

TAPE RECORDING



September, 1962
35c

Mr. Roy Perrin
231 Woodland Ave.
Rutherford, New Jersey



Pardon us while we change our face

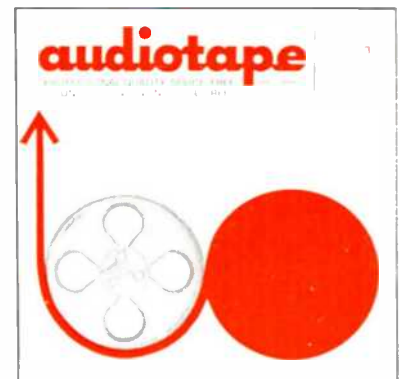
Some say that only women are privileged to change their minds, and their faces, whenever they choose. We disagree. And we have the courage of our convictions, because—from this day forward—Audiotape will be wearing a bright new face you've never seen before.

We think you'll like the new Audiotape look, not only because it's fresh, clean and attractive but because it will now be easier than ever to select the type of Audiotape you need. We've assigned a distinct, highly visible color to each of the eight types so that you can locate your favorite immediately. We've also printed a description of the contents on every package—brief, simple and in large, clear letters. (No matter which Audiotape you favor, you're getting the tape that quality made famous.)

Look for the new family of Audiotape packages. They're well worth your attention.

audiotape
TRADE MARK

AUDIO DEVICES INC., 444 Madison Ave., New York
Offices in Los Angeles, Chicago, Washington, D. C.





COLUMBIA STEREO TAPE CLUB

NOW OFFERS NEW MEMBERS

An outstanding selection of Stereo Tapes—at Club Plan Savings!



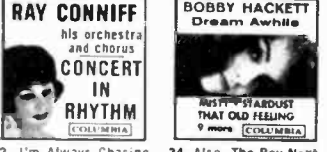
9. Complete academy Award winning score
24. "Ideal for stereo."
11. "He is champion of recordings!"
22. "It soars and it swings."
40. Battle Hymn of the Republic, Dixie, etc.
29. Also: Sabre Dance, Mam'zelle, etc.
7. Do-Re-Mi, Laendler, Maria, 17 in all
25. 13 top stars in 14 classical and pop hits



15. "No better need be sought!"
10. Also: The Hanging Tree, Rawhide, etc.



5. Complete score: "A triumph."
19. "Gorgeous colors."
10. Also: The Hanging Tree, Rawhide, etc.



2. I'm Always Chasing Rainbows, 12 in all
34. Also: The Boy Next Door, Bewitched, etc.



27. "Exquisite, glitters throughout."
18. "A super soprano."

AS A NEW MEMBER YOU MAY HAVE

ANY 3

of these \$6.95 to \$9.95 stereo 4-track tapes

\$5.98

FOR ONLY RETAIL VALUE up to \$29.85

If you join the Club now and agree to purchase as few as 5 selections from the more than 150 to be offered in the coming 12 months



3. Also: How High the Moon, etc.
47. Isle of Capri, Si-boney, Say Si Si, etc.



46. Caravan, in a Persian Market, 9 more
8. "A glittering performance..."



31. A Wonderful Guy, I Love Paris, 12 in all
4. Moonlight Bay, Avalon, 16 hits in all



20. "...perfect in stereo."
45. Too Darn Hot, Bewitched, 43 hits in all



21. Also: Don Elliott, Gerry Mulligan, etc.
16. "Super...best recording..."



28. "Packed with rowdy gusto."
5. The Rain in Spain, Show Me, 16 in all



13. "Fabulous sound."
30. Also includes: April in Paris, etc.



35. "Rich, bellowing sound."

HERE AT LAST is a convenient method of acquiring, systematically and with expert guidance, a stereo tape library of the music you enjoy most—at truly remarkable savings! The selections shown here are typical of the wide range of entertainment you'll be offered each month — every one reproduced with all the flawless clarity and brilliance of modern pre-recorded stereo tape!

By joining now, you may have your choice of ANY THREE of the outstanding 4-track stereo tapes shown here — up to a \$29.85 retail value — ALL THREE for only \$5.98.

TO RECEIVE YOUR 3 PRE-RECORDED STEREO TAPES FOR ONLY \$5.98 — simply fill in and mail the coupon today. Be sure to indicate which Club Division best suits your musical taste: Classical or Popular.

HOW THE CLUB OPERATES: Each month the Club's staff of music experts selects outstanding selections for both Divisions. These selections are described in the Club Magazine, which you receive free each month.

You may accept the monthly selection for your Division . . . or take any of the wide variety of other tapes offered to members of both Divisions in the Magazine . . . or take NO tape in any particular month.

Your only membership obligation is to purchase 5 tapes from the more than 150 to be offered in the coming 12 months. Thereafter, you have no further obligation to buy any additional tapes . . . and you may discontinue your membership at any time.

FREE BONUS TAPES GIVEN REGULARLY. If you wish to continue as a member after purchasing five tapes, you will receive — FREE — a pre-recorded bonus tape of your choice for every three additional selections you buy! The tapes you want are mailed and billed to you at the list price of \$6.95 (Classical \$7.95; occasional Original Cast tapes somewhat higher), plus a small mailing and handling charge.

SEND NO MONEY — just mail the coupon today to receive 3 tapes for only \$5.98.

IMPORTANT NOTE: All tapes offered by the Club must be played on 4-track stereo play-back equipment. If your tape recorder does not play 4-track stereo tapes, you may be able to convert it simply and economically. See your local service dealer for complete details.

COLUMBIA STEREO TAPE CLUB
Terre Haute, Indiana

SEND NO MONEY—mail coupon to receive 3 tapes for \$5.98

COLUMBIA STEREO TAPE CLUB, Dept. 403-7
Terre Haute, Indiana

**CIRCLE 3
NUMBERS:**

I accept your special offer and have circled at the right the numbers of the 3 tapes I would like to receive for \$5.98, plus small mailing and handling charge. Enroll me in the following Division of the Club:

CLASSICAL POPULAR

I understand that I may select tapes from either Division. I agree to purchase five selections from the more than 150 to be offered in the coming 12 months, at the list price plus small mailing and handling charge. Thereafter, if I decide to continue my membership, I am to receive a 4-track pre-recorded bonus tape of my choice FREE for every three additional selections I accept.

Name (Please Print)

Address

City Zone State

APO, FPO addressees: write for special offer 300

- 2 15 29
- 3 16 30
- 4 18 31
- 5 19 34
- 6 20 35
- 7 21 40
- 8 22 45
- 9 24 46
- 10 25 47
- 11 27 48
- 13 28

9/7/5

PLANNING A PARTY??

Here's the answer to the old-time question of what can we do that's different?



SEND FOR A TAPE FUN KIT

The Tape Fun Kit is composed of whimsical, hilarity provoking, laugh-filled skits, all of which are designed primarily for fun—and lots of it. Each skit is short and each has a script for every character called for.

10 SCRIPTS INCLUDED

Kit No. 1 contains ten scripts—all different—all amusing. These skits are excellent for affairs where a goodly number of party-goers are present. Everyone has something to say and he or she can say it as his imagination interprets it. The ten scripts encompass 26 different characters, 14 male and 12 female.

TAPE KIT NO. 1—\$2.00

Order yours today. Use the handy form below.

(Add 24¢ each if First Class Mail delivery is desired.)

TAPE RECORDING

Severna Park, Maryland

Please send me Tape Fun Kit No. 1. I enclose \$2.00. (Send First Class. I enclose additional.)

Name

Address

City Zone State

TAPE RECORDING

VOL. 9 No. 10

SEPTEMBER 1962

MARK MOONEY, JR.
Editor and Publisher

JOHN L. ALLEN
Circulation Manager

JEAN COVER
Assistant Editor

ROBERT W. LAPHAM
Art Director

JAMES H. MILLS, SR.
Technical Consultant

ANTHONY J. MORIN, JR.
National Advertising Manager
274 Madison Ave., New York 16, N. Y.

IN THIS ISSUE

OPERATION GIRL COMMENTATOR	Irving Geller	20
TAPE CARRILLON PLAYER		24
REMOTE MIKE CONTROL AT 100 FEET	Tommy Thomas	26
RECORDING FROM RADIO AND TV	Bart Pierson	31
NEW TAPES		6
CONTEST WINNERS		11
CROSSTALK		12
INDUSTRY NEWS		13
TAPESONDENTS WANTED		14
TAPE IN EDUCATION		15
LETTERS		16
NEW PRODUCTS		18
TAPE CLUB NEWS		19

Cover: Girl Scout Commentator recording Indian Dance Group from Minneapolis, Minn., using a Norelco 100 Portable



TAPE RECORDING is published monthly by Mooney-Rowan Publications, Inc., 101 Balto.-Annapolis Blvd., Severna Park, Md. (301-647-1800). Entered as second class matter January 7, 1954 at the Postoffice Severna Park, Md. under the Act of March 3, 1879. National Advertising Representative: J. V. Associates, 274 Madison Ave., New York 16, N. Y. (212-679-0030). Subscriptions, U. S. and Possessions, Canada and Mexico \$5.75 for one year, all others add \$1.00 a year. Two years \$7.00. Contents copyrighted by Mooney-Rowan Publications, Inc., 1962. Printed in U. S. A.

POSTMASTER—Send all address labels clipped from undeliverable copies with Form 3579 to Tape Recording, 101 Balto.-Annapolis Blvd., Severna Park, Md.



a **V-M**
EXCLUSIVE...



Language "Treasure Chests" in French or Spanish!

Your V-M dealer has a pre-recorded demonstration tape that will enable you to hear yourself speak a foreign language in just three minutes! At the same time you'll see an eye-opening demonstration of V-M's amazing 'ADD+A+TRACK'® in action!



V-M Model 722
 'ADD+A+TRACK'® Tape Recorder

With interest in foreign language at an all time high, V-M has a most stimulating new idea for tape recorder owners . . . foreign language "Treasure Chests." Now you can learn to speak conversational French or Spanish quickly . . . easily and correctly. All you need is a V-M 'ADD+A+TRACK'® Tape Recorder and a few minutes to practice each evening.

V-M's amazing 'ADD+A+TRACK'® feature enables you to listen to a recorded language lesson on one track, while answering your instructor's questions on a second track. On playback, you hear both tracks simultaneously. Each "Treasure Chest" contains:

- **Four thirty minute Recorded Tapes.** Instruction is entirely by authentic native speakers, so that pronunciation conforms with modern usage.
- **Four Flip-Over Picture Booklets** permit quick association with the words and phrases spoken by the instructors to illustrations of actual scenes.
- **A Glossary** lists in alphabetical order all of the words used in each course, along with their literal and idiomatic translation.
- **An Instruction Book** points out how easy it is to obtain the best results while learning and prescribes best procedure for study.

Stop at your V-M Dealer's for an 'ADD+A+TRACK'® demonstration and three minute language lesson Today!

the **V**oice **M** of **M**usic®

V-M CORPORATION • BENTON HARBOR, MICHIGAN • KNOWN FOR THE FINEST IN TAPE RECORDERS, RECORD CHANGERS AND PHONOGRAPHS

NEW TAPES

★—Fair

★★—Good

★★★—Very Good

★★★★—Excellent

CLASSICAL

Reviewed by Robert E. Benson



Music ★★★★★
Performance ★★★★★
Fidelity ★★★★★
Stereo Effect ★★★★★

BRAHMS: Piano Concerto No. 2 in B Flat Major, Op. 83

Sviatoslav Richter, pianist; Chicago Symphony Orchestra conducted by Erich Leinsdorf

RCA FTC 2055

4-track, 7½ ips

\$8.95...47 mins.

Richter's controversial performance of the *Piano Concerto No. 2* was recorded in October of last year, at the beginning of his tour of the United States, a tour which established him immediately as a highly individual, mature artist, apparently with no technical limitations. Although some listeners may question certain points of interpretation, it cannot be doubted that this is great playing. The Chicago Symphony is in top form under the baton of Erich Leinsdorf, who stepped in at the last minute substituting for the ailing Fritz Reiner. Reproduction on the Victor tape is superb, with a natural balance between the rich piano and splendid orchestra. Tape processing is admirable; a thoroughly distinguished release.



Music ★★★★★
Performance ★★
Fidelity ★★
Stereo Effect ★★

BRAHMS: Piano Concerto No. 1 in D Minor, Op. 15 Piano Concerto No. 2 in B Flat Major, Op. 83

Julius Katchen, pianist, with the London Symphony Orchestra conducted by Pierre Monteux and Janos Ferencsik

LONDON LCK 80070

4-track, 7½ ips

\$11.95...93 mins.

This new LONDON tape combines both of the Brahms piano concertos, a formidable task for any pianist, as both make extraordinary demands on the soloist, both musically and technically. Katchen has made some fine recordings before, notably the Rachmaninoff *Paganini Rhapsody* coupled with Dohnanyi's *Nursery Tune Variations* (London LCL 80036, \$7.95). However, here he sounds rather ill-at-ease when compared with the nobility and assurance of the Fleisher *Piano Concerto No. 1* (Epic EC 802, \$7.95), or the individuality and strength of Richter in the *Piano Concerto*

No. 2. The London Symphony Orchestra is a fine organization, but not as good as the Cleveland or Chicago orchestras, and reproduction on the London tape is marred by overly-sharp highs and a piano lacking definition. There is much to admire on the new London tape, but the performances fall short of the competition, except for value in playing time, the London being a distinct bargain.



Music ★★★★★
Performance ★★
Fidelity ★★
Stereo Effect ★★

BEETHOVEN: Symphony No. 9 in D Minor, Op. 125 "Choral" Symphony No. 1 in C, Op. 21

Phyllis Curtin, soprano; Florence Kopleff, contralto; John McCollum, tenor; Donald Gramm, bass; Chicago Symphony Orchestra and Chorus; Fritz Reiner, cond.

RCA VICTOR FTC 3005

4-track, 7½ ips

\$8.95...1 hr. 31 mins.

In spite of the wild acclaim for these performances in the booklet accompanying this release, I find them quite disappointing both in performance and reproduction.

Reiner's tempi are brisk and sure, but too frequently the tension lags and the performance is bogged down with overstated details, and orchestral playing is not consistently of the usual Chicago Symphony standard. The actual performances of these works in Orchestra Hall in April of 1961 are said to have been magnificent, but the inspiration was evidently lacking during the recording sessions. This surely is not one of the best Reiner-Chicago Symphony recordings.

Recorded sound is definitely overly resonant and muddy, strings lack brilliance and the soloists in the last movement of the Ninth are too distant. Placement on the tape is rather awkward, with the changeover being before the last movement of the Ninth, certainly a moment which should not be interrupted.

This new Victor tape is superior to the London version of the Ninth with Ansermet and the Suisse Romande Orchestra, which is scant praise. The Krips performance on Everest 43-006 is the best of the lot, but we are still waiting for an ideal recording of this, one of the greatest of all symphonies.



Music ★★★★★
Performance ★★
Fidelity ★★
Stereo Effect ★★

HANDEL: Water Music Suite (arr. Harty-Szell) Royal Fireworks Music (arr. Harty)

Minuet from "The Faithful Shepherd" (arr. Beecham) Largo from "Xerxes" (arr. Reinhard)

London Symphony Orchestra conducted by George Szell

LONDON LCL 90089

4-track, 7½ ips

\$7.95...43 mins.

This tape contains practically all of Handel's best-known orchestral works, played with precision and authority by the London Symphony Orchestra conducted by George Szell. Beecham's arrangement of the Minuet from "The Faithful Shepherd" is a welcome addition to the tape repertory, but the Largo from *Xerxes* sounds overly pompous in this rather heavy orchestration by Reinhard.

I cannot be very enthusiastic about reproduction on this tape. There is a tendency towards shrillness in the strings, with boomy, undefined bass. Vanguard's version of the two suites (VTC 1621) is slightly better, but for a tape really doing justice to Handel, try Epic EC 803, with Van Beinum and the Concertgebouw Orchestra in a magnificent performance of the complete *Water Music*.



Music ★★★
Performance ★★★
Fidelity ★★★
Stereo Effect ★★★

LIVINGSTON MASTERPIECES

Side 1: MUSSORGSKY: Night on Bald Mountain

BRAHMS: Academic Festival Overture

ROSINI: William Tell Overture

SIBELIUS: Finlandia

Side 2: WAGNER: Meistersinger Overture

SCHUBERT: Symphony No. 8

(Unfinished)

PFITZNER: Little Symphony, opus 44

BEETHOVEN: Egmont Overture

Florence May Festival, Vittorio Gui, Conductor

Graz Philharmonic, Miltiades Caridis, Conductor

LIVINGSTON 4T-100-6

4-track, 7½ ips

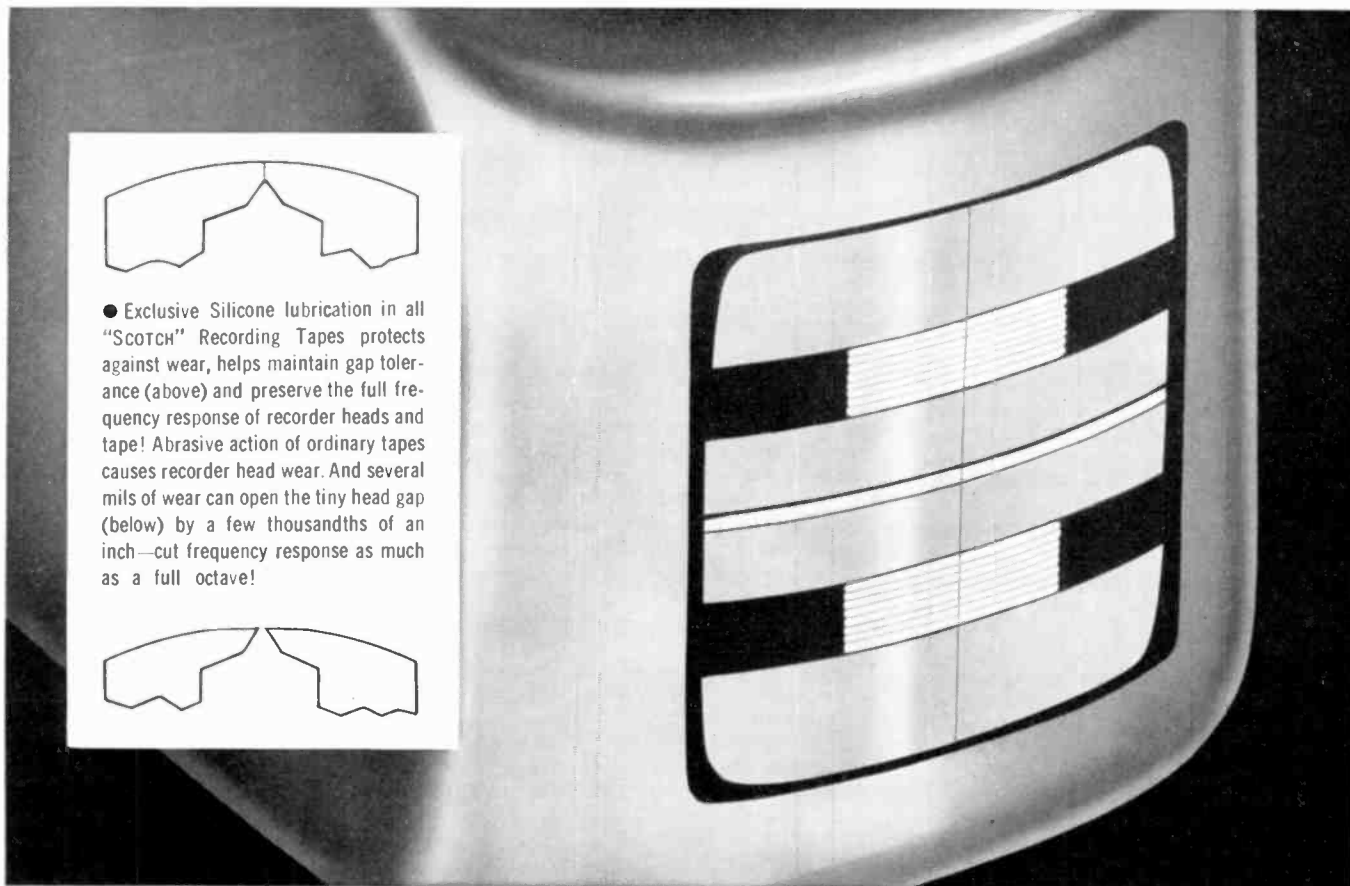
\$10.95...100 mins.

This is the sixth in Livingston's new 100 minute series of stereo tape releases, with more on the way. The idea of a full concert of 50 minutes of music on each side is a good demonstration of the merits of ¼ track tape over records. An LP record of this length would be an innovation. Livingston is certainly on the right track.

This tape contains some rather well known classical selections played at the Florence May Festival with Vittorio Gui conducting, and one by the Graz Philharmonic. There are enough "pop concert" selections, such as the "William Tell Overture," "Finlandia" and Schubert's "Un-

SOUND TALK

...from the world's most experienced manufacturer of recording tapes



● Exclusive Silicone lubrication in all "SCOTCH" Recording Tapes protects against wear, helps maintain gap tolerance (above) and preserve the full frequency response of recorder heads and tape! Abrasive action of ordinary tapes causes recorder head wear. And several mils of wear can open the tiny head gap (below) by a few thousandths of an inch—cut frequency response as much as a full octave!



How to keep your head in 4-track stereo!

EXCLUSIVE SILICONE LUBRICATION IN SCOTCH® BRAND RECORDING TAPES PROTECTS HEADS, EXTENDS TAPE LIFE!

When abrasion can actually wear away frequency response, as shown above, today's delicate 4-track recorder heads deserve tender care. They deserve the *exclusive* protection of Silicone lubrication that's available *only* in "SCOTCH" BRAND Recording Tapes and lasts the lifetime of the tape.

Silicone lubrication not only protects against wear—it extends tape life, eliminates chance of squeal by assuring smooth tape travel! Silicone lubrication is impregnated throughout the oxide coating of all "SCOTCH" Recording Tapes. It's completely clean and dry—nothing gummy to attract rust or clog head gap.

This built-in lubrication is one of many reasons why professionals and discriminating home

recordists alike insist on "SCOTCH" Recording Tapes. High-potency oxides make possible thinner, more flexible coatings that ensure intimate head-to-tape contact for maximum frequency response, wide dynamic range, sharp resolution. Precise backing and coating thicknesses assure identical recording properties inch after inch, reel after reel. So to help ensure the lasting fine sound of your equipment (4, 2 or full track) we suggest you *play the favorite* ... "SCOTCH" BRAND!



For free descriptive literature, write Magnetic Products Division, Dept. MDF-92, 3M Company, St. Paul 1, Minn.

"SCOTCH" AND THE PLAID DESIGN ARE REGISTERED TRADEMARKS OF MINNESOTA MINING & MANUFACTURING CO., ST. PAUL 1, MINN. EXPORT: 99 PARK AVE., NEW YORK, CANADA: LONDON, ONTARIO. ©1962, 3M CO

Magnetic Products Division **3M** COMPANY

finished Symphony," to satisfy the less advanced classical connoisseur. Frequency range and stereo effect are satisfactory, but the effort to provide great dynamic range has resulted in some passages being recorded too low for good listening comfort.—*F. N. West*



Music ★★★★★
Performance ★★★★★
Fidelity ★★★★★
Stereo Effect ★★★★★

STRAVINSKY: Firebird Ballet (complete)
Columbia Symphony Orchestra conducted by Igor Stravinsky
COLUMBIA MQ 450
4-track, 7 1/2 ips
\$7.95...44 mins.

Since its first performance in 1910, the *Firebird* has been a favorite with concert audiences, and its popularity is easy to understand, with its exotic topic and lush orchestration. There is so much wonderful music omitted from the familiar suite drawn from the ballet, that this new recording of the complete work is more than welcome. Among the excerpts not included in the usual Suite, I particularly like the Scherzo (Princesses With the Golden Apples) and the episodes with Kastchei and his followers.

Performance here is definitive, with the composer evoking superlative playing from the Columbia Symphony Orchestra. Quality of sound is extraordinary, wide-range and clean, although I found a slight cut in the highs necessary. Columbia's processing is perfect, with minimum hiss and no cross-talk. Definitely one of the best tapes we've had for a long while, and decidedly superior to the London twin-pack containing both the *Firebird* and *Le Sacre du Printemps*.

POPULAR



Music ★★★★★
Performance ★★★★★
Fidelity ★★★★★
Stereo Effect ★★★★★

DANCE PARTY

Contains 45 popular hits, such as Keep It Gay, Sunny Side Up, I Feel Marvelous, The Way You Look Tonight, I Could Have Danced All Night, Old Devil Moon, and others.

Phil Bennett and his Society Dance Orchestra.

LIVINGSTON 4T-68

4-track, 7 1/2 ips
\$8.95...44 mins.

Phil Bennett and His Society Dance Orchestra present 45 popular tunes played in the "Lester Lanin" or "business man's bounce" style of continuous dance music. The melodies run on and on from fox trots through cha-cha's, waltzes and tangos, and provide a good toe-tapping program for your own party.

Except for a few high frequency notes that are a bit too sharp at times, Livingston's sound is well recorded, with nicely balanced stereo and full fidelity.—*F. N. West*



Music ★★★★★
Performance ★★★★★
Fidelity ★★★★★
Stereo Effect ★★★★★

THE MUSIC OF LEROY ANDERSON

Side 1: Belle of the Ball, Fiddle-Fiddle, Sandpaper Ballet, Sarabande, The Penny-Whistle Song, Syncopated Clock
Side 2: The First Day of Spring, Forgotten Dreams, Blue Tango, Sleigh Ride, Serenata, Song of the Bells
Livingston Orchestra
LIVINGSTON 4T-67D
4-track, 7 1/2 ips
\$7.95...39 mins.

The number of tape releases by various orchestras, of Leroy Anderson's music is proof of the popularity of this gifted composer. This release from the Livingston Stereo Library belongs in its place with the others. Although the name of the orchestra which provided "full orchestration" is not disclosed, the performance is generally intelligent, often spirited as it should be, and reasonably satisfactory from a stereo standpoint.

The recording is fairly well balanced, but brilliance and sharp high notes are not all that they could be.

Anyone acquainted with Anderson's music knows what to expect and this tape won't let them down, even though at times it seems to get a bit listless.—*F. N. West*



Music ★★★★★
Performance ★★★★★
Fidelity ★★★★★
Stereo Effect ★★★★★

THE THIRTEEN FINGERS OF SIR JULIAN

Sequence A: Caravan, On The Street Where You Live, Misty, Canadian Sunset, Third Man Theme, Sir Julian's Mambo
Sequence B: Back Goes Berserk, Diane, Song From Moulin Rouge, Peanut Vendor, Sir Julian's Blues, Lover

Sir Julian at the Organ
RCA VICTOR FTP 1122
4-track, 7 1/2 ips
\$7.95...34 mins.

An organist who titles himself "Sir Julian," romps through a hodge-bodge of popular tunes, including two of his own compositions, a "Mambo" and a "Blues," on an electric organ.

The arrangements are novel and played in a rhythmic style without much emphasis on melody. The recording is sharp, clear and quite brilliant, to the extent that at times, the volume of the high notes almost becomes unpleasant.

From his activity at the Console, it would seem that the versatile Sir Julian really has thirteen fingers.—*F. N. West*



Music ★★★★★
Performance ★★★★★
Fidelity ★★★★★
Stereo Effect ★★★★★

MOON RIVER

Side 1: Moon River, Sleepy Lagoon, Willow Weep For Me, Far Away, The Day the Snow is Meltin', High On A Windy Hill

Side 2: The Wayward Wind, Beyond The Sea, You've Come Home, Lullaby of the Leaves, Ebb Tide, The Day the Rains Came
The Pete King Orchestra and Chorus.

KAPP-MEDALLION MSC 47020

4-track, 7 1/2 ips
\$7.95...34 1/2 mins.

Once in a "Blue Moon," along comes a simple, straight forward, just naturally played tape that has emotional appeal. "Moon River" is such a tape. Splendidly orchestrated, lush with beautiful sound, at times tastefully augmented with a choral group, it moves along from one pleasant, peaceful ballad to another, and all too soon it has ended.

Music for relaxing, reminiscing, or just plain outright enjoyment—this performance by the talented Pete King and company makes delightful listening. There should be an encore to this one.—*F. N. West*



Music ★★★★★
Performance ★★★★★
Fidelity ★★★★★
Stereo Effect ★★★★★

REMEMBER THE NIGHT, AND THE GIRL, AND THE SONG

Side 1: Blue Skies, I Don't Want To Walk Without You Baby, Green Eyes, Cecelia, Nighty-Night, Sam's Song

Side 2: Marie, And The Angles Sing, I Guess I'll Have to Change My Plan, Tangerine, Hong Kong Blues, Chattanooga Choo-Choo

Singers and Swingers of the Great Bands.
WARNER BROS. WSTC 1426

4-track, 7 1/2 ips
\$7.95...35 mins.

Back in the 30's and 40's, the big dance bands of the day featured a vocalist who became identified with a special song that became thereafter a high spot in the singer's career.

Although these original performance recordings are hard to find today, Warner Bros. have persuaded the artists who made them to return to the studio and record them again in stereophonic sound.

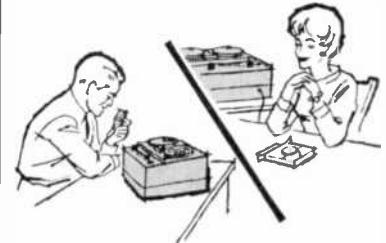
Using both old arrangements and some bright new ones, the singer and orchestras have captured on tape a wonderful, nostalgic collection of twelve hit songs that bring back fond memories of bands, singers and songs from the good old days. Art Lund, Helen Forrest, Skinnay Eunis and Martha Tilton, to name a few, sound better than ever in today's fine stereo recording.

A collector's item!—*F. N. West*



**GOOD HEADS
PREFER
TARZIAN TAPE**

ITEM	Reel Size	Length (Feet)	Code Number	Approximate Recording Time		
				1½ I.P.S.	3¾ I.P.S.	7½ I.P.S.
Standard Play 1.5 Mil Acetate Tape	3"	150	1131-01	30 mins.	15 mins.	7½ mins.
	5"	600	1131-06	2 hrs.	1 hr.	30 mins.
	7"	1200	1131-12	4 hrs.	2 hrs.	1 hr.
	Reel Hub	2400 2400	1131-24R 1131-24H	8 hrs. 8 hrs.	4 hrs. 4 hrs.	2 hrs. 2 hrs.
Long Play 1.0 Mil Acetate Tape	3"	225	1121-02	48 mins.	24 mins.	12 mins.
	5"	900	1121-09	3 hrs.	1½ hrs.	45 mins.
	7"	1800	1121-18	6 hrs.	3 hrs.	1½ hrs.
	Reel Hub	3600 3600	1121-36R 1121-36H	12 hrs. 12 hrs.	6 hrs. 6 hrs.	3 hrs. 3 hrs.
Long Play 1.0 Mil Mylar Tape	3"	225	1321-02	48 mins.	24 mins.	12 mins.
	5"	900	1321-09	3 hrs.	1½ hrs.	45 mins.
	7"	1800	1321-18	6 hrs.	3 hrs.	1½ hrs.
	Reel Hub	3600 3600	1321-36R 1321-36H	12 hrs. 12 hrs.	6 hrs. 6 hrs.	3 hrs. 3 hrs.
Empty Reels and Boxes	3"			NOTE: These figures are for monaural 2-track, and stereophonic 4-track recording. Divide by ½ to find recording time for single-track monaural and two-track stereophonic systems. I.P.S. indicates speed of tape past recording head in inches per second.		
	5"					
	7"					
Premium Package			1131-12RM6			



Engineered for Highest Fidelity

Sarkes Tarzian, Inc., a leading manufacturer in the electronics and communications industry, guarantees that every reel of Tarzian Tape is manufactured to identical professional quality standards. Three types of Tarzian Tape satisfy virtually every recording requirement: Standard Play 1.5 mil acetate, Long Play 1.0 mil acetate, and Long Play 1.0 mil Mylar*. The 1 mil tapes give 50% more recording time on the same size reel.

Try a Reel Today

Let your own ears prove the sound reproduction superiority of Tarzian Tape over any other brand—of lower, equal, or higher price. Discover for yourself that, while Tarzian Tape's price is competitive, its quality is unchallenged. Write for your free copy of Sarkes Tarzian's 16-page booklet, "The Care and Feeding of Tape Recorders"—a handy guide to increased benefit and enjoyment from your tape equipment.

**Typical Tape Applications ...
Have You Tried Them?**

- Recording TV, AM and FM radio programs
- Taping valuable records, both old 78's and newer 45's and 33½'s to preserve record quality
- Recording family events, such as weddings, birthdays, reunions, children's activities
- Taped letters—to family, friends, business and club acquaintances
- Practicing speeches, language, shorthand, music, many other learning activities
- Recording "live" concerts, lectures, party activities, theatrical events, special sound effects
- Adding sound to home movies and slide programs



*DuPont trademark for its polyester film



SARKES TARZIAN, Inc.

World's Leading Manufacturers of TV and FM Tuners • Closed Circuit TV Systems • Broadcast Equipment • Air Trimmers • FM Radios • Magnetic Recording Tape • Semiconductor Devices
MAGNETIC TAPE DIVISION • BLOOMINGTON, INDIANA
 Export: Ad Auriema, Inc., N. Y. • In Canada, Cross Canada Electronics, Waterloo, Ont.



Music ★★★
 Performance ★★★★★
 Fidelity ★★★★★
 Stereo Effect ★★★★★

LOVE EMBERS AND FLAME

Side 1: Love Embers and Flame, What Can I Say After I Say I'm Sorry?, Lady of the Evening, How About Me, The Lover's Waltz, Would You
 Side 2: Now That You're Gone, For All We Know, Always and Always, It's A Blue World, Where Are You?, Dark Is the Night

Jackie Gleason and His Orchestra
 CAPITOL ZW 1689
 4-track, 7½ ips
 \$7.98...32 mins.

This is a mood music tape that might well have been titled "Music for a Rainy Night," for it's that kind of smooth, soft, velvet instrumental that will please those who love full orchestras without tricked-up sound. Jackie Gleason uses well balanced orchestral arrangements, with occasional solo parts, as well as two string orchestras, to create a variety of color to accompany the mood of his music. The recording, fidelity and stereo effect by Capitol are as sweet as Jackie's music. This is no hurried production—its slow, easy and relaxed pace may even lull you to sleep.—*F. N. West*



Music ★★★
 Performance ★★★★★
 Fidelity ★★★★★
 Stereo Effect ★★★

STRINGS OVER HAWAII

Side 1: Blue Hawaii, I'll Be Thinking Of You, Lovely Hula Girl, Sea Breeze, E Malii Mai, Hawaiian Guitar, Hawaiian Wedding Song
 Side 2: Mapuana, Forevermore, Beyond The Rainbow, Silhouette Hula, Medley Don Tiare and His Enchanting Violins
 WARNER BROS. WSTC 1420
 4-track, 7½ ips
 \$7.95...34 mins.

Those who have sought musical novelty without "gimmicks" will take heart when they hear this one. Hawaiian music has been predominantly guitars and ukes, and has long been recognized as the music of love and romance. But here Don Tiare, a native Hawaiian, with one of the largest string ensembles in the world, has adapted these beautiful melodies so that violins tell their story—and the result is breath-taking, new, and delightful to hear.

Technically, the recording has been well done. Very high notes that come through without stridency, stereo that is natural, balance that leaves nothing to be desired.

There's room for more of this type.—*F. N. West*

RELIGIOUS



Music ★★★★★
 Performance ★★★★★
 Fidelity ★★★★★
 Stereo Effect ★★★★★

INSPIRATION

Sequence A: The Heavens Are Telling, Deep River, Largo from Xerses, Evening, Prayer from Hansel & Gretel, Jesu, Joy of Man's Desiring, Praise God From Whom all Blessings Flow
 Sequence B: Pilgrim's Chorus, Sheep May Safely Graze, Pater Noster, O Saviour, Hear Me.

Leopold Stokowski & Norman Luboff Choir, with the New Symphony Orchestra of London.

RCA VICTOR FTC 2102
 4-track, 7½ ips
 \$8.95...44 mins.

The combination of Leopold Stokowski, the Norman Luboff Choir and the New Symphony Orchestra of London is inspiration itself. Combine these with the great music listed above, and you have, without a doubt, a winning combination.

Although the Norman Luboff Choir is composed of a dozen voices, their presentations are sensitive, soulful and awe-inspiring, without being overdone.—*F. N. West*

CAPSULE REVIEWS

CLASSICAL

COLUMBIA OQ 458, BRAVO GIOVANNI: 51 min. \$8.95 Cesare Siepi heads this original cast recording sounding rather ill-at-ease in this somewhat contrived musical comedy, all recorded in over-bright sound by Columbia. Siepi is heard to much better advantage in a collection of Italian songs, assisted by an orchestra and chorus conducted by Dino di Stefano (LONDON LOL 90047 43 min. \$7.95).

LONDON LCL 80094, DELIBES: Highlights from *Coppelia* and *Sylvia*, 47 min. \$7.95 Ernest Ansermet conducts the Suisse Romande Orchestra in most of the important highlights from both of these ballets, recorded with some of London's finest sound.

LONDON LCL 80097, HOLST: The Planets, Op. 32, 50 min. \$7.95 Herbert von Karajan conducting the Vienna Philharmonic Orchestra and the Vienna State Opera Chorus. This fascinating music, played as well as it is here, deserves much better reproduction. The enormous orchestra is not clearly recorded, woodwinds are too distant, and there's no bite to the brass and percussion. Too bad, for this could have been a real showpiece.

LONDON LCL 80096, ROSSINI OVERTURES, 45 min. \$7.95 Pierino Gamba conducts the London Symphony Orchestra in five of the most popular overtures of Rossini—*William Tell*, *Semiramide*, *The Thieving Magpie*, *The Silken Ladder* and *The Barber*

of Seville. Performances are adept and spritely, but the sound, spectacular and clean though it is, has very little depth, and the rather dry acoustics rob the horns of their richness.

WESTMINSTER WTC 155, RESPIGHI: *Feste Romane* and *Fountains of Rome*, 41 min. \$7.95 St. Cecilia Academy Orchestra conducted by Fernando Previtali. This tape is a puzzler. *Fountains* is a highly satisfactory performance with good sound, but *Roman Festivals* is recorded with such inferior sound—muddy, marked absence of high frequencies and confused directionality—that it never should have been released.

POPULAR

COLUMBIA CO-359, BENNY GOODMAN SWINGS AGAIN. Benny Goodman and his orchestra, 4 track, 7½ ips, 37 mins. \$6.95. Jazz fans will love this one, recorded live on the West Coast. The "King of Swing" and his nine top-flight jazzmen go to town on a group of Goodman favorites as only this group can. There is something different and special in a live recording session, and the Goodman Band rises to the occasion and the demands of it's audience, with thrilling results. Technically, the tape suffers somewhat when compared with clean studio recordings. There is less brilliance and dynamic range, but, overall, if you like Benny Goodman, you should not miss this one.

RCA VICTOR FTP-1073, THIS IS NORMAN LUBOFF. The Norman Luboff Choir, 4 track-7½ ips., 34 mins., \$7.95.

The first tape of the Norman Luboff Choir presents his twelve talented voices in a varied program of songs, performed in an easy going natural style. Smooth arrangements, well recorded, with nicely balanced stereo, make this a "sing-along-with-Luboff" that everyone will enjoy.

RCA VICTOR FTP 1083, YOU'RE MY GIRL. The Norman Luboff Choir, 4 track-7½ ips., 34 mins., \$7.95. The Norman Luboff Choir blends its voices in a group of "girl" songs, all sentimental and sweet, aimed at the object of your affections. Tender melodies, the kind best sung by a glee club, are presented in a warm and appealing style, unique with this group. Recording and stereo are fine. If you can't sing to your girl, let the Luboff Choir do it for you.

WARNER BROS. WSTC 1428. LIVE CONCERT, music made famous by GLENN MILLER. Original Miller Band members, 4 track-7½ ips., 34 mins., \$7.95. Ray Eberle, Tex Beneke, The Modernaires and most of the original members of the Glenn Miller Band were re-united at Santa Monica Civic Auditorium to pay tribute to one of the great music makers of our time. Their enthusiasm for the work is matched only by the wild applause of the big crowd, as they weave a magic spell of Miller favorites that will bring back extremely pleasant memories. Lacks only the presence of the Maestro himself, to make it complete. Sound is adequate for this type of recording.

"WHY MY RECORDER IS IMPORTANT TO ME" CONTEST

WIN A REEL OF TAPE. Tell us in your own words why your recorder is important to you, not why it could be important to someone else. Entries will be judged on the basis of their usefulness to others and on the uniqueness of the recorder use. No entries will be returned. Address your entry to: Important Recorder Contest, Tape Recording Magazine, Severna Park, Md.

Gentlemen:

Many years ago I studied music and was taught to play the piano.

I never considered myself a real success as a piano player and as time went by I gradually drifted away from it entirely.

Two years ago I purchased an electronic organ.

I was determined to teach myself to master it.

Since I have a very fine stereo-"hi-fi" system, complete with a Concertone 62 series recorder and an Electro Voice 636 Microphone, I soon found a new use for my tape recorder, namely, I could record my organ music and be my own critic. This has been a greater asset than having a teacher at my side.

I have found out my pitfalls, errors, what to change to improve my technique; and last but not least, I can check on my progress.

This is "Why My Recorder Is Important to Me."—George L. Nestler, St. Petersburg, Florida.

Dear Sir:

Because I dabble in amateur radio and electronics, I find my Webcor to be very useful. The thing I like to do most is receive stations from as far away as possible. When I do get one, from a place such as Chicago, Tennessee, or the like, I listen until the announcer tells the call letters, location, and frequency of the station. This way I have an indisputable record of the abilities of my radio.

Also, I try to write humorous monologues. I practice giving these on the recorder to see what they sound like, work out the timing, and eliminate the rough spots. Without this invaluable aid, I think I would have been a dismal failure.

I hope you find these uses suitable for publication, not only because they give others ideas on how to use their recorder in more ways, but because I need another reel of tape.—John Shepley, Wilkes-Barre, Pa.

Gentlemen:

My tape recorder has enabled me to get the most out of my education dollar.

I am a student of the sciences and mathematics and would have had to neglect the liberal arts side of my education had I not had a tape recorder.

I would get various friends of mine to take the portable recorder to literature, history and philosophy lectures that I could not attend because of schedule conflicts.

In these kinds of classes the lecture is the thing—blackboard notes really do not count—and I was able to listen to the finest my university had to offer in the liberal arts while I was attending the technical classes.

—Roman L. Weil, Jr., Wash., D. C.

Gentlemen:

Please enter the following reasons "why my Tape Recorder is important to me," in your contest.

My reasons cover mostly the entertainment aspect as we record our organ music, and try to improve the technique by listening to the play back. Years from now, my small grandchildren will have these tapes of their Grandmom's modest efforts of entertaining on the Hammond.

I also record, on the small spools, original poems, with background music, to send to friends for whom I've written the poetry. In a small sense I feel I can give pleasure, as well as receive it from my tape recorder.

One of my most prized possessions is a recording, made by a dear friend, who is a professional organist.

Never having been able previously to afford purchasing a hi-fi or records, I am now delighted to have the opportunity to tape off and edit the desired portions of friends' records. They are agreeably willing to participate in this interesting experience.

Without a tape recorder, none of these things would be possible to fill the aesthetic need of mind, which is just as important as bread and butter to the body.—Mrs. Howard Nickerson, West Nyack, N. Y.

Gentlemen:

As a play director, I have used our tape recorder often. We sometimes tape record sound effects, as suggested in the February issue.

I also take the recorder to tryouts, and I have the students tape their readings. We always have a large turnout, and when I get home later and try to decide between those who read for each part, I have an accurate "memory" on tape. This also helps me to know just which students have voices which carry, those who have speech impediments or other problems with which I'll have to work.

I take the recorder to practice once a week and put it on the edge of the stage. When played back it tells more eloquently than I could the errors the cast are making. We can tell when voices drop at the end of the sentence, which voices won't go beyond the front row, those who hesitate too long or take too much prompting, those who read woodenly.

The night of the play I tape the performance. We play the best parts back at the cast party, seeing what made the audience laugh, where we "goofed"—and I have the tape to keep as a "live" memento.

—Barbara Weng, Lena, Illinois.

- ◆ REMARKABLE
- ◆ PRACTICAL
- ◆ SCIENTIFIC

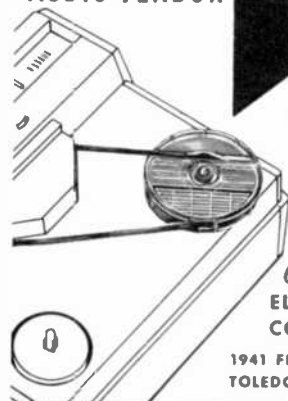
Nothing to change

No rewinding

Always ready for use

\$975
15 minute size

Cousino
AUDIO-VENDOR



MODEL
U-1310

Cousino
ELECTRONICS
CORPORATION

1941 FRANKLIN AVENUE
TOLEDO 2, OHIO

record or erase as with standard re-wind tapes

ERASE TAPE THE PROFESSIONAL WAY

...without rewinding



CINEMA DEGAUSSER

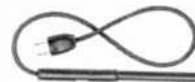
- EXCELLENT ERASING QUALITY
- GIVES YEARS OF DEPENDABLE SERVICE

The Hi-Q Cinema Degausser completely erases program and residual noise from your magnetic tape. Model 64221 is capable of erasing a recorded signal to more than 50 db below saturation. Handles Stereo and monaural tape up to 1" on reels to 10½" diameter. ... 2" tape can be demagnetized by reversing the reel.

It's as simple as one—two—three! You place the reel on a spindle and rotate. Demagnetizing is completed as the reel is withdrawn from the spindle.

...Price **\$49.95**
NET

Where erasing of limited areas of magnetic tape or film is important, select the Model 8905 Magnetic Erasing Pencil... Price—\$15.00 Net.



Hi-Q
DIVISION

Write for free literature, and address of your area distributor

AEROVOX CORPORATION

Cinema Plant, 1100 Chestnut St., Burbank, Calif.

CROSSTALK

from the Editors

A LITTLE SHORT of four years ago the tape recorder industry was in a tizzy. In some quarters there was a wringing of hands, in others the attitude was "nuts" or let's wait and see.

* * * * *

THE CAUSE OF the uproar was the announcement by RCA that it had perfected a cartridge machine so that it became unnecessary to thread tape anymore. The impression got around that, due to this development, reel-to-reel recorders were about to lay down and die.

* * * * *

WITH THE SINGLE exception of Bell Sound, no manufacturer was interested in going along with the cartridge concept. Bell likewise brought out a cartridge machine—but they did not discontinue production of reel-to-reel recorders.

* * * * *

YOU CAN WALK into any shop that sells tape recorders today and you may find a cartridge machine on display—but you will find reel-to-reel recorders. All the uproar, all the hand wringing, all the words of doom and "confusion" in the trade press amounted to nothing. This is easy to see in retrospect.

* * * * *

VERY SHORTLY THE industry will have another cartridge available. It is the 3M-CBS designed unit which will be manufactured by the Revere Company, a subsidiary of 3M. This cartridge uses 1/8" wide tape and plays at a speed of 1-7/8" per second.

* * * * *

THIS TIME THERE doesn't seem to be any uproar, any hand wringing or even a "nuts." The attitude is—let's wait and see. The sole exception to this came from an ad manager of a recorder firm who told us he would never advertise in a publication that took such a short-sighted course as to mention the cartridge. Unfortunately for our bank account, we feel our readers would like to know about all developments in tape.

* * * * *

THE 3M-REVERE APPROACH is quite mature . . . and we think, correct. Bert S. Cross the 3M Executive Vice President recently said. "While reel-to-reel recorders today enjoy a pre-eminent position in the market, many in the industry believe that recorders utilizing tape cartridges for recording and playback will eventually replace reel-to-reel tape recorders and conventional record players. While we at 3M-Revere have our opinion in the matter, we have no intention of getting involved in this speculative game of crystal gazing.

"We are, however, determined to offer a complete line of tape recorders—whether they are reel-to-reel or tape cartridge units. . . . In many respects, our current position is similar to that faced by the automobile industry in the early 1950's when automatic transmissions first started to become popular. In those years, car makers continued to produce shift cars in great volume while, at the same time, supplying a lesser number of models equipped with automatic transmissions. The automobile industry didn't stop manufacturing standard shift cars when automatic transmission appeared on the scene. Neither has the television industry stopped production of black and white sets with the advent of color. . . . We are convinced that the tape cartridge system—which will be extremely easy to operate—will substantially broaden the over-all tape recorder market but most certainly will not replace reel to reel units."

* * * * *

AND WITH THAT he introduced the new Revere reel-to-reel recorder!

INDUSTRY NEWS

3M-REVERE will test market their new cartridge-type machine before the end of the year, according to Bert M. Cross, 3M executive vice president.

The city in which the test is to be made still remains to be selected and national marketing of the units will not take place until some time next year. 3M Revere will continue to supply a full line of reel-to-reel recorders when the tape cartridge machine becomes available.

RCA VICTOR has announced a line of 4 track stereo tapes that will retail for \$4.95. The same price will hold for both pop and classical music and the tapes will be from the RCA Camden line. The initial release will be comprised of eight tapes comprised of Camden best sellers.

INSTITUTE OF HIGH FIDELITY MANUFACTURERS is desparing of legislative action on the bill to exempt components from excise taxes this session of congress. A delegation of manufacturers headed by Ray Pepe, president of IHFM, spent over a week in the nation's Capitol trying to get action on the Internal Revenue Service penny-wise, pound foolish policy. Representative Philbin of Mass. stated that it was made clear in the committee report of 1955 that Congress intended that hi-fi components be exempted from the tax. The Internal Revenue Bureau reversed the ruling which, it is feared, will hold down research and development and mean the closing of some firms now hard pressed by competition from large corporations at home and imports from abroad.

TARZIAN TAPE has brought out a 3 1/4" reel which doubles the playing time of many battery-powered portables. Each reel contains 600 feet of 1/2 mil Mylar tape which compares to the 300 feet of regular tape found on 3" reels. The new over-size reel will fit on nearly every tape recorder able to use conventional 3" reels. They have also added to the line a tape on 1/2 mil Tensitized Mylar, available in standard reel sizes.

WECOR recently held showing for their 500 distributors in New York and Los Angeles. The theme was "The Music Man" as a salute to the motion picture and to call attention to the tie-in with it in the Music Man automatic stereo phono and the Music Man stereo tape recorder. More than 40 products, the largest number in Webcor history, were shown at the day and a half showings on each coast. George Harder has been named to the newly created post of sales manager of the new components Division.

THE AUDIO ENGINEERING SOCIETY will hold its Fourteenth Annual Fall Convention at the Barbizon Plaza in New York City, October 16-19. Papers will cover: microphones and earphones, loudspeakers, amplifiers, magnetic recording, disc recording and reproduction, recording techniques in Europe, psychoacoustics, stereophonics, requisites of modern telephony, broadcast audio, FM stereo

broadcasting, sound reinforcements and acoustics, music and electronics.

SOUND CORPORATION OF AMERICA, manufacturers of background music systems, tape cartridges and related items has consolidated all administrative, R&D and production facilities at their 45 New Street plant in Worcester, Mass. The move was made to expand R & D facilities and also to enable the company to meet future production demands.

ELECTRONICS FOR EDUCATION, 10582 Metropolitan Ave., Kensington, Md. has named Nat Welch vice president for marketing according to John Dostal, president. The firm manufactures specialized products for the educational field. Mr. Welch formerly was vice president for sales of Orr Industries, Opelika, Alabama, manufacturers of magnetic tape.

THE NEW YORK HIGH FIDELITY SHOW which is set for October 2 to October 6 will have its first "Ladie's Day" on October 4, according to Raymond V. Pepe, IHFM president. Special events will be scheduled for the gals including home decorators showing how hi-fi components can be fitted into the home decorations, a new line of hi-fi fashions for women and clinics on how to hook up components. A record attendance of 30,000 is expected at the show.

REEVES SOUNDCRAFT has announced a new "Golden Tone" premium tape. According to Frank B. Rogers, Jr. Soundcraft executive vice president, only the most magnetically active oxide particles are used in the Golden Tone coating and it is manufactured to extremely close tolerances. Geared especially for the new four-track recorders and their narrower soundtracks, the tape will sell for slightly more than present premium tapes. The tape has a dynamic range of 77 db and a high frequency output 25 per cent greater than standard competitive tapes. New slitting techniques are also used in its production. It is available in 1 1/2 mil acetate, 1 mil Tensitized Mylar and 1/2 mil Tensitized Mylar.

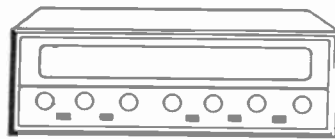
WORLD'S FAIR OF MUSIC AND SOUND, to be held at McCormick Place, Chicago, from August 31 to September 9 will embrace all segments of the music and sound industry. Personal appearances by greats of the musical world are scheduled, including many orchestras and bands. More than 300,000 visitors are expected to attend the fair. Trade hours will be from 10 A.M. to 2 P.M. daily with the public being admitted from 2 P.M. to 10 P.M. on weekdays and 11 A.M. to 10 P.M. on weekends and Labor Day.

The entertainment will be presented in the 5,000 capacity Arie Crown Theater in McCormick Place. The show will be scheduled three times daily, 3, 5 and 7:30 P.M.

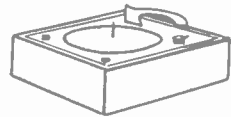
ROBINS INDUSTRIES, Flushing 56, New York has issued a new catalog of its complete line of record and tape accessories and replacement parts. The catalog provides descriptions, illustrations and prices of hundreds of products.

SPECIAL STEREO CABLE ASSEMBLIES

FOR CONNECTING
2 PIECES
OF STEREO
EQUIPMENT



- Eliminate Soldering
- Make a Quick, Clean Connection



Connect your Stereo Amplifier to Multiplex Adapter, Record Changer, Turntable or Tape Recorder!

Construction—Two shielded insulated cables, inside a common chrome grey plastic jacket, provide for two completely isolated channels. Separately insulated shields minimize the "ground loop" problem.

Available with two straight Phono Plugs on each end, plugs color coded for channel identification. Also available with two straight Phono Plugs on one end to stripped and tinned ends, plugs and inner jackets color coded. 3', 6' and 10' lengths—from \$2.90 up.

Contact your dealer or write us for name of dealer nearest you.

SWITCHCRAFT
INC.

5555 N. ELSTON AVE. • CHICAGO 30, ILL.

ROBERTS STEREO TAPE RECORDERS



LAWRENCE WELK:
"My Roberts 1040 tape recorder is the closest to recording studio equipment that I have seen."

ONLY THE ROBERTS 1040

4-TRACK STEREO PHONIC TAPE RECORDER

Combines these Advanced Features:
Unique "listen-to-yourself" feature • Records new FM MULTIPLEX STEREO CASTS • 4-track stereo and monaural record/play • 2-track stereo and monaural play • Sound-with-sound, using either track as basic track • Dual, self contained power stereo amplifiers • Dual, built-in extended range stereo speakers • Automatic shut-off. **\$299.50**

ROBERTS ELECTRONICS, INC. Dept. TR-9-L
5920 Bowcroft Ave. Los Angeles 16, Calif.
Please send me:

- Roberts Stereo Tape Instruction Manual containing stereo and monaural applications. I enclose 25¢ (cash, stamps) for postage and handling.
- The name of my nearest dealer.

Name _____

Address _____

City _____ Zone _____ State _____

TAPESPENDENTS WANTED

This listing is for those seeking tape correspondents, looking for swaps of tapes, etc. and it is a free service for our readers. If you wish your name listed send us the following information on a post card: 1-Name, 2-Mailing Address, 3-Kind of recorder, speed and number of tracks, 4-Subjects on which you want to tapespond or items for which you are looking, 5-Indicate whether you are an adult or teenager. Listing will run two months and then be dropped to make way for new listings. Address your postcard to: TAPESPENDENTS WANTED, Tape Recording Magazine, 101 Baltimore-Annapolis Blvd., Severna Park, Md.

Frank Hyde's Tape Library, 5 Woodland Rd., Box 114, Stoneham, Mass.; Recorders: Webcor Regent Coronet, 2 Wollensak 1 7/8, 3 3/4 & 7 1/2 ips., 2 and 4 tracks; portable Magnemite recorder, 7 1/2 ips, single track; Interests: Music and band concerts, talent festival, stereo music (not taken from record or radio), birds and sound effects, health lectures and church services and freedom rallies. I have a large tape library of 1,000 programs which include the above; also, cooking schools, childrens' programs, oratorical contest, sound games, etc.; Adult (43).

Charles Sokol, 1241 59 St., Brooklyn, N. Y.; Recorders: Norelco 3516 modified for stereo playback, Bell T-337, stereo record and playback, 2 & 4 track, 7 1/2 and 3 3/4 ips; Interests: I would like to copy your stereo tapes and you can copy mine, classical, popular; Adult.

C. Koswell, 152 W. 42nd St., New York 36, N. Y.; Recorders: Webcor, Telectro, dual track, 3 3/4 & 7 1/2 ips, monaural; Interests: General, unusual rare adult tapes, canine publisher interest, rare parrot type birds; Adult.

Ted A. Cooper, 17 E. Shore Blvd., Timberlake, Willoughby, Ohio; Wollensak T-1500, 2 track, 2 speed; Concord 880, 4 track, 3 speed; Interest: I have popular music, TV shows, including music, comedy, Paar & Tonight shows, Belafonte, Bob Hope, Party records, Mitch Miller—TV specials. Would like: Paar Shows from 1961 down; popular music, Nebraska State Football song, copy of "Hey Look Me Over," Mitch Miller (1961), party records. Anyone interested is more than welcome to my collection so as to enlarge yours as well as mine.

Eldon H. Gensicke, 1542 So. Walnut Dr., Santa Maria, Calif.; Recorders: Ampex, Model 970, 3 3/4 & 7 1/2 ips, 2 track; Sony, Model 300, 3 3/4 & 7 1/2 ips, 4 track; Interests: Recordings of night club comedians, male and female impersonations, stereo music of big dance bands, exotic sounds and stereo organ music. Welcome tape exchanges from all parts of the world. Promise to promptly answer all tapes. English language only; Adult.

Kevin F. McCarthy, 148 Major's Bay Road, Concord, New South Wales, Australia; Recorder: Pye Technicorda, mono, 3 3/4 & 7 1/2 ips, half track; transistorized Nivco handrecorder; Interests: all music, swimming, color photography, travel. I do desire to hear from anyone in North or South America or Europe. Adult (34), single.

Marlon J. Klosinski, 313 Army Trail Rd., Addison, Illinois; Recorder: V-M 720, 2 track, stereo, 3 3/4 & 7 1/2 ips; Interests: Sports, unusual humor, anecdotes, want recording of Edmundo Ross and Lenny Dee on organ; Adult (37).

Stanley Goldman, 780 Astor Ave., Bronx 67, N. Y.; Recorder: Telectro, 2 speed (3 3/4 & 7 1/2), Model 1965, 2 track; Interests: Amateur radio, rock and roll, show tunes, sound effects, and meeting the opposite sex, provision for the copying of tapes. Also citizen band radio. Teenager (18).

Eugene T. Burns, Box 183, Schenectady 1, N. Y.; Recorder: Webcor 2202, 3 3/4 & 7 1/2 ips, dual track; Interests: Tapesponding, music, self improvement tapes, printing and hypnotism; Adult, single.

Eric R. E. Meyr, 96 Queensbury Ave., Scarborough, Ont., Canada; Recorder: Phillips 300,

4 track, 1 7/8, 3 3/4 and 7 1/2 ips; Interests: All kinds of music, also traveling and see the world, have large record collection and record own musical tapes. Like to meet opposite sex; Adult (25).

Don Goldman, 240 2nd St., San Francisco, Calif.; Recorder: Roberts 990, 7 1/2 and 3 3/4 ips, 4 track, stereo; Interest: stereo music—pop.; Adult (33), single, occ.-seaman.

Roger Feingold, 2055 Cruger Ave., Bronx 62, N. Y.; Recorder: V-M, 3 3/4 & 7 1/2 ips, 4 track, stereo record/playback. Plays and records single track, 2 track and 4 track; Interests: Will talk about anything and with anyone who is willing, art of conversation, will answer all tapes sent; Teenager (17).

Stanley E. Cahn, 89 Thayer St., New York 40, N. Y.; Recorder: Wollensak T1515, 3 3/4 & 7 1/2 ips, 4 track playback, 2 track record; Interests: Film art, ham radio, classical music. Would like to obtain tapes of baroque music; Adult (24).

Bob Green, 110 No. 3rd St., Paterson 2, N. J.; Recorder: Webcor, 2 track, 1 7/8, 3 3/4, 7 1/2 ips; Interests: Willing to rent any tapes, monaural or stereo, of Kingston Trio's personal appearances, concerts or anything else. Pay postage. Also exchange comedy tapes; Adult.

Baker Hendershot, 106 Broad St., Selma, Ala.; Recorder: V-M 700, 3 3/4 & 7 1/2 ips, dual track; Interests: Hi-fi, jazz, Dixieland, pop, show tunes, pre-recorded monaural, sound effects, photography, floristry, raising orchids; Adult.

G. VanDeWalker, 915 Cornelia Ave., Lakeland, Fla.; Recorder: V-M 711, 7 1/2 & 3 3/4 ips, monaural; Interests: Would like to exchange tapes with anyone interested in Florida, ideas exchange, Gospel music—to Roberts owners—"What do you think of your recorder."; Adult.

Jasper W. Tolson, 368 West Park Ave., Aurora, Ill.; Recorder: Cartridge; Interest: Answered invitation from Duane Davidson (from this column) who also corresponds by tape and has a cartridge machine and they would both like more tapesponders to chat with who have cartridge machines. Also is interested in 8mm movies.

D. Pospisil, Nerudova 10, Brno, Czechoslovakia; Interest: Electronics, jazz music, wishes to contact some countrymen in America, especially those who can still speak either Czech or Slovakian language; 19 years old.

Ralph Holder, 116-06 139th Street, South Ozone Park 36, N. Y.; Recorder: Elizabethan Essex, 3 3/4, 7 1/2 & 15 ips; Interests: Tapespondence, tape clubs, audio servicing and electronics, hi-fidelity, modern jazz and classics, live microphone techniques, general secretary of a fast growing tape club, misc. stereo audio equipment; Adult.

J. L. Gjertsen, 928 N. E. 108 Avenue, Portland 20, Oregon; Recorder: Sony 464D Stereorecorder, 3 3/4 & 7 1/2 ips, 2 channel, 4 track; Interest: Would like to swap tapes on opera; Adult.

Richard A. Fox, 246 Pleasant St., Lowell, Mass.; Recorder: Roberts 990, 4 track, 3 3/4 and 7 1/2 ips; Interest: Have large collection of swing era and modern jazz—big bands and small groups. Willing to trade for Stan Kenton transcriptions and broadcasts from any period; Adult.

Sid Stellmaker, 10973 W. Exposition Pl., Denver 26, Colo.; Recorder: V-M 730, 1 7/8, 3 3/4 & 7 1/2 ips, 2 track monaural; Interests: College, girls, social activities, travel, music, recording, almost all topics of interest. Would especially like to meet other college students, and high school students, from other sections of the country or other countries (English speaking), boy or girl; Age (19).

Walter Young, 2656 E. 115th Street, Cleveland 4, Ohio; Recorder: Norelco 400, 1 7/8, 3 3/4 & 7 1/2 ips, 4 track stereo and monaural; Interests: Organ music, hymn type, played on home type organ, sounds—steam locos, street cars, exchange tapes of German language broadcasts—FM or AM with instrumental, vocal, march music, also zither; Adult.

George Vlasto, 403 North St., Greenwich, Conn.; Recorder: Viking, 3 3/4 & 7 1/2 ips, half and quarter track; Interests: Collecting old radio and TV broadcasts (before 1956), news, comedy, mystery, adventure; Adult.

Michael G. Johnson, 5050 N. Broadway, Combined Insurance Co., Audio Visual Department, Chicago 40, Illinois; Recorder: Berlant, 3 3/4 & 7 1/2 ips, dual track; Interests: Philosophy, folk music, music (classical), acting; Adult.

Homer G. Hodges, Drawer 29, Clinton, N. C.; Recorder: Webcor Regent Coronet, 2 or 4 track, 1 7/8, 3 3/4, & 7 1/2 ips; Interests: Music, photography, theater; Adult (33), single.

Martin Gary, 807 Westham Parkway, Richmond 29, Virginia; Recorders: Viking—85 & 75 & 86 and Wollensak—1515 & 1515-4, will use all types of tape, all tracks, 3 3/4 & 7 1/2 ips; Interests: ham radio, radio teletype, photography, music, audio equipment, psychology, physics; Teenager (15).

Jack Warner, 77 Maryland Ave., Manchester, N. H.; Recorder: Knight 4000 deck and 4001B preamp, 4 track stereo or monaural, 3 3/4 & 7 1/2 ips; Interests: Receive tapes of jazz performances, especially "avant garde," recorded live, or from disk and airwaves. Will exchange tapes made from large selection of jazz or rock & roll records and broadcasts. Would also like info on recording cars at drags or races, or tapes of the same; Age (20).

Keg. L. Preston, 4, Queens Road, Maidstone, Kent, England; Recorders: Elizabethan Essex, 1 7/8, 3 3/4 & 7 1/2 ips, 7" spools, mono, dual track; Brenell, 1 7/8, 3 3/4, & 7 1/2 ips, 7" spools, mono, dual track; Knightrider, 3 3/4 ips, 5" spools; Interests: Electronic organs, light music, classical, sound effects, 35 mm photography, country and western, guitar, general interest and gab—no need to write, just send tape, contacts anywhere.

TSGT Earl L. Denny AF16286796, 6499th Support Group, APO 94, San Francisco, Calif.; Recorder: Aki Terecorder (Roberts Brand), 2 track, 3 3/4 & 7 1/2 ips; Interests: Famous speeches, music-F. Litz, religion, plus general chit-chat.

A. V. Larsen, 822 4th St., Madison, Minnesota; Recorder: Wollensak T 1515, stereo, mono playback, dual track, 3 3/4 & 7 1/2 ips; Interests: Swiss Alpine music; also, Scandinavian oldtime and organ music; Adult.

Major Preston Hardy, Jr., 417 Baltic St., Apt. 4F, Brooklyn 17, N. Y.; Recorder: Norelco Continental 400, 1 7/8, 3 3/4 & 7 1/2 ips, 2 & 4 track stereo and monaural; Interests: Religion, stereo and monaural hi-fi. I own dozens of stereo tapes, no discs, medium priced component hi-fi system. Would like to trade classical, Latin-American and African recordings, equipment and info. I have friends who speak German, Arabic, French, Spanish, Hebrew, Portuguese, etc. I have forgotten most of the Portuge I knew; Adult, married.

NOTE: We have a backlog of names on file which we must hold until we have space to publish them. We are publishing each name in two issues as stated in our heading. Please be patient until your name is used.

TAPE IN EDUCATION

Robert C. Snyder

WE are indebted to Mr. E. D. Smith, of Eaton, Colorado for sending us a clipping from the Greeley Tribune of Greeley, Colorado which describes the work done by Miss Earline De Moss, a Colorado State doctoral candidate.

She has been teaching for twenty years and is currently teaching the first grade at Plain Dealing, Louisiana.

She found, after her long experience, that something was wrong with the teaching system for the first grade pupils were not kept busy enough, and some of them required more attention than she could possibly give.

Four years ago she turned to tape as the answer and so it has proved. She even supplied the recorders and tapes herself.

Now, so many students wish to get into her first grade classes that the school superintendent finds it necessary to select them by lot!

Using her tape system, *she has most of the pupils reading third grade materials before the end of the school year!* This is an accomplishment since the school district has no kindergarten and no reading readiness before the first grade.

The pupils in the class represent a cross-section of children in the school district.

The first grade class which Miss DeMoss teaches has 30 pupils. These are divided into four groups with not more than eight in any one group.

Three desks, which Miss De Moss designed and built herself, each has a tape player connected to eight headsets. The desk provides plenty of room for the pupils to have their work papers and books before them without interfering with their neighbors. Three children are placed along each side and one at each end. The desk is of a height to accommodate the small fry and their small chairs.

Three of the four groups are taught by tape at the same time while the fourth is receiving personal instruction from the teacher.

One group may have a reading lesson which has been previously recorded by Miss De Moss from her own experience and the teacher's manual. This group of pupils will quietly read and then the tape breaks in with suggestions, questions and explanations.

At the same time another group may be listening to a tape on phonics with the appropriate book before them. A third group may be doing some number work.

At the end of a period, the groups exchange tapes, with the group that Miss De Moss has been teaching going to tape and one of the groups that had been using the recorders coming for a period of personal instruction.

In answer to the question as to how long it takes the pupils to learn about tapes—the answer is no time at all.

Pupils who are due to start school in the fall come for one day in the spring. That's when they learn about tape.

There never has been a single complaint

about the "mechanization" of the class or a loss of personal contact between the teacher and her pupils. Parents, on their visits to the classes are as much thrilled by the use of tape as are the young students. In fact, the tapes provide a means of demonstrating to the parents how the children read in an ordinary school situation without visitors.

In reading, for instance, Miss De Moss will put the introductory part of the story on tape and leave a space. The children, as a group, are then asked to complete it and when they had agreed on how the story should end, Miss De Moss adds the ending in the space provided on the tape and the whole is played back. The children are thrilled with this procedure, hearing their efforts actually made a part of a story.

Further use of the tape recorder in reading is made by taping the children as they read and then playing it back to them. They thus are able to criticize their own work and rapid improvement results.

The way in which she has used tapes has greatly increased the demand for workbooks and other materials and has given her the funds to buy 40 or 50 sets of eight books each. Thus the groups have a variety of reading material systematically advanced beyond the normal first grade level.

One of the tapes she uses explains a slide program, one of the first graders projecting the pictures into a shadow box for the rest of the group.

She has found that first grade children quickly accustom themselves to the use of audio-visual aids.

Miss De Moss makes her own tapes because she feels that the children want to hear the voices and ideas of a person they know. The use of personally made tapes enables her to speak directly on the tape to any of the children.

She makes her tapes at home in the evenings for use the next morning. These run about 20 minutes. The 15 minute lesson tapes she makes in the morning before school.

This sounds like it might be quite burdensome to the teacher but Miss De Moss said that after four years she can do it almost impromptu.

Will this system work in other first grades, or other grades? It will *if* the teacher is interested, *if* the teacher wants it and *if* the teacher is enthusiastic about it.

The work of Miss De Moss has been done in Plain Dealing, an agricultural community. Most of her students have come from farm families, none especially privileged and a few definitely underprivileged.

When she receives her doctor's degree she does not want to leave the classroom but is very much interested in supervising student teachers using the system.

We feel that Miss De Moss deserves the highest praise for her work. It is teachers like her that have made the profession of teaching an achievement rather than a job, and would that there were more like her.

TAPE RECORDING IN EUROPE

Some of the most interesting developments in tape recording are taking place in old-established factories and laboratories in Europe. The fullest information about them appears regularly in *TAPE Recording Magazine*, published in London, England, since February 1957.

TAPE Recording Magazine was the first and is today the foremost publication in Europe in this field.

It will enable you to enjoy a unique world-view of what tape recording engineers and scientists and European amateur enthusiasts are doing.

For a one-year postal subscription send \$3.50 to —

TAPE

RECORDING MAGAZINE

7 Tudor St., London, EC4, England

 **AUDIO unlimited**

Specializes in SAVING YOU MONEY

- ✓ FACTORY FRESH COMPONENTS
- ✓ LOWEST POSSIBLE QUOTATIONS
- ✓ FAST DELIVERY

We are FRANCHISED for most HI-FI lines. Orders SHIPPED PROMPTLY from our large stock. RECORDING TAPE at LOWEST PRICES. FREE STEREO CATALOG.

715 Second Ave. (Nr. 38th)
New York 16, N. Y.

Visit Our Showroom

We specialize in TRADE-INS — highest allowances—Ampex, Concertone, Magnecord, Noreleo, Presto, Tandberg, etc. HI-FI Components — Bozak, Citation, Thorens, Sherwood, Butoba, etc. Write for lists of new and used items.

BOYNTON STUDIO
10 Pennsylvania Ave., Dept. TR
Tuckahoe, N. Y. Tel. SP 9-5278

HOW TO GET THE MOST OUT OF TAPE RECORDING

by Lee Sheridan

This book is aimed at the new recordist, who has yet to discover the hundred and one unusual, interesting and profitable uses to which a tape recorder can be put . . . with patience, a little imagination, and a few accessories.

6" x 9", 128 pp., paper bound, illustrated
ONLY \$1.25

Order from: Book Dept.,
Mooney-Rowan Pub., Inc.
Severna Park, Md.

JOIN NOW!

We Want You

to belong to the ranks of satisfied subscribers to the magazine exclusive in its field—TAPE RECORDING.

Each issue is designed with the tape recording enthusiast in mind. The information contained therein is written just for you—to help start you in the hobby, to keep you up with the industry, and to prove that your purchase of a tape recorder was one of the wisest investments you ever made.

In addition to the interesting articles contained in every issue, there are regular features created with the reader in mind. Here you will find everything from a criticism of Elvis Presley to swapping your antique vase for a tape recorder. These features include:

- ✓ **Tape Reviews (No punches pulled)**
- ✓ **Crosstalk (Our editor speaks out)**
- ✓ **New Products**
- ✓ **Tape in Education**
- ✓ **Industry News**
- ✓ **Tapespondents Wanted**
- ✓ **Tape Club News**
- ✓ **Shop or Swap**

You can have 12 issues a year conveniently delivered to your door by simply filling out the coupon below and returning it to us.

We have always maintained a "money-back" guarantee policy should you not be satisfied with your investment.

2 Years\$7.00

1 Year\$3.75

Fill out the coupon today. If your checkbook isn't handy, we'll be glad to bill you later.

TAPE RECORDING
Severna Park, Md.

Please enter or renew my subscription as indicated below:

2 years\$7.00

1 year\$3.75

Payment enclosed. Bill me later.

Name

Address

CityZoneState

LETTERS

Excerpts from readers' letters, including questions and answers, will be used in this column.

Address all correspondence to: The Editor: TAPE RECORDING, Severna Park, Maryland

Confused

To the Editor:

I am just a beginner and have questions which may be quite elementary. I want to buy a tape recorder that will do as many things for me as possible for the money we have to spend.

My first problem is to understand. I am thoroughly confused by the terms monaural, two track, four track, etc. Does one decide something about tracks before he buys a tape recorder? Will a recorder which will play monaural recordings also play, to some extent, a 4-track and conversely.

The next point which makes it difficult for me to know what to buy is stereophonic recording. Will a recorder which will not record stereo be able to play back stereo recordings?

From catalog descriptions of machines it is very hard for me to understand their resources and limitations in this respect.

I am pleased to be a subscriber to TAPE RECORDING. It is a good journal and I would be in possession of a recorder and on my way if I knew how to know what they will do and will not do.—N. W. R., Shawnee Mission, Kansas.

The first distinction to make is in the matter of stereo and monaural. Monaural has one sound track, and plays through one speaker. Stereo takes two tracks, each one of which is played through a separate speaker.

The sound track on the tape may be full-track (rare) in which the sound occupies the entire width of the tape. This is played through the machine as usual but must be rewound to be replayed. Since it is one track, it is monaural.

The next step is dual-track or half-track. As the name implies, there are two sound tracks on the tape, each occupying about half of the tape width. One is recorded in one direction and the second in the reverse direction. This eliminates the need for rewinding the tape since, when the tape has been played through it is removed from the take-up spindle and placed on the feed spindle and played through again. The two tracks on the tape thus provide a longer recording time per reel of tape and eliminate rewinding. Dual-track machines are monaural.

Four track tape recorders come in a number of forms—1. the machine will record monaurally on two tracks (the two tracks on the edge of the tape). It will play stereo tapes if an additional speaker or an amplifier-speaker is hooked up to the recorder. It will not record stereo nor all four tracks monaurally. 2. the machine will record all four tracks mono and play stereo tapes as above. 3. the machine will record monaural or stereo and play back either.

The mono can be recorded on all four tracks, again doubling the recording time over the two track machines.

There are still other variations, those are the machines which will record on one track while playing the other. This is especially valuable if you are intending to use the machine for language study using some of the available courses. It also enables you to do such things as sing or play a duet with yourself.

Regarding the playing of various kinds of tapes on different types of recorders the easiest thing to remember is that going in order from full-track to half-track—to four-track, any recorder having one feature will be able to play tapes of the one preceding. For instance, a four-track machine will play a two track-tape or a full-track tape. A half-track machine will play a full-track tape BUT you cannot go the other way. A full-track recorder will not play a dual-track or a four-track tape because it would play all the tracks at once. A half-track machine will not play a four-track tape because it would be playing two of the tracks at the same time.

So you more or less have to make up your mind as to what you want before you make the purchase. If you intend to play stereo tapes then you will need a machine with stereo playback. If you want to record stereo, you will need a full stereo recorder.

If all you need is monaural, then a half-track machine should be adequate and give good signal to noise ratio. A four-track machine capable of recording and playing each track separately will give the most tape mileage.

We don't wonder that you have been confused and we trust that the above may help straighten things out for you.

Converted

To the Editor:

Enclosed you will find a news clipping I thought would make for an interesting item for your magazine.—Theodore Arbach, New Hyde Park, L. I.

"Taped Sermon Converts Crook"

"The pastor of a South Miami Methodist Church received a telephone call from a man who has said he had stolen a tape recorder from the church.

"The thief admitted he played the tape on the machine and heard a sermon the pastor had delivered calling on sinners to mend their ways.

"The sermon had convinced the thief and he told the pastor the name of a service station where he would leave the recorder."

Our thanks to Mr. Arbach. We are sure our readers will enjoy the story.

OUR MISTAKE

In our Complete Directory of Self-Powered Portable Recorders which appeared in the last issue we inadvertently included the Cipher III tape recorder picture and specs under the Citroen Electronics Corp. head. The Cipher III is marketed by the Inter-Mark Corporation and should not have been included under the other heading.

The correct listings are reprinted below.

CITROEN ELECTRONICS CORP.

832 N. La Brea
Los Angeles 38, Calif.



MODEL 550 (top, col. 1): Weighs just 5 lbs., operates on penlite batteries, has two-track recording heads, heavy duty transport mechanism, two speed capstan drive, fast rewind, automatic tape erase, push-pull audio output, transformer coupled amplifier, remote control dynamic microphone, record level and battery condition meter, tape indicator scale. Using 3" reels, plays in any position and will play or record for two hours. Can be used without removing from case. Price: \$129.50—with case, remote control mike, earphone, easy load cartridge of penlite batteries, roll of tape and takeup reel, and telephone pickup.

INTER-MARK CORP.

80-00 Cooper Ave.
Brooklyn 27, N. Y.



CIPHER III (bottom, col. 1): Operates at either 1 7/8 or 3 3/4 ips using six standard 1 1/2 v penlite batteries. Takes a standard 3" tape reel and provides continuous record or playback for 16 to 32 mins. or 32 to 64 mins. Microphone features a thumb-controlled switching bar which stops, starts or locks the recording operation enabling the unit to be used as a dictating machine. Has an illuminated footage indicator; four large push-buttons control record, play, stop and rewind. Two heads are used in a double track system. Frequency response at the faster speed is 200-6,000 cps. Unit has a 3" dynamic speaker. An AC adapter is available. Price: \$119.95—includes dynamic microphone, crystal earphone, recording tape and reel, rewind reel, radio patch cord and battery set.

"No Echo"

Why Burgess Magnetic Recording Tape is 8 ways better:

NO Echo

Lower print-through — Revolutionary Burgess dispersion processes greatly reduces possibility of magnetic transfer from layer to layer. "NO ECHO" with Burgess tape — after months of storage.

Greater tensile strength — new Burgess processes and formulas make Burgess tape "tough" tape. Tensile strength is important wherever tape is given rough handling, as in schools and colleges.

Higher frequency response, greater sensitivity — Burgess uses only acicular oxide particles and disperses them evenly to achieve finer sensitivity and top frequency response. Burgess wide bias latitude produces professional results on all types of recorders.

Lower noise level — New dispersion techniques eliminates "clumps" of oxide on Burgess tape. You get a lower noise level and eliminate "hissing" or "popping".

Freedom from flake-off — New Burgess precoat formula eliminates flake-off, cuts the amount of head-cleaning necessary, and gives constant true-tone qualities.

Consistent satisfaction — Burgess' new processes, monitored by rigid quality control, assure the user that Burgess tape is uniform from reel to reel. You get the same high reproduction quality today, tomorrow or next month.

Superior built-in lubricant — Enables tape to glide smoothly, without friction or squeaking over recorder head and guides. Prolongs the life of tape recorder heads.

Erases clean — Burgess tape erases clean and evenly on home recorders. No bulk eraser needed!

No other line of Magnetic Tapes offers you such **VERSATILITY, ADAPTABILITY** to your needs, or gives you all the advantages cited above

BURGESS BATTERY COMPANY



DIVISION OF SERVEL, INC.
MAGNETIC TAPE DIVISION
FREEPORT, ILLINOIS NIAGARA FALLS CANADA

RENT

STEREO TAPES

- Over 2500 different, 4-track & 2-track
- No deposit on tapes rented
- Postpaid 2 to 5 day delivery (48 States)

FREE BROCHURE **stereo-parti**
811-N CENTINELA, INGLEWOOD, CALIF

MOVING?

Let us know in time to change your stencil so you won't miss any copies.

SAXITONE RECORDING TAPE

*oxide guaranteed not to rub off or squeak—or money back. Compare ours with other "Bargain" tape. You'll find it's more than just "price" when you deal with us. We are original pioneers in the tape recorder business and our reputation means everything to us.

800' acetate (plastic), 5 inch...	.78
800' MYLAR 5 inch reel...	.85
800' MYLAR (Polyester), 5 inch...	.90
1200' MYLAR, 1/2 mil, 5 inch reel...	1.38
1200' Acetate (plastic), 7 inch...	1.39
1200' MYLAR, 1 1/2 mil, (strong)...	1.29
1800' acetate (plastic), 7 inch...	1.79
1800' MYLAR 1mil. thick, 7 inch...	2.00
2400' MYLAR, unantistated, 7 inch...	2.00
2400' MYLAR, tensitised, 7 inch...	2.99

(Large Users, Even Lower) Plus Postage

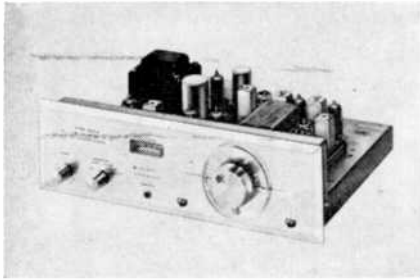
NORELCO SPEAKERS
Famous AD3803M, twin cone 8" (75-10,000 cycles) comparable net 9.90 now 4.95, 2 for 9.00, plus postage. OTHER Norelco models at BIG DISCOUNTS. Specifications on entire Norelco line set on request.

SAXITONE TAPE SALES
div. Commission Electronics, Inc.
1776 Columbia Rd., Wash., D.C.



NEW PRODUCTS

SCOTT MULTIPLEX TUNER



H. H. Scott, Inc., 111 Powdermill Road, Maynard, Mass. has announced a new version of their 350 FM multiplex tuner, model 350B. This new version includes the Scott sonic monitor that audibly signals when stereo is on the air. Sensitivity of the 350B has been increased to 2.2 uv. Its multiplex circuitry provides separation better than its predecessor by 30 db. A convenient tape output has been added to the front panel. Separate level controls are provided on the rear for each channel, making it possible to balance channels perfectly. A new balanced detector provides low distortion. Signal to noise ratio is 60 db; selectivity 35db. The price (east of the Rockies) is \$219.95. For complete technical specifications, write to Department P at the above address.

WOLLENSAK "1580"



Revere Camera Company, a subsidiary of Minnesota Mining and Manufacturing Co., 320 East 21st Street, Chicago 16, Illinois, has introduced the Wollensak "1580" full-stereo tape recorder. This self-contained machine will record and play four- and two-track monophonic and stereophonic tapes; record sound-with-sound by playing one channel and recording on the other, or the unit can be used as a public address system. It is compact (11 $\frac{3}{4}$ " x 10 $\frac{1}{4}$ " x 6 $\frac{1}{2}$ "); weighs 26 pounds; four aircraft-type, three-position rotary tabs perform all operating functions; has speeds of 3 $\frac{3}{4}$ or 7 $\frac{1}{2}$ ips; produces a maximum of 22 watts of audio power output. The "1580" has flexible control facilities, inputs and outputs, which will record on stereo or monophonic tapes from microphones, from the speaker terminals of radios, phonos or TV sets or from the

tape outputs of hi-fi amplifiers and tuners. Also can be used with FM stereo multiplex. The cost is \$379. Write for more details.

COMMUNICATIONS RECORDERS



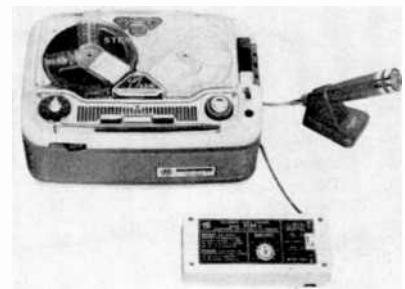
A new series of Communications Recorders has been announced by the Stancil-Hoffman Corp., 845 North Highland Ave., Hollywood 38, Calif. Incorporating transistorized plug-in electronics, the new series CR-100 machines are compact: 8 $\frac{3}{4}$ " high x 19" wide x 8 $\frac{3}{4}$ " deep for complete four channel unit. They feature MMS (Motion Memory Sensor) which permits the operator to change from any mode of operation to any other without pausing in the STOP mode. MMS makes it impossible to spill or damage tape by error. The machines have unusually fast starting time to full speed in less than 15 milliseconds. All tape functions are electrically controlled, and electro-dynamic braking is used. The unit can be remotely started or stopped with a single pole single throw switch or external voice operated relay. Prices start at \$675.00 for a single channel unit while the four channel is priced at \$1,035.00.

LAFAYETTE 2 SPEED STEREO TAPE DECK



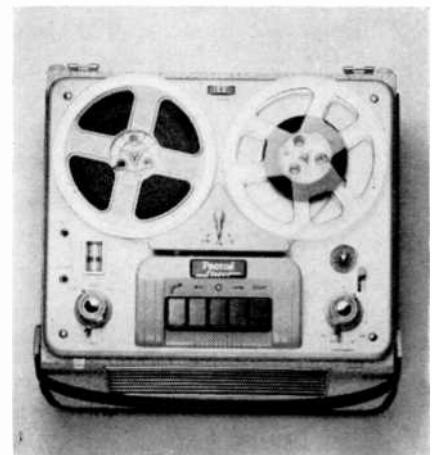
Lafayette Radio Electronics Corp., 111 Jericho Turnpike, Syosset, L. I., New York, presents a new stereo playback tape deck, designated the RK-141WX. It is equipped with its own 6 transistor dual stereo playback preamplifiers which are equalized to the NARTB curve. Uses 4 pole heavy duty induction motor in the tape transport with automatic end of tape shutoff. Accepts tape reels to 7", has speeds of 3 $\frac{3}{4}$ and 7 $\frac{1}{2}$ ips, has frequency response 50-15,000 cps plus or minus 2.5 db at the faster speed, wow and flutter is 0.15% at the faster speed, crosstalk and stereo separation is 50 db, and signal-to-noise ratio is 50 db. Complete with hookup cables, the cost is \$59.50. For additional information, write to Lafayette.

ADDITIONS TO GELOSO LINE



The Stenotape Division of American Geloso Electronics, Inc. have announced two new pieces of equipment. This new combination uses the latest model G310 Stenotape machine, and the 9095A automatic voice control. This equipment can start and stop the tape automatically, controlled by a signal of variable predetermined strength from any source, such as a microphone, a telephone pickup or any other type of monitoring connection. It activates the recorder when a signal is present, and stops the recorder when the signal goes off. The control relay is fully transistorized. Model G310 Stenotape is priced at \$249.95 and the Automatic Voice control Model 9095A is \$42.45. For more details, contact American Geloso Electronics, Inc., 251 Park Avenue South, New York 10, N. Y.

NORWEGIAN PROTON RECORDER



The Norwegian manufacturer of the Proton Magnetofon 4-track recorder has appointed American Foreign Industries, Inc., 640 Sacramento St., San Francisco 11, Calif. as their exclusive U. S. import representative. Now moving into distribution, the Proton records/plays 4 track stereo and monaural; plays 2 track stereo and monaural; has dual 4.5 watt stereo amplifiers (9 watts/monaural); dual stereo Magic Eye; exclusive "Programindikator"; two channel balance control; bass control; edit control. The machine has speeds of 3 $\frac{3}{4}$ and 7 $\frac{1}{2}$ ips, frequency response 30-15,000 cps at the faster speed, better than 50 db. signal to noise ratio, and flutter and wow less than 0.12% at the faster speed. Inquiries are invited, write to above address.

TAPE CLUB NEWS

Voicespondence Club Aids Handicapped

The Voicespondence Club is a tape club with a heart. And the heart shows in its activities to aid blind and otherwise handicapped people to a richer life through recording. During the club's fiscal year just ended it purchased through its Tarver Memorial Fund recorders costing \$4476.20 for sale at less than cost or as gifts to handicapped people. During this same period hundreds of tapes and other accessories were sold to the blind at less than cost, and the Fund launched the operation of its Tape Library for the Blind as a full-scale project. The Tape Library was not in use for the entire fiscal year, but it distributed 997 tape books to blind readers, 1133 copies of the club magazine, 298 copies of a special magazine, and 684 copies of Tape Recording. These were sent on loan and without cost. The club's Tarver Memorial Fund is its major special project for public service, and none of the club's dues or other income is used to support the Fund, the Fund's money coming entirely from voluntary donations. If you would like to assist in this worthy effort, the Fund could use your help. No gift is too small and all over \$1 will be acknowledged. Just send anything you'd like to contribute to the Tarver Memorial Fund, Noel, Virginia.

American Tape Exchange Changes

The new director of The American Tape Exchange is Clarence J. Rutledge. This diligent gentleman has started his directorship first of all with a new, larger, well presented club bulletin.

Secondly, he has made arrangements with James Greene of the defunct Tape Respondents International Club to integrate their organization into his. This will be of benefit to A.T.E. as well as past members of T.R.I. In the October issue of American Tape Exchange's bulletin a list of all T.R.I. members who did not receive a listing at the end of that club's operation will appear. A.T.E. is ready and happy to answer all inquiries about T.R.I., but due to limited funds a self-addressed stamped envelope will be needed.

We congratulate Mr. Rutledge on his quick action and progressive outlook, and we wish him and his club continued expansion.

Club Member Meets Tape Friends



Magneto-Vox member, Ralph LePage (MV2FL) of Southgate, Michigan, visited the Province of Quebec during the first weeks of August, and he met with his tape friends. In Montreal Ralph and his family

visited Magneto-Vox club headquarters and Maurice Roussel, club secretary, acted as their guide in visiting the principal points of interest in the city. The Roussel and LePage families have been exchanging tapes together more than five years, but it was the first time they met in person. Picture shows Ralph (left) and Maurice (right) at club headquarters.

CTRI Alaskan Member Extends Invitation

Catholic Tape Recorders, International member Mrs. Michael Malone has cordially invited fellow club members to her home if anyone decides to take an Alaskan vacation sometime. She writes that her home has a spacious basement where a meeting could be held and where members could tape to their friends back home.

Mrs. Malone tells us that Alaska is the Palm Beach of the north. She talks of the beautiful flower gardens that exist in her locale. In the latter part of June the gardens are sumptuous with colorful flowers of

many varieties. Members of garden clubs vie with one another to make Alaska a virtual floral paradise. According to Mrs. Malone's description, the flowers are more beautiful than those seen in sunny Fort Lauderdale.

WTP Members Visit South Africa

Dallas, Texas WTP members Clyde and Naomi Driscoll were welcomed in early August by their South African tape pals after a plane trip through Europe and a brief reunion with tape pals there.

Clyde, an enthusiastic photographer, went on a 10 day photographic safari arranged by WTP George Magnus of Orangemund, while Naomi was the guest of Len and Peggy Follett of Beaconsfield. The couple later visited many other tape pals in Kimberley and Johannesburg.

WTP Membership Steadily Increases

A new eight page Roster Listing accompanied the August-September issue of the World Tape Pals bulletin (Tape Topics). This listing featured members in 20 countries and 43 states of the U. S., and is the third list issue to club members during 1962 under the association's policy of publishing its Membership Roster in looseleaf form.

JOIN A CLUB

TAPE RECORDING Magazine assumes no responsibility for the management or operation of the clubs listed. This directory of clubs is maintained as a service to our readers. Please write directly to the club in which you are interested regarding membership or other matters.

Please enclose self addressed, stamped envelope when writing to the clubs.

AMATEUR TAPE EXCHANGE ASSOCIATION
Ernest Rawlings, President
5411 Bocage Street
Cartierville, Montreal 9, P. Q., Canada

AMERICAN TAPE EXCHANGE
Clarence J. Rutledge, Director
1422 No. 45th Street
East St. Louis, Illinois

CATHOLIC TAPE RECORDERS OF AMERICA,
INTERNATIONAL
Jerome W. Ciarrocchi, Secretary
26 South Mount Vernon Avenue
Uniontown, Pennsylvania

CLUB DU RUBAN SONORE
J. A. Freddy Masson, Secretary
Grosse Ile, Cte, Montmagny,
P. Que., Canada

INDIANA RECORDING CLUB
Maxie Coffman, Secretary
4770 E. 39th St.
Indianapolis 18, Indiana

MAGNETO-VOX CLUB
J. M. Roussel, Secretary
7915 Des Erables
Montreal 35, Que., Canada

ORGAN MUSIC ENTHUSIASTS
Carl Williams, Secretary
152 Clizbe Avenue
Amsterdam, New York

STEREO INTERNATIONAL
O. B. Sloat, Director
1047 Flatbush Avenue
Brooklyn 26, N. Y.

TAPEWORMS INTERNATIONAL
TAPE RECORDING CLUB
Marion Chism, Co-ordinator
129 South Broad Street
Carlinville, Illinois

THE SOCIETY OF TAPE HOBBYISTS
Ralph Holder, General Secretary
116-06 139th Street
South Ozone Park 36, N. Y.

THE VOICESPONDENCE CLUB
Charles Owen, Secretary
Noel, Virginia

UNION MONDIALE DES VOIX FRANCAISES
Emile Garin, Secretary
512 Hart Street
Brooklyn 21, N. Y.

UNIVERSAL TAPE NETWORK
Larry Duhamel, President
R. F. D. #1, Main St.
East Douglas, Mass.

WORLD TAPE PALS, Inc.
Marjorie Matthews, Secretary
P. O. Box 9211, Dallas 15, Texas

WORLD-WIDE FRIENDS BY TAPE
George A. Benton, 3rd, Mgr.
1018 Leo Way
Oakland 11, Calif.

OVERSEAS

AUSTRALIAN TAPE RECORDISTS
ASSOC.
Bob Nardi, Hon. Sec./Treas.
P. O. Box 67, Eastwood,
New South Wales,
Australia

ENGLISH SPEAKING TAPE RESPONDENTS'
ASSOCIATION
Robert Ellis, Secretary and Treasurer
Schoolhouse, Whitsome By Duns
Berwickshire, Scotland

INTERNATIONAL TAPE FELLOWSHIP
Fred Rimmer, Overseas Rep.
21 Mount Pleasant
Sutton-in-Ashfield
Nottinghamshire, England

THE NEW ZEALAND
TAPE RECORDING CLUB
Kenneth M. Tuxford
P. O. Box 7060
Auckland, W. I, New Zealand



A Girl Commentator using the Norelco Continental 100 to record a Girl Scout group from Allentown, Pennsylvania dressed in Pennsylvania Dutch costumes playing a "Kitching" Band of homemade instruments.

Operation "Girl Commentator"

by IRVING GELLER

... Girl Scouts 900 strong kept their local radio stations supplied with taped interviews during their 1962 Senior Girl Scout Roundup.

OPERATION "Girl Commentator" was the greatest tape recorder workout in history. Last month, from July 18 through July 31st, at the 1962 Girl Scout Senior Roundup at Button Bay State Park in Vermont, almost 900 Girl Scouts became Girl Commentators and recorded their impressions of the Roundup and interviews with Scouts from all over the world on over 4,000 reels of tape for rebroadcast over 900 of their local hometown radio stations.

Taking place every three years, the Roundup is the high point of a Girl Scout's career. At the Roundup, the girls live as tent mates and neighbors with Scouts from all over the United States and 21 foreign countries. It is an experience in living with persons of many different interests and backgrounds—finding out about them and in the process finding out more about oneself.

One of the main purposes of the Girl Commentator program was to fill-in each girl's parents, friends and community with a very personal picture of the Roundup to supplement the impersonal reports they would be getting on TV and in the newspapers. At the same time,

it acquainted the girls with tape recorders and recording as well as giving them a taste of broadcasting as a possible vocation.

For most of the Girl Commentators, this was their first experience with tape recording. Yet so efficiently was the program organized, and so thorough the training, that many tapes approached a professional level. Before Roundup ended one Girl Commentator from Lake Wells, Florida was offered a job by her local radio station.

Operation Girl Commentator was conceived, organized and directed by Natalie Flatow, Director of Radio-TV, Girl Scouts of the U. S. A. She tried out the idea at the 1959 Roundup in Colorado where 183 girls from 45 states made more than 900 recordings for broadcasting over 238 stations. So successful was the project that it was decided to repeat it on a much expanded scale at the 1962 Roundup.

The 1962 operation was of such magnitude that the services of many individuals and organizations had to be enlisted, including the Girl Scout Councils throughout the U. S., radio station program directors and station managers,



Upper left: Girl Scout Commentators wait outside one of the recording tents. Upper right: each tent had a reception desk where the girls signed in for time in the recording booths. Center left: a recording engineer at the controls of one of the Norelco Continental 200's watching a production assistant for the signal to end a taping. All tapes were stopwatch timed. Center right: Commentator in one of the recording booths just prior to a recording session. Lower left: Mr. Britt Petty, station manager of WLTC, Gastonia, North Carolina preparing to record Girl Scout Commentator Lynn Dupree of Amarillo, Texas. Lower right: Mr. Ken Jarvis of Winnetka, Illinois, one of the electronic engineers who assisted the program, giving special instructions to three of the girls.

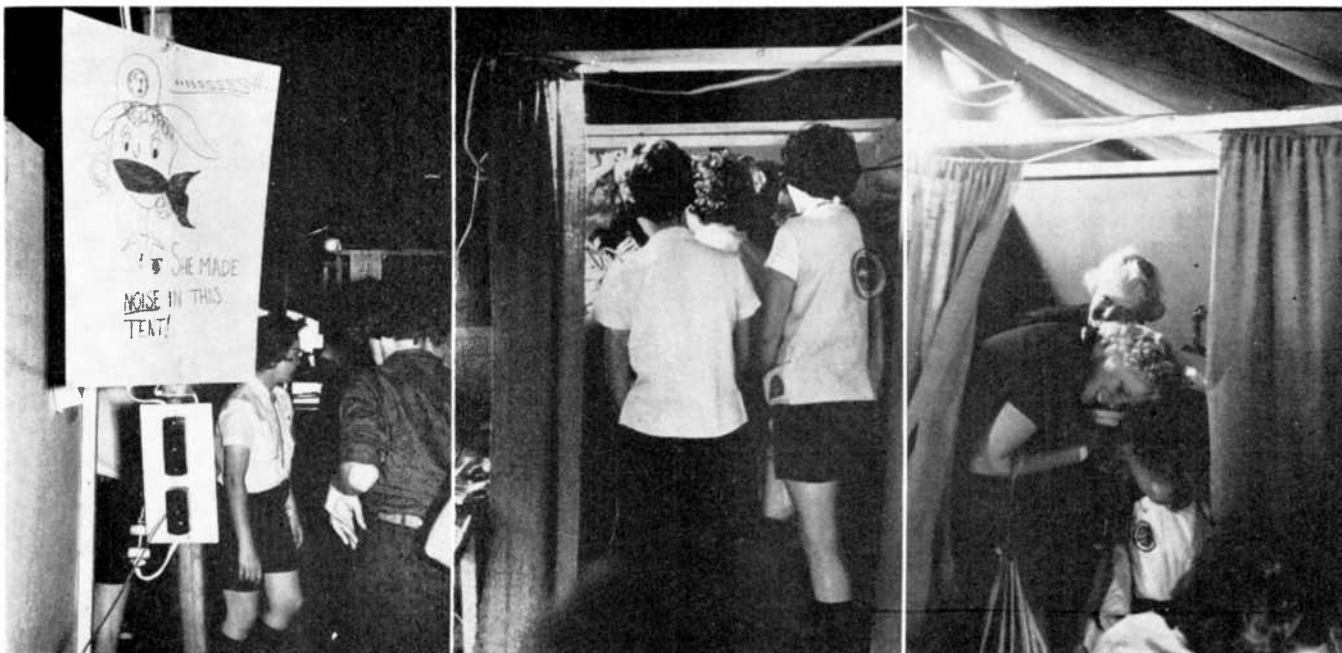
members of the organization American Women in Radio and Television, Inc., electronics engineers, speech therapists, psychologists, the U. S. Army, and Mr. W. Semmelink of the North American Philips Company, who provided 17 Norelco Continental tape recorders.

In the spring of 1962 the nearly 900 Commentators were selected from among those Roundup Girl Scouts (ages 14-17) who seemed to show an aptitude for, and interest in recording, speech or broadcasting. They were selected by their Councils, with the local radio station program director in many instances, helping in the choice, often by personally auditioning the girls.

Thereupon, the Council, the station program director and the fledgling Girl Commentator decided how many tapes would be made, how long each would be, and, in a general way, their subject matter.

For efficiency, and to keep the program from getting completely out of hand, Miss Flatow suggested that each Commentator be limited to a maximum of five tapes, with each tape running no longer than five minutes.

Experience at the 1959 Roundup showed that the more a Girl Commentator practiced and rehearsed, the more interesting and fluent her tapes were likely to be. (Also true of home recording) To start the ball rolling, some



Left: a warning sign "She made a noise in this tent" was erected at the entrance to one of the tents. Center: on multiple interviews some of the small recording booths looked like a telephone-booth packing contest. Right: two girl scouts from Sweden and a Girl Scout Commentator crack up with laughter during a recording session. They started over again.

Girl Scout Councils arranged with local radio stations for the neophyte Girl Commentators to sit in with a woman commentator, observe her working methods, interview her, and sometimes even go on the air with her.

Members of American Women in Radio and Television, Inc. also helped train Girl Commentators. AWRT is a professional group of women who work in radio, television and allied fields with 39 local chapters throughout the country. A unique contribution was made by the Houston, Texas chapter of AWRT when its president, Krin Helzhauser, made four instructional tapes which she sent to Girl Scouts Councils throughout Texas. In Philadelphia, the girls were trained by an AWRT member who was also Radio, TV assistant at the Board of Education.

When the Girl Commentator received her accreditation, she also received a copy of a booklet entitled, "Meet Mike." It was written and prepared by AWRT Eastern Area vice president Julie Chase Fuller, who presides over a daily 1½ hour interview program on Station WTAG, Worcester, Mass. In "Meet Mike," Mrs. Fuller provides the fledgling Girl Commentator with the basic facts on microphone techniques, special speech techniques, general broadcast station procedure, possible interview topics and hints on how to ask questions in such a way that answers are bound to be interesting.

She also advises the girls on advance preparation, especially keeping notes, being receptive to topics that would interest the audience back home, and—perhaps most difficult of all for a beginner—how to identify oneself gracefully. The booklet also provides an answer to that most embarrassing of situations, "What do I do if I make a mistake?" Mrs. Fuller advises, ". . . don't go back and try to correct it . . . just go ahead."

Meanwhile, back at Girl Scout headquarters in New York City, Miss Flatow and her staff were designing the recording tents and their interior layout, determining how many tape recorders and reels of tape would be needed,

recruiting technical as well as non-technical personnel to man the recording tents, and outlining a method of procedure and operation for 4,000 recording sessions.

Final arrangements called for three large recording tents with four recording booths in each tent. Each tent also had to have enough additional working space for clerical and technical personnel.

After consulting with officials from Norelco, it was decided that the Norelco Continental "200" would be the best machine to use. It is exceedingly simple to operate, having only one speed of 7½ ips, the speed required by all stations. With its extremely narrow headgap the "200" provides tapes of broadcast quality, more than meeting the professional standards of radio stations. In addition to providing 13 Continental "200's," Norelco also made available four Norelco Continental "100's," a portable transistorized tape recorder for those adventuresome Girl Commentators who wanted to try their hand at location work.

A staff of 44 was needed to operate the three recording tents. Headed by Miss Beth Brown of Watertown, New York, Executive Director of the Jefferson County Girl Scout Council, the staff consisted of three electronics technicians from the U. S. First Army and 40 volunteers. These 40 came from every corner of the U. S. and from all walks of life. They included a radio station owner, an electronics engineer, a speech therapist, a college instructor, a psychologist, housewives, former Girl Commentators and veterans of the previous Roundup.

Of the 40 volunteers, 33 were divided into three groups of eleven each and assigned to the recording tents. One of the eleven was a receptionist who received the girls and scheduled appointments. Each of the tents had two hostesses to work with the Girl Commentators, answering questions and helping with scripts. Each tent had four production assistants, one for each recording booth. Provided with stop watches, they signaled the Girl Commentators to begin taping, carefully timed the broadcasts

and signaled when time was up. Each tent also had assigned to it four recording engineers to operate the Norelco tape recorders. For maximum efficiency, each worked side-by-side with a production assistant.

To meet minor crises, which are inevitable in such a large and complicated operation, a Swing Patrol was organized. It included Miss Brown, the three Army technicians, and two professional engineers: Mr. Ken Jarvis of Winnetka, Illinois and Mr. Britt Petty, owner and Manager of WLTC, Gastonia, North Carolina.

Not one of the 12 volunteer recording engineers, it turned out, had ever operated a tape recorder. But they received a course of instruction unique in the annals of hi-fi. On the first day they were shown the machine and instructed how to operate it. On the second day they paired off and, using the "role playing" technique, tested each other. The person acting the Girl Commentator part tried to trip up her opposite number by producing every difficulty that might later occur. After a period when the "recording engineer" was on the verge of exhaustion or homicide, the roles were exchanged. As it worked out in practice, this learning method provided in one day the equivalent of many months of ordinary working experience with tape recorders.

In the morning and afternoon of Thursday and Friday, July 19 and 20, the Girl Commentators, 200 at a time, received their final briefing. Miss Flatow presided and, after introductory remarks, introduced Mrs. Fuller who provided more tips and special hints. Then followed specific instructions on procedure, an extended question-and-answer period and finally, the scheduling of appointments.

The Girls were also told about the Village Green, a fine spot for on-location taping with the portable Norelco Continental "100." There, each day, different Girl Scout groups would present programs of songs and dances typical of their home areas. A Scout group from New Mexico was to present a Spanish Song Fiesta. A group from Pennsylvania was to do Welsh dances. Girls from Allentown, Pennsylvania, dressed in picturesque Amish costumes, formed a "Kitching Band," making music on homemade instruments such as washboards and tin cans. Another group from Davenport, Iowa would present an Indian dance and girls from St. Paul, Minnesota acted out an Indian story.

At her scheduled time, each Girl Commentator proceeded to her assigned tent where she was signed-in and conducted to a recording booth. There, she met the recording engineer operating the Continental "200" and the production assistant, stopwatch in hand and ready to proceed. The Girl Commentator was asked to speak a few words in a normal speaking voice so the recording engineer could adjust the volume control to the proper level.

A typical recording session: everything is ready now and everyone concerned having been thoroughly briefed and trained, the recording session gets under way immediately. The production assistant, after a nod from the recording engineer, points her index finger directly at the Girl Commentator, signaling, in radio sign language, that she is to start. A chart of radio hand signals is posted at the entrance of each tent as a last minute reminder.

The Girl Commentator now makes her recording. Most probably she has rehearsed and timed herself carefully so that the session proceeds smoothly. Most Girl Com-



A Girl Scout Commentator uses a portable Norelco Continental 100 to record a group from Delaware County, Pennsylvania singing and dancing a Welsh dance.

mentators speak from notes as was suggested to them in the booklet, "Meet Mike," since experience has shown that in the hands of a beginner a completely written out script tends to sound stiff and a completely ad lib one presents too many hazards for an amateur.

When the girls conducted live interviews, they, of course, brought the person interviewed into the booth with them. Sometimes there were multiple interviews with as many as six people jammed into the booth.

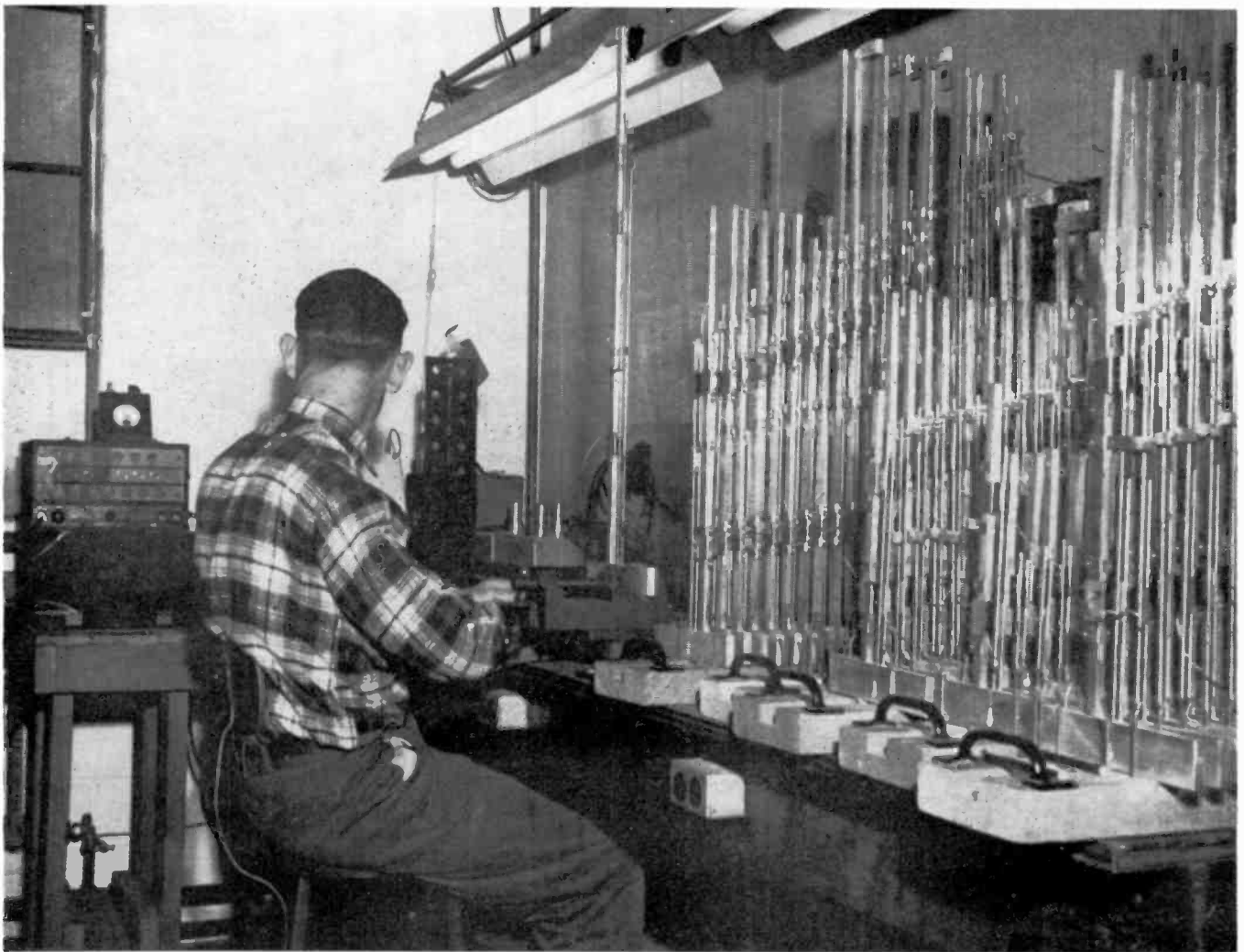
The interviews and commentary covered every conceivable topic from the geology of Vermont to the dietary habits of Girl Scouts from Nigeria. Whatever the topic, the Girl Commentators quickly learned the need to exercise editorial judgment. As one Girl Commentator put it, "I suddenly realized that you can't tell everything in two minutes. You have to be choosy and concentrate on the most colorful and significant details. And you often have to steer the person you're interviewing. Otherwise, before you know it, you've run out of time."

Immediately after a Girl Commentator finished her script, the recording engineer rewound the tape, handed it to the Commentator who took it to the mailing section of the tent where it was put into the mailer carton and addressed. (To save time the labels had been typed and prepared before Roundup.)

Within one minute after the Girl Commentator had left the recording booth another Commentator arrived, script in hand, ready to record. And so it went, a girl making a tape every ten minutes in each of the 12 recording booths from early morning to late at night for thirteen days.

The Girl Commentator program proved conclusively, if further proof were needed, that it is easy to learn to use a tape recorder and use it well; that it is a basic, universal entertainment instrument of unparalleled flexibility, roughly comparable to the box camera, and that the uses and applications to which a tape recorder can be put are limited only by the needs and imagination of the user.

The Girl Commentator operation also demonstrated forcefully that the more thorough the preparation and planning the better the tape. An average program can be made into a good one with rehearsals. A good program can become a superb one with proper preparation. Planning and rehearsing make the difference.



Miniature bronze bell generators are struck by tiny metal clappers to produce tones just as perfect as those sounded by traditional cast bronze cathedral bells. A set of Flemish tuned bells is shown being tuned (above) in the Schulmerich Carillon factory at Sellersville, Pa.

Tape Carillon Player

THE tones of cathedral bells have been called the most appealing ever heard by human ears.

The peal of bells, which have summoned the faithful to worship for centuries, are majestic and pure.

When George Schulmerich, a Philadelphia sound engineer, developed modern "miniature" carillons, he had to produce a tone just as pure and more tonally perfect than sounded by the traditional cast bronze bells.

He triumphed by inventing exactly tuned miniature bronze bell generators which are struck by tiny metal clappers. The faint vibrations from the electromechanical carillon are then amplified approximately a million times so that they can be audible over any desired area. In many cases the amplifiers generate anywhere from 1,000 to approximately 4,000 audio watts and at considerably less than 2% distortion.

Schulmerich Carillons, Inc., revolutionized an industry with this invention. Traditional cast bronze bells weigh anywhere from 80,000 to 280,000 pounds. Few cathedral towers or commercial buildings are capable of supporting that weight. Only trained muscled carillonneurs can swing

the huge clappers against the bells to produce the rich and full tones of which the bells are capable.

But Schulmerich reduced a set of bells to a few pounds and the audio amplification equipment necessary to amplify the bell tone generators is mounted in the conventional rack type equipment. The cost also was reduced from hundreds of thousands of dollars to only a few thousand.

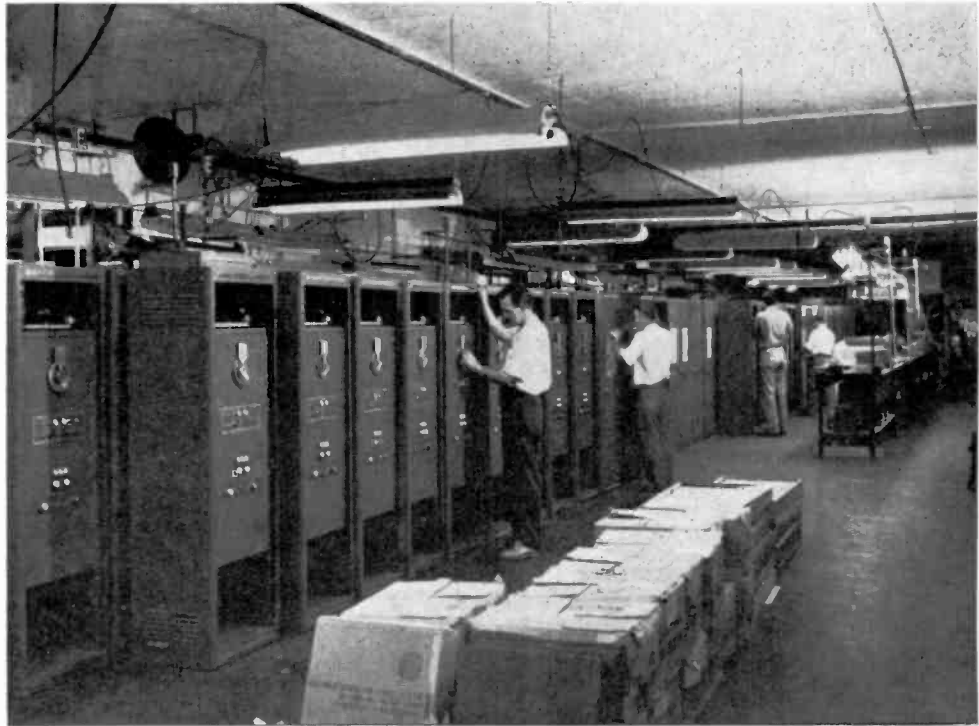
Schulmerich also automated them. The finest models are played from an organ-type console, either by an organist or a trained carillonneur. Other models are played by automatic means through perforated plastic rolls similar to a player piano operation.

However, Schulmerich, who founded Schulmerich Carillons, Inc., which produces the bells at Sellersville, Pennsylvania, realized there were many churches and institutions which could not afford even those models.

So he turned to a product which had revolutionized the sound industry, just as his carillons had revolutionized the bell industry.

For those who couldn't afford the finest, he developed a magnetic tape carillon player.

A partial view of the Schulmerich carillon production line is shown above. The company produces miniature carillons which are played either by an organist or carillonneur from an organ-type console, or automatically by perforated plastic rolls similar to a player piano operation. A third type is a magnetic tape carillon player.



In producing the tape playback deck, Ronald O. Beach, president of the concern, says, "we had to satisfy the most critical musical ear.

"Because a bell is a percussion instrument, whose recording imperfections cannot be covered by other instruments as in an orchestra, an off-tone produced by any wow and flutter is easily distinguishable. Dropouts could not be tolerated."

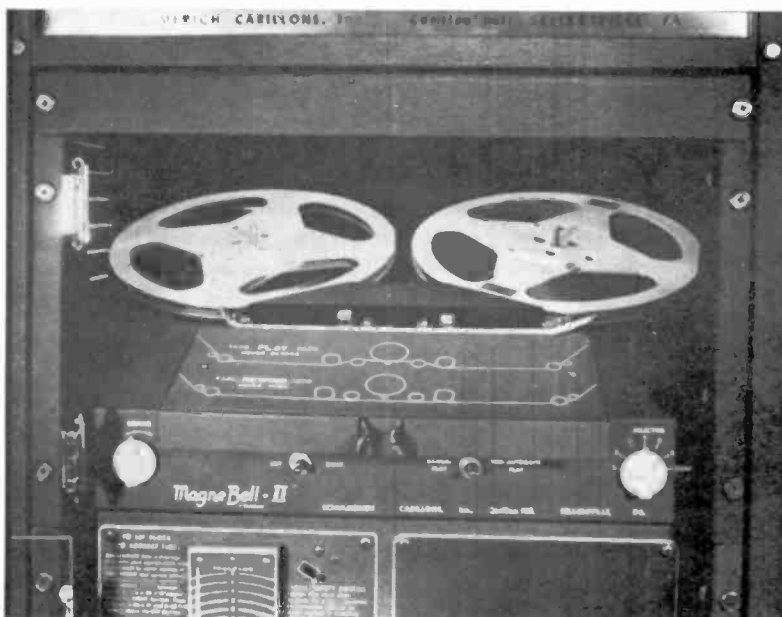
To eliminate wow and flutter, the company was compelled to design its own tape playback mechanism. And for recording, it turned to the 3M Company, which pioneered the development of magnetic recording, for a tape which not only reproduced a true tone, but also was rugged and able to withstand repeated handling.

It chose "Scotch" brand No. 498 instrumentation tape for mastering, and No. 111 for duplicates. The former is a heavy duty tape which is free of dropouts—a quality which is of utmost importance in recording a percussion

instrument such as a carillon. It also provides the best resolution of high and low frequencies. No. 111, which is regarded as the international standard of the recording industry, is ideal for all general recording needs.

The Schulmerich player has an automatic reversing mechanism and, as well, the carillon tape can be automatically programmed for one or more selections per playing time by a clocking device. It operates at 3¾ inches per second, and uses 10½ inch dual track reels. The company has a library of some 5,000 bell music selections which can be recorded on magnetic tape.

The beauty of bell music will be heard by the millions who attend the Seattle World's Fair this year. The largest carillon ever produced—538 bells—was installed by Schulmerich Carillons on the Space Needle. Its music is produced by all three methods—by trained world famous carillonneurs at a keyboard . . . by plastic perforated rolls . . . and by sound recording tape.



A special silent sensing and automatic reversing tape player was designed by Schulmerich Carillons to reproduce without wow and flutter, the true tones of miniature bell carillons in order to satisfy the most critical musical ear.

Remote Mike Control at 100 Feet.

by
Tommy Thomas

... here's a rig that will enable you to control your recorder from a distance.

Fig. 1. With a hundred feet (or as much as you need) of cable hooked up to a low impedance mike, you can wander around the largest home, indoors or out. And with this special motor control hookup, you can turn your recorder on and off from wherever you may be.



FOR those of you interested in utilizing an overly long cable with your microphone, here's a somewhat unique method that may well be of interest. It costs a bit of money, but the results are superb, with the added "extra" that you can control your recorder from the microphone position . . . turning the machine instantly on or off by remote control. And strangely enough, the wires that control the recorder are right inside the shielded mike cable itself.

Now before possibly scaring you off with a listing of high priced components, let me point out that this is an "add-on" system. You can purchase the separate items one at a time as you can afford them, and use each one as you get it. Their versatility expands as you combine more and more of them together.

The accompanying photos and their captions and diagrams explain the basic procedure. Note that there are

two completely separate circuits involved: the low impedance microphone hooked up to one hundred feet of cable and the relay switching arrangement that turns the recorder motor on or off from the mike position. Except for the 100-foot shielded cable that these two circuits "share," they have nothing at all in common.

LOW IMPEDANCE MICROPHONE:

Most home recorders come with an inexpensive crystal or ceramic mike that is quite adequate for the beginner in recording. But for more advanced work, where a smooth wide response is required for a more faithful reproduction of both voice and music, a *dynamic* microphone is usually recommended as the best type for general applications. I'm sure you've read articles describing the various features of dynamic mikes so I won't go into that now. The important feature here is that they come in low impedance, which is absolutely essential if you're interested in an extra-

Fig. 2. Best of all, on low impedance and despite the hundred or more feet of cable, your recordings will sound astonishingly more real and natural than those made with your regular "short-corded" crystal/ceramic mike. A quality microphone yields a smooth, wide response that records with a wonderful clarity and trueness of tone.

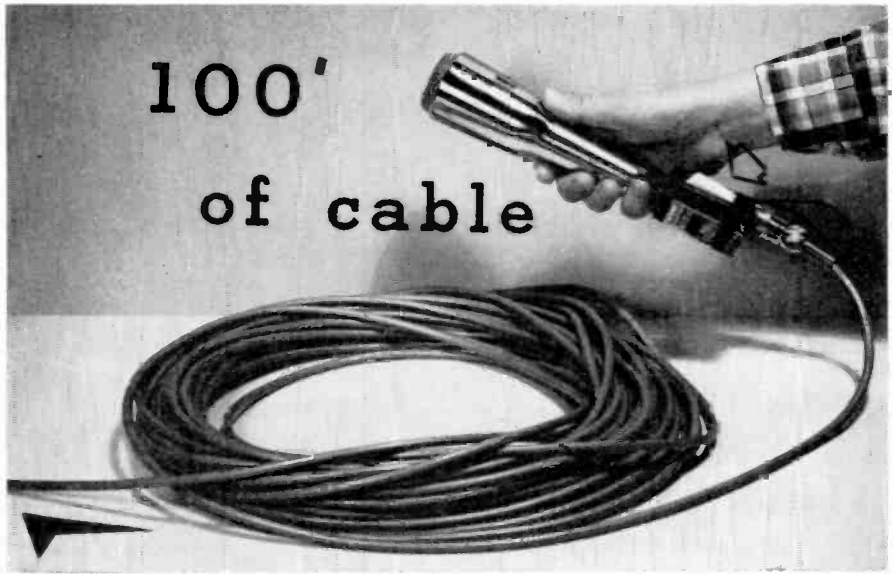


Fig. 3-a, Here's the remote control push-switch that activates the recorder. It is taped to the mike (see Fig. 2, arrow): press it down and the tape starts moving and recording . . . release it and it stops instantly. This particular doorbell switch must be held down to work the recorder, but you may prefer one that holds itself down.

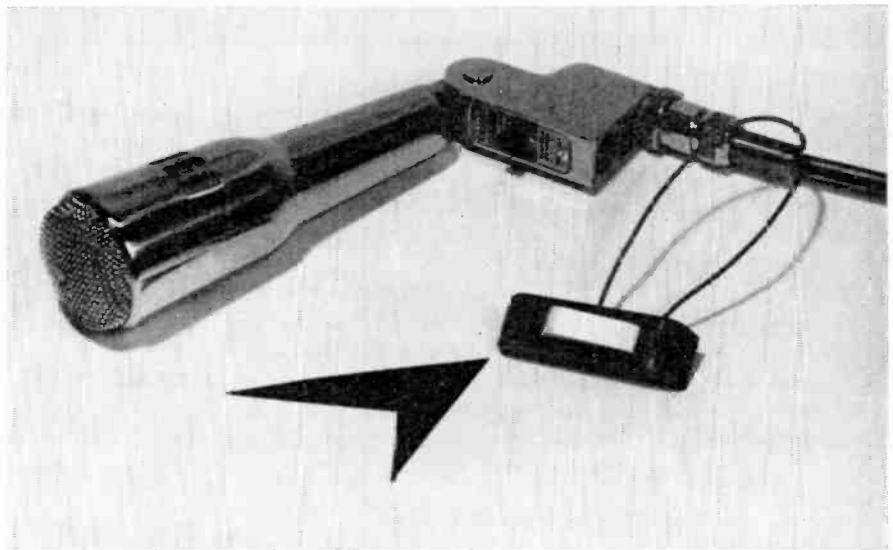
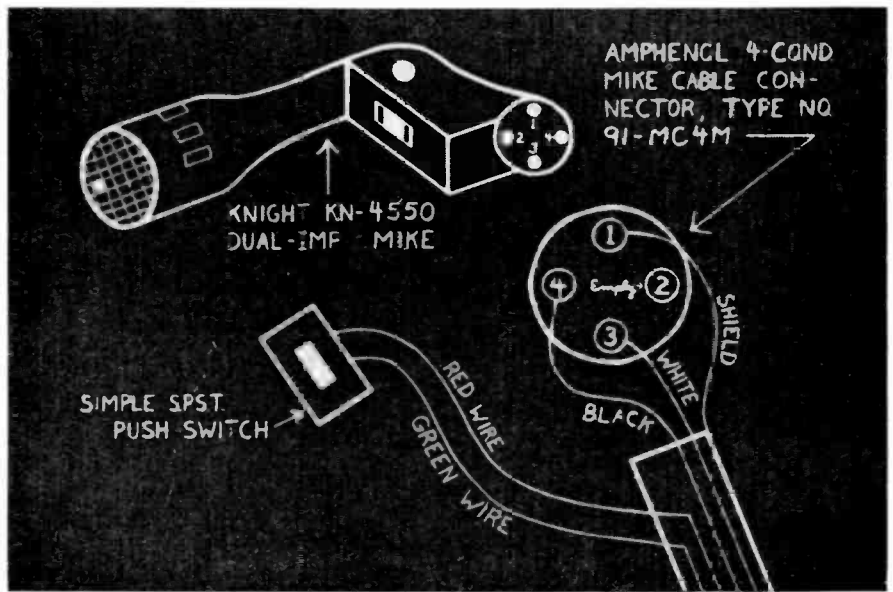


Fig. 3-b, Normally the shielded cable used with a low impedance mike has only two inside conductors (white and black wires) that go to the microphone via a male connector as shown here. But by using a FOUR-conductor shielded cable instead, the extra wires (red & green) can be used to control the relay that activates the recorder.



long cable. You can use a hundred, two hundred or even a thousand feet of cable with a good low impedance microphone without *any* loss in quality in your recordings. Any decent dynamic mike will do the job, but don't expect to buy a cheapie import job and get adequate

results. My own mike, which I've been using for over a year now with all-around excellent results in many different applications, is the *Knight KN-4550 Cardioid Dynamic Microphone*. It has a super-cardioid anti-feedback pickup pattern (it picks up sound mostly from the

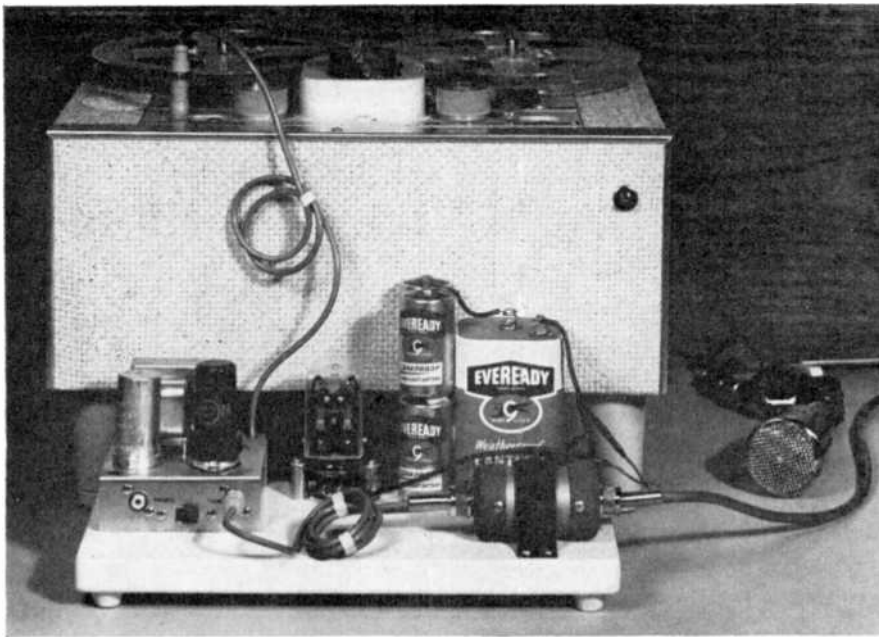


Fig. 4. Here, in outside "breadboard" arrangement, is the complete hookup, though you may not need all of it. If you have enough extra space inside your recorder and if you're adept at this sort of thing, you may wish to conceal all of these components inside the single cabinet as illustrated in Fig. 1; but it's not at all necessary.

front) that greatly reduces the recording of unwanted noises on the other side of the mike. Also, the sharply defined pickup pattern permits the user to stand as much as twice the usual distance from the mike without audible loss of response. It has many other fine features for the not unreasonable price of \$34.50.

Best of all, this mike can be wired EITHER for high or low impedance. It comes with eighteen feet of cable and is wired for high impedance. This means that you can plug it into your recorder and put most of its quality features to work for you immediately. Then later, you can rewire it very simply for low impedance use with long cables.

LOW-TO-HIGH IMPEDANCE CABLE TRANSFORMER:

But then, of course, you will have to use a special transformer that will change the low impedance to high so it will work with your recorder (only professional recorders are originally wired for low impedance). This means another ten dollars or so for a *Shure Model A86A*

Cable-Type Transformer. Actually, the transformer itself is quite tiny, but in order to shield it from strong magnetic fields that would introduce noise into your recordings, it is sealed inside a sturdy magnetically shielded cylindrical metal casing (see Fig. 8 for a closeup of this transformer). Even then, as the instructions point out, if you place the transformer inside the recorder cabinet, say, you should try out various positionings until the one that yields the least hum is found. Placing the transformer outside the recorder, as illustrated here, of course minimizes this problem of hum pickup almost to non-existence. In either case, read the instruction sheet carefully and you'll get excellent results.

Just how strong the now-high-impedance signal is at "B" (see Figs. 5, a & b) depends on how long your microphone cable is. If it's only fifty or so feet long and you have a fairly powerful recorder, you should be able to record directly. Just plug from the transformer on the "B" side (using shielded cable, naturally) right into your machine. With my little recorder here and a full hundred feet of cable, I had to turn it up to full recording volume

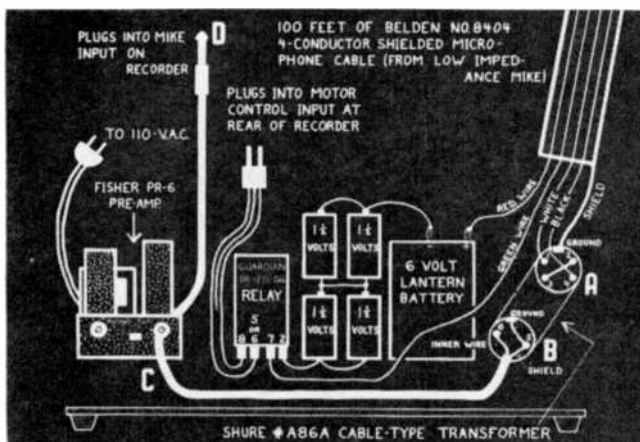


Fig. 5-a. Actually you have two individual circuits here: (1) the mike hookup that routes itself first through the cable transformer and then through the preamp before plugging into the recorder, and (2) the completely separate relay control that acts as a simple switch to remotely turn the recorder's motor on and off as needed.

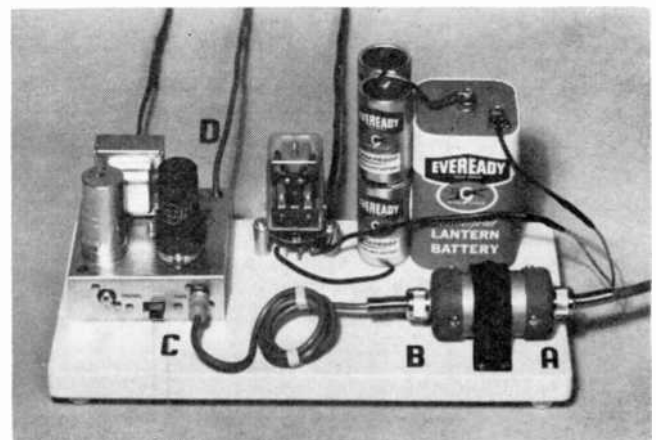


Fig. 5-b. The tiny original signal from the low impedance microphone goes through the hundred or so feet of shielded cable and comes to the "A" side of the Shure transformer. It comes out at "B" as high impedance. From there, still very weak, it goes into the Fisher preamp at "C", emerging highly "souped up" at "D".

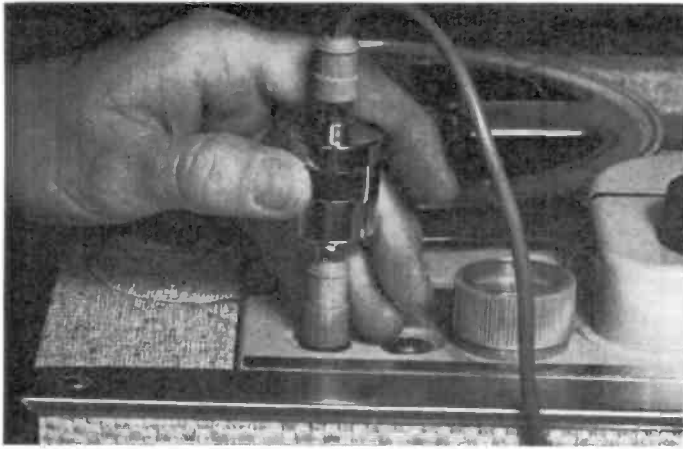


Fig. 6, The output "D" of the preamp may be so strong as to overload your recorder. The preamp instructions show how to reduce this gain by shorting out a capacitor inside the unit but a simpler method (for some) will be to use an auxiliary 1-megohm control in the line as shown here plugged into the recorder (Switchcraft Part #366).

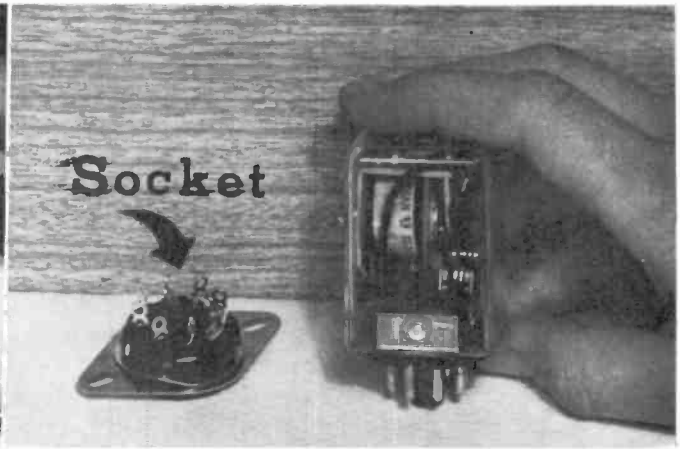


Fig. 7, The main component of the second circuit (switching the recorder motor on and off) is this Guardian d.c.-operated relay. It's a small relay that comes completely encased in a plug-in type Lucite enclosure for efficient, dust-free and trouble-free operation. The 8-ampere contacts easily handle the motor switching.



Fig. 8, Notice the extra batteries added in series/parallel to the lantern battery hookup. Although this relay is rated at six volts, a number of variables (such as going through two hundred feet of fine cable wire) makes it necessary to build up the voltage to nine volts or so for best and consistent results with the relay.

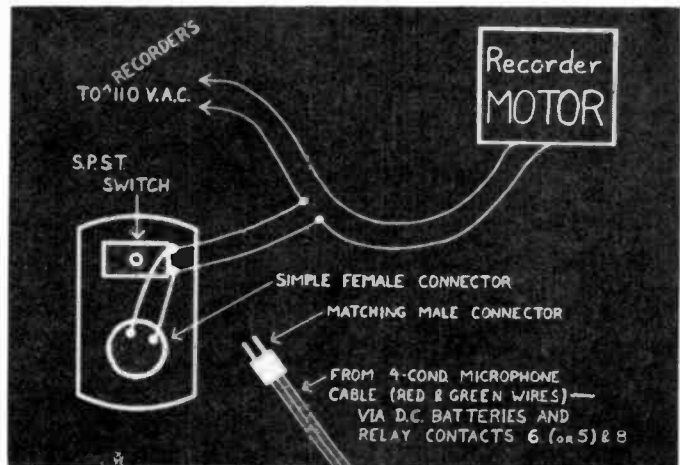


Fig. 9-a, This diagram shows the change and additions necessary to control the recorder. Cut one (either one) of the two wires coming from the motor and lead the two ends to a SPST switch and a parallel-connected female socket connector. The switch allows normal use of the recorder when the mike-switch is not plugged in for use.

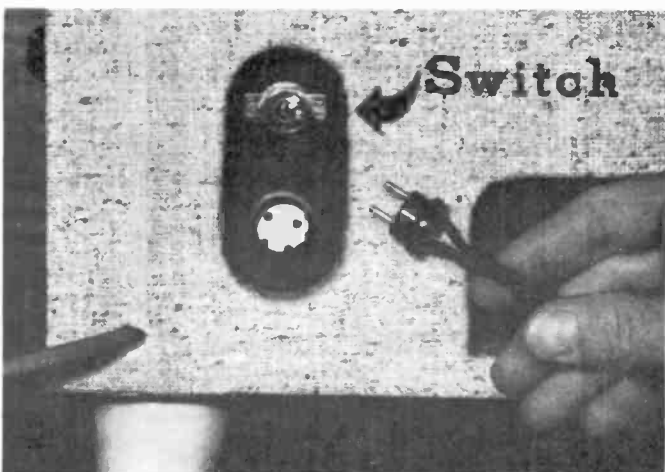


Fig. 9-b, A good place to locate the auxiliary switch and socket is at the rear of the recorder, shown here recessed right into the cabinet. But since the wire lengths are not at all critical, you can locate these parts wherever most convenient. Then, for remote control, plug in the relay plug and flip the toggle switch to "OFF."

and speak into the mike from only inches away to make it work . . . which of course is less than adequate.

EXTRA ("PRE.") AMPLIFICATION:

(Here go another thirteen bucks!) The little *Fisher Model PR-6 Preamplifier* shown here is the same one I've been using for years for many different recording jobs. Rewired slightly, it'll work equally well with a phono deck, a tape head or a low-level microphone to provide the voltage gain and equalization necessary to use any of these components with a regular amplifier (recorder). Here it is used to build the tiny signal—much weakened from all that cable travel—into a mighty one that the recorder can handle. In fact, as pointed out in Fig. 6, the amplified signal may now be so powerful as to need cutting down by means of an accessory volume control. The preamp instructions, which you should read thoroughly, show how to reduce this more-than-ample gain by shorting out a 1,000 mmfd. ceramic capacitor inside the chassis. But as I use this handy little preamp for various purposes, it's easier for me to just insert the auxiliary *Switchcraft Volume Control* when I'm using it for mike amplification.

This, now, takes care of the initial circuit, involving the microphone proper. Fig. 3-b points out that instead of using regular two-conductor shielded mike cable, FOUR-conductor cable is used instead so you'll have an extra two wires for the motor control switch that tape-mounts onto the mike. A hundred feet of Belden No. 8404 four-conductor shielded cable costs about \$7.50, which is less than two dollars over the price of "regular" two-conductor cable. So even if you don't intend to add the extra motor control circuit to your recorder system right away, it's a good idea to get this cable. You can ignore the extra two wires until you need them.

RECORDER MOTOR CONTROL:

Once set for "Record," you can remote-control the "On" and "Off" of your recordings by inserting a switch in the motor line as shown in Fig. 9-a. It would be impractical for a number of reasons to run this wiring directly through to the auxiliary switch on the microphone, but a nearby relay will do this job for you perfectly. Shown here is a *Guardian No. IR-1215-G6 Enclosed Plug-In Relay* with a 6-volt d.c. coil and 8-amp. DPDT switch contacts. You can't get less than a DPDT switching arrangement with this relay, so the extra contacts will go idle until you maybe need them some day if and when the first set burns out (just switch your wiring). This dandy little

relay sells for a bit less than six dollars, though a less expensive open-type relay will do the job just as well. But for the uninitiated, this is a sturdy, tamper-proof relay that is worth the extra money. It plugs in like a regular tube, so be sure to get a matching octal socket.

By using contacts "8" and "6" (the octal socket is numbered underneath) the recorder will go ON when you press the mike switch. By using contacts "8" and "5", the recorder will go OFF when you press the switch. NOTE! The switch taped to the microphone (see Fig. 2, arrow) is a *push* switch. If you're not careful when you use it, it can lead to relay "chattering" under prolonged use, as your hand gets tired and relaxes its grip. So you may prefer a switch that will hold without constant pressure. Or here's an idea! Use a small *mercury switch* that is positioned on the microphone to automatically start the recorder working whenever the mike is held upright, with the machine stopping immediately every time the mike is upended.

It's usually safe to overload a relay coil as much as 100% without doing a bit of harm, so note that the Fig. 5-a wiring of the various batteries comes out to about nine volts total (which is but an extra 50% overload). I had trouble at first with only a 6-volt lantern battery—which even when brand new only checked out to 5½ volts—because often the relay would not snap shut when activated a number of times in quick succession. Building the voltage up well past six volts solved this problem neatly and permanently. And in case you're wondering why I didn't use an a.c.-operated relay so batteries wouldn't be necessary . . . that's just exactly what I first tried. I used a *Guardian 6-volt a.c. relay* that I activated with the current from a small 6.3 volt filament transformer (plugged into 110-V. A.C.) and it functioned beautifully. EXCEPT THAT the 60-cycle a.c. current pulsating through the 100 feet of mike cable and back again was picked up and amplified into a small but annoying hum when recording. So I *had* to use direct current.

FINAL NOTE! I ran into a freak deal (which you may or may not run up against) when running the short shielded cables from the cable transformer at "B" to the preamp at "C", and from the preamp at "D" to the mike input on the recorder. At first cables "B-to-C" and "D"-to-recorder were made very short, which seemed the convenient thing to do. But all of my first recordings were distorted and it took me hours to discover that somehow these too-short cables were the culprits. When each shielded cable was lengthened to 30 inches, the distortion disappeared and I've had nothing but wonderful results ever since.

Recording from Radio and TV

by **BART PIERSON**

. . . . There are a number of ways in which recordings may be made—
some better than others.

ONE of the plus values of recorder ownership is the ability to record from the radio or TV. With the recorder hooked to the set, anything that interests you can be put on tape and preserved.

Now, with the advent of stereo broadcasting, it will be possible to record in stereo as well as monaural.

There are a number of ways in which recordings may be made from radio or TV and the same principles apply to recording from a phonograph or from another recorder.

The simplest method of recording, of course, is to put the microphone up to the loudspeaker and hope for the best. Actually this is a very poor way to make a recording since any noises in the vicinity of the recording point will be picked up by the microphone in addition to the program material you wish. Footsteps across the floor, children making noise, or even noises from streets outside the home may find their way to the tape.

If you must record this way, wrap the microphone in a handkerchief and place it right on the speaker opening. The thickness of handkerchief will aid in cutting down the extraneous noise you do not want.

A second method is making a connection to the voice coil of the loudspeaker. Most recorder accessory packs contain the necessary cords, on one end of which is a plug fitting the recorder input and on the other a pair of alligator clips for attachment to the voice coil leads.

This might be termed the second best way of making recordings. It has two faults: 1—if such a hookup is made

to a table model AC-DC receiver you may get a bad shock because these small radios frequently have some voltage on the chassis. 2—the loudspeaker itself can act as a microphone and generate a voltage which is fed into the tape recorder along with the signal you wish to record, just as with a microphone. While this can happen, the loudspeaker really is not such a good "mike" and the level of sound produced by it would be very low.

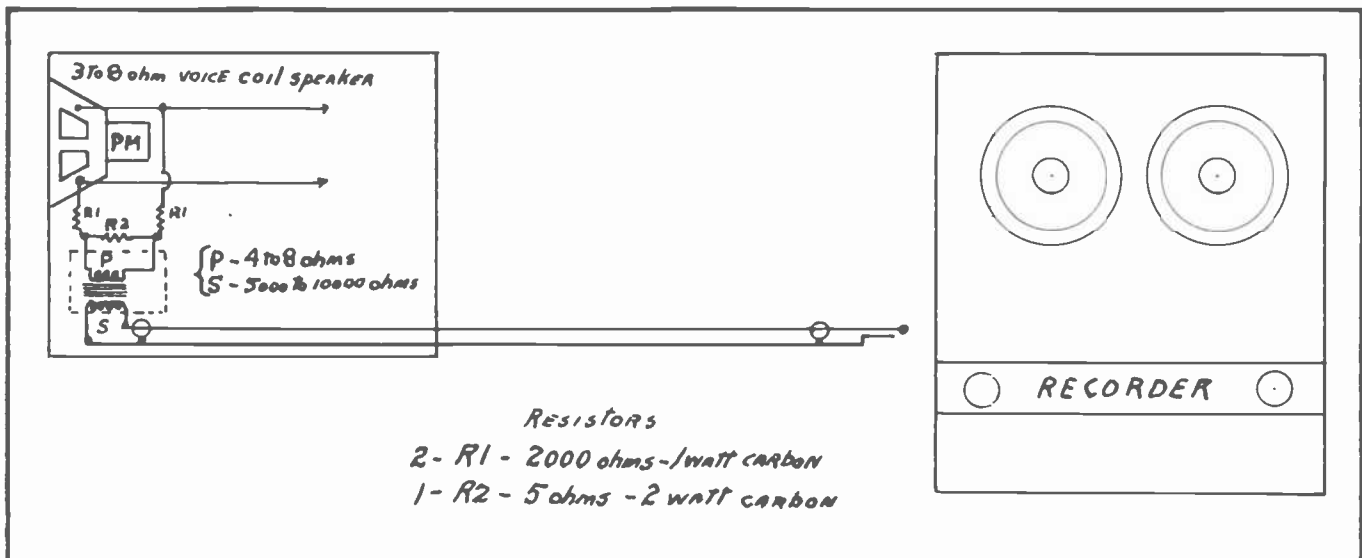
The third method of recording is the best of all and that is taking the lead from the volume control of the radio, TV or other device from which it is desired to record.

By using this takeoff point, the amplifier in the set is bypassed and a better and cleaner signal is secured, in contrast to one taken from the speaker voice coils after passing through the amplifier.

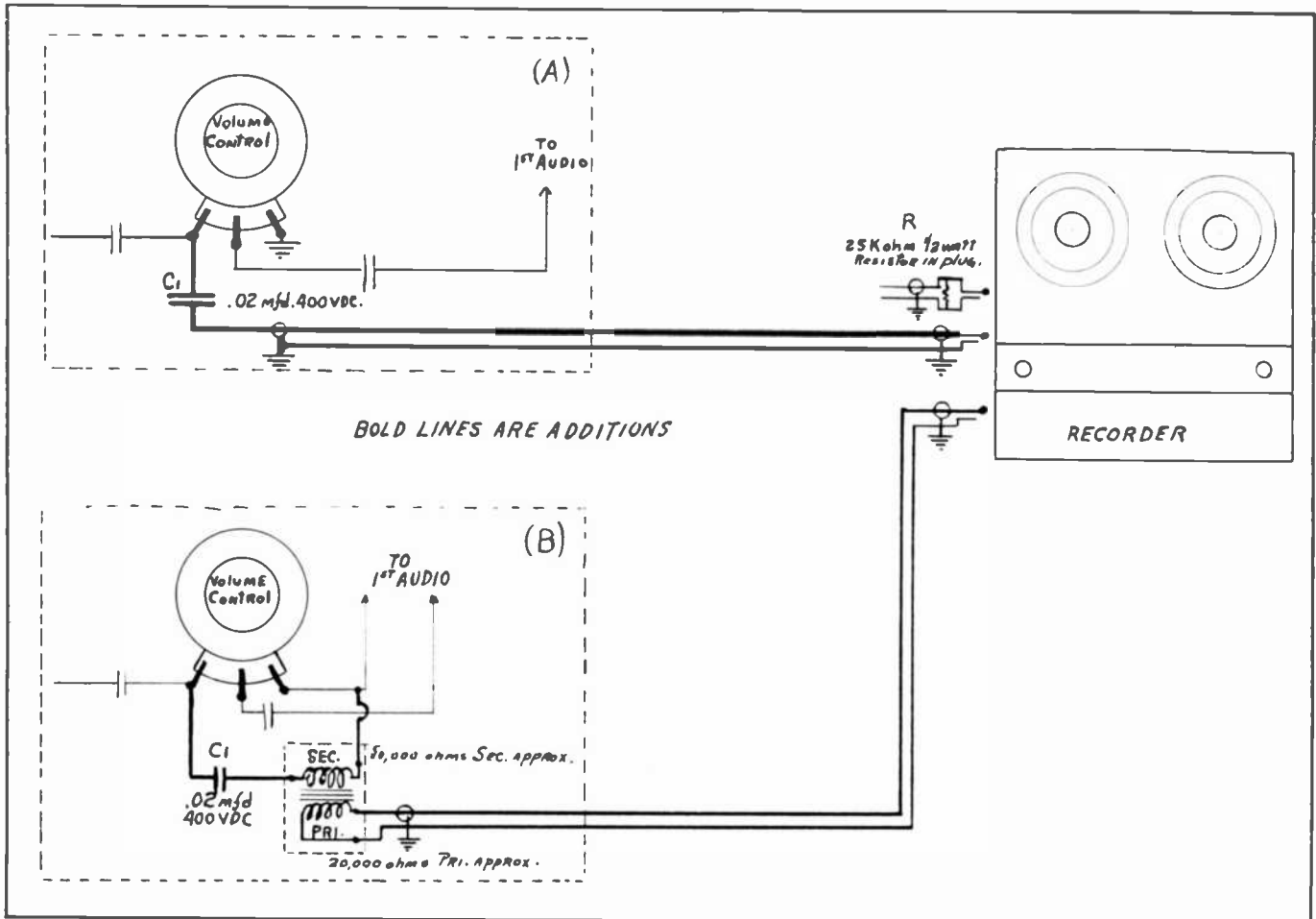
Sometimes set amplifiers will introduce distortion into the signal, in addition to the currents generated by the speaker as mentioned above. TV has not been noted for excellence of audio.

Generally the volume control is placed in a receiver circuit ahead of the first audio stage of amplification and thus you will have a clean signal right from the tuner.

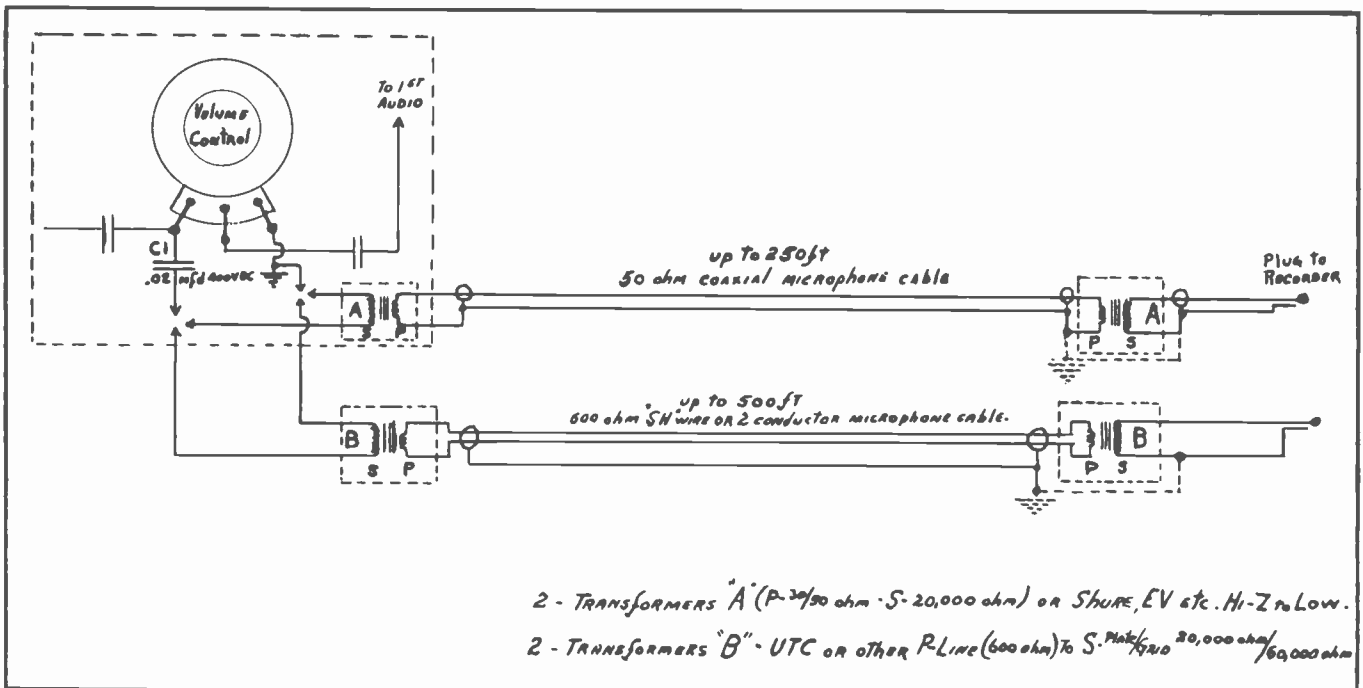
FM reception is superior to AM for the reason that man made static, and natural static, is eliminated. AM radio, on the other hand, will respond with clicks and pops to thunderstorms, the switching on and off of appliances in the home and even to noises coming along the power



You can make a recording simply by hooking the alligator clips on the recorder accessory cord to the voice coil speaker terminals but if hum and distortion is encountered you will make out better by employing a transformer and a matching "pad." The latter consists of a 1 watt, 2000 ohm resistor connected to each line with a 5 ohm 2 watt resistor connected across them. The transformer is a medium quality plate to voice coil transformer 10,000 to 4 ohms. It is bridged across the circuit as shown.



The volume control is the best takeoff point for recording and on most sets the hookup shown in the (A) drawing will work fine. If necessary a 25,000 ohm resistor may be incorporated in the plug which goes into the recorder. You can run up to 25 feet with this hookup using single conductor shielded microphone cable. If more bass is desired, increase the value of the condenser to a maximum of .1 mfd. For AC-DC sets or TV sets which may have a voltage on the chassis, use the hookup shown at (B) otherwise some dangerous shocks may result or excessive hum be present. It is necessary to include the transformer to isolate the voltage. Your local serviceman can make the hookup if you do not feel up to it.



If your recorder is at a great distance from the sound source (such as might be the case in a hall of auditorium) use the hookups shown. The connecting wire must be operated at low impedance to transmit the current without loss hence it is necessary to use a transformer at the set to drop the impedance to the line and another at the recorder to boost it back up again. The transformers are placed "back to back" by connecting their primaries together by means of the long line.

lines and which are caused by heavy commercial users. In fact, the latter power or switching surges will affect all audio equipment.

There is one way in which these may be eliminated or at least drastically cut down and that is through the use of a line filter such as the Cornell-Dubilier AC line filter which is available from radio parts houses. These are a good investment if much recording between various units is contemplated.

Getting back to FM radio, which is the superior source, it must be remembered that a good signal must be present at the set in order for the quiet reception to take place. A weak signal from a distant station will not have enough umph to override the noise and the reception in fringe areas will not be true FM quality. Ignition noises may also be picked up from nearby cars.

One thing which will definitely improve FM reception and assure a good clean signal for recording is an FM antenna properly mounted free of obstructions and even rotatable, as are some TV antennas. This will give you the maximum results that can be had in your particular area.

With stereo FM or multiplexing, the same rules apply, only more so. In addition, if the stereo adapter or receiver is not properly made, there may be a whistling noise generated between the set and the bias current in the recorder. This is a beat frequency note that cannot be eliminated from the recording if it should occur. In this case the stereo FM unit must be matched to the recorder and if one is purchased with recording in mind, it should be tried out in the home before the purchase is made. Most dealers are willing to permit this or else will guarantee that the set will work with your recorder.

Another source of sound for the recorder is a tuner, which is not a complete radio because it lacks an amplifier, and speaker, and is made to be hooked up to an amplifier in the hi-fi system. These units usually have outputs on the back which may be fed directly to the tape recorder input. In fact, many of them are marked "tape."

If any amount of recording from radio or TV is contemplated and, at the same time, it is desired to be able to move the recorder about, it will pay to have a jack installed on the set. This may be placed where convenient and will save making connections with the accessory clips each time a recording is to be made.

Such a jack may be connected to the speaker voice coils or preferably to the volume control. If to the latter, shielded cable should be used to avoid hum pickup. The jack may be either the small RCA type or a regular phone jack. It may also be the type which has incorporated in it a switch which will cut the set speaker when the plug is inserted. This will prevent the speaker from acting as a mike since it is switched out of the circuit, but if the recorder does not have facilities for monitoring the incoming signal you will never know what you are recording. If you are handy with the drill and the soldering iron you can easily install a jack yourself or your serviceman will be able to take care of it for a nominal charge. If you contemplate using an AC-DC table radio it would be best to have your serviceman take care of it for he will be able to determine the voltage on the chassis and make a safe setup. In some cases the use of transformers are advised.

One of the biggest problems is the avoidance of hum which will sometimes occur when units are interconnected. Plugging all units, tuner or radio, TV and recorder into the same power outlet by means of a three-way connector is advised. The plugs should be turned until minimum hum is secured in all units.

Another problem is mismatching of the output of the radio, TV or phono, or a recorder to the input of the recorder being used to record. Just because an input may be marked "Microphone" or "Radio-Phono" does not necessarily mean that the lead from the sound source need go in the input that seems most logical.

The microphone input is a low level input, where the currents are very small. For instance, a tap taken from the volume control will do much better in the microphone input than in the radio-phono input.

The radio-phono input is generally designed for high level sources such as the outputs from the voice coil of the loudspeaker or the output of an amplifier. Also, the mike input is generally a high impedance input running from 10,000 ohms up whereas the radio-phono input may only be about 8 ohms and designed for pickups from the voice coils of speakers, which are about this impedance. If the voice coil is connected to the microphone input there will be a great mismatch (8 ohms to 10,000 or more) and the result will be very tinny and distorted because of the heavy voltage from the speaker.

On some recorders there is only one input for both mike and radio-phono but these units usually have a double jack which takes a multi-contact plug. Others use a double jack, pushing the plug half way in for connections to radio or phono and all the way in for microphone or other low level sources.

Still another method is the incorporation of suitable resistances in the accessory cord. One cord, without the resistances is used for the mike and another containing the resistance is to be used when recording from radio or phono high level outputs. Such cords are generally available from the dealers.

When recording stereo, connections must be made to both channels and each channel should be properly balanced so that maximum stereo effect is secured. Stereo may be recorded in monaural, either from the radio or from tape and records by the use of a "Y" connector that combines the two channels into one to feed the recorder input. It is important that the wire shields be grounded to the plug and in turn to the chassis ground or output jack of the set.

The "Y" connector is made by connecting two jacks to a single jack, the jacks on the legs of the "Y" going into the two stereo outputs and the single one into the tape recorder. Shielded wire should be used.

If you have a solenoid operated recorder you can record programs while you are away from home by hooking both the radio and the recorder into a time clock that will turn them on at program time and off again following the conclusion of the broadcast. Recorders without solenoids can be left in the record position but flats may develop on the pressure rollers and cause wow.

Assure 100%
**COMPLETE
ERASURE**
of Recorded Tape
ON THE REEL



with the
Magneraser

—the Original and still the best!

Quickly erases a reel of magnetic tape or sound film of any size or type. Erasure is 100% complete even on severely overloaded tape. Lowers background noise level of unused tape 3 to 6 db. Also demagnetizes record-playback and erase heads. Only \$18.00. Two-Year Guarantee. Available at your dealer's or write to:

AMPLIFIER CORP. of AMERICA
An Affiliate of the Keystone Camera Co., Inc.
398 Broadway, New York 13, N. Y. • WO 6-2929

TAPE RECORDERS

HI-FI COMPONENTS
SLEEP LEARN KITS

Unusual Values
Free 1962
Catalog
DRESSNER
1523AA, Jericho Tpke. New Hyde Park, N. Y.

MERITAPE
Low cost, high
quality recordings
tape, in boxes or cases.

BUILD A SOUND STORY LIBRARY

These unusual, different 3" reels of recorded tapes are already a library in sound. Each is authentic and original. More will follow from time to time. Why not start your collection today—choose from those listed below.

\$100 EACH
postpaid

- #1—General examples and excerpts of Tape Recorder Music, Dr. Vladimir A. Ussachevsky; plus, Sounds of New York City, Tony Schwartz
- #2—The Contact Microphone, Kenneth Miller—A hilarious tape that demonstrates creative production.
- #3—Beat Recording, O. Nodlchs—The cats who swing this crazy tape are real-ree beat.
- #4—Africa, Frank Weston — Authentic sounds recorded in the wilds of Africa.
- #5—Portuguese Fado, John H. Lerch—Fados are songs of fate, typical throughout Portugal.
- #6—Tape Trolologue—Yucatan, Mexico, Russell B. Maxey
- #7—B & O Locomotive 25—Interview with engineer and authentic sounds of this old-timer.

All tapes are dual track and all except #7 are 7½ ips. #7 is 3¾ ips. Order from: Sound Story Dept., Mooney-Rowan Pub., Inc., Severna Park, Md.

SHOP OR SWAP

Advertising in this section is open to both amateur and commercial ads. TAPE RECORDING does not guarantee any offer advertising in this column and all swaps, etc., are strictly between individuals.

RATES: Commercial ads, \$3.00 per word. Individual ads, non-commercial, \$.05 a word.

In figuring the number of words in your advertisement, be sure to include your name and address. Count each abbreviation, initial, single figure or group of figures as a word. Hyphenated words count as two words. The name of your city, local postal zone and state count as two words. Maximum caps first four words. Proofs are not submitted on classified ads.

Remittance in full must accompany copy. No exceptions permitted. Ads will be inserted in next available issue. Please print or type your copy to avoid error. Address ad to: Shop or Swap, Tape Recording Magazine, Severna Park, Md.

RECORDINGS WANTED of radio and TV broadcasts (before 1956) of news, special events, comedy, mystery, adventure. George Vlasto, 400 North St., Greenwich, Conn.

LEARN HYPNOTISM, SELF-HYPNOSIS from recorded tapes! Other amazing Tapes, Books, Records. Complete Sleep-Learning information! Free Catalog! Philanthropic Library, Drawer TR400, Ruidoso, New Mexico.

FOR SALE—MAKE OFFER: 2 Norelco "400", 1 E/V Soundspot Mike, 1 FM/AM Tuner w/FM Multiplex Jack. All in good condition. R. O. Ressel, 5519 N. Lincoln Ave., Chicago 25, Ill. Tel. RA-8-0668.

RENT STEREO TAPES—over 2,500 different—all major labels—free catalog. Stereo-Parti, 811-F Centinela Ave., Inglewood 3, Calif.

SCOTT (299-B) STEREO AMPLIFIER: 1st class condition. Only \$135.00. With Scott (310-B) FM tuner and case (perfect condition), only \$225.00; postpaid. B. K. Balch, 611 Livingston Rd., Linden, N. J.

USED MYLAR TAPES—200 reels on hand, 1,800 feet, \$1.10 each. For order of 40 or more—99¢ each. Postage prepaid. B. Freeman, 800 W. 87th St., Kansas City 14, Mo.

FOR SALE: J. P. D.—F. M. Yaggi type antenna, with rotor and 100 ft. of cable, slightly used. Best offer. FOB. Write, H. W. McClelland, Box 970, New York City 17, N. Y.

HI-FI RECORDS MADE from your tape. Finest professional quality. All speeds-sizes. Prompt service. For prices write MBS Recording Studios, 228 S. Wabash-Chicago.

LEARN WHILE ASLEEP, hypnotize with your recorder, phonograph or amazing Electronic Educator endless tape recorder. Free catalog lists over 300 unusual tapes, records, equipment for experimenters. Sleep-Learning Research Association, Box 24-TR, Olympia, Washington.

WANTED: GOOD SELF-POWERED tape recorder. Write giving full details, price. First letter. John K. Dockman, 805 Chulmleigh Rd., Baltimore 12, Md.

BERLANT SERIES 33 Stereo Recorder, quarter track heads, excellent condition—\$425.00, New Ampex 354-U—\$1,350.00, Wymore, 3441 So. Ivy Way, Denver, Colorado.



**OWN THIS
MACHINE
RECORDING FOR US
PART TIME**

For Complete Literature
& Tape—Send \$1
(refundable)

ARTISTIC RECORDING
SYSTEMS
Box 3774, Oak Park, Mich.

WRITE for quotation on components, recorders. Free catalog. Hi-Fidelity Supply, 2817-JC Third, N. Y. C. 55.

FREE plastic record cover when you write for our price list for duplicating your tapes to record. High fidelity at low prices. Complete tape duplicating service. 24 hour service. Fred Berney's Recording Studio, 5935 S. W. 8 Street, Miami, Florida.

ACROSOUND 30-Watt Ultra-Linear Amplifier, \$45; Turner Model 77 Velocity Microphone, \$20; Portable Typewriter, \$10. V. R. Hein, 418 Gregory, Rockford, Illinois.

SWING ERA BANDS Taped Air Checks. Collectors Items. Box 322, Glen Head, New York.

SELL: Ampex 910 Recorder, \$210. Ampex 620F Amplifier-Speaker, \$100. Dynakit PAS-2 Stereo-Preamp, \$45. Dynakit Mark II Amplifier, \$35. Knight 83 Y125 VTVM, \$15. R. D. D., 1308 Hampshire Lane, Richardson, Texas.

QUALITY! Tape: 73% Discount! Pre-recorded; Accessories. Catalog: Tape King, 2028 Garth, Los Angeles 34, California.

ELEMENTARY LANGUAGE TAPES wanted for handicapped-unbridled by printed manuals. Also broadcast bloopers and boners. Clarence Webb, 341 E. Forest, Arcadia, California.

TRUE SCIENCE, TRUE HISTORY, Bible confirmed. Recordings, 2521 N. W. 23 St., Miami.

WANTED TO BUY—dual track ¾ educational, information tapes. Send me list, prices. John Bobbitt, P. O. Box 7596, Memphis, Tenn.

PAIR JENSEN TR10's with ST944 floor stands and pair X20's—all walnut, Craftsmen C10 FM-AM tuner, Bogen DB230A amplifier, Webcor changer with GE cartridge, Jensen E200 walnut equipment cabinet, 50-70% off. \$450 takes all. Don Gilbert, 3842 W. 63rd Pl., Chicago. PO 7-1626.

TRADE TAPE RECORDER for stereo record changer, or FM tuner. Recorder is 6 transistor battery operated book size in excellent condition. J. Sherman, Box 475, Palatka, Fla.

WANTED: Concertone Frame (Rack) MFG. 20A. Carl Fiene, Steepleville, Ill.

FOR SALE—NEW "CROWN" Model 714C professional four track stereo recorder, \$520.00. F. Schaefer, 1826 Upas Street, San Diego 3, California.

WANT TAPE of dedication Hoover Library, to include speech of Mr. Hoover, Aug. 10, Brooks, 520 Label, Oconomowoc, Wis.

WANTED: MICRORECORDER, BUTOBA, STUZ-ZI or Norelco Continental, must be in good condition and reasonable. Robert Webster, Box 1604, Pittsburgh 30, Pa.

ELECTRIC TROLLEY CAR SOUNDS wanted on tape to add to my hobby on this era. Trolley sounds exterior and/or interior, stopping to pick up passengers, starting up, passing by, etc. Also interviews with former or present employees of trolley firms about experiences and equipment. Send letter telling about sounds and/or interviews, and playing time of tape with asking price. Fred Reynolds, 544 Clarkson St., Denver 18, Colo.

COMPONENTS, TAPE RECORDERS

Write for our low quotes on your choice of components. Save more on "pages." All factory sealed. Send for "Monthly Specials" bulletin.

HI-FI RECORDING TAPE

Splice Free (except 2400') freq. resp. 20—20,000 cps. 15 day money back guarantee.

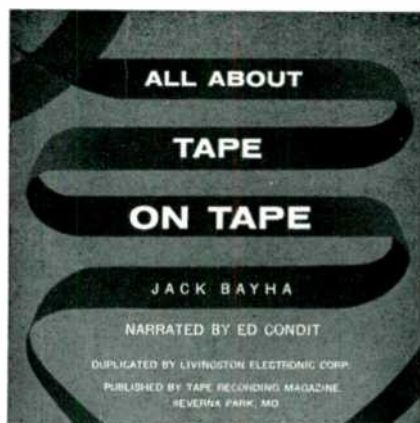
	3-11	12-23	24+
1200' 7" acetate	1.29	1.17	.99
1800' 7" acetate	1.79	1.59	1.40
1800' 7" mylar	1.95	1.85	1.83
2400' 7" mylar	2.69	2.59	2.45
2400' 7" tensilized mylar	2.99	2.95	2.90

Can Be Assorted. Add 15¢ Postage Per Reel 10¢ for 24+ Lots.

125-C East 88 St., New York 28, N. Y.

CARSTON Studios

TAPEBOOKS AND OTHER TAPES



ALL ABOUT TAPE— ON TAPE

Will give you the information you need about tape recording in sound, not in the written word.

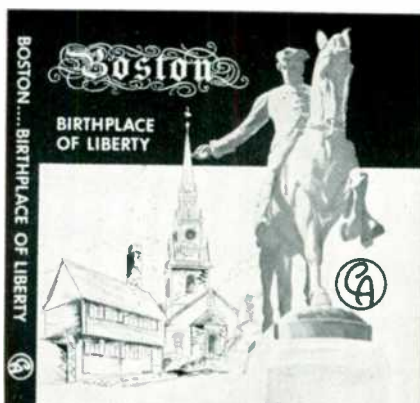
... authored by Jack Bayha ... a book to which you listen ... the first book specifically designed and produced on tape instead of the printed page. ... Now you can actually HEAR what good recording, over-recording, wow, flutter, distortion, wrong mike placement, etc., sound like. A test section allows 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.

7 1/2 IPS, 7" Reel, Dual Track
\$6.95

3 3/4 IPS, 5" Reel, Dual Track
\$5.95

Including a 28 page manual of illustrations



BOSTON

A full 57 minute tour of one of America's most famous and historic cities. You visit in sound Boston Common, the Park Street Church, Kings Chapel, Old South Meeting and Faneuil Hall, the Cradle of Liberty. Hear the worship service at Old North Church in the belfry of which Paul Revere hung his famous lanterns and also hear the Vicar of Old North tell about the clear glass windows, kept clean so your forebearers could see the need outside, as well as the beauty inside. Every sound, every voice is authentic. Dual track, 7 1/2 ips.

\$6.95

HOW TO STAY ALIVE ON THE HIGHWAY

This tape may save your life. Contains the actual voices of nearly 40 auto drivers, victims and survivors of highway accidents, police and traffic officials. Portions were secretly recorded in court rooms, on the highway and in police stations over a period of three years. A must for driver education programs. Dramatic, forceful—something you won't forget.

\$7.95

ADD-THE-MELODY TAPE

Twelve old favorite tunes for you to sing along with. Specially recorded with the melody missing so you can sing or play with the tape then, on playback hear both parts together. Suitable for use on any recorder with the ability to play the lower track while recording on the upper. Can be recorded again and again without harm to the Hammond Organ accompaniment by Hack Swain. You can get a million dollars worth of pleasure from this tape.

\$9.95

HOW'S YOUR HEARING?

Periodic hearing tests are important because unlike most other ailments, a hearing loss gives little positive warning. Tape contains 33 tone pairs to test your musical discrimination, 75 word pairs to test speech discrimination and 30 minutes of music by the famous Lenny Herman orchestra for screen testing of hearing. Full 7" reel, 7 1/2 ips and booklet giving full directions for use of the tape.

\$9.95

New! TAPE RECORDS

Monaural Music

3" reels, 3 3/4 ips, full track

Only \$1.00 each postpaid

- 1—Cha Cha Cha—Tito Puente—Oye Me Mama, Sope de Pinchon, El Miche
- 2—Dinner-Dance—Fred Martin Radio Orchestra—Let's Dance, Somewhere over the Rainbow, Women are No Angels
- 3—Jazz—Dickie Thompson Quartet—Love for Sale, Blues in My Heart
- 4—Jazz—Dickie Thompson Quartet—Laura—What is This Thing Called Love
- 5—Jazz—Dickie Thompson Quartet—Misty, Satin Doll
- 6—Dinner-Dance—Jose Melis—Tonight, Am I Blue, White Cliffs of Dover
- 7—Dinner-Dance—Fred Martin Radio Orchestra—Flamingo, Song of India, Symphony
- 8—Dinner-Dance—Fred Martin Radio Orchestra—I've Got Plenty of Nothin', Ebttide, Autumn Leaves
- 9—Dinner-Dance—Fred Martin Radio Orchestra—Fiddle Faddle, Blue Tango, Serenata
- 10—Hammond Organ—Bill Thompson—Touch of Your Hand, I Won't Dance, Smoke Gets in Your Eyes

TAPEBOOK DEPARTMENT TAPE RECORDING MAGAZINE Severna Park, Md.

Please send me the following:

- All About Tape on Tape, 7 1/2 ips.\$6.95
- All About Tape on Tape, 3 3/4 ips.\$5.95
- Boston, Birthplace of Liberty.\$6.95
- How to Stay Alive on the Highway.\$7.95
- Add-the-Melody Tape, 7 1/2 ips.\$9.95
- How's Your Hearing.\$9.95
- MONAURAL MUSIC TAPES.each \$1.00

(circle numbers desired)

1 2 3 4 5 6 7 8 9 10

NAME

ADDRESS

CITY ZONE STATE



Perhaps two years from now the quality of this tape may be duplicated...perhaps never! **Soundcraft Golden Tone—a physically perfect tape...a musically perfect sound.** A bold claim? Yes.

Warranted? Yes. Here's why. Golden Tone is a very special tape...

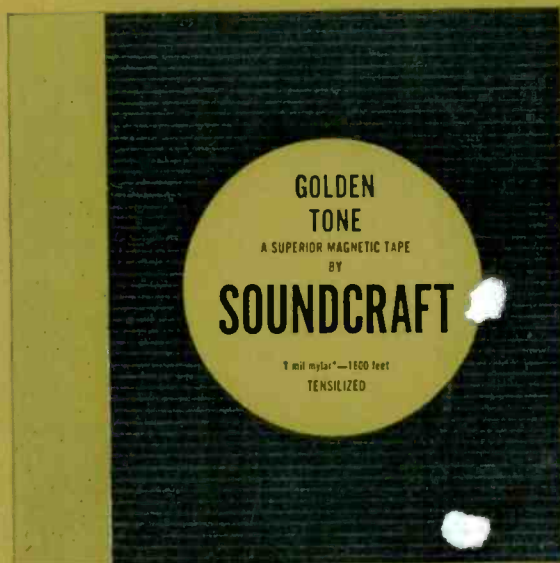
designed just for those who demand the finest performance from today's

advanced recorders. Unless you have the discerning ear and the exacting equipment which ordinary tapes can't satisfy, there is no reason for you to buy Golden Tone.

A special magnetically-active FA-4 oxide formulation increases Golden Tone's high frequency output by 25%. Its signal-to-noise ratio is 7 db better than other brands, to give your recordings **the greatest dynamic range possible with a tape.** Precision-slit Golden Tone is free of edge burrs and skew. These physical defects can be cruelly exposed by the narrower tracks in 4-track recording. Microscopic burrs prevent the tracks on the edge of the tape from making intimate head contact, resulting in loss of "highs."

Skew, another hidden defect, produces cross-talk and loss of recording level. Golden Tone's oxide formulation and base are balanced to prevent cupping or curling, an effect which can also prevent tape to head intimacy. Golden Tone's oxide surface is Micropolished. This patented Soundcraft process removes any surface irregularity, prevents drop-outs, protects high frequency response and minimizes head wear.

From this physically perfect tape, comes musically perfect sound. Golden Tone costs more, but it is worth more. It is produced in small quantities with infinite care and rigid quality control. It is the world's finest tape for those who demand the ultimate in sound reproduction. Offered for the first time anywhere—a long play Golden Tone tape on 1 mil Mylar*, TENSILIZED by DuPont—will not stretch or break. Also on ½ mil "Mylar" and 1½ mil Acetate Bases.



*DuPont T.M.

GOLDEN TONE BY REEVES SOUNDCRAFT CORP.