# **EXAMPE RECORDING**

## TAPE CORRESPONDENCE AROUND THE WORLD

TAPE RECORDERS

OCTOBER 1962

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

10/11/62



bzzzz

When a very small boy has his hair cut, the clippers make a harsh buzz—a nervous, exciting sound. Yet the same machine gives off only a dull hum when it's used on a man.

The unfortunate part is that once you've heard the dull hum, you never get to hear that exciting buzz again. No matter what. Even Audiotape can't record it.

Audiotape can (and does) take care of everything else that adds to listening enjoyment. It gives you clarity and range, freedom from noise and distortion and unequaled uniformity, reel after reel. All you have to supply is the point of view. Audiotape does the rest, and does it superbly. Whether you're taping a barbershop quartet or a hundred-voice choir, there's an Audiotape exactly suited to your needs. From Audio Devices, for 25 years a leader in the manufacture of sound recording media—Audiodiscs\*, Audiofilm\* and . . .





AUDIO DEVICES INC., 444 Madison Ave., New York 22, N.Y. Offices in Los Angeles • Chicago • Washington, D. C.

## In every way, this new V·M tape recorder gives you more...

Hove's Hor

More of the things that count . . . for less money. That's V·M's promise to you in the new Model 735 tape recorder . . . a more highly developed version of the famous V·M Model 730, recently hailed by a leading tape recording authority as producing sound equal to that produced by some tape recorders costing three times as much. Here are the features that make this new unit a very superior tape recorder buy:

EXCLUSIVE V.M **`ADD+A+TRACK'** FEATURE lets you record on one tape track, then add voices or musical accompaniment on a separate track on the same tape *while listening* to the first. When you play back, you hear both tracks simultaneously. Imagine what that means: play or sing with your favorite bands; practice music or a language; polish up a speech; or, just have fun. (You can re-record the second track as often as you wish without disturbing the first.)

• Records three speeds -7 ½, 3 ¼ and the new tape-saving 1 ½ ips speed.

• Stereophonic playback is yours with addition of the style matching Model 136 auxiliary amplifier speaker. You'll be thrilled by the brilliance provided by this two-unit stereo playback.

- True high-fidelity amplifier-speaker system brings out the quality of your tapes.
- Can be used with an automatic slide projector synchronizer such as V·M Model 1412.

There's a V·M dealer close to you. Why not stop in and try this versatile new V·M recorder, and discover why it offers you so much more value for your investment.



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



of leading music directors on their NORELCO 'Continental' Tape Recorders:

"... laithful, undistorted reproduction of vocal and instrumental timbres ..." John Brownlee, Director, Manhattan School of Music.

", . . , ruggedness, versatility and high fidelity . . ." Norman Singer, Director, Aspen Music Festival and Dean of the Aspen School of Music.

"... reproduces sustained notes without pitch variation ..." Peter Mennin, Director, Peabody Conservatory of Music.

"... most useful in the evaluation of performance and progress ..." Dr. Arved Kurtz, Director, New York College of Music...

and <u>here</u> is the outstanding school choice, the

CONTINENTAL '300'



Far voice and music teachers, audio-visual and all specialized teaching applications, the '300' offers these advantages:

4-track monaphanic recording and playback • 4track stereo playback • Headphone manitoring • 3 speeds • Up to 16 haurs playing time an one 7" reel • Excellent far partable P.A.

For more facts, investigate the complete line of NORELCO "Continentals" at your dealer's - or write to Dept. P-10 for detailed literature and Tape Recorder Buyers' Guide'.

NORTH AMERICAN PHILIPS COMPANY, INC. High Fidelity Products Division 230 DUFFY AVENUE, HICKSVILLE, L. I., N.Y.

## TAPE RECORDING

VOL. 9 No. 11

OCTOBER 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

WORLDWIDE HOBBY—TAPE CLUBSJean Cover	18
PROPER RECORDER VENTILATION Tommy Thomas	24
TROUBLE SHOOTING YOUR RECORDERMark Mooney, Jr.	28
NEW TAPES	6
INDUSTRY NEWS	11
CROSSTALK	12
NEW PRODUCTS	13
LETTERS	14
CONTEST WINNERS	15
TAPESPONDENTS WANTED	16
TAPE IN EDUCATION	17



TAPE RECORDING is published monthly by Mooney-Rowan Publications. Inc. 101 Balto.-Annapolis Bivd., 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 5, 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 \$3.75 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.

- - - 12



...over 3 million feet of it\* just to prove a point:

Triton is the finest magnetic recording tape ever made!

Strong claim? Strong answer. Test your first Triton reel at home, free. Compare it with any other. You'll note the difference. Wider frequency response. Lower distortion. Better lubrication. More uniform coating. Less oxide shed. Why this daring offer? Simple. Your **next** reel won't be free. But it will be Triton.



## NFW TAPFS

+---Fair

★★—Good

\*\*\*-Very Good

★★★★—Excellent

#### **CLASSICAL**

Reviewed by Robert E. Benson



Music \*\*\*\* Performance Fidelity ++ Stereo Effect  $\star \star \star$ 

MAHLER: Song of the Earth

Maureen Forrester, contralto; Richard Lewis, tenor; Chicago Symphony Orchestra conducted by Fritz Reiner

RCA FTC 3002

4-track, 71/2 ips

\$10.95....63 mins.

Mahler's Song of the Earth is a cycle of six songs based upon old Chinese poems, sung in German, and might be described as an expression of the philosophy of human existence. It is intense, poetic music, with pessimistic overtones of despair and futility. composed in 1908, toward the end of Mahler's life. Mahler never heard this music performed; it was premiered in November of 1911, with Bruno Walter conducting.

Mahler's masterpiece is here available in its second four-track taping, the first being the high quality SMS tape (S-17, \$8.95), with Grace Hoffman and Helmut Melchert as the soloists, and the Southwest German Radio Orchestra directed by Hans Rosbaud. This new Victor recording is a result of concert performances in Chicago several years ago. Reiner shows more sympathy here for the music of Mahler than he did in his clipped-sounding recording of Mahler's Symphony No. 4 (RCA FTC 2027, \$8.95); Maureen Forrester is perhaps the finest Mahler contralto of our time, and Richard Lewis strives valiantly with the Heldentenor demands of the odd-numbered songs. The Chicago Symphony Orchestra is superb. Why then should this tape be so disappointing?

The only reason is the quality of reproduction, which is cloudy and veiled, although occasional effects are very well handled by the engineers. There is a lack of solidity to the orchestra, no firm bass line, and distortion, particularly in the trumpets, is disturbingly high. Perhaps future issues of this tape will be free from the distortion, but nothing can be done about the lack of orchestral body. It is to be hoped that Columbia will release on four-track tape its fine Bruno Walter recording with the New York Philharmonic.



Music Performance Fidelity Stereo Effect \*\*\*

BEETHOVEN: Piano Concerto No. 5 in E

Flat Major, Op. 73 "Emperor"

Van Cliburn, pianist; Chicago Symphony

Orchestra: Fritz Reiner, cond.

RCA FTC 2081

4-track, 71/2 ips

Van Cliburn is steadily developing in his interpretive powers, at least as evidenced by this new recording. This is a rather studied sounding Emperor, not as successful in its idiom as Cliburn's earlier tapings of Tchaikovsky and Rachmaninoff concertos. Still, this is a youthful, exuberant account of the score, though lacking in the understanding shown by Backhaus on London LCK 80048 (\$11.95, coupled with the Moonlight and Pathetique Sonatas).

Reiner's accompaniment is superb in every way; orchestral sound is massive, with a somewhat larger-than-life piano. Magnificent stereo by RCA; if only Cliburn's Rachmaninoff Third Concerto had orchestral sound like this!



\*\*\* Performance ++++ **Fidelity** Stereo Effect +++

MENDELSSOHN: The Hebrides Overture, Op. 26 Symphony No. 3 in A Minor, Op. 56 "Scotch"

London Symphony Orchestra conducted by Peter Maag

LONDON I CL 80083

4-track, 71/2 ips

\$7.95 .49 mins.

With the death in recent years of so many fine conductors-Bruno Walter, Artur Rodzinski, Eduard van Beinum, Erich Kleib r, Arturo Toscanini, Dimitri Mitropoulos, Sir Thomas Beecham and Guido Cantelli, to mention only a few-more gifted young conductors are being called upon to fill the cap.

Peter Maag is certainly one of the most talented of today's younger conductors, and perhaps in time will develop to the stature of the departed. Here he offers sensitive, individual readings of two thoroughly enjoyable works of Mendelssohn, and the London Symphony, probably the finest orchestra in England today, responds readily. London's reproduction is exemplary, and this is another tape that can be recommended without hesitation.



TCHIAKOVSKY: Romeo and Juliet Overture

STRAUSS: Don Juan, Op. 20 Vienna Philharmonic Orchestra conducted by Herbert von Karajan LONDON L 80072 4-track, 71/2 ips \$7.95....38 mins. With a distinguished conductor such as

von Karajan and one of the world's great orchestras, one would expect these performances to be something special, but they aren't. Romeo and Juliet is too deliberate for my taste, and Don Juan sounds introverted here.

Reproduction is wide-range, but balances are not well managed-the woodwinds are curiously distant, and certainly the Vienna Philharmonic horns playing the famous horn call from Don Juan should glow more than this. The review copy had tape hiss usually not found on recent London tapes.



BRAHMS: Symphony No. 2 in D, Op. 73 Tragic Overture, Op. 81

Columbia Symphony Orchestra conducted by Bruno Walter

COLUMBIA MO 373

4-track, 71/2 ips

\$7.95....55 mins.

A leisurely but powerful performance of this idyllic symphony, and the first fourtrack tape version yet to appear. The Tragic Overture is an added dividend, although this dramatic music should have more drive than offered here. Reproduction is very clear and rather cavernous, including some extraneous, though slight, sounds that might well have been omitted. As was the case with the earlier Columbia issue of the Brahms Symphony No. 4 conducted by Bruno Walter, the high frequencies here are considerably boosted. With a hefty treble cut, things sound just about right.



GOULD: Fall River Legend Interplay Tango and Guaracha from Latin-American Symphonette

Morton Gould and his Orchestra

- RCA FTC 2051
- 4-track, 71/2ips

\$8.95....44 mins.

Morton Gould's music frequently has a superficial quality, particularly when he's trying to be serious as in the Fall River Legend Ballet. Coupled with stage action



NEW SONY STERECORDER 464 CS: A COMPLETE, PORTABLE STEREO RECORDER AT A REMARKABLY LOW PRICE

Another Sony triumph in tape recorder engineering, the new Sony 464 CS Sterecorder *records* and *plays back stereo* tapes with the professional purity of studio recording. Whether it's the delicate tone of a Stradivarius, the fire and poetry of Flamenco, the resounding blare of seventy-six trombones, or the full magnificence of a London Symphony—*all* the richness of stereo sound—yours to command for only \$299.50. *All Sony Sterecorders are Multiplex Ready!* 



The new Sony 464 CS is a completely self-contained stereo system with two microphones, two extended range stereo speakers and such additional features as sound-on-sound recording, push button channel selection, dual recording indicators, automatic tape lifters, digital counter, pause control and FM stereo recording inputs. Also available, model 464-D for custom installation, (464 CS less case, speakers and microphones) \$199.50. Sony, the world's most respected name in quality tape recording equipment, manufactures a complete line of monophonic and stereophonic recorders, priced from \$79.50 to \$595.00. Sold only at Superscope franchised dealers, the better stores everywhere. For literature or nearest dealer, write Superscope, Inc., Dept. 15. Sun Valley, Calif. as a ballet, this can be effective, but simply as music I find it rather tedious. The ballet *Interplay* was adapted from a minor piano concerto written for Jose Iturbi, and this music wears better than the *Legend*. Presumably in this taping Motton Gould conducts *Interplay* from the keyboard, although this is nowhere clarified in the notes accompanying the tape. The two brief excerpts from the *Latin-American Symphonette* are immediately appealing and make one wish the entire *Symphonette* had been included.

As performed by a high quality studio orchestra under the direction of the composer, these readings must be accepted as definitive. Reproduction is Victor's studio best—big and resonant, with fine stereo separation. A beautifully processed tape.



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

BEETHOVEN: FIDELIO (complete opera) Sena Jurinac, soprano (Leonara); Jan Peerce, tenor (Florestan); Maria Stader, soprano (Marcellina); Gustav Neidlinger, bass (Pizarro); Murray Dickie, tenor (Jacquino) and others with the Bavarian State Opera Orchestra and Chorus, Hans Knappertsbusch cond.

WESTMINSTER WTZ 154 (two reals) 4-track, 7<sup>1</sup>/<sub>2</sub> ips.

\$19.95....2 hrs. 43 mins.

Beethoven's only opera Fidelio is a masterpiece of the operatic stage. We now have its first appearance on tape. Westminster has a real winner here, as this set of two reels is much more effective than its disc counterpart. Here we have quiet tape surfaces and immaculate, ultra-clean processing, completely free from obtrusive swishes and clicks that plagued the discs.

This performance is a good one, although some might question Knappertsbusch's rather slow tempi. After a somewhat shaky beginning to the overture, the orchestra plays very well. All of the soloists are more than competent, if not outstanding; perhaps the least satisfactory is Jan Peerce's Florestan.

Quality of recorded sound is among the best I've heard, with a big-hall quality and plenty of resonance. Voices are very prominent, much more than in London's operatic recordings, but even in the loudest vocal passages there is no distortion. Sensible stereo staging has been adopted, and there are a few sound effects.

Angel has a new highly-praised recording of this opera conducted by Otto Klemperer, but it is unlikely that it ever will be released on tape. Those interested in opera should audition this outstanding new Westminster recording.

#### POPULAR

#### 21 CHANNEL SOUND

With most of the leading recording companies introducing new methods and processes in the recording of nearly perfect sound, it is only natural that MGM should enter its latest development called 21 Channel Sound. It derives its name from the 21 carefully selected microphones placed to provide ideal pick-up of each section of the orchestra. In the hands of a skilled recording engineer, amazing flexibility is possible. To quote MGM-"21 Channel Sound means the ultimate in sound separation, the cleanest definition of instruments and the widest range of realism." That all of this effort is worthwhile is obvious when you hear these tapes. A full description of the new process and technical data is given in the folder enclosed with each tape.



21 CHANNEL SOUND

Side I: Kiss Of Fire, In A Sentimental Mood, Love, You Stepped Out Of A Dream, Ebb Tide, Caravan. Side 2: Blue Prelude, Misty, The Man With the Golden Arm Theme, Shangri-La, All The Things You Are. DAVID ROSE & HIS ORCHESTRA MGM STC 4004 4-track, 71/2 ips.

\$7.95....32 mins.

David Rose and his strings have long been a favorite of this reviewer, but never before has the sound been so brilliant, so clear, so dynamic and so altogether pleasing. It is refreshing to see this electronic and engineering talent devoted to reproducing the beauty of the music, and letting the music, rather than gimmickry, do the speaking.

David Rose has assembled a group of 12 popular selections, such as "Ebb Tide," "Blue Prelude" and "Misty," and given them his best musical treatment. The result is, of course, spectacular and wonderful stereo.—F. N. West



Music  $\star \star \star \star$ Performance  $\star \star \star \star$ Fidelity  $\star \star \star \star$ Stereo Effect  $\star \star \star \star$ 

MUSIC IN MOTION

Side 1: Time After Time, Spring Is Here, Little White Lies, Dancing In the Dark, C'est Si Bon, Cornelia. Side 2: Diane, Honey, I'm Dancin', The

Touch of Your Lips, Life Is Just A Bowl Of Cherries, The Party's Over.

LARRY ELGART and his ORCHESTRA MGM STC 4028

4-track, 71/2 ips.

\$7.95....28 mins.

Larry Elgart, aided by his wife, recording engineers, and arrangers, carefully plan every phase of the recording session in his own elaborate home studio prior to the actual "date." This preparation assures him that the studio taping will be the "Elgart Bandstand Sound" exactly as he would be heard on the stage or in the concert hall.

Larry and his band have established a style that has proved quite durable over the years. They make splendid use of the lower and middle registers to carry their themes, never overlooking the highs, when appropriate. Add 21 Channel Sound to this and you have the effect of the band moving into your living room. Each instrument stands out when it should, not like a sore thumb, but as you would like to hear it. This is a revelation in new sound which you can't resist.—F. N. West



#### NEW & EXCITING LATIN SOUNDS

Side I: Cachita, Yours, The Bandit, Primera, Jealousy.

Side 2: Amor Amor, Anema E Core, The Breeze and I, Carnavalito, Adios.

MANUEL and his STRINGS

MGM STC 4029

4-track, 71/2 ips.

\$7.95....271/2 mins.

Manuel uses a full size orchestra of 44 string instruments, augmented by a vocal group with rhythm and percussion section to create all of the color and action normally associated with Latin Music.

The orchestra's sound is accentuated beautifully, no doubt due to the 21 channel system. The strings, whether in high or low key, are natural and appealing.

This tape is vivid with presence, and the music, such as "Jealousy," "The Breeze and I," etc., has been wisely chosen. Highly recommended.—F. N. West



POPS ROUNDUP

- Sequence A: Pops Roundup, O Bury Me Not On the Lone Prairie, Red River Valley, Home On The Range, Whoopie-Ti-Yi-Yo, Tumbling Tumbleweeds.
- Sequence B: The Yellow Rose Of Texas, Wagon Wheels, Riders In The Sky, Cool Water, The Last Roundup, Pops Hoe-Down.

Boston Pops Orchestra—Arthur Fiedler

RCA VICTOR FTC 2105

4-track, 71/2 ips.

\$8.95....42 mins.

When the Bostonians go West they do it with a bang! Starting with a herd of TV Western themes, and riding on through some of the best known folk tunes of the Wild West era, they end up with a genuine, foot stomping, rip-snorting hoedown that is a masterpiece of comic inventiveness.

A toss of the ten gallon hat must be given to Jack Mason and Richard Hayman for their inspired and imaginative musical arrangements that contribute so much to

Fidelity Stereo Effect

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





IMPERFECTIONS YOU AVOID WITH "SCOTCH" RECORDING TAPES! Oxide flake (photo-micrograph, above) and backing defect (below) result in coating flaws that can interrupt the head contact of ordinary tape. Now, 4-track stereo makes the uniformity, the intimate head contact assured by "Scotch" Recording Tapes more important than ever!



## How to avoid "signal spoilers" in 4-track stereo!

#### Make intimate head-to-tape contact a certainty with SCOTCH<sup>®</sup> BRAND Recording Tapes!

When you lose head-to-tape contact, the result can be distortion, loss of high frequency signal, even complete signal drop-out. Now, the narrower tracks involved in 4-track stereo magnify the danger of tiny tape irregularities becoming "signal spoilers" make the assured uniformity of "SCOTCH" BRAND Recording Tapes more important than ever!

Oxide coating techniques used by 3M assure a smooth recording surface, with coating thickness microscopically precise. Similarly close tolerances are maintained for backing thickness, tape width. Result—identical recording properties, intimate head-to-tape contact are a certainty, inch after inch, reel after reel!

High-potency oxides permit thinner, more flexible coatings for sharp resolution, wide dynamic range, full frequency response. Exclusive Silicone lubrication assures smooth tape travel across heads, protects against head wear and extends tape life. To ensure brilliant, dependable sound reproduction whether making 4, 2 or full track recordings, *play the favorite* ... "SCOTCH" BRAND.



For free descriptive literature, write Magnetic Products Division, Dept. MDF-102, 3M Company, St. Paul 19, Minn.

SCOTCH AND THE STAD DE-SIGN ARE REGISTERED TRADE MARKS OF MINNESOTA MINING A MANUFACTURING CO ST PAUL 19 M NN EIPORT 99 PARKAVE NEW YORK CANADA LONDON, ONTARIO

Magnetic Products Division

the glory, significance and feeling that only a great orchestra, the Boston Pops, and its gifted conductor, Arthur Fiedler, can impart.

Produced with excellent fidelity, balance and recording technique, this sagebrush saga is a thrilling, dynamic and nostalgic mirror of Americana.—F. N. West

ROMANTIC AND SOSTALGIC MOODS WERE BROTHES SAMPLE GREATER ADTRIES WITH STATE	Music Performanc Fidelity
	Stereo Effec

Ausic ★★★ Performance ★★★★ Tidelity ★★★ tereo Effect ★★★★

ROMANTIC AND NOSTALGIC MOODS 25 popular hits such as Five Foot Two, St. Louis Blues, Green Eyes, Star Dust, Brazil, Time On My Hands, and others. Various Orchestras and Artists WARNER BROS. WSTC 1500 4-track, 71/2 ips. \$7.95....77 mins.

The purpose of a sampler is to create a desire in the listener to purchase some or

#### **CAPSULE REVIEWS**

#### CLASSICAL

KAPP KTL 49007, BACH: Concertos in C Major and C Minor for Two Pianos and Orchestra. Abram Chasins and Constance Keene, pianists, with the Kapp Sinfonietta conducted by Emanuel Vardi. 34 min., \$7.95. Expert performances of these brief concertos, recorded with fine sound and excellently processed.

RCA CAMDEN CTR 468, GROFE: Grand Canyon Suite, Oslo Philharmonic Orchestra conducted by Oiven Fjeldstad, 33 min. This performance has really made the rounds, first as a Stereo Music Society four-track tape (SMS S-21) costing \$8.95, and then as a tape cartridge (SMS C-21, \$6.95). Now it is issued on an RCA Camden four-track tape at only \$4.95. The performance is a good one, and sound is satisfactory if not ultra-high fidelity.

RCA VICTOR CARTRIDGES—Victor continues to issue tape cartridges recorded at 3¾ ips. The latest two we've received are KCS 4079 with Fritz Reiner conducting the Chicago Symphony Orchestra in music of Beethoven, the Symphony No. 5 in C Minor, Op. 67 and the Coriolan Overture, and KCS 4030, with Artur Rubinstein as soloist with the RCA Victor Orchestra conducted by Joseph Krips in a performance of Schumann's Piano Concerto in A Minor, each cartridge costing S6.95. Sound on both of these cartridges is quite harsh with a definite lack of high frequencies.

VANGUARD VTC 1645, "ACCORDI-ORAMA," 53 min., \$7.95. This is labeled a "sound spectacular" and it features the Hohner Accordion Symphony Orchestra conducted by Rudolph Wurthner augmented by percussion, harmonicas and an electronic instrument called the Hohner Electronin. Familiar classics are featured including music of Liszt, Weber, Brahms, all of the full tapes sampled. With this in mind, Warner Bros. generously provided selections from twenty-five of the best in their library. There is enough variety to help you decide whether or not you want to buy more. Naturally, they are all hit numbers, well recorded, have lots of presence and make full use of stereo.

A fine investment, since this is a twinpak.—F. N. West

#### **SHOWS**



I CAN GET IT FOR YOU WHOLESALE Side I: Overture, I'm Not A Well Man, The Way Things Are, When Gemini Meets Capricorn, Momma, Momma, Momma, The Sound of Money, Too Soon, The Family Way, Who Knows.

Rossini and Johann Strauss. Performances are in good taste and surprisingly effective. Quality of recorded sound is indeed spectacular, with some fabulous bass.

VANGUARD VTC 1700, "THE SOUND OF VANGUARD," Five Centuries of Music, \$7.95. For those just starting a classical tape library, this is a definite best buy, containing as it does complete excerpts from previously released Vanguard tapes, with a total playing time of cightyone minutes. Included are works by Gabrieli, Corelli, Albinoni, Vivaldi, Bach, Handel, Haydn, Mozart, Beethoven, Schubert, Dvorak, Tchaikovsky, Rimsky-Korsakov, Prokofiev and Khachaturian.

#### JAZZ

CAPITOL ZT1660, JONAH JONES/ GLEN GRAY, and the Casa Loma Orchestra. 4 track, 71/2 ips., 34 mins., \$6.98. Jonah Jones toots his trumpet through a dozen tunes made famous by other great jazz horn players. The Casa Loma Band swings along with some bright new arrangements, and the whole thing is recorded in the most brilliant sound, with stereo divided between Jonah's trumpet on the left and most of the band on the right. A real swinger!

ERNE IN STEREO": Elliott Lawrence and Orchestra, 2 or 4 track, 71/2 ips., 30 mins. This tape is part of a "premium pack" being offered by Reeves Soundcraft and is available only through their dealers. The "premium pack" is composed of two rolls of tape, one of which is recorded, and it is priced at two rolls of blank tape plus a dollar. Elliott Lawrence uses a hand picked group of jazz instrumentalists who improvise and create their original and different interpretations of eight of Hoagy Carmichael's all time favorites. Strictly jazz in the modern manner. The eight selections are recorded on only one side of the tape.

Side 2: Ballad of the Garment Trade, Have I Told You Lately, A Gift Today, Miss Marmelstein, A Funny Thing Happened, What's In It For Me, Eat A Little Something, What Are They Doing To Us Now?

Original Broadway Cast COLUMBIA, OQ457 4-track, 7½ ips \$9.95....54 mins.

The famous novel of the thirties, "I Can Get It For You Wholesale," by Jerome Weidman, has been adapted for this new musical by the author. The old, old story of flim-flam in business, the high cost of elegant dames, and the inevitable day of accounting, are closely woven together to provide the means for many humorous and touching situations.

Columbia has recorded the score with excellent fidelity and stereo, complimenting all of the members of the original cast who repeat their Broadway performances of the music and lyrics by Harold Rome.

The tunes are catchy, but better understood if you have seen the show. An enclosed story folder is a help.—F. N. West

VERVE VSTC 263, KAI OLE': Kai Winding's Trombones and Orchestra, 4 track, 71/2 ips., 33 mins., \$7.95. Kai Winding takes his trombones (four of them) and orchestra South of the Border to blast through a group of Latin American tunes done in jazz style. The sound is good, the rhythm is hot as a tamale, with outstanding solo work by Phil Woods on alto sax and Kai Winding on trombone.

VERVE VSTP 271 (Twin-Pak) Sound Tour—ITALY & FRANCE. 4 track, 71/2 ips., 62:20 mins., \$7.95.

VERVE VSTC 272, Sound Tour-SPAIN 4 track, 71/2 ips., 29:45 mins., \$7.95.

VERVE VSTC 273, Sound Tour—HA-WAII. 4 track, 71/2 ips., 28:25 mins., \$7.95. Arranged and Conducted by Kenyon Hopkins.

Verve Records and Esquire Magazine combined to produce these Sound Tours of France, Italy, Spain and Hawaii that are supposed to be sound impressions of an American on Tour in these countries. Complete with noises of crowds, traffic, ocean waves, sea gulls, etc., they are offered as "authentic" instead of progressive jazz versions of music of the countries visited. As such, they would probably appeal to those who like this type of music.

The first tape (a twin-pak) travels to Italy and France where the familiar melodies are maligned to the extent that at times it is difficult to recognize them.

In Spain, the tunes are also jazzed up with a reasonable facsimile of Andre Previn cavorting over the piano keys in anything but Spanish style. In Hawaii the orchestra plays instruments not generally associated with music of the Islands, to make it more confusing.

Great imagination, as might be expected, is evidenced in the offerings, but as authentic travelogues, they are disappointing. The recordings are not very brilliant or dynamic, but do take advantage of stereoto tell their message.—F. N. West

## **INDUSTRY NEWS**

COLUMBIA RECORDS vice president William Gallagher recently said that the recorded tape industry can expect an increase of 25 to 30 per cent in its sales for 1962. The estimate was based on the general growth of the industry and the fact that Columbia sold 200 per cent more recorded tapes in 1961 than in 1960. Tony Rubino, merchandise manager pointed out that Columbia has done 70 per cent better this year so far than in 1961. The firm's policy is to bring out on tape those items which have proved to be successful in the record line. Thus the tape recorder owner will really be getting the cream of the musical releases.

ATLAS FILMS, INC., 13 W. 28th Street, New York, has issued 39 recorded monophonic tapes on three inch reels which will sell for \$1.98 each. The initial release contains 26 pop items and 12 children's programs. The 3 inch reels contain about 24 minutes of program material recorded at 3<sup>3</sup>/<sub>4</sub> ips on 1 mil tape. A display rack is free to dealers. A number of distributors have been named in the photo field with distributors in other fields yet to be named.

RECORD INDUSTRY ASSOCIATION OF AMERICA will begin to gather data on factory sales of recorded tapes.

REEVES SOUNDCRAFT executive vice president Frank Rogers has predicted that magnetic tape sales will go from the current \$65,000,000 to \$100,000,000 in the next few years. The increase will come from the expanding use of tape in the home. Consumers today are using 6 reels of tape a year, on the average as, against only 1½ reels just two years ago.

T E L E PROMPTER CORPORATION which recently acquired Weathers Industries, makers of hi-fi components and stereo systems is now negotiating for the purchase of Conley Electronics Corporation of Evanston, Ill. manufacturers of endless loop tape cartridges and related products. This purchase fits in with Teleprompter's plans to expand into the tape industry. The deal will be closed on approval of the stockholders.

MINNESOTA MINING AND MANU-FACTURING has found that polyester backed magnetic tapes would withstand damage from radiation dosages up to 200,000 times greater than the 50 per cent human lethal dose. Neither fallout nor radioactive dust would produce significant tape degradation without first killing humans.

MAGNETIC RECORDING INDUS-TRY ASSOCIATION has elected new officers and directors at their annual meeting held this year in Chicago. William P. Gallagher, who is vice president for marketing of Columbia records is the new president of MRIA, succeeding Ken L. Bishop of Bell Sound. Other officers are: W. G. Paradis, Warwick Mfg Co., vice president; Herman Kornbrodt, Audio Devices, secretary; and Herbert L. Brown, Ampex Corporation, treasurer. New Board members elected were: Myron L. Kerney, manager, Amateur Film Sales Division, Eastman Kodak Company; E. O. Welker, marketing manager, Magnetic Tape Products, RCA Record Division; Leonard Kronfeld, president The Nortronics Co., and Mr. Bishop. Other Board members include: Daniel E. Denham, Minnesota Mining and Manufacturing Co., and Arnold P. Hultgren, Amerline Corporation.

Three new members joined the association. They are the Warwick Mfg. Co., Roberts Electronics, Inc., and KRS Electronics. There are now 41 MR1A member firms.

Mr. Gallagher in addressing the group said that major sales increases for 1963 were in store for all segments of the magnetic recording industry. He estimated that raw tape sales would reach \$60 million this year with sixteen companies now manufacturing tape as compared to eight in 1960.

He called attention to the fact that there are now some 1,500 titles available in tape libraries and said that recorded tape sales should top 12 million this year. Equipment sales will top 20% more than 1961 when 600,000 machines were sold.

WEBCOR has completed "maximum coordination" between its consumer divisions with the location of all marketing, sales and advertising functions at the firm's executive office building, 5610 W. Bloomingdale Ave., Chicago according to Board Chairman Titus Haffa.

Sales and marketing policies of the firm's various divisions have been placed under divisional sales managers.

V-M CORPORATION is the first tape recorder manufacturer to offer language courses based on tape instead of records. Designed to take advantage of the Add+A+Track feature, the courses may be used with or without a teacher and are based on the most modern approach to language learning. They are available in French and Spanish and include four halfhour tapes, four flip picture and text books plus a glossary and instruction manual. Cost is about \$30.00. Sets will be available through V-M dealers.

SONY CORPORATION of Japan has developed a small video tape recorder for industrial, educational and medical uses. It will be ready for market next summer. The new recorder measures  $18 \times 23 \times 14$ inches and weighs about 132 pounds. It is priced at \$12,000 including camera, recorder, monitor screen and other necessary attachments. The recorder was developed in research on making a home-type video tape recorder.

## NEW! low cost solution for superior tapes

- Cuts Background Noise
- Focuses on Your Voice



## ceramic microphone

Most low cost microphones pick up sound indiscriminately—from all around the room echo'' and ambient noise. Unidirectional microphones (which pick up sound mainly from the front while suppressing unwanted sound coming from the sides and rear) were too high priced for many users. Now! Shure has incorporated its world-famous "Uniphase" network (found in our most expensive unidirectional dynamic microphones) into this low cost, probe-type ceramic microphone that makes it possible for you to get professional results at a minimum investment. Ask for a demonstration at your micropnone or sound system dealer's ... you'll hear how it can improve all your tapes ...

50 to 7000 cps response. Can be hand held, or stand mounted. Response at rear down 15db from front. High impedance.

> Literature: SHURE BROTHERS' INC. 222 Hartrey Ave. Evanston, III., Dept. TR-J

## CROSSTALK

from the Editors

THERE PROBABLY IS little use in bringing up this topic but we thought it might as well be mentioned anyhow. The topic in question is that of standardization—especially in the matter of cords and plugs to interconnect, units.

\* \* \* \* \* \* \* \* \* \* \*

THIS PROBLEM NOW has international implications because there are a number of recorders on the market which come from outside the United States. In the shops we can find recorders from Germany, England. Sweden, Norway, Holland. Italy and Japan.

\* \* \* \* \* \* \* \* \* \* \* \*

UNFORTUNATELY EVEN THE recorder manufacturers in the United States do not agree among themselves as to one particular type of jack or plug so foreign manufacturers are not alone in causing the inconvenience and confusion.

\* \* \* \* \* \* \* \* \* \* \*

WE NOW HAVE the familiar telephone type jack and plug, the RCA pin type, the Cannon connector, the polarized jack and plug, the banana plug, single, double and triple, the miniature jack and plug, the multi-pronged connector, which is similar to the radio tube sockets, etc.

\* \* \* \* \* \* \* \* \* \* \*

USUALLY THE FOREIGN manufacturers will very carefully inquire as to the kinds of machines needed by the American market before they start to make them up for import. Apparently the discussion never gets down to jacks and plugs. Or perhaps the US is out of step with the rest of the world in this matter.

\* \* \* \* \* \* \* \* \* \* \*

IN THE REALM OF stereo machines we have those which have the power amplifiers in the case and need only an external speaker, those which have a preamp built in and require an amplifier speaker and those which simply have a head output and require a preamp-amplifier and speaker for the second channel.

\* \* \* \* \* \* \* \* \* \* \* \*

THE HEAD OUTPUT, vs a preamp output, vs a full power output is mostly a matter of economics. A machine with only a head output is cheaper to make than one containing a preamp which in turn is cheaper than one with a full amplifier.

\* \* \* \* \* \* \* \* \* \* \*

THE MACHINE MANUFACTURER naturally hopes you will use his brand of auxiliary units, in which case the jacks and plugs will match. But such is not always the case. A person might have part of the gear and simply buy a new tape deck or recorder. Unless he gets the proper plugs or cords when he makes the purchase he will find the units cannot be interconnected when he gets home. And there is nothing more frustrating than to have a piece of new equipment and not be able to use it immediately.

\* \* \* \* \* \* \* \* \* \* \*

SOME MACHINE MANUFACTURERS apparently recognize this problem and include jacks to fit the machine in the accessory package. But even this good-will gesture would not be necessary if things could be standardized.

\* \* \* \* \* \* \* \* \* \* \*

BUT AS WE MENTIONED above, there is probably little use in bringing up this topic. The industry has had about 10 years to settle down on something but they still are in orbit.

12

## **NEW PRODUCTS**

#### KORTING ENTERS ELECTRONIC FIELD



Matthew Stuart & Co., Inc., Korting Recorder Sales Corp. Division, 156 Fifth Avc., New York 10, N. Y., has announced its entrance into the electronic specialty field with the following electronic devices: Universal FM Multiplex Adapter, Universal Tape Recorder-Slide Projector Synchronizer, and Universal FM Low Pass Filter.

The FM Multiplex Adapter, Model 23911 sells for \$39.95. Can be used with any multiplex ready FM tuner; all transistorized circuitry assures lowest noise level. Can be plugged into 110 volt AC or convenience outlet on amplifier or tuner. Is equipped with an impedance changing input stage and a self contained power section.

The Korting Universal Tape Recorder-Slide Projector Synchronizer, Model 13900, the Diamat, is \$39.95. Either monaural or stereo recorders can be used with the Diamat, providing they have a stereo output. Simple installation requires soldering of connecting plugs.

The Korting Universal FM Low Pass Filter, Model 23910 costs \$19.95. Is designed to eliminate any interference whistle. Filter can remain connected during all phases of tuncr applications; it may be used with any tape recorder and stereo tuner.

Write to above address for additional information on any of these items.

CONCORD AUDIO SYNC



Any home movie projector can become a sound projector with Concord Electronics' new Audio Sync accessory for their model 220 tape recorder. Narration, music, and sound effects can be added to existing film with the new unit, or sound can actually be recorded while shooting film with any movie camera. The Concord Audio Sync accessory sells for under \$30, while the companion model 220 recorder sells for under \$160. In addition to sound synchronization, the 220 tape recorder has three speeds, all push button operation, professional dynamic microphone, remote control jack, dual monitoring jacks, electronic eye recording level, automatic record equalization shift, and automatic pressure roller release.

A free booklet entitled "All the Facts About Sound Synchronization" may be had by writing the Concord Electronics Corp., 809 Cahuenga Blvd., Los Angeles 38, Calif.

#### ASTATIC INDUSTRIAL MICROPHONE



A new microphone especially designed for heavy-duty industrial use has been made available by the Astatic Corporation. This Model 551 will stand up under extreme conditions. It's unbreakable; can be operated even while wearing heavy gloves; it's sealed-hang it in a jeep, forget it overnight in the rain, use it in a mine, or in a corrosive atmosphere, or under water -it still works beautifully. Should it get clogged with soot or other foreign matter, it can be taken apart for cleaning by using a dime for a tool, without breaking the seal. Also, features dynamic high or low impedance, a shielded transformer for very low hum pickup and high signal to hum ratio, leaf type switch, coiled cables stretching to 8 feet and recoiling to 15 inches, and it is blastproof. Complete data on this mike is available by writing to The Astatic Corp., 250 Harbor Street, Conneaut, Ohio.

#### SCOTT STEREO AMPLIFIER



H. H. Scott, Inc., has announced its model 296, 100-watt, complete stereo amplifier. Each output stage delivers a full 50 watts from 20 to 20,000 cps; variable phono level control permits precise matching to any phono cartridge or tape deck. There is a stereo selector switch for choosing between stereo or monophonic sources, a front panel stereo headphone output, and a derived center channel level control. Complete information and price of this amplifier is available from H. H. Scott, Inc., Dept. P, 111 Powdermill Road, Maynard, Mass.





**ONLY** THE ROBERTS 1040 **4-TRACK STEREOPHONIC TAPE RECORDER combines these Advanced Features:** Unique "listen-to-yoursell" feature • Records new FM MULTIPLEX STEREC CASTS • 4-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**<sup>50</sup>

POBERTS ELECTRONICS, INC. Dept. TR-10-L 5920 Bowcroft Ave., Los Angeles 16, Calif. Please send me:

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

Name

Address	
City	Zone State

### JOIN NOW!

### We Want You

ta belang ta the ranks of satisfied subscribers ta the magazine exclusive in its field—TAPE RECORDING.

Each issue is designed with the tape recarding enthusiast in mind. The informatian cantained therein is written just far yau—ta help start yau in the hobby, ta keep yau up with the industry, und ta prave that yaur purchase af a tape recarder was ane of the wisest investments yau 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 fram a criticism af Elvis Presley to swapping your antique vase for a tope 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

Yau can have 12 issues a year conveniently delivered ta your daar by simply filling out the caupan belaw and returning it ta us.

We have always maintained a "maneyback" guarantee paticy shauld yau nat be satisfied with yaur investment.

2 Years\$7.00
1 Year\$3.75
Fill out the caupan taday. If yaur checkbaak isn't handy, we'll be glad ta bill you later.
TAPE RECORDING Severna Park, Md.
Please enter 🗌 ar renew 🗌 my sub- scriptian as indicated belaw:
2 years\$7.00
□ 1 year\$3.75
Payment enclased, Bill me later.
Name
Address
CityZane State

## 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

#### Advocates Monaural

To the Editor.

On page 19 of your August, 1962 issue, you published a letter and added editorial comment of your own on the subject of "Monaural Tapes."

In hope that the good points brought out by your reader and yourself might eventually penetrate the closed minds of the tape and hi-fi industry, let me add this further comment.

My interest and experience in hi-fi began in 1956 when tape and record rigs were strictly monophonic. As an airline pilot l get around to many shops and dealers in this field all over the country. In those early days I met in the various shops not only the hobby seeking youth but also doctors, lawyers, teachers, and other professional people who were finding pleasure in putting together personal sound rigs.

The entire field of the business was booming. Several makes of fine tape recorders were on the market, and the enthusiasts were well satisfied with the clear, brilliant, live sound they produced through their monophonic speaker systems.

Then came "stereo." It "busted" the boom. The sudden obsolescence (seemingly) of their beloved equipment discouraged customers in droves. Good tape recorders like Ampro and Berlant disappeared. Many of my professional acquaintances in the hobby lost interest in it because the business lost interest in them. Some were made hostile because they felt "forced" to go along with stereo. Development of monaural tapes and sound systems practically ceased.

Now, I do agree that there are certain special circumstances for which stereo rigs are the only answer, but I know many people who went for stereo as a status symbol who are now disillusioned with it and who would have been better off originally with a first class monophonic system. For example, here in Florida you are invited to admire your host's custom stereo in the living room and then out to the patio or pool side for listening where stereo effect is totally lost, or else the sound comes through an extension speaker; strictly monophonic.

Likewise I know several people who possess stereo but who definitely do not have high fidelity sound, which is what they wanted, and all they wanted.

I am not against progress, but it certainly was foolish of the sound industry to dump the monophonic customers whose enthusiasm made them a stable source of revenue in order to jump into stereo in the abrupt and radical way it was done. Dealers in several cities have discussed this with me and agree that stereo was improperly handled, and, as handled, injured their business seriously. My positive suggestion in all this business is that a return to further developments of monophonic sound will be a step forward, not backward, and that one of the first revenue producers in such new development will be in the field of monaural tapes.

I know this to be a demonstrable fact for the reason that I now have a large backlog of orders from friends, neighbors, and their friends for monaural tapes which I make for them from their records or mine with my old but well kept Berlant equipment.

In fact, many have discovered that the effect of Florida climate on vinyl records makes it necessary to preserve favorite or valuable music material on tapes. For preserving old record favorites, monaural tapes are the only answer in damp, humid climate. For this and other reasons, monaural tapes must be brought back because there is demand for them.

Your magazine can be a big help to tape recording fans and to the industry as a whole by alerting manufacturers to this latent but so far too silent market.— *Lew Drill, Coral Gables, Fla.* 

We couldn't agree with you more. Unfortunately a lot of dealers were also so impressed with the merits of stereo that they unloaded what monaural tapes they had and refused to order any more. The resultant drop in orders caused the tape libraries to stop producing them. Everyone in the business just seemed to fold his tents and silently steal away. The disc record industry, however, did not dump monaural when stereo came along which was by far the wiser course. Monaural disc records now account for at least half the record sales the same should hold true for tape ... if the tapes were readily available.

#### Monaural Tape Source

#### To the Editor:

For those who would like to purchase monaural recorded tapes, the Radio Schack of Boston has many available. The tapes are 57 minutes long and are dual track, recorded at 3¾ ips and sell for \$3.99 per tape. Radio Shack is located at 730 Commonwealth Avenue, Boston 17, Mass.

For those who would like to get some two track stereo tapes, there are 1,500 now on sale by the McGee Radio Co., 1901-07 McGee Street, Kansas City 8, Mo. Their special sale price is \$3.49 per tape or 3 for \$9.99. These are Decca tapes.

The above mentioned companies will gladly send anyone their catalogs on request.—Nathan Holt, Portsmouth, N. H.

Our thanks to Mr. Holt and other readers who informed us of the availability of these tapes.

## "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, nat 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:

A little over six years ago I chanced upon a copy of TAPE RECORDING magazine. What I saw inside caused me to become a persistent subscriber—caused me to purchase my first recorder—and gave me the first hobby that I have ever had in my life. Living Sound. Fun. Thrills. Laughs.

Since that day this hobby has accelerated to four professional recorders—and my interest has never leveled off. I believe that there is little that I have missed in the recording field. Tape respondent clubs. Hidden microphone fun. Holiday and birthday parties. Fireside chats and tender conversations elicited from older members of family and relations including The Story of Their Life . . . someday to become priceless. We have had sidesplitting interviews with the Little People, children of all ages. We love to "goof up" tapes.

I have recorded weddings, plays, important community, civic and religious matters. While some were "for fun"—many were for a paid fee. We have also been hired to provide dinner music for as many as 500 people. Gay music for indoor and outdoor gatherings may be included.

The uses of my recorders are seemingly endless. As the assigned State Prison Parole Officer and combination Probation Officer. my interviews with individuals are almost continuous and often lengthy. The words spoken are obviously important since we are dealing with various personalities of persons who may be imprisonable material. And this person's liberty is next to importance to his life-a very precious cargo. Those cases that become the most involved (particularly those who are being investigated for purposes of a presentence report for the Court) are recorded in the event a busy Judge might desire to hear for himself certain key aspects of an offense that he might not otherwise be able to hear.

Our keen, highly trained and veteran court reporter, one of the best in the business, found some of our enthusiasm rubbing off on him. He purchased a fine recorder which he uses (hidden) while performing his courtroom functions. Recently, some out-of-town attorneys bitterly argued (a \$35,000 suit) that he had left out a key statement that they were sure that they had previously uttered-and this had direct bearing in causing them to lose their case. The matter was taken to a higher court. The recording tape lent great weight to the fact that the reporter was flawlessly accurate in his recording. Two other nearby Circuit Court reporters immediately made recorder purchases!

And now for the highlight. This we enjoy most of all. Two articles, several years ago, stimulated the thought and challenge. These were in your magazine and dealt with Broadway and Little Theatre taped sounds and music used to round out and highlight productions.

The Traverse City Civic Players were formed two years ago. You have guessed the rest. They have a permanent Sound man and music arranger. We take pride in throwing lite-like "sound" in various positioned speakers, offer music appropriate to the particular play being given—background—seating—and between acts. The cueing is split-second and the tape is spliced to almost a hair.

The productions have been compared to off-Broadway shows, play to 1,300 people, and despite only two seasons they have made over 6,000.00—which is a feather in a community of 18,000 that offers countless functions.

We could go on-we love to tell and show others-as you can tell from the length of this letter.-Charles E. McCarty, Traverse City, Mich.

#### Dear Editor,

A tape recorder is virtually a "brother" of this chapter of my fraternity. In the past three years, we have used it so much and to such advantage, that the brothers feel that we couldn't get along without it.

When we have our annual dance, advertising becomes a problem. We solve the problem by recording some popular dance music and playing it in the school lounge instead of the juke box. The fact that they don't have to pay for the entertainment makes the kids listen appreciatively to the spot announcements for the dance. In comparing financial results of dances, we find that the dances advertised in this manner have been most successful.

Taking minutes at meetings has been made more efficient with a tape recorder. l set it up and start it and the meeting progresses . . . letting the Executive Secretary participate freely in the discussion without having to take bothersome notes. The minutes have become more complete and accurate due to the ease and accuracy of typing them directly from a recording.

The fraternity's occasional song-fests are kept for future enjoyment and for comparison with past contests.

Recently, a brother found that he could not attend a special meeting of the fraternity, and he had certain important remarks to deliver to the meeting. His solution was simple: he recorded his remarks and they were played to the meeting with the result that he had desired.

Thus it is that we find our tape recorder indispensable to the normal business of the fraternity. — Frederick II. McCarty, Elmhurst, N. Y.

## TAPE RECORDING IN EUROPE

Some of the most interesting developments in tape recording are taking place in old-established factories and labarataries in Eurape. The fullest infarmotian obaut them appears regularly in TAPE Recording Magazine, published in Londan, Englond, since February 1957.

TAPE Recarding Magazine was the first and is today the foremast publication in Europe in this field.

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

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

RECORDING MAGAZINE 7 Tudar St., Landon, EC4, England





For complete enlarged Literature Packet and Tape send \$1 (refundable) if sincerely interested. Many territories still open but closing fast!

ARTISTIC RECORDING SYSTEMS Box 3774, Oak Park, Mich.

## TAPESPONDENTS 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: I-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: TAPESPONDENTS WANTED, Tape Recording Magazine, 101 Baltimore-Annapolis Blvd., Severna Park, Md. Tape Recording magazine assumes no responsibility for any inquiries between people listed in this column which are not answered.

- Baker Hendershot, 106 Broad St., Selma, Ala.; Recorder: V-M 700, 334 & 7½ ips, dual track; Interests: Hi-fi, jazz, Dixieland, pop, show tunes, pre-recorded monaural, sound effects, photography, floristry, raising orchids; Adult.
- G. YanDeWalker, 915 Cornelia Ave., Lakeland, Fla.; Recorder: V-M 711, 7½ & 3¾ 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. Taalson, 368 West Park Ave., Aurora, IU.; 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.
- Relph Holder, 116-06 139th Street, South Ozone Park 36, N. Y.; Recorder: Elizabethan Essex, 31/4, 71/2 & 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 Sterecorder,  $3\frac{3}{4}$  &  $7\frac{1}{2}$  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, 3¾ and 7½ 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%, 3¾ & 7½ 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%, 3% & 7½ 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, marck music, also zither; Adult.
- George Vlasto, 400 North St., Greenwich, Conn.; Recorder: Viking, 3¼ & 7½ 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, 3¼ & 7½ 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%, 334, & 7½ 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, 33/a & 71/2 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 40018 preamp, 4 track stereo or monaural, 3¾ & 7½ 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).
- Reg. L. Preston, 4, Queens Road, Maidstone, Kent, England; Recorders: Elizabethan Essex, 1%, 3¾ & 7½ ips, 7" spools, mono, dual track; Brenell, 1%, 3¼, & 7½ ips, 7" spools, mono, dual track; Knightrider, 3¼ 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, 33/4 & 71/2 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, 334 & 7½ 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, 17/6, 33/4 & 7/2 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, Portugese, etc. I have forgotten most of the German I knew; Adult, married.
- Spencer M. Berger, 65 Laurel Rd., Hamden II, Conn.; Recorder: Wollensak T-1515-4, 71/2 & 33/4 ips, 2 & 4 track; Interest: Wants any material (standard Phonograph records excepted) with Ted Lewis; John, Lionel, or Ethel Barrymore; Leopold Stokowski; Adult (45).
- Emerson Evans, 1444 S. 14th East, Salt Lake City 5, Utah; Recorders: 2 Roberts, I Ekotape, 2 tracks, 3¾, 7½, 15 ips; Interests: Unusual sounds, tape recording and mixing, gay-nineties songs and piano music, 1900-1930 history. Want to tape with someone over 40 from New York City, San Francisco, New Orleans, Texas, Quebec, Baltimore, Maine, Vermont or New Hampshire—just tape, all tapcs answered; Adult, Advertising Artist.
- Ernest Centofante, 3085 Adams Way, Santa Clara, Calif.; Recorder: Sony 101, 3% and 7½ ips, 2 track; Interest: Tapespondence in English anywhere outside U. S. & British Empire; Adult.
- LCDR John W. Beale, SC, USN, Command and Staff Course, Naval War College, Newport, Rhode Island; Recorder: Norelco 400, 1%, 334, 7½ ips, 4 track mono/stereo; Adult.

Warren L. Wallis, 1355 Continental Drive, Daytona Beach, Florida; Recorders: V-M and Silvertone, all speeds, two tracks; Interest: Want tape contacts in Caribbean; Adult (36).

- Leif G. Brush, 234 N. Austin Blvd., Oak Park, Illinois; Recorders: Ampex 601, Roberts 192FT, 71/2 ips, full track; Interests: First Day Covers, old-time radio voices-network local. Want 1945 or earlier network station breaks of Red, Blue, CBS, Mutual and CBC, Dominion networks. Chimes included in Red, Blue breaks: "This is NBC-The National Broadcasting Company, bing-bong-bing," etc. Also: Complete Blue Coal spons. Shadow half-hour; Kix spons. Lone Ranger half-hour; Bayer spons. American Album of Familiar Music. (Felix Knight, Donald Dameannounced by George Ansbro). Offer: Natilus arrival in Portland Harbor, Eng., '58-no charge; Adult.
- Bill Surmik, 103 N. McKinley Ave., Endicott, N. Y.; Recorder: RCA 8-TR-3, 71/2, 33/4 ips; Interests: Talk and write Czech and English. Interested in Czechoslovakian polkas, Waltzesan Csardas (Bohemian-Slovak). I tape this kind of music for radio, 30 min. tapes, at 71/2 ips speed. Maybe I can find someone who does this kind of work. Would like to find information how to get some tapes and records made in Czechoslovakia.
- Tom A. McIntire, 501 Wright St., Wilmington, N. C.; Recorders: Concord 880 and Norelco,  $1\%_8$ ,  $3\%_4$  &  $7/_2$  ips, 4 track record/playback, 2 track playback; interest: Want to exchange classical music tapes. Send your "want" list-I'll send you mine. Have some stereo, lots of mono; Adult.
- Stephen Edward Buggie, 2421 Garfield Avenue South, Minneapolis 5, Minn.; Recorders: Norelco 400, Wilcox-Gay 5M, 15/16, 176, 33/4, 71/2, 15 ips; Interests: Electronic sound effects, world politics, science fiction, unusual people, Spanish language study, various types of "Language Laboratories," round robin tapes, 8mm movies, hi-fi, travel, records (stereo), 1 would like to get a 71/2 ips, 4 track stereo recording of a boomerang, also different cookoo clocks in stereo as well as other sounds. Interested in promoting new young tape club, International Voices of Youth; Mature Teenager (16).
- PFC Robert P. Rice, RA12611579, Box 194, U.S.A.R.S.C.A.T./D.1.C.S., A.P.O. 90, San Francisco, Calif.; Recorder: Fujiya-corder, 2 track, 3¼, 7½ ips; Interest: Old recordings Edison through 1930, particularly the 20's; also railroad sound effects, would like to hear from fellow railfans; Age 21, single.
- Irwyn S. Greif, 2231 Batchelder Street, Brooklyn 29, N. Y.; Recorder: Telectro SR-441, dual track, 1%, 3%, 7½ ips; Interests: Flying saucer research, occult research, E.S.P. research and development. My desire is to gather together all psychically sensitive people into one group to develop higher E.S.P. and psychic sensitivities, 1 have 8 years background in psychic field. I wish to use tape correspondence as a worldwide communications setup; Adult (32), married.
- John W. Howe, 84 Sproat, Detroit, Mich.; Recorders: Wollensak Ti616, 334, 71/2 ips, monaural or stereo; Telectro, 334, 71/2 ips, monaural; Interests: Music, all kinds, but especially organ, honky tonk piano, pre-recorded tapes. Folkvoice taped programs; any Dick Kenny series, spot recording sound effects; world tapesponding exchanges; Adult.
- Edmund Perry, 7 Raposa St., South Dartmouth, Mass.; Recorder: Realistic, 3¼ & 7½ ips, dual track; Interests: Controversial discussions, psychic phenomena, adult comedy, travel, etc. Interested in anything and everything, but prefer the unusual and different sounds; Adult (36).
- Dod. Wilcox, 731 East 73rd St., Los Angeles I, Calif.; Recorder: Telectro Stereo Master, 3 speeds, dual track, 4 track, record/play stereo; interests: Play real swinging organ, use sound on sound and percussion for blues and R & R, play all kinds of music. Arrange and compose. Hoping to form own trio for recording. Will answer all interested in music, or exchange ideas; Adult (single).

(Continued on page 33)

## TAPE IN EDUCATION

**T**HERE may be difficulties ahead for Educational Television whether live or on video tape.

It seems that Educational TV station WNDT in New York City desired to videotape a lecture by Zero Mostel, the star of the Broadway hit show, "A Funny Thing Happened on the Way to the Forum."

The station planned to tape his humorous lecture on the history of comedy which he had previously delivered at Harvard University last May. It was to have been the highlight of the first broadcast day. His union wouldn't let him.

The American Federation of Radio and Television Artists decided to make a test case with the station. It said that it would not let any of its members appear on any WNDT show until its jurisdiction was recognized over all of the new station's performers—including teachers, Government officials and others.

This WNDT officials have refused to agree to.

However, the scope of this action is not confined to New York because WDNT is an affiliate of the National Television and Radio Center and is expected to produce taped and filmed programs which the center may distribute to other educational outlets in other areas. The union wants residual payments to performers for these additional showings.

The dispute could have further nationwide repercussions by setting precedents for AFTRA negotiations for some 60 other educational stations throughout the country.

WNDT officials insisted they had been prepared to pay Mr. Mostel the basic performers fee of \$70. They stated thar they had recognized AFTRA's jurisdiction over professional performers and had also planned to make appropriate payments to the union's pension and welfare funds. The union countered that the station had decided to pay only after the question had been brought up.

The union spokesman said, "You can't pick and choose who would be paid and who would not. The policy has to cover everybody—and we're talking about everybody who goes before that camera."

"With respect to teachers," he continued, "We think they are entitled to residuals for their services."

He said a lot of teachers who are appearing on TV are "getting unhappy" about not being paid for reshowings of programs they have conducted.

No further negotiations were scheduled with the station and the union sent out a communication to all its members telling them not to appear on the station.

A spokesman for the station said that they hoped the union will join with it in achieving a fair and balanced approach to the proper function of this new educational medium and that Mr. Mostel would be able to appear on the opening night.

WDNT will air instructional programs

every weekday beginning October 1, in addition to some educational courses in prime evening hours.

This has all the earmarks of an interesting situation which may have far reaching effects on the development of cducational TV.

It could lead to an educational ASCAP which would keep track of the showings of films or videorapes, collecting the "residuals" and distributing them to the various performers or teachers concerned.

This would also put the teachers in the ranks of the show people, in addition to their role as educators if they would have to join the union in order to make appearances before either electronic or motion picture cameras.

Shows produced by non-union performers might be barred from areas where the union was strong enough.

In case you haven't mer up with a residual, this is a payment made each time a show is rerun, or a commercial sung. Many artists make a fair living on their residuals alone. It is more or less like the royalty payments a publisher must make to an author each time a copy of the book was sold.

It may also turn out that educational TV will become increasingly expensive and a far different thing than was first envisioned. Most of the educational TV stations are set up on shoestring budgets in comparison with the commercial TV stations and, if they must pay high prices for showing the materials, ir will most certainly 1:mit their capabilities and restrict the use of the medium which educators felt would show so much promise.

When you consider that it costs on the average, somewhere between \$1200 and \$4000 depending on the film and market area for your local TV commercial station to bring one late, late movie your way, it becomes apparent that the "residuals" can become a very important factor.

As we go to press it is reported that the union struck the station and the station closed down after its opening day pending a settlement of the issues involved!

Minnesota Mining and Manufacturing Company, manufacturers of "Scotch" brand tape has issued a new reel of interest to educators.

It is called, "A Measure of Language: The Testing Phase." An accompanying booklet, "A Beginning Audio Lingual Testing Guide" describes possible testing procedures, shortcuts to grading tapes and a bibliography or testing for oral responses. The package is available for \$2.25 from Dept. Y2-370, 3M Company 2501 Hudson Road, St. Paul 19, Minn.

It is the third language teaching guide offered by the company. The others are a tape-booklet set "Behind the Tape—the Teacher" and "A Beginning Audio-Lingual Guide" and a tape, "First the Ear . . .". They are available from the company for \$2.25 and \$1.50 respectively.



Inc., Severno Park, Md.

## WORLDWIDE HOBBY—Tape Clubs

#### by Jean Cover

. . . if you do not already belong to a club, join one soon.

THERE is no question as to the increasing popularity and importance of tape correspondence clubs. Continued growth of clubs already in existence, plus a variety of newly organized ones, are indicative of this.

The guiding force behind any successful club venture is made up of the people concerned with it. It is more and more apparent that the people associated with these tape clubs are among the friendliest, the kindest, and especially, the most understanding, anywhere in the world.

They join to meet other people, to learn about the culture and living habits of others, to further their education, to exchange ideas, to find new interests or broaden those they already have, to promote their hobby, to help or be helped, to create international cooperation and understanding, and to share a part of their lives with others.

So whole-heartedly have some shared, that the end result was a mutual lifetime of sharing. We refer to the few instances of couples meeting through tape correspondence and eventually entering into matrimony. You must admit recorded tape is a most economical and convenient way of becoming introduced to some he or she in a foreign country. Once introductions, via tape are over, nature follows a set pattern, if all conditions are compatible of course.

All these clubs are non-profit organizations created wholly for pleasure and the fostering of human communication. Most operate on a shoe-string budget in order to publish bulletins and rosters, answer inquiries, help handicapped members, send out introductory tapes, maintain a library, etc. They depend entirely upon nominal dues (usually \$2-\$5 per year), together with voluntary contributions to carry on the club. This, of course, is in addition to the all-important personal contributions of time and service given freely by club officers. These officers maintain a central headquarters and aid all members as much as possible. When possible, directors of a club meet once a month. They conduct their clubs in such a way as to encourage active participation of all members. As it was so aptly stated by the secretary of the Indiana Recording Club—"We would prefer to have a small number of active tapers, rather than a large list of names of members who 'just sit there'."

By "active participation," we refer to prompt, interesting answers to all tapes received from fellow members, contributions to club bulletins, volunteering for committees and offices, attending meetings when possible, etc. The members are the lifeblood of any club and without their continued participation the central body of the organization soon dissolves. Just as the members are dependent upon headquarters for leadership and guidance, so too headquarters is dependent upon the members for continued maintenance.

Since most of the clubs are worldwide, it is necessary to have headquarter's representatives stationed throughout the areas with the heaviest memberships. Members who are willing to take on added activities in order that their club may mature and continue to operate are appointed by central headquarters to handle local meetings and activities as well as to welcome new members from their district. They engage in promoting their club in their locality, and without their cooperation the larger clubs would find it difficult indeed to function smoothly.

In the Voicespondence Club these representatives are known as District Deputies. They welcome new members to the club, aid older ones and handle complaints from their area.

World Tape Pals has set up a system of chartering local tape groups into Reels (Reel #1, Reel #2, etc.). These groups must have a minimum of ten members, hold at least ten regular meetings annually, send reports to Tape Topics (club bulletin), submit lists of members to



Emile Garin (left), secretary of Union Mondiale des Voix Francaises and Amateur Tape Exchange president E. A. Rawlings.



Elmer Friman, President of Indiana Recording Club, makes tapes with his wife Alice, and sons Richard and Paul. Exchanging family tape letters with other families in foreign countries, they find that taping is a good way to do "armchair traveling."



Recordings of great variety are received by Mrs. Mazie Coffman, secretary of the Indiana Recording Club from all parts of the U.S. and many foreign countries.



Clarence J. Rutledge, director, American Tape Exchange.



Maurice Roussel, secretary of Magneto-Vox Club, answering tapes in his Tape Station MV2RM, Every MV station is identified by a call-sign. The first letters are representative of the club name; the figure shows the number of recorder tracks, and the other letters can mean any other words of special interest to particular stations.

headquarters, pay a special charter fee to the club, and all officers are required to be regular members of World Tape Pals.

Indiana Recording Club also has an Associated Clubs Plan whereby they obtain lists of affiliated club members from foreign countries for their American counterparts to correspond with.

While general club meetings may be organized from time to time, it is impossible to have all of the larger club's members assemble at once, due to the nationwide and worldwide spread of membership. It is the duty of sectional representatives to arrange meetings in their localities and report on them to headquarters. Some clubs, such as Universal Tape Network, hold a national convention



Jean Thevenot, President of Honor of Union Mondiale des Voix Francaises. He is also founder of the International Federation of Sound Hunters and a well known French radio and TV producer.



Voicespondence Club Secretary, Charles Owen, prepares tape for copying. He and his wife, Melva, were charter members of the old Wirespondence Club, the first and original organization of recorder owners which continued in operation until 1953 when tape recorders were beginning to become popular. From this The Voicespondence Club evolved.

once a year. World Tape Pals once even held a Jamboree in Germany for its members, for which arrangements were made with travel bureaus to aid club members in organizing their trip.

Club bulletins and rosters are published at different periods, depending upon the club itself. Some are monthly, some quarterly, others semi-annually and in some cases they are yearly. The larger clubs who are in a position to afford it have their bulletins and rosters printed by professional printers, while others have members who have access to duplicating equipment and contribute the printing free of charge.

Rosters with complete listings of all members, their backgrounds and interests, are usually sent out annually or semi-annually. In between these issuance dates, monthly supplements with changes and additions are mailed to members.

Some clubs have started putting their rosters and supplements on looseleaf type paper with holes, so that an accurate, up-to-date home record may be bound and maintained by members.



O. B. Sloat, director, Stereo-International beside his equipment.



Emile Garin, of Pittsburgh, Pa., the General Secretary and founder of the Union Mondiale des Voix Francaises.



Harry Matthews, founder and executive Director of World Tape Pals,

It is interesting to note the Club du Ruban Sonore

publishes its list of members yearly in braille for its handicapped, and also on tape, as well as printed.

Stereo International puts its roster on tape monaurally, and its bulletin on tape stereophonically. Members of this exclusively stereo club exchange tapes recorded in stereo.

While the directory of the New Zealand Tape Recording Club is mailed, its sound magazine, "Tape Digest", is taped. This travels around the Dominion round-robin style. This service is not available to overseas members, however, unless they send in a tape with a request for copying the Digest.

The members who work on the editorial matter of club bulletins depend upon contributions from members and manufacturers, as well as their own talented staff, to produce an interesting and informative paper.

Emphasis on recorder and components maintenance, servicing and trouble-shooting, as well as tips on making better recordings are features of the bulletin of The Society of Tape Hobbyists. It is most instructive and the items are well explained.

There are a few bulletins which are bilingual, such as that of the Canadian Club du Ruban Sonore which is part English and part French, and the Magneto-Vox Club which is also Canadian and has an English and French bilingual bulletin.

Included among the individual items contained in the bulletins are such things as committee reports; answers to questions relating to technical matters, electronics, recording, accessories and voicesponding; postal rate information; teen columns; a trading column for exchanging or selling equipment; interesting notes on individual members; a how-to-do-it project; a listing of library tapes; and articles of recording experiences submitted by members.

Size and format of club bulletins depend mainly upon the size of the club. Well developed, large organizations such as The Voicespondence Club and World Tape Pals which are the two oldest tape clubs have bulletins which are excellently written, laid out, and printed. This is due to a greater number of members and their contributions, more funds with which to operate, efficient leadership, and more promotion.

The more modest bulletins of smaller clubs are just as informative and well done, of course, the only difference being they are on a much smaller scale in all respects.

Being as large as it is, The Voicespondence Club has special committees and funds. As do most of the clubs, Voicespondence makes a special effort to aid the blind and handicapped, who make up a goodly percentage of club membership. It has a Service Committee which helps the physically handicapped by maintaining a sighted reader service, and offering varied special services to such people. Such activities as this are also carried on by World Tape Pals and Club du Ruban Sonore.

Indiana Recording Club, Inc. has a Blind and Handicap Fund. Besides contributions for this fund, the club requested all members to send to headquarters all used postage stamps they get. These are sold to stamp dealers and the proceeds added to their fund.

In conjunction with this, Voicespondence also has a Cohen Honor Fund established through Ways and Means for the Blind, Inc. of Augusta, Ga. Through it several reliable recorders, complete with a supply of tape and a year's membership in the club, are given free to worthy blind people who need the equipment and the fellowship of voicespondence.

Another noteworthy project of The Voicespondence Club is the Tarver Memorial Fund, made up entirely of member contributions—no amount too small. Money is used to pay dues of those who can't afford their own, to furnish tapes, postage and even recorders to those who need them, and to distribute free loan copies of reading material for the blind. It is also used to finance purchase of equipment by those who can afford to pay only a little each month (no charge for financing).

As soon as a club becomes fairly well established, one of the first projects it concentrates on is setting up a tape library. Members submit tapes in all categories—music, sound effects, education, history, etc.—and before long the club finds need of appointing a club librarian and of publishing a listing of the tapes.

Members may either borrow and copy the tapes, or, in some clubs, may send in a raw tape, together with necessary postage, and have a copy of a specific recording made and returned to them.

Besides a library of stereo and monaural tapes, the Indiana Recording Club, Inc. also has a Voice of History Library, with recordings of interviews with prominent people in its files.

World Tape Pals has a special World Tapes For Education section which sponsors tape exchange programs between schools and youth groups. This service for teachers and students is free except for the necessary postage in sending tapes to those who request them.

A special World Tapes For Education Services for the Blind has also been set up. This is a matching service between sighted readers and blind students, teachers, and professional people. Its main aim is to match the reader and the blind person who needs educational and technical information read rather than pleasure reading. These services have proved invaluable to many blind college students.

The library of Universal Tape Network has over 8000 songs in stereo, plus many sound effects and is enlarging constantly.

While clubs of a general nature are flourishing, we find more specific tape clubs beginning, such as the Organ Music Enthusiasts whose activities are concerned primarily with discussion, criticism, and actual recordings of organ music.

In the early stages of development are a Cartridge Correspondence Club, for owners of cartridge tape machines, and a Health Friends Tape Club, mainly for shut-ins, but for others as well, to exchange good-health ideas.

All members of the Union Mondiale des Voix Francaises club already speak or are learning French, and most of the tapespondence is in this language. To help American members with their French pronounciation, the club has established the "Service de Tutelage Franco-American" which has voluntary "tutors" in France and Belgium. This club is a boon to students, or anyone else for that matter, who is studying French.

Then too, it is notable that even religion has entered into club formation, with the organization of Catholic Tape Recorders of America. While a member does not have to be Catholic to join, most of them are since the majority of club activities and recordings pertain to their religious beliefs. Many priests, nuns, sisters and prominent Catholic





Organ Music Enthusiasts Members: Left, top: Rosa Ria, N. Y. C. professional organist. Left, bottom: Don Knights, from England. Above, left: Nick Snow at a theatre organ in Pennsylvania. Above, right: Larry Lesniewski, Reading, Pa., a polka stylist. Members of this exclusive organ tapespondence club exchange recordings and criticisms of each others playings as well as suggestions for improvement.



Photo Shields, Wash., D. C.

Catholic Tape Recorders International assisted the American Catholic Sociological Society, at their 24th annual convention. Jerome W. Ciarrocchi, director and founder of CTRI, was present and assisted in recording many sessions. Betsy Toland, a student of Trinity College and Emile McMillan also assisted in recording sessions.





Above, left: VS-er Henry Toomer (England) at Brandenburg Gate in Berlin before erection of wall with VS-er Harald Grohsman (Germany). Above, right: VS-er Erik Lindgren (Sweden) on trip to London and talking to VS-er Geoff Gillett (England).



Above, left: Students on Ile de la Reunion, Indian Ocean, prepare a tape recording for a class in the U.S. Above, right: Juan M. Handal, La Paz, Bolivia, South America, is director of World Tape Pals operations in the Spanish-speaking world. Bottom, left: Mr. and Mrs. J. E. Pearce, enthusiastic WTP members of Cape Town, South Africa. Bottom, right: WTP representative for Japan, Shin Tanaka.







The Voicespondence Club has a great many blind and handicapped members. This is Jimmy Sletten, Madison, Wis., blind, listening to a tape from the Tarver Memorial Tape Library for the Blind, operated by the club as a public service.





Above: Daniel W, Shattuck listens to stereo music from the Indiana Recording Club's Library. He is the "Voice of History Library" Chairman of IRC, and will be the director of the club booth at the 1962 Hobby Show in November. Left: Bob Brunson, himself blind, heads World Tapes for Education Services for the Blind, a section of World Tape Pals.

people belong. Missionaries especially, stationed in foreign outposts, welcome the help and friendship of this club.

One of the favorite activities of all clubs is the exchange of round-robin tapes. The Magneto-Vox Club refers to these tapes as "community tapes" and they are known as "tour-au-rubans" in Union Mondiale des Viox Francaises. Whatever the distinction, these tapes are lots of fun and they certainly encourage member participation. Some of these tapes are general in scope, others have a central theme, such as a talent tape on which each recipient tapes his specialty whether it be musical, dramatic, humorous, or what have you. The end result is a tape worthy of addition to the club library.

The Amateur Tape Exchange Association circulated a round-robin tape called "Macadem Madness" dealing with the hazards of automobile traffic. While not especially entertaining, this type tape is most instructive and worth hearing.

Every year Union Mondiale des Voix Francaises gives a prize for the club's best round-robin (Prix International du Tour-au-Ruban).

Many of the clubs hold contests of this sort. Last year, The Voicespondence Club gave "Golden Mike" trophies to the winners of its tape contest. Submittals of recorded tapes in this contest were by the following categories: Composition Class, Documentary Class, and Miscellaneous Class.

The Magneto-Vox Club sponsors a continues "Sound Hunters" contest, with best recordings aired on Canadian and even European radio stations.

Besides the committees for aiding the handicapped, welcoming new members, answering questions, handling the tape library, arranging meetings, preparing contests, publishing rosters and bulletins—we find also sections of clubs devoted to specific groups.

There is Teen Pals of World Tape Pals, for teenage members news; and the Catholic Tapettes of Catholic Tape Recorders Int'l., exclusively for female members.

Tape exchanges between members of these clubs need not and are not devoted just to general chit-chat. Chess games are played via tape, foreign and American receipes and cooking hints are exchanged, a whole new horizon of learning is opened at the throw of a "Record" switch. Stereo International carries on an interesting tape exchange idea. It has a committee in charge of dramatic stereo plays which are written just for this type recording. Parts in these plays are acted out in different regions of the world by different people, and the tapes are later edited into complete productions. Professional people, such as doctors, lawyers and engineers exchange ideas connected with their profession. Interesting tape exchanges are limited only by the imagination, and it is this interest which keeps participation active throughout the clubs.

Customs processes tapes which enter foreign countries. So explicit was this check on tapes coming into Australia that when members of the Australian Tape Recordists Association began receiving tapes loosely rewound and tangled, the club officers trekked to the Customs office to register a complaint. There they found that the machines for reviewing recorded tapes were not being properly operated. After instructing the officials on how to use a tape recorder, tape exchanges soon began coming through in good condition.

Many lasting friendships between whole families, as well as individuals emerge from tape correspondence. Eventually, quite a number of these result in one tape pal visiting another. Invitations from members in foreign countries to American members (and vice-versa) are regular occurrences in the clubs. And for a foreigner to have someone guide him in a strange land is helpful indeed. He need not be afraid, nor feel out of place with a native son by his side. Any would-be travelers would do well to look into contacting some tape pals in the country or state they are considering visiting.

Unfortunately, sometimes the burdens and expenses of a club become too much for the officers to handle and they find themselves unable to carry on, as well as to locate successors. In such cases, every so often another club will absorb the members into their organization to help them continue their tapespondence and also to increase the membership of the absorbing club.

One of the newer, but rapidly progressing clubs which has done just this is American Tape Exchange. This club has made arrangements to absorb at least some of the members of the former Tape Respondents International club. Names of these people will appear in the next roster of American Tape Exchange and if after that they care to become regular members, they will be welcomed into this organization.

It is easy to see the value of tape exchange, and to understand why it has developed into the fascinating hobby it is. So important is human communication that the government of the United States inaugurated a People-To-People program in 1956 to further contacts and exchanges between peoples around the world.

Such a program would be incomplete without a Tape Recording Committee. So it was that World Tape Pals became affiliated with the People-To-People program and Harry Matthews, club president, was appointed to head the tape recording section of the general Hobbies Committee. Since that time World Tape Pals has worked closely with the government's program. In 1960 they sponsored a People-to-People Hawaiian Holiday tour. Club representatives in Australia, New Zealand and Japan also planned tours from their countries to coincide with the date of the Hawaiian tour. The whole emphasis of the tours was on people-to-people contacts.

While all tape clubs are not directly affiliated with this

governmental program, they are in a sense a part of it since they all engage in stressing the importance of human communication.

Every tape recorder owner owes it to himself to look into becoming a member of a voicespondence club. It isn't hard to do-simply look over our roster of clubs at the end of this article, decide upon whom you would like to consider joining, and drop a letter to the secretary requesting information and an application blank. Due to the limited funds of most of these clubs, they request a selfaddressed, stamped envelope for replies. When you have looked over the information, join the particular club which offers you the most.

Most of the clubs send out a 3" reel of tape welcoming newcomers, together with a copy of the latest up-to-date roster and bulletin. Some give members code numbers, some have membership wallet size cards and mailing labels; World Tape Pals even has jewelry with the club emblem design available. Each club has its own format and method of operation and they are all happy to answer your inquiries.

As mentioned earlier, dues to belong to tape clubs are nominal. The dues of the Indiana Recording Club includes all members of the immediate family residing at the same address. Some clubs have an initiation fee, and then regular annual dues. The Magneto-Vox Club is divided into three individual sections (musical exchanges; spoken messages and making new friends; and "sound hunters") any one of which or all of which a person may join. At present there is only one young club in which membership is free-International Tape Recording Club. It's founder, Marion Chism, does not issue a bulletin, but he does send out an informative and entertaining tape monthly to members.

After deciding upon the person or persons you wish to tapespond with from the club roster you receive, send that individual a post card first asking if tapespondence will be mutually agreeable. This is better than taking the initiative and sending along a tape which the recipient may not even want to listen to, much less answer.

When making a tape, if it is in answer to another, first listen to the one you are going to answer and jot down notes so you will not forget what you want to discuss. Always begin your tape with an identification of yourself. If it is the first message you have sent, introduce yourself. Some tapers begin their tapes with a musical passage or some sound effects. All tapes are best preserved with a leader tape at the beginning.

Choose the room in which you are making the tape with care, so that it will be free of extraneous background noises and as little interruption as possible. Follow your notes and use as few "ahs" and "uhs" as you can when recording. This eliminates troublesome editing chores. It is well to use more than one voice on some tapes. A long dissertation by the same voice can become monotonous and tiring. Plan your replies as interestingly as your know-how lets you. Mark your tape or the box it is in properly as to tracks and speed so that its recipient will know immediately what reproduction elements he will need. Find out the proper postage you will need and send it off. You are now on your way to a most rewarding hobby.

Remember, when you contact clubs and members in foreign countries, such as English Speaking Tape Respondents' Association in Scotland or Internationl Tape Fellowship in England, you must not only use proper postage, but customs stickers on all tape reels. Check with your local post office for stickers and correct mailing procedure.

It is well too, when taping someone overseas, to remember that you are not just a member of a club, but an ambassador of the U.S. A. Your friendliness and helpfulness is representative of our country and the impression you make will be a lasting one.

I once heard a toast made by an old-old man which went, "Here's to you, and your children, and your children's children-may they all live and prosper." If I may, I would like to change the phrasing a bit and as a salute to tape clubs everywhere say, "Here's to your clubs, and your club's officers, and your club's members-may they all grow and prosper.'

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 IIe, Cte, Montmagny, P. Que., Canada J.

INDIANA RECORDING CLUB Mazie Coffman, Secretary 4770 E. 39th St. Indianapolis IB, Indiana

JOIN A CLUB

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 1067 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, Virginla

UNION MONDIALE DES VOIX FRANCA:SES 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

#### **OVERSEAS**

AUSTRALIAN TAPE RECORDISTS ASSOC. Bab 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 EAPE RECORDING CLUB Kenneth M. Tuxford P. O. Box 7060 Auckland, W. I, New Zealand

## **Proper Recorder Ventilation**

#### by Tommy Thomas

. . . avoid recorder problems resulting from overheating by suitably ventilating your machine.



Fig. 1: Putting legs on your recorder can not only add to its convenience and attractiveness, but this may completely solve your cooling problem as well. Being higher up, the cooling fan underneath the motor has a better chance to draw in an adequate supply of air.

**S** OME recorders can run hour after hour, pracically indefinitely, without heating up. Others "run hot" after only an hour or two. The way to tell, if there's any doubt in your mind about your own recorder, is to let your machine play continuously all day, giving it hourly "hand checks" to see how hot it's getting. My own system is to play background music hour after hour, with a clock nearby that is started at zero (12 o'clock). If, after five or six hours or perhaps a lot sooner, the recorder I'm testing gets definitely hot to the touch when I rest my palm on the tape deck, I start worrying.

A few over-zealous recorder salesmen will tell you not to worry about this, that it's to be expected. But that's nonsense! If your recorder heats up unduly, then you'd better expect right now to have more trouble and to pay more money operating your machine over the years. Tubes, operating in a confined and overheated enclosure, will not last nearly as long as they normally should. And most of the other components, especially drive belts and other rubber parts, certainly will dry out and suffer sooner under



Fig. 2: The next time you're listening to taped music for an extended period, run a time check to see how many hours your recorder runs before heating up unduly. If the tape deck feels only slightly warm to the touch after many hours of running, you're in no trouble. But if definitely HOT, it might pay to cool by supplementary means.



Fig. 3: Because it's easiest, first try cooling your recorder by simply raising it up a few inches. Lock underneath to make certain that the motor fan is really working (they have been known to fall off unnoticed, causing quite a temperature raise when operating), and then check the tape deck again after half a dozen hours.

excessive heat. So if you're interested in getting the very best performance out of your recorder, and in saving money while doing so, then perhaps you'd better check to see if YOUR machine is "running hot" or not.



Fig. 5-a, top: If your recorder is a large one, a set of long legs can be quite elegant looking (and table saving). But there will be times when you'll want to unscrew the long legs and replace them with shorter ones for table top—or, in this case, fireside—use.

Fig. 5-b, bottom: Though the metal mounting plates mount permanently to the bottom of the recorder, the legs themselves unscrew easily whenever you wish portability outside your home. Rubber crutch tips, with 5/16'' bolts Epoxy-fastened as shown, serve as my tabletop legs.



Fig. 4: Then, if raising up the recorder solves your problem, permanently substitute regular screw-on table legs. You may wish "shortie" legs as shown here—which are the perfect answer for those of you who like to set your recorder down on a deep-piled rug to operate—or longer 21" legs as sported by the Sony in Fig. 1.

If it is, then your first step will be to check the cooling fan that is a part of your recorder already. Most recorders have a circular vent hole on the bottom of the cabinet, located just below the motor. Attached to the bottom of the motor (practically always) is a little fan blade that sucks air into your machine when it's running. Sometimes this fan blade drops off unnoticed. It's not likely that this has happened, but look to make sure. And see that the fan is moving properly when the motor switches on.

If the motor fan is working okay, then perhaps the trouble is that not enough air is getting to where the fan can haul it inside the recorder. If the recorder is located free and clear, then maybe it would benefit to raise it up a bit. Make a test, as in Fig. 3, to see if raising up your recorder doesn't allow it to run considerably cooler. If you're lucky, this one simple "remedy" will solve your whole cooling problem. But even if it doesn't completely do the job, it'll surely help. Also, adding legs to your recorder offers other benefits. Add long legs, as I did with the Sony in Fig. 1, and you won't need a special table to set your recorder on, as it becomes its own "table." Add even short legs and you'll be able to safely set your recorder down on a carpeted floor. Usually, the underneath gliders on recorders are so skimpy that you're cautioned to never set the machine down running on a sofa or even a rug, because it'll surely sink down so that no air at all can get underneath to be sucked in for cooling. Now, with decentsized legs on your machine, you can set it most anywhere without worrying.

Personally, I like being able to put my recorders down on the floor on occasion, so for this purpose alone the legs are well worth the extra bit of expense. These legs are available by the way, in many different lengths and styles, and come complete with mounting plates. Most lumber yards and hardware stores carry them, as does Sears and Roebuck. NOTE! If it worries you to fasten the metal mounting plates underneath your recorder with the wood screws furnished (for fear of injuring internal components), or if your recorder has a metal cabinet, you can "play it safe" by mounting these plates down securely with Epoxy adhesive. The legs screw into these plates, making them instantly removable any time you wish.

Anyway, if raising doesn't come to your complete rescue



Fig. 6: If your recorder still runs hot, even though raised, then a fan or blower will be needed for adequate cooling. The small fan shown here—at the right—has a certain amount of usefulness (especially when it can be mounted right inside the recorder cabinet itself) but unluckily it only furnishes a limited amount of cooling.

and your recorder still overheats, then it's time to get down to more serious measures involving an auxiliary fan or blower. A number of mailorder supply houses offer little motor-fans made for the express purpose of cooling tubes. The one shown here (Fig. 6, right) came from the Newark Electronics Corporation, 223 W. Madison St., Chicago 6, III. It's their Stock No. 28F998, Model DYAB6167-1 Tube Cooling Fan selling net for \$3.99. It's a nice enough little fan I guess, but frankly it doesn't pull much air. And even the fact that it's small enough to fit inside some of the larger recorders has a catch to it. If the recorder is large enough, and has extra space enough inside to spare room for the addition of this fan, then most likely it doesn't need auxiliary cooling in the first place. It's the over-crowded, jam-packed recorders that are in trouble with over heating, and there's no room inside them for even this tiny a fan.

So what to do? The perfect answer, as I first discovered almost fifteen years ago, was to use a small ventilating blower such as shown in Fig. 6, left. Years ago I owned a beautiful single track recorder that I had bought from the Amplifier Corporation of America. Tape recording was very new then, but this machine had just about every auxiliary gadget and gizmo-control known to man installed inside its ample but still over-crowed cabinet. And, to make matters worse, I found it necessary to operate this recorder inside a small closet, really making it heat up considerably. My final solution, and it worked like a charm, was to pipe air through the recorder from a ventilating blower much like the one shown here. I put a number of air-escape holes near the top of the closet door to let the hot air out, and-for lack of space inside the closet-the blower itself was located about six feet away, inside my attic. Flexible tubing piped the air to the recorder, and a remote switch gave me the On-Off control I needed.

So, if you are up against a really tough cooling problem, I can definitely recommend this blower method as the one to use. The ventilating blower I'm using now, and it's a jim dandy, comes from the Radio Shack Corp., 730 Commonwealth Ave., Boston 17, Mass. The price was just recently reduced to \$6.95 (it cost me a buck more when I bought mine some time ago), and it's their Archer Single-Blower model, Stock No. C96LX296, Sh. Wt. 4 lbs. It runs on 115 volts, 60 cycles, and when you plug it in direct it produces a small hurricane of wind (and a bit too much noise). So, to get the rush of air down to a sensible and

usable (for our purposes) speed, it's necessary to put a *resistor* in series with one of the two wires going from the blower to the 115-volt line. This resistor, which can be an ordinary lamp bulb, will reduce the speed of the blower down to whatever you need to properly and gently cool your recorder's innards. Also, reducing the speed will reduce the motor and wind noise to a virtually unhearable whisper.

Besides the blower and the resistor, you'll also most likely need a length of *flexible* tubing. Heavy metal tubing from an auto supply store will do, but much neater to work with is the lightweight plastic tubing shown here. It costs about a dollar a foot in short lengths, and can be obtained at a supply store for house trailers. Trailerites use it to lead waste materials out of their trailers, but when it's clean and new you'll never know the difference. It comes in various diameters, so try to get the  $2\frac{1}{2}$ " size. And also get a short length or two of stiff plastic "fitting-tubing" (Fig. 7, lower right) to make your installation work easier. The flexible tubing fits snugly over it.

If you don't mind the light it makes (which is dim anyway because of the reduced voltage), you can use an ordinary light bulb as the "resistor" needed to slow the blower down to a gentle speed. With my set-up, a 40-watt light bulb was way too slow and a 100-watter a bit too fast; a 75-watt bulb was just perfect. If you'd rather not have any light, you can spend about eight times as much



Fig. 7: The real answer to the problem, if you can afford the room for it, is a miniature ventilating blower. By slowing it down with an ordinary light bulb placed in series with one of the blower leads, and adding flexible tubing to guide the air, you can have just the correct amount of air needed to properly cool YOUR recorder.



Fig. 8, left: Within reason, of course, you can use almost any length of tubing to lead the air from the blower to the recorder. This means that you can locate the blower assembly out of sight and wherever it's most convenient. Different-wattage bulbs affect the blower speed differently, so pick out the bulb that cools right for you. Fig. 9, right: Before cutting an opening in the side of your recorder, to let in the air from the blower, make a careful study of the air flow possibilities. The incoming air should blow gently across the heat-producing tubes and then out again, but where and how you use your recorder will also govern the position of the input hole.

and get a *real* resistor to do the job for you. They heat up quite a bit, so it's necessary to mount this unit a bit away from the mounting support. Metal "clips" are supplied for this purpose. The vitreous enameled variable resistor (Ohmite Adjustable Dividohm Resistor, Type 0960B, Newark Stock No. 13F655, 100 watts, 250 ohms, \$2.07) is shown in Fig. 11 with the blower wiring pulled out so you can see the wire going to the movable *slider* and then being picked up again at the terminal on the right. The closer the slider is to this end terminal, the faster the blower will go ... from barely moving to full speed. It's best to run it at the slowest speed that will adequately cool your recorder.

Now all that's left to figure out is WHERE are you going to locate the blower assembly and HOW are you going to lead the air into your particular recorder? Both of these answers will depend a great deal on where you usually locate your recorder. If it's in a permanent set-up, and especially if it's part of a complete and larger hi-fi cabinet hookup, you should have plenty of "behind-the-scenes" space to play around with, and your job will be simple. Not so simple is the recorder standing alone, perhaps on a table or even on a shelf. Here it's best, in preparation for occasional portability purposes, to design your set-up so that the blower tube just pushes into a hole in the side of your recorder. This way, the flexible tubing can be pulled out easily and instantly any time you want to use your recorder elsewhere. The perfect deal often, though usually difficult to arrange initially, is a table or similar arrangement where the tubing carrying the air from the blower COMES FROM UNDERNEATH. Arrange it so that when the recorder is put in its regular position, the underneath vent hole already in the recorder will come smack over the blower exit hole in the table top. No extra input hole in the recorder is necessary this way, yet instant auxiliary cooling is immediately available whenever desired.



Fig. 10, left: This compact little blower is only about 5½" wide by 6" deep, but even this relatively small size will usually be too much to permanently attach to the rear or side of a recorder. If there is room, though, and if it's a permanent installation, you may wish to consider attaching the blower directly to the recorder cabinet. Fig. 11, right: Instead of using a light bulb to reduce the blower speed, you can substitute a variable rheostat. It'll cost a bit more, but it won't light up (which is often an advantage) and it permits a finer "tuning" of the blower speeds. Moving the slider works the blower faster and faster, until you reach just the speed you want.

## **Trouble Shooting Your Recorder**

.... finding what might be wrong with a recorder is not difficult if you know what to look for.

#### by MARK MOONEY, JR.

**S** OMETIMES a little detective work on a recorder which has troubles will not only save a trip to the repair shop, or perhaps even back to the factory, but will save time and money as well.

Tape recorders are electro-mechanical devices and a basic understanding of their operation in conjunction with the trouble shooting chart which follows should enable you to pinpoint the cause of the difficulty fairly easily.

The repair of mechanical functions, except for the replacement of parts which have broken, is fairly simple in most recorders and requires only the use of common tools and patience.

On some of the more complicated, electrically operated machines, however, there is plenty below the deck and you might save time and money by taking it directly to a repairman who knows the machine. Unfortunately, these people are often not easy to find, hence some knowledge of what goes on and why should be known by every recordist.

If the machine has troubles of an electronic nature then you will need special equipment, such as vacuum tube voltmeters, oscilloscopes, etc. to be able to find the particular component that is causing the trouble. Lacking this kind of equipment, a reliable repairman is the best bet.

Without special test equipment you will be limited to such simple chores as cleaning and adjusting contacts and testing tubes, but even this can work wonders.

The most common type of recorder has one motor and this will have a fan on one end of the shaft to draw air into the unit and dissipate the heat of the motor and the tubes. This motor is connected to the drive mechanism either by a belt and pulleys or by drive wheels or pucks. These are metal wheels which have a rubber rim and the motion is transmitted by bringing the driving wheel in contact with those to be driven.

Some recorders have three motors, one for the capstan, and one each for the takeup and rewind. In order to keep them at the proper speed, the takeup and rewind motors have DC voltage applied to them in addition to the AC. This slows them down to give the constant torque necessary.

The tape transport itself has but one function—to handle the tape. The tape must be fed off the feed reel, be pulled past the heads by the capstan and roller and wound up on the takeup reel at a constant and even tension.

By knowing what *should* happen in each mode into which the recorder can be put, it is easier to spot what is *not* happening and hence causing the difficulty.

STOP BUTTON. When the stop button is depressed the pressure pads are lifted from the heads and the drive wheels under the deck are lifted from each other. If the recorder is left in play or record for a period of time the pressure on the rubber rims in one spot will cause flats and give rise to wow or flutter. The stop button prevents this from happening.

The depressing of the stop button also applies brake shoes to the rims of the reel driving hubs to stop the motion of the tape and prevent spillage.

It also opens the pressure between the capstan and roller so that the tape is no longer pulled through. The motor continues to operate and so does the amplifier so that the recorder is ready for instant action.

PLAY BUTTON. Depressing the play button brings the pressure pads up to the heads, causing them to hold the tape in close contact. It connects the head to the amplifier, releases the reel brakes so the tape can move and brings the pressure roller against the capstan to pull the tape past the heads. It also disables the bias and erase oscillator so that the tape will not be erased.

RECORD BUTTON. Performs the same mechanical steps as the play button except that the head is switched to the record amplifier and the bias current is applied to the erase head to erase the tape and also bias is fed to the record head to properly record the signal. The record button will most often have a record lock which must be operated before the record button may be depressed. This prevents accidental erasure.

FAST FORWARD. This disengages the heads, capstan and roller from the tape to permit its free motion and, at the same time, transfers the power of the motor from the capstan and roller directly to the takeup reel. It also releases the reel brakes.

REWIND. Same as fast forward except the feed reel is directly driven.

SPEED CHANGE LEVER. This shifts either a belt or drive wheel from one pulley to another or from one shaft diameter to another. The recorder usually should be in motion to prevent the belt from being thrown off, or the rubber rims nicked.

PAUSE BUTTON. This stops the tape by lifting the capstan from the roller.

Because the diameter of the tape going onto the takeup reel varies, the drive of that reel must also be variable. This is usually accomplished by either a felt clutch which permits the reel platform to slip or by means of a belt which also permits slippage.

This, very basically, is how the recorder should operate. If one or more functions are out you can locate the difficulty by observing what is not happening and adjust the mechanism so it does.

As you go through the trouble check list you will find two things which recur with great frequency. These are dirt and oil. Both are the number one enemies of recorders. Excess oil promotes slippage and poor performance, dirt causes binds, frequency loss and other troubles. Avoid them both.

TROUBLE	CAUSE	REMEDY			
RECORDER DOES NOT OPERATE	1—Defective power cord or plug 2—Power cord not plugged into out- let or into recorder	Check cord and repair or replace Plug in power cord			
	3—Blown Fuse	Replace			
	4—Stop Button not depressed	Depress stop button			
	5-Motor starting capacitor defective	Replace			
	6—Tape not properly threaded through cutoff switch	Correct tape threading			
	7—Power transformer defective	Check for shorts or opens and replace			
		if necessary			
	8-On/off switch defective	Replace			
PUSH BUTTONS DO NOT OPER- ATE PROPERLY	l—Latch plate bent, broken or dis- connected	Repair or replace			
	2—Latch plate spring defective	Replace			
	3-Buttons loose on hinges	Repair or replace			
TAPE DOES NOT MOVE IN RE- Cord or play	1—ldler tension spring loose or broken	Replace spring			
	2-Drive belt broken	Replace			
	3-Drive belt off pulleys	Replace belt on pulleys. Check align-			
	1 Motor pulley loose on seven shelf	ment of pulleys to prevent recurrence.			
	<ul> <li>4—Motor pulley loose on motor shaft</li> <li>5—Oil on motor pulley or idler wheels</li> </ul>	Tighten pulley set screw Clean with alcohol			
	6—Tape wound on capstan	Remove head covers and unwind tape from capstan			
	7—Pressure roller not holding tape against capstan	Examine mechanical linkage between push button or other control to see if parts are bent or broken. If so, repair or replace. Also check to see that face of pressure roller is parallel to that of capstan.			
	8—Pause button in "on" position 9—Control knob loose on shaft 10—Speed control malfunctioning or binding	Release pause button Tighten in proper position Follow instructions as to speed changes as given in recorder manual. On many machines speed changes may only be made if the motor is running else belt may be pushed off pulley or broken.			
TAPE DOES NOT WIND IN RE- Cord or playback	<ol> <li>Right hand spindle belt broken or off pulley</li> <li>Belt stretched</li> <li>Idler wheel not making proper</li> </ol>	Replace if broken. If off, check align- ment of pulleys and replace Replace belt Check idler wheel for proper motion			
	contact with drive wheels	and idler wheel spring for proper			
	4—Bind in hub of take-up bearing	tension. Check for foreign matter and oil			
	5—Oil on pulleys or pucks	Check for foreign matter and oil Clean with alcohol			
	6—Tape improperly threaded	Rethread recorder properly			
	7—Worn clutch felt or face	Replace			
	8—Tape wound around capstan	Remove head covers and unwind tape			
	9—Drag clutch stuck	Free clutch, check tension			
	10—Pulley set screw loose 11—Reel Platform loose	Tighten screw Tighten set screw			
	12—Takeup motor resistor open	Replace			
	13—Takeup motor defective	Replace			
	14—Pressure roller does not engage	Check linkage and adjust			
	capstan	Check mikage and adjust			

\_

\_

TROUBLE	CAUSE	REMEDY				
NO FAST FORWARD	<ul> <li>1—Idler not contacting takeup reel drive</li> <li>2—Belt stretched</li> <li>3—Belt broken</li> <li>4—Brake lever does not release</li> <li>5—Oil on pulley or drive pucks</li> <li>6—Fast forward lever spring off or broken</li> </ul>	Check for bent or broken lever and poor spring tension Replace Replace Check for bent, broken or stuck parts Clean with alcohol Replace				
NO REWIND	<ul> <li>1—Reel brake not releasing</li> <li>2—Drive belt off pulleys</li> <li>3—Left hand fast winding roller does not contact spindle drive</li> <li>4—Control linkage defective</li> <li>5—Belt stretched</li> <li>6—Broken pressure spring</li> <li>7—Rewind motor not operating</li> <li>8—Reel platform loose</li> <li>9—Glazed idler wheel</li> <li>10—Idler wheel slips</li> <li>11—Warped reel platform</li> </ul>	Free brake lever and also check ad- justment and condition of brake shoes Replace and check pulley alignment to prevent recurrence Spring broken or missing. Replace. Foreign matter preventing contact, re- move and clean Examine for bent, worn or missing parts Replace Replace Check connections, resistors and power supply to motor. Tighten on shaft Remove glaze with clean cloth or rub- ber eraser held against rim while run- ning Clean or replace				
SPEED SLOW	<ul> <li>1—Dirt in bearings</li> <li>2—Clutch drag excessive</li> <li>3—Drive wheels or pucks worn or oily</li> <li>4—Drive belt stretched or oily</li> <li>5—Insufficient line current</li> <li>6—Brake shoes not releasing properly</li> <li>7—Capstan binding</li> <li>8—Bent or binding motor shaft</li> <li>9—Tension spring not holding idler in good contact with motor pulley and capstan drive</li> <li>10—Excessive pressure on pressure pads</li> <li>11—Defective tape. Interlayer adhesion</li> </ul>	ReplaceClean and lubricateAdjust clutch spring tensionClean or replaceClean or replaceCurrent may be low in your area orthere is too much load from other appliances on your house wiringAdjust brakesClean and oil bearingIf bent, replace motor otherwise cleanand lubricateTighten or replace springAdjust pressure pad arm spring forproper tensionDiscard tape or, if valuable, dust withtalcum and copy—then clean up recorder				
WOW OR FLUTTER	<ul> <li>1—Flats on pressure roller</li> <li>2—Oil on pucks or pulleys</li> <li>3—Idler or drive wheel bearings binding</li> <li>4—Binding reel spindles</li> <li>5—Improper pressure between capstan and roller</li> <li>6—Excessive take-up tension</li> <li>7—Dirty pressure pads</li> </ul>	Run recorder in play without tape for at least a half hour. If flats do not work out, replace roller. Clean with alcohol Clean and lubricate Test by holding brakes off and turning spindle by hand. Clean and lubricate Adjust for proper pressure Relax brake spring or clutch Clean with alcohol, restore nap or re- place				

TROUBLE	CAUSE	REMEDY		
	8-Pressure roller binds on shaft	Remove roller, clean bearing with alcohol, lubricate with light grease and reassemble		
	9—Bent fan blades	Place fan on flat surface and align blades so all contact surface		
	10—Bent motor shaft 11—Bent Capstan	Replace motor Replace, including flywheel if neces-		
	12-Counter binding	sary Check for dirt in gears. Clean and lubricate		
	13-Scored flywheel shaft or bearings	If lightly scored polish with crocus cloth. If badly scored, replace		
	14—Flats on drive pucks or idlers	Press flat side of screwdriver against rim while running. If flat persists, in- stall new wheel or tire. If rim is nicked, replace		
	15—Speed change lever not positive in operation	Check linkage and springs		
	16-Motor pulley not concentric with shaft	Replace		
	<ul> <li>17—Foreign matter on idler wheel</li> <li>18—Defective pressure roller</li> <li>19—Oil or excessive tape lubricant on capstan and roller</li> </ul>	Clean Replace Clean with alcohol		
TAPE SPILLS ON STOPPING	1—Brake levers do not contact spindle or brake drum	Spring missing or broken. Lever bent or broken.		
	2—Brake pads worn 3—Grease or oil on brake surfaces 4—Dynamic brakes malfunction	Replace Clean with alcohol Check rectifier, resistors and motor. DC should be present in all models and at proper voltage		
COUNTER INOPERATIVE	1—Belt off pulleys 2—Gears or drive binding 3—Foreign matter in gears 4—Belt broken	Replace belt and check alignment Check and free bind Clean Replace		
CUTOFF SWITCH INOPERATIVE	<ul> <li>1—Tape not threaded properly</li> <li>2—Dirt in switch</li> <li>3—Switch spring broken</li> <li>4—No tabs on tape</li> </ul>	Rethread recorder Clean Replace Some makes of recorder depend upon metallic tabs on tape to operate shut-		
	5—Relay open	off. Place tabs at reel ends Replace		
RECORD LEVEL INDICATOR IN- OPERATIVE	<ul> <li>1—Burned out neon bulb</li> <li>2—Bulb loose in socket</li> <li>3—Indicator always glows or meter stays at top of scale</li> </ul>	Replace Tighten Indicator shorted or amplifier may be oscillating. Too much voltage being applied to input.		
FAILS TO RECORD	1—Tape not held against head	Tape pressure pads worn or defective. Replace		
	2-Microphone defective	Try with good mike. Check cord, plug and unit. Replace if bad.		
	3—Accessory cords defective 4—Wrong side of tape toward head 5—No signal going into recorder	Check for opens Dull side should contact head Check input cords, mike and sound		
	6—Open circuit in head 7—Defect in amplifier circuit	source Replace Check amplifier components and tubes for shorts and opens		
	8—Bias voltage absent or too low 9—Dirty head	for shorts and opens Check voltage across oscillator Clean		

TROUBLE	CAUSE	REMEDY			
DOES NOT ERASE—Prior signals on tape may be heard	1—Erase head out of alignment 2—Erase head not contacting tape	Align Pressure pads worn or defective re- place. Erase head arm is not swinging into position, check linkage			
	<ul> <li>3—Defective erase head-open or short</li> <li>4—Weak output tube</li> <li>5—Tape guide not properly aligned</li> </ul>	Replace Replace Align so tape contacts head properly			
	6—Bias adjustment incorrect 7—Record/play switch defective 8—Dirt on erase head	Check bias oscillator Replace Clean			
	9—Bias oscillator not operating	Check			
NO PLAYBACK, Records O.K.	<ul> <li>1—Defective selector switch contacts</li> <li>2—Preamplifier tube defective</li> <li>3—Extension speaker jack or cord defective</li> </ul>	Check, clean and adjust Check and replace Check and replace			
	4—Short in shield wiring to grid of first tube	Check and remove short			
	<ul><li>5—Head defective or open</li><li>6—Push button control linkage defective</li></ul>	Replace Check and adjust or replace			
	7—Wrong side of tape toward head 8—Defective monitor switch	Place dull side toward head Replace			
WEAK OR DISTORTED PLAY- BACK. Playback from recorded tape O.K.	<ol> <li>Bias oscillator coil defective dur- ing recording</li> <li>Weak bias oscillator tube in re-</li> </ol>	Check for proper output, both voltage and frequency Replace			
	cording 3—Input jack defective	Check jack. Speech 1 foot from mike should flash normal indicator			
	4—Inputs not functioning	Check that proper cords and plugs are used. Also proper signal strength			
	5-Defective record indicator	Check and replace			
WEAK PLAYBACK	1—Tape under-recorded 2—Head out of alignment	Record at higher level Use alignment tape and adjust for maximum output			
	3—Weak pressure pad spring	Check to see that pressure pad holds tape properly against head			
	4—Defective or worn head 5—Tape guides not aligned 6—Defective amplifier	Replace Align guides Check components and tubes			
	7—Wrong side of tape toward head 8—Tone control shorted	Dull side should be toward head Remove short or replace			
TAPE SQUEALS	1—Faulty tape	Use reliable brand. Temporary relief may be had by applying graphite or talcum powder to tape.			
	2-Pressure pads hardened or glazed	Clean with alcohol, restore nap or re- place			
	3—Excess spring pressure on pressure pads	Relax spring pressure			
	4—Dirty guides or heads 5—Worn or grooved guides or heads	Clean Replace			
	6—Misaligned heads	Align properly with test tape			
EXCESSIVE HUM	<ul><li>1—Defective hum adjusting control</li><li>2—Cold solder joint on output trans- former</li></ul>	Replace Reheat and solder			
	<ul> <li>3—Defective amplifier tubes</li> <li>4—Shield missing from first preamp tube (usually 12AX7)</li> </ul>	Test and replace Replace shield			
	5-AC line polarity wrong 6-Head shield loose	Reverse plug in outlet Tighten			

\$

TROUBLE	CAUSE	REMEDY			
	<ul> <li>7—Ground loop present between re- corder and radio, phono, TV, etc.</li> <li>8—Shield open on connecting cables</li> <li>9—Defective tone control</li> <li>10—Open power supply filter</li> <li>11—Recorder too near hum producing electrical equipment</li> </ul>	Use isolation transformer Check and repair or replace Replace Replace Move recorder to different location			
EXCESSIVE HISS	<ol> <li>1—Defective tape</li> <li>2—Magnetized head</li> <li>3—Noisy amplifier tubes</li> <li>4—Bias oscillator defective</li> <li>4—T a p e under-recorded, v ol u m e turned up too high</li> </ol>	Discard Demagnetize head using head de- magnetizer Check tubes and replace Check Record at higher level			
LOSS OF HIGH FREQUENCIES	<ul> <li>1—Dirty head</li> <li>2—Head out of alignment</li> <li>3—Poor contact in selector switch</li> <li>4—Bad component in equalization switch</li> <li>5—Worn or dirty pressure pads</li> </ul>	Clean and remove foreign matter Use alignment tape and adjust head for maximum response Repiace or clean Check and replace Replace			
POOR LOW FREQUENCY RE- SPONSE	1—Defective head 2—Defective speaker 3—Bad component in equalization network	Replace Replace Check and replace defective component			
HOW'L OR RINGING SOUND	1—Microphonic tube in amplifier 2—Acoustical Feedback	Tap tubes with pencil, replace those which produce ringing sound in speaker Recording made with monitor switch open			
REELS WOBBLE	1—Warped reel 2—Reel not properly seated on hub 3—Spindle bent 4—Hubs touch drive wheel	Replace Make sure reel is firmly seated Straighten or replace Align to clear			

#### (Continued from page 16)

- John P. Baker, 217 Sturgeon St., Springfield, Ohio; Recorder: Telectro Model 999, 176, 334, 71/2 ips, dual track, stereo and mono playback; Interests: Philately, travel, good music, science fiction, writing, books, recording techniques, general tapespondence; Adult.
- Skip Gorman (wife, Jake), 493 Lovell, Mill Valley, California; Recorder: Wollensak, 334, 71/2 ips, dual track; Interests: Writing (all aspects), jazz, sports car racing, authors, abstruse thinking, Yeats, Eliot, cooking; Adult (26).
- F. O. Chumbley, 1929 College, Springfield, Missouri; Recorder: Pentron, 3¾, 7½ ips, monaural, two track; Interests: Have tape, will talk. Wish to exchange English tapes with anyone, any country; Adult (58).
- Horold A. Miller, D.D.S., 1121 Edgewater Drive, Orlando, Florida; Recorder: Norelco 100, 1% ips, 2 track, monaural; Interests: Want to contact dentists here and abroad. Interested in dentistry, travel; also wish to tapespond with trailer dealers in the U. S.; Adult.
- William W. Lau, 512 W. Lehigh Ave., Philadelphia 33, Pa.; Recorder: Realistic, 2 speed, 4 track; Interests: Fiction, news events; Adult (33).

Gloria-Ann Pauly, 42 West 65 St., New York 23,

N. Y.; Recorders: Wollensak, 4 track, 3<sup>3</sup>/<sub>4</sub>, 7<sup>1</sup>/<sub>2</sub> ips; Pentron, 2 track, 3<sup>3</sup>/<sub>4</sub>, 7<sup>1</sup>/<sub>2</sub> ips; Interests; Folk songs and trivia from Tom Lehrer to Segouia Bagpipes, military & marching music; Adult (30).

- Ellys Lund, 35 Division St., New Rochelle, N. Y.; Recorder: Webcor, 71/2, 31/4, 17/8 ips, 2 tracks; Interests: Spanish and English, any cultural subjects, travel, music, foreign customs, story, geography, medicine, religion; Adult.
- John R. Fursey, 9024 53rd St., Seattle 18, Wash.; Recorder: Norelco C. 400, 2 or 4 track, 1%, 33%, 7% ips; Interests: Anyone interested in talking about our Century 21 World's Fair, music, photography. Would like to exchange tapes with anyone, anywhere, on any subject; Adult.
- Manley D. Hinshaw, 1420 Aldrich Ave., No., Minneapolis II, Minn.; Recorder: Revere, dual track, 3¾, 7½ ips; Interest: Exchange of humorous monologues and dialogues; Adult.
- Paul Sheldon, 6 Rollins St., Concord, New Hampshire; Recorder: V-M 720, 3¾ & 7½ ips, dual track; Interests: Conversation, music, publishing, and anything I can re-record and pass on to shut-ins. Guaranteed answer to all tapes in English; Adult.
- Al Keller, 2738 Colonial Ave., Merrick, New York; Recorder: Magnecordette 101, 2 track, stereo/mono, record/playback, 3¾ and 7½ ips;

Interests: Swing music of the 30's and 40's; Jazz music of all kinds; Hi-fidelity equipment; Adult (33).

- F. Lockie (Miss), 4, Maryfield Place, Bonnyrigg, Midlothian, Nr. Edinburgh Scotland, U.K.; did not list recorder; Interests: Wishes to tapespond with a young lady of her own age around 29 yrs. in Texas or Wyoming. Does not wish to tapespond with any religious sects such as Jehovah Witnesses, etc. Likes reading, music (light classical), swimming, tapesponding, country life, photography and travel. Wishes tapespendence with females only.
- P. A. Moss & S. Roberts, 4 Queen St., Coggeshall, Nr. Colchester, Essex, England; Only two track, 3% ips, 5%" spools; Interest: We are looking for a couple the same as ourselves aged between 19 to 25 years. Our ages are 19 and 21, we are unmarried and our interests are dancing, records and general.
- Earl Linder, 2521 N.W. 23 St., Miami, Fla.; Recorder: Norelco #400, 4 track, 1%, 3%, 7½ ips; Interest: Exchange data on True Science, True History, in relation to the Scriptures as originally written; Adult.

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.

## IMMEDIAT DELIVERY from Stock!



#### Professional Transistorized **Portable Field Recorders**

Exceed NAB Broadcast Standards Assure studio quality performance with complete independence from AC power. Over 25 models available in two series:

TransFlyweight<sup>®</sup> Series 312: 8 lbs.; electric motor, battery-operated. Size: 51/2 x 9 x 12 inches TransMagnemite® Series 612: 15 lbs.; spring motor. Operates 125 hours from rechargeable batteries. Choice of single or multiple tape speeds, one or two tracks. All models equipped with multi-purpose VU meter, Full unconditional 2-year Guarantee.

#### Write for Literature



HI-FI COMPONENTS SLEEP LEARN KITS MERITAPE Unusual Values Free 1962 Catalog DRESSNER 1523AA, Jericho Tpke. New Hyde Park. N.Y.

HOW TO GET THE MOST OUT OF TAPE RECORDING

#### by Lee Sheridan

This book is aimed at the new recordist. I his book is almed 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.

PI N

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

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

## SHOP OR SWAP

Advertising in this section is open to both amateur and commercial sds. TAPE RECORDING does not guarantee any offer advertising in this column and all swaps, etc., are strictly between individuals. RATES: Commercial ads, \$.30 per word. Individuals adt, non-commercial, \$.05 a word. In figuring the number of words in your advertise-

ment, be sure to include your name and address. Count each abbreviation, initial, single figure of group of figures as a word. Hyphenaled words count as two ment 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 excep-Address ad to: Shop or Swap, Tape Recording Maga-alae, Severna Park, Md.

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

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.

FAMOUS DANISH STEREO RECORDER (Purchased as gift, recipient deceased.) Movic 2/4 track, all deluxe features, including S. on S. I'll sell this magnificent new instrument, full service warranty, original crate, for \$445. Everyone else pays \$695. Perfect for a music listener/recordist who wants the best there is for built-in or portable, R. F. Blaine, 15022 Blackhawk St., San Fernando, Calif.

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.

4 TRACK STEREO RECORDERS. Slightly used. \$297.50 Viking Stereo Compact RMQ \$150.00; \$595.00 #505 Concertone \$399.-00; \$297.50 Viking 86 Stereo Compact \$209.00; \$399.50 Norelco "400" \$189.00: \$399.50 #2207 Webcor \$189.00; \$87.70 Sony Stereo Tape Deck \$57.00; \$139.95 Concord #107 \$59.00: \$99.95 Phono Trix Mark 3 \$49.00; \$99.95 Columbia C-690 \$49.00. WIFI, Box 3022, Philadelphia 50, Pa.

I HAVE A BATTERY operated miniature tape recorder. I record candid conversations. If interested in swapping and collecting, write and tell about yourself to: Bob Franzenburg, 8 Gutheil Lane, Great Neck, L. I., N. Y.

"CHRISTIAN TAPE LIBRARY"-Gospel singing, organ music, good gospel sermons. Undenominational. Also write about rental of slide show to Samuel Fry, Box 500, Selinsgrove, Pa.

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

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.

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

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.

LP'S MADE FROM TAPES: 12"-45 minutes \$5.95, add 50¢ total postage. Other sizes and speeds, write Artistic Sound, Box 3774, Oak Park, Mich.

WAS YOUR FACE RED 

How many times have you become involved in embarrassing situations simply because your memory failed you? Maybe it was forgetting a name, a special accasion, the speech you thought you had down pat, or perhaps in your work you flubbed advancement because you couldn't remember important business items.

Whatever the event or situation, it could have been avoided if only your memory were better. ELIMINATE THIS PROBLEM NOW. To help you do so, we affer William D. Hersey's memorytraining course. It is designed for everyone-school children, businessmen, housewives and career people. Upon completion, not anly will your recall be better, but you can conquer shyness-you will be able to converse with anyone on a variety of subjects.

The course is HOW TO REMEMBER NAMES AND FACES. It is presented on a dual track tape which runs for 50 minutes.



	Be		those	who	move	ahead.	Order	your	сору — —	today		
——————————————————————————————————————												
Please rush m	iy co	py of	How 1	lo Re	membe	r Names	and	Faces.	l en	close	\$9.20.	
Name												
Address	•••••											
City						Zone		State				

#### 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, overrecording, wow, flutter, distortion, wrong mike placement, etc., sound like. A test section allows you to adjust the head of your recorder for best results. Chapters include: How a Tape Recorder Works, A Demonstrated Glossary, Recorder Operation, Home Recording, Field Recording, Low Impedance, Microphones, Recorder Maintenance and Testing. . . Playing time of the Tapebook is one hour. Accompanying each reel is a 28 page booklet containing 80 illustrations to supplement the spoken word. It is unique, enjoyable and instructive.

7½ IPS, 7" Reel, Dual Track S6.95 3¾ IPS, 5" Reel, Dual Track S5.95 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 \$695

#### 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.

\$795

#### 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 dollors worth of pleosure from this tope.

#### HOW'S YOUR HEARING? tests are important because unlike

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 Leany Herman orchestra for screen testing of hearing. Full 7" reel,  $7l/_2$  ips and booklet giving full directions for use of the tape.

\$995

#### TAPEBOOK DEPARTMENT **New! TAPE RECORDS** TAPE RECORDING MAGAZINE **Monaural Music** Severna Park, Md. 3" reels, 3¾ ips, full track Please send me the following: Only \$1.00 each postpaid □ All About Tape on Tape, 7½ ips. .....\$6.95 1—Cha Cha Cha—Tito Puente—Oye Me Mama, Sope de □ All About Tape on Tape, 3¾ ips. .....\$5.95 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 Jazz—Dickie Thompson Quartet—Misty, Satin Doll (circle numbers desired) 6-Dinner-Dance-Jose Melis-Tonight, Am I Blue, White Cliffs of Dover 2 3 4 5 6 1 7 8 9 10 7—Dinner-Dance — Fred Martin Radio Orchestra — Flamingo, Song of India, Symphony 8—Dinner-Dance — Fred Martin Radio Orchestra — NAME ..... I've Got Plenty of Nothin', Ebbtide, Autumn Leaves 9—Dinner-Dance — Fred Martin Radio Orchestra — Fiddle Faddle, Blue Tango, Serenata ADDRESS 10—Hammond Organ—Bill Thompson—Touch of Your Hand, I Won't Dance, Smoke Gets in Your Eyes

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  $\frac{1}{2}$  mil "Mylar" and  $\frac{1}{2}$  mil Acetate Bases.



GOLDEN TONE BY REEVES SOUNDCRAFT CORP.

DuPont T.M.

MARAAR