc.) are provided.

Stokowski's star shines bright in the musical firmament and as one of the world's greatest conductors (and proponents of high fidelity reproduction) and he conducts these scores with his usual mastery. He has not lost his ability to take you heavenward with the string section as you will hear in the beautiful "Adagio." The percussion displayed in Farberman's "Section I of Evolution" is most certainly a hi-fi man's showpiece. One word of warning . . . if you have heard the ultra hi-fi disc versions of Moussorggky-Ravel's "Pictures at an Exhibition" do not expect to hear "The Great Gate of Kiev" rhump, blast or emote you out of the room . . , there is no apparent "souping up" of this rendition and, thusly, though it may not provide as emotional a bounce, it is nevertheless very realistic and satisfying sound.

The members of the orchestra were individually selected from the musical pool of New York where this recording was made. The stereo reproduction is excellent.

LANDMARKS—STOKOWSKI

Bach: Toccata and Fugue in D Minor Debussy: Clair De Lune Sibelius: The Swan of Tuonela Debussy: Prelude to the Afternoon of a Faun Sibelius: Finlandia Leopold Stokowski and Orchestra CAPITOL ZF-35 421/2 mins ... \$14.95

I wouldn't miss having this in the tape library. We have long since owned the Stokowski discs and this release stands up very well against the older recordings. The tape fidelity is far superior. Having grown up with Stokowski's transcriptions (i.e., the Bach selection) and interpretations, I am thoroughly happy with his view on these pieces . . . even to the rather poetic, nonconformist translation of "Finlandia."

The two Debussy compositions and the Sibelius "Swan of Tuonela" are, for me, well-nigh perfect readings.

A beautiful tape given highest calibre engineering.

A SUZANNE BLOCH RECITAL

Selections played on Lute and Virginal CONCERT HALL EX-68 18:15 mins ...\$8.95

Miss Bloch presents a recording which is "way off the beaten path" and is not only unusual, but sonically interesting. She performs pieces from the 16th and 17th centuries on instruments popular during that same period.

This highly-skilled artist renders three duets on two lutes (special engineering does the trick); then goes on to sing four songs with lute accompaniment, and closes the recording by playing three selections on the virginal (earliest form of harpsichord). In the larter, her agile fingering is aptly demonstrated in the Gibbons composition, "Prelude." The reproduction method used in the second section is such that when Miss Bloch sings she is predominately singing on one channel while the lute plays on the other. Her voice is closely miked and you will hear that she does not possess inaudible breath control.

Overall, this is a very different tape, and although its appeal may be limited, it is a recording of merit.

ORCHESTRAL (Ballet) STRAVINSKY Petrouchka Cento Soli Orchestra of Paris Rudolf Albert, Conductor OMEGATAPE ST 3014 35 mins ... \$14.95

This important new stereo recording does three things: launches a new classical series in stereo by Omegatape, elegantly brings the illusion of theater into the home, and multiplies the audience for one of the world's greatest living composers. Those who are particularly fond of ballet music should rejoice in this tape for its high quality of performance. This conductor knows theater, and especially the Paris theater which welcomed Petrouchka first in 1912. Engineering and recording are equally high, so why shouldn't Stravinsky be a welcome new guest in many homes?—DSW.

LIGHT CONCERT

L'ITALIA The Hollywood Bowl Symphony Orchestra Carmen Dragon, Conductor CAPITOL ZF-3 26 mins \$14.95

The slick sophistication of Hollywood at its best is apparent in this attractive medley of folk and operatic airs. The sound is really stirring, the orchestral arrangements, as in "Santa Lucia" and "Come Back to Sorrento," arc most expert, and the orchestra and conductor are equal to the romantic demands of these light classics. The music illustrates the emotional power of Italian art in general, and this kind of expert recording does for music what color printing has done for the visual arts. The order of selections is well planned, and the absence of vocals suggests background use in what we now call "gracious living."—DSW

POPULAR

WALTER SCHUMANN PRESENTS THE VOICES

Voices of Walter Schumann, with orchestra Henri Rene, Conductor RCA APS-103

15 mins ... \$6.95

On this release are presented a half-dozen soloists, accompanied by chorus and orchestra, in a stereo sound setting of popular songs that we shall continue to hear for a few more decades. This permanently established ensemble is highly professional in all phases of arrangements, production and direction, and they are accorded high quality reproduction that upholds RCA's fine repu-



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tation. This is the kind of distinctive but brief medley that you may wish to splice to other short selections of your own choice. Among the titles are "Blue Tango," "It Had to Be You," "Would You Like to Take a

LENNY HERMAN GEMS

I'll Take You Home Again Kathleen Grandfather's Clock A Bird in a Gilded Cage Lenny Herman Quintet

This Livingstonette contains selections which appear in various albums already taped by Lenny Herman. For those of you who like the secure beat and musicianship displayed by this aggregation (similar to Lombardo, King, Welk, etc.) this tape will serve as a nice, rather nostalgic, tidbit. If you're not acquainted with this group, this sampling will serve as a brief intro-

The stereo recording is well done . . although in the first number the sound is somewhat hollow, as though recorded in a large, empty room. The remaining numbers are more intimately recorded.

DOLLS, DOLLS, DOLLS The Toy Trumpet Oh! You Beautiful Doll Dance of the Dutch Doll Parade of the Wooden Soldiers March of the Toys Wedding of the Painted Doll

The versatile, talented trio of Jerry Murad. Don Les and Al Fiore swing out on their electronic harmonicas and give these tunes a good run for the money. They are supported and further enhanced by an instrumental group which includes piano, drums, string bass, flute, reeds, rhythm and solo guitar.

The mood is gay, the recording hright and of top-notch quality. The entire session was taped at 15 ips and the transfer seems to lose nothing. The younger set enjoyed the selections and the oldsters felt young listening to the catchy rhythms.

TWIN IVORIES

Chop Sticks Sweet Georgia Brown I Got Rhythm Honky-tonk Train Say Si Si Lady in Red Snowfall

Bill Austin, Eddie Scofield, pianists

STEREOPHONY, INC., A 131 S \$6.95

Here is a lively piano duo with plenty of punch on the keyboards. This is a stimulating, entertaining tape that will fill the house with lots of high-spirited music.

The twin grand pianos are used most effectively in the stereo reproduction. The sound of the instruments is realistic. Good backing is provided by drums and string bass, i.e., "Lady in Red." All tunes are played in fast tempo until the dreamy version of Claude Thornhill's theme, "Snowfall."

I can certify that the teenagers hereabout liked this tape . . . so did this post-teenager!

PRESENTING OSCAR MOORE

I Can't Get Started With You There's a Small Hotel Angel Eyes To a Wild Rose It's a Pity to Say Goodnight Tangerine Sweet Lorraine If You Were Mine Taborra

Oscar Moore; guitar Leroy Vinnegar; bass

OMEGATAPE ST 7012 \$11.95

Moore was with Nat "King" Cole's trio for almost a decade and has, in the past, been winner of many awards for his artistry. He has been absent from the national jazz scene for some time. Last year I reviewed "The Guitar of Oscar Moore" (featuring Mike Pacheco on bongo drums) but it was put aside in the initial shuffle and didn't hit print. I was not too satisfied with it in several respects. One of the past complaints has been alleviated this time round, but one still stands.

This time we have Oscar Moore with Leroy Vinnegar featured on bass. You may be accustomed to hearing Vinnegar through the Carl Perkins or Andre Previn tapes.

These selections are played by Moore in a slow, languid style and it is not until he plays his own composition "Taborra" that my interest quickened a little. My feeling is that Moore is a good artist but the sameness of tempo applied in this recording proves monotonous and the whole thing falls a bit flat. I cannot resist the temptation to offer a recipe. Blend Moore with a good jazz pianist (Hammack) and a creative drummer (Pacheco). Mix in plenty of Vinnegar. Add the spice of some good uptempo and blues numbers. Stir in stereo sound and the result might be well worth consuming.

The fidelity has improved greatly over the tape of last year. The recording procedure used in making this tape was a bit off-beat and might be of interest. The bass and rhythm guitar were put on tape. Then later the solo guitar was recorded over the original tape. The solo guitar was recorded by plugging into the studio mixing board and bypassing the usual guitar amplifying box.

SHOW TUNES

SOUTH PACIFIC RODGERS AND HAMMERSTEIN Hollywood Radio City Orchestra Thomas M. Davis, Conductor OMEGATAPE ST-2023 31 mins \$11.95

There is a place for Class B recordings, and all the marks of second rating are sometimes found in a single production: only average voices, little style or characterization, except in the bass soloist, undistinglished orchestration, and most pedestrian conducting. Seven separate selections amble a ong in production-like sequence, recorded possibly in haste, unrelieved by the superior workmanship or even professional musicianship one expects from Hollywood. Note the casual way in which three-dimension sound is turned off and on as the chorus enters to s ipport a solo voice. The movie premiere of South Pacific will create a new wave of rape and disc buying for the music itself, and that may be reason enough for this recotding.-DSW

DEMONSTRATION TAPE

A Miracle in Sound MERCURY DEMS-2 14 mins

Like most samplers, this tape offers a convincing introduction to a number of varied selections, and can aid you in dec ding where to expand your musical tastes. Strangely, for this producer, the ten selections are interrupted by commercials which take precious tape time and discourage rereated hearings of the music itself. Mercury simpler discs, to my knowledge, are free t om the sponsor's words. While good music takes repetition easily, even the words of a poet can wear thin in your living room. (You may wish to rent or borrow such a sampler, or suggest to your dealer that he freely circulate or give such a tape as a bonus.) The sounds of this tape are superb though very brief, and range from popular items like "My Sin," "Nevertheless," "Cha Calipso" and "Alexander's Ragtime Band" t + the Debussy "Iberia," and Frederick Fennel's distinctive "Ruffles and Flourishes" for field trumpets and drums .--- DSW

INTRO TO STEREO CAPITOL ZA-I 13 mins....\$9.95

I have listened many times now to quite a stack of Capitol releases and I am most impressed by the variety of music offered, the artists, and the quality of reproduction. This demonstration tape gives you both the fun of showing off your stereo rig (Part I) as well as short excerpts from some of the riusical releases the company is producing Part II).

Around here the favorite "gimmick" in the first portion is the bowling alley bit ... this is a sure-fire stereo display piece. The before and after (hi-fi vs. stereo hi-fi) is demonstrated in the New Year's eve recording. Also included are sounds of diesel train, fetty boat, subway train, etc.

In the musical portion the narrator, Art Gilmore, again introduces some beforeafter examples and briefly introduces the short tidbits which are sure to cultivate the interest of music lovers. Represented are the Hollywood Bowl Symphony, the Concert Arts Orchestra and the Roger Wagner Chorale. The pops specimens are presented by Stan Kenton, Nat "King" Cole, etc.

Hi-fi stereo.



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Fabulous Eddie

.... star of Replica's organ tapes has played pipe organs since childhood.

> by Fran Soffe

Eddie Osborn, better known as "Fabulous Eddie" shown at the console of the huge organ in the Oriental Theater in Chicago. A Naval airman during the war, he was able to entertain his shipmates aboard the carrier by sending music over the intercom system.

ABULOUS-In any man's language fabulous is the right word to describe Eddie Osborn and his musical abilities. Back at the time when Eddie was two or three years old it is doubtful if the word fabulous was bandied about so profusely as it has been in recent years. Even so, it would have held true then as now, for at the tender age of three Eddie-with his keyboard fascination-was picking out tunes on the family piano such as Ob, Katherina. By the time he was seven years old Eddie was making the keys fly with the St. Louis Blues. Listening to a stereo tape of Eddie playing the Replica pipe organ it is difficult to believe he actually did not have piano lessons; he did take violin lessons when he was nine years old from Victor Young. Much to the amazement of his parents, Charlie and Jeanette Osborn, it was found that instead of taking the violin lessons as scheduled he was in the Granada theatre playing the pipe organ. Another little shocker for his family was the discovery that although he was supposedly violinist in his eighth grade class orchestra at Thorpe Grade School he was playing drums and really doing great. Wonder if he can play the violin!

After Eddie attended Michigan State University where he was better known on the campus as an organist than as a business administration major, he went into the Navy as an aviation cadet. He received his wings at Pensacola in 1941 and for a while was an aviation instructor at Glenview Air Station. From there he was with the celebrated *Fighting 8* in the Pacific flying some eighty combat missions. He was on the carrier USS Intrepid and was able to send his rhythmic music throughout the carriers via the intercommunication systems because of the electronic organ donated for his use. The morale value of his music was so salutary that when Eddie was transferred from the USS Intrepid which was dry-docked, the organ donated to that carrier was transferred with Eddie to the USS Bunker Hill. Later when he was released to naval reserve status as a lieutenant commander he was featured on the Chicago Theatre stage as the *Flying*. *Fighting Minstrel*.

Eddie's vibrant personality shows through in all his music. His irresistible style with a smile has been demonstrated on every kind of keyboard instrument from coast to coast. Eddie has appeared professionally in Chicago clubs, played at many special events and has appeared on a number of television programs plus numerous radio interviews. While he was in college, Eddie was featured on the Pontiac Varsity Show over the old NBC-Blue Network with a nationwide hookup. He was later selected by 32 radio editors as one of the outstanding acts of the Pontiac radio series and returned to play for the special Varsity Show broadcast on Christmas Eve, 1938. For several years he was quite a familiar figure to thousands of persons in Chicago's huge Union Station where he played the organ during the Christmas holidays. Not too long ago, he was playing the pipe organ for the audiences at the Oriental Theatre in Chicago. Even with his busy entertaining sched-



A view of a portion of the many ranks of pipes located in one of the two huge organ chambers in the Replica studio in Des Plaines, III. The organ is especially built for stereo recording and is featured on the Replica tapes. Right: Betty Huck passes the word from the organ chamber to her brother Bill in the control booth via the intercom that all is in readiness for the recording session to begin.

ule, Eddie has made good use of his business administration major. In 1948, he joined the sales staff of J. C. Deagan, Inc., and was named vice president and general manager of the firm in 1954. He is now with the Baldwin Company and is General Supervision Manager for the organ division which necessitates his traveling throughout the United States. Recently he made a demonstration movie for the Baldwin Company. It goes without saying that anyone who has seen Eddie perform in person or heard any one of his Replica stereo tapes that he does have *style with a smile*.

Combine Eddie's music abilities with those of Bill Huck the owner and sound engineer of the Replica Recording Studio in Des Plaines, Illinois and you have stereophonic reproduction of the pipe organ at its utmost. Fortunately for organ enthusiasts, the meeting of Eddie Osborn and Bill Huck caused a fusion of abilities to produce 4-dimensional sound reproduction on stereo tape to satisfy the most descriminating hi-fi ear. The pipe organ that Eddie records on for Replica Tapes is the fulfillment of a dream come true for Bill and Margaret Huck (hereby hangs another tale). The instrument is actually two Wurlitzers skillfully combined into one and housed in a spacious and acoustically perfect studio with a fully equipped conttol booth. One of the original organs was located in the Strand Theatre in Madison, Wisconsin; the other in the Tiffin Theatre in Chicago. This tremendous Replica organ has twenty-three ranks with thirteen ranks of reeds alone, including such unusual voices as Krumet and Musette. There are double sets of percussions and traps, with one set outside the organ chambers, and one set behind the shutters and completely under expression control. At the

back wall of the studio is a gleaming rank of brass fanfare trumpets. Because of its being installed in a brand new studio specifically designed for today's miraculous high fidelity recording techniques, the Replica organ possesses voicings and tonal nuances never before achieved in a pipe organ—in fact, like no other on earth.

To watch Eddie during a recording session at the Replica Wurlitzer is, needless to say, something to behold. The four manual console is mounted on a moveable platform and when Eddie is ready to start recording it is like watching a pilot enter the cockpit of his plane with the huge instrument panel in front of him awaiting his every command. When the Telefunken microphones are placed at strategic locations and the Ampex recording equipment is all set, Bill Huck who is in full charge of the sound engineering, throws the switch in the control booth which starts the wind pressure flowing through the organ making it ready for action. Bill gives Eddie the go-ahead signal for test runs and it is as though Eddie revvs-up the motors and gets ready for the take off. He runs through a few numbers which have been carefully selected previous to the recording session date. When all channels meet the specifications of the adroit sound engineer the session is ready. The final signal is given, and Eddie takes-off into a musical flight to please the *beart* and *ear* of the hi-fi fan.

As evidenced by the overwhelming sound quality of all recordings emerging from the Replica studios the efforts of men like Valdemar Poulsen of Copenhagen, Denmark who actually built the first magnetic recorder back in 1893 have not been in vain. They say there is always room for improvement but at this point it is hard to imagine any further improvements on stereo sound reproduction.



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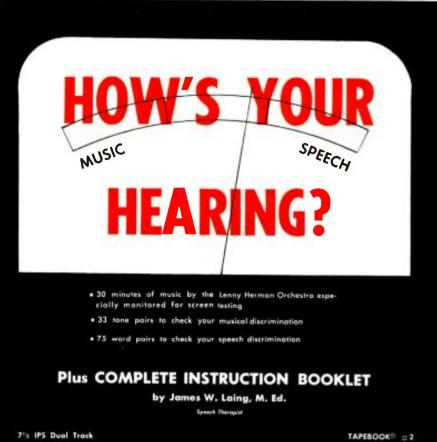
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Sound Effects

(Continued from page 20)

ing that she was actually back in Boston-for she had recognized the voice of the WBZ announcer.)

The Recorder Control Panel was used to collect and mix the sound coming from the external speaker jacks of the three recorders. Recorders A, B and C were thus connected to the panel in jacks A, B and C, respectively, by means of three patch cords.

Three toggle-switches wired to the three jacks enabled us to choose any combination of sounds desired. A recorder could thus continue to run but its sound could be cut off by throwing the proper switch to the off position.

Each switch was wired in series to one side of the jack it controlled but all of the switch-jack combinations were wired in parallel to each other. Thus, throwing a switch opened the circuit for that particular jack but it left the circuits of all the other jacks closed.

Consequently, the total "sound mixture" was fed to the phone plug X which went to the input jack Y of the Speaker Control Panel.

The Speaker Control Panel was the distribution control for the loud speakers located about the stage. With the 'sound mixture" coming into the SCP from the Recorder Control Panel, it could be distributed to speakers, 1, 2 and/or 3 by throwing on or off switches 1, 2 or 3 as needed.

The wiring arrangement of the switches and jacks on the SCP is exactly the same as that of the RCP. In fact, the only difference in the two boxes is that the speaker control is equipped with an input jack (Y) and a toggle switch (Z) instead of an output plug on the recorder control.

The toggle switch Z ordinarily could have been omitted but it was inserted for one specific purpose: by being in series with the input jack, throwing it to the off position would kill all sound simultaneously if necessary. Otherwise three different switches would have to be thrown if three recorders happen to be running.

Volume and tone control had to be controlled individually at each recorder although an eager beaver might want to wire such controls directly into the panel.

Number and lettering the speaker as we did made it easy to follow the cue sheet and sound script.

Throughout our season, our sound effects were quite varied. On different occasions we had to have such things as crickets chirping, seagulls squawking, the ocean surf, automobiles coming and going, crowd noises, telephones ringing, a conversation between three drunks, etc., not to mention various types of music.

By way of an anti-climax, I might mention that the Community Theatre director, Lucille Babcock, became so enthused with tape recording during the season that she finally decided to join T-R-I and get in on the fun with the rest of us.

Splicing

Continued from page 17)

stiff splice can't negotiate the various rollers and turns in your recorder as easily as can unspliced tape. It produces sudden changes in tape tension as it travels over the rollers. The diagonal splice makes these changes more gradual and less noticeable. Thirdly, the diagonal splice keeps the torn ends of the splicing tape off the splice itself. Torn ends tend to ooze adhesive, which will stick adjacent layers of tape together.

(5) You trim away part of the tape as well as the excess splicing tape. Why? To make sure you do trim away *all* of the overhanging splicing tape. This, again, is to prevent sticking.

(6) Why not an overlapping splice? Because an overlapping splice is thicker and stiffer than a matched splice, and therefore has more difficulty in negotiating the rollers and heads smoothly.

(7) Why care about longitudinal alignment? Because a sudden change in alignment of the tape to the head causes a sudden drop in high frequencies, which is quite noticeable. A splice exhibits its worst characteristics at high frequencies—there's no point in making it worse than we have to.

(8) Why this absurd insistence on commercial splicing tape? Because it is the only stuff made which will provide

non-sticking splices. Transparent mending tape has entirely the wrong kind of adhesive, and too much of it. In the period of a few hours, it will ooze adhesive from every edge, and firmly stick adjacent layers of tape to the splice. These globs of adhesive stick to the adjacent layers, so that when they finally do pass the recording head, they bobble over it, not recording, and leave some of the stickum behind on the head, to help further deteriorate the quality of the recording. Then, to add insult to injury, the splices pull apart on you, after about 6 months.

Well! I guess I got carried away by all this. I hope you will find something here of interest or use. Splices are one of my pet peeves, as you may gather. In the course of a day's work, I handle five or ten tapes which have come in from various sources. Three tapes out of five are misspliced by some misguided radio engineer, and they bobble, squeak, and skip as they go out on the air. The folks who make up tape programs can't check every tape every time it comes in . . . so the result is that a given tape collects splices from all over the country, made by panicked engineers and announcers who never really found out how to splice, but have to do something to get the program on (or back on) the air. And, of course, there are those "amateur" sources of transcribed programs, who are learning-as-they-go, and sometimes come up with wierdies ("Scotch" tape wound 'round and 'round the tape in the fashion of a GI splice). I'm hoping that you can glean some helpful information out of this article that will be of assistance not only to inexperienced professional people, but to hobbyists and amateurs, too.

SHOP OR SWAP

Advertising in this section is open to both amateur and commercial ads. TAPE IRECORDING does not guarantee any offer advertised in this column and all swaps, etc., are strictly between individuals. RATES: Commercial ads, \$30 per word, Individual ads, non-commercial, \$.65 a word. Remittances in full should accompany copy. Ads will

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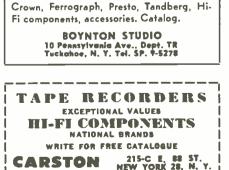
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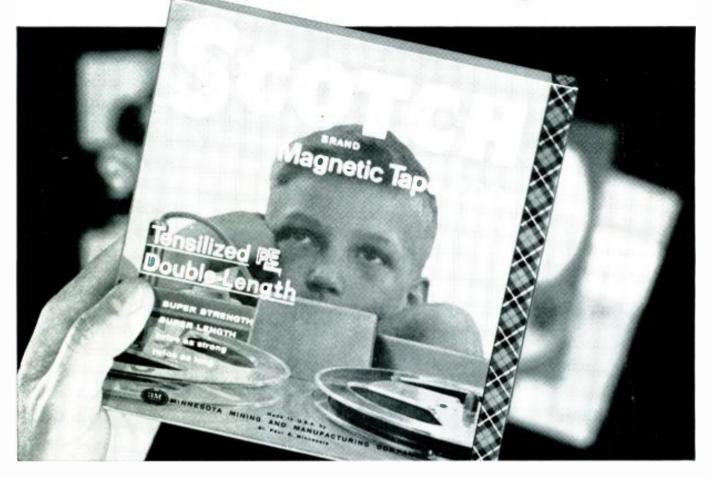
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