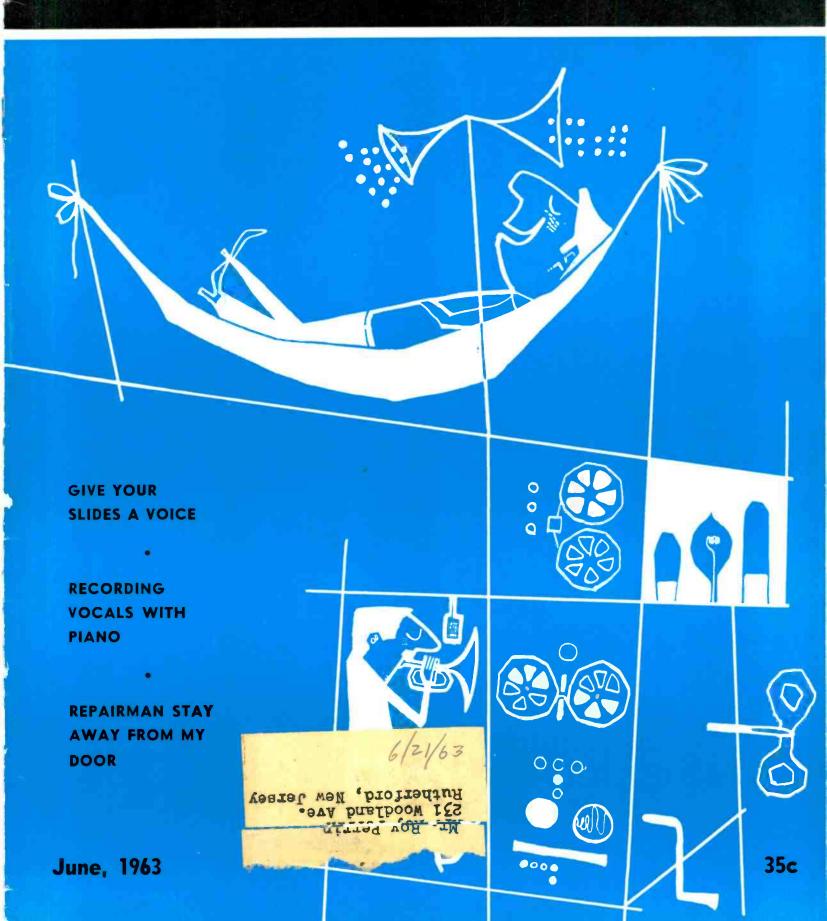
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Magnetic Products Division 3



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# TAPE RECORDING

VOL. 10 NO. 7

**JUNE. 1963** 

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JZ-2 Bob Mielke and His Bear Cats. Creole Sang; Blue Guaiac Blues; Ice Cream; My Lovin' Imogene; Egyptian Fantasy; Bogalusa Strut; Yes, We Have No Bananas. Pet Stanton, trumpet; Bunky Coleman, clarinet; Bob Mielke, trombone; Dick Oxgrot, banjo; Peter Allen, bass; Don Fay, drums.

JZ-3 Red Onion Jazz Band—Bob Thompson:

Is It True What They Say About Dixie, Susie; Yellaw Dog Blues; Too Much Mustard; Why Do I Love You; Sang of the Islands; Red Onion; Oriental Strut.

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#### CLASSICAL

BRUCH: Scottish Fantasia, Op. 46 HINDEMITH: Violin Concerto (1939) David Oistrakh with the London Symphony Orchestra conducted by Jascha Hornstein and Paul Hindemith

Music \*\*\*
Performance \*\*
Fidelity \*\*
Stereo Effect \*\*

#### LONDON

4 track, 71/2 ips, 61 min., \$7.95

Here is another rather fantastic bargain from London tapes, with more than an hour of fine music on one reel for only \$7.95. The Scottish Fantasia of Bruch is already available in an RCA Victor taping by Jascha Heifetz, but this new Oistrakh version contains more of the score, is as well played, and has equally good reproduction. In addition, this new tape couples the Bruch with the Hindemith Violin Concerto, a much more worthy score than the Vieuxtemps Concerto No. 5 included on the Heifetz tape. The Hindemith concerto is conducted by the composer, and although this music may not immediately appeal to many listeners, this is an important modern concerto and this must be considered a definite recording.

The reproduction is unsensationally high fidelity, very clean and clear, with virtually no hiss and no cross-talk whatever.

RACHMANINOFF: Symphony No. 3 in A Minor, Op. 44 Chanson Georgienne Netania Davrath, soprano; Utah Symphony Orchestra conducted by Maurice Abravanel

Music
Performance
Fidelity
Stereo Effect

★★★

★★★

VANGUARD VTC 1662 4 track, 7<sup>1</sup>/<sub>2</sub> ips, 43 min., \$7.95

It is a pleasant surprise to find as obscure a work as Rachmaninoff's Symphony No. 3 available on four-track tape. This is a dramtic, impassioned work, episodic in nature, with a strong Slavic elements, and exotic orchestral color abounds throughout its three movements.

For full justice to be done to this music one would have to hear a performance by one of the major orchestras. Although the Utah Symphony lacks the sheen and finesse of some of the larger orchestras, it plays very creditably under Abravanel's direction, and many details of the score not heard in the monophonic LP recording by Ormandy and the Philadelphia Orchestra are crystal clear here. The song "O Cease Thy Singing Maiden Fair" is beautifully sung by Netania Davrath, known to tape collectors for her remarkable collection of Songs of the Auvergne. It is unfortunate that Vanguard did not include several additional songs of Rachmaninoff to fill out the tape as there is considerable blank tape at the end of the second track.

The tape processing is excellent, with a

minimum of hiss and wide dynamic range. Very highly recommended.

MUSIC OF JEAN SIBELIUS Morton Gould and his Orchestra

Music ★★★
Performance
Fidelity
Stereo Effect ★★

RCA VICTOR FTC 2149 4 track, 71/2 ips, 42 min., \$8.95

This collection contains five of the most impressive and best-known compositions by Sibelius. In addition to Finlandia, Valse Triste and The Swan of Tuonela, it contains the symphonic poem Pobjola's Daughter telling the story of a Finnish hero's unsuccessful attempts to attract a bewitching girl, and the final movement, Lemminkainen's Return, from "Legends, Op. 22."

Unfortunately, the fine playing of the pick-up orchestra cannot compensate for Gould's overstatements of the scores and for his erratic treatment. When RCA has access to Stokowski, it is ridiculous to have music like this recorded by Morton Gould. The best of the lot here from a performance standpoint is *The Swan of Tuonela* with a wonderfully played English horn solo by Albert Goltzer.

These performances would doubtless be more attractive if the reproduction had been better. The sound is loud, brilliant and full, but there is definitely a restricted dynamic range; it seems everything is loud. This might be moderately impressive on low-quality equipment, but on a good high-fidelity set it leaves much to be desired.

LISZT: Hungarian Rhapsodies 1 and 2 ENESCO: Roumanian Rhapsodies 1 and 2 Philadelphia Orchestra conducted by Eugene Ormandy

Music ★★★
Performance
Fidelity
Stereo Effect ★★★

COLUMBIA MQ 540 4 track, 71/2 ips, 44 min., \$7.95

This is an appropriate coupling of four nationalistic rhapsodies, including the most popular work in that form by both Liszt and Enesco. Ormandy has a flair for this type of music, and he elicits brilliant performances from his orchestra. The Enesco Roumanian Rhapsody No. 2 is particularly welcome in a performance as fine as this, with the lush sonorities of the Philadelphia Orchestra strings ever present. I still prefer Stokowski's RCA tape of the Enesco first Rhapsody, but this new Columbia tape presents the finest tape versions of the other three works.

These performances were recorded at least four or five years ago, but that should be no deterrent to tape collectors, as the sound quality is exceptionally fine, with a rich, sonorous bass and clear, smooth highs. Technically, this belongs with the finest

recordings ever made of the Philadelphia Orchestra.

"THE SOUND OF GENIUS"
Various artists and orchestras

No ratings are possible.

4 track, 71/2 ips, 1 hr. 27 min., \$8.95

Under the somewhat questionable title "The Sound of Genius" Columbia has issued a tape containing nineteen different selections performed by eighteen of their top artists. Included are performances by pianist Robert Casadesus, Rudolf Serkin, Glenn Gould, Philippe Entremont and Alexander Brailowsky; violinists Zino Francescatti and Isaac Stern; singers Richard Tucker and Eileen Farrell; the Mormon Tabernacle Choir; organist E. Power Biggs; cellist Pablo Casals; the Budapest String Quartet, and conductors Leonard Bernstein, George Szell, Bruno Walter, Igor Stravinsky, Vladimir Golschmann, Eugene Ormandy and Thomas Schippers, in addition to others.

Many of the longer works are not complete; for example, the tape includes only the last movement of Mendelssohn's Violin Concerto, the Russian Dance from "Petrushka," the Largo from Bach's "Piano Concerto No. 5," etc., but the tape obviously is intended to be a sampling of the talents of Columbia's masterworks artists and it does attain its purpose. Although the performances might not all be at equal heights of inspiration, the sound is generally excellent. The tape is a tremendous value in playing time, is very well processed, and doubtless will appeal to many.

MUSSORGSKY: Pictures at an Exhibition RIMSKY-KORSAKOV: Capriccio Espagnole, Op. 34

New York Philharmonic conducted by Leonard Bernstein

Music ★★★
Performance
Fidelity
Stereo Effect ★★

COLUMBIA MQ 538 4 track, 71/2 ips, 48 min., \$7.95

This would appear to be an attractive tape, but it has several disadvantages. Most listeners will find Bernstein's interpretations of these two familiar scores satisfying, although throughout he takes many liberties in regard to tempo change.

Columbia's sound is very big and full, but it is also rather harsh and lacks a solid hi-fi impact. It is disturbing to have the solo trumpet in "Pictures" towards the left side; it would be much more effective on the right. The tape turn-over occurs during Catacombs in "Pictures"—and ill-chosen point—and this necessitates fast forwarding the tape to the end before turning it over, as there is more music on track two than there is on track one. This interruption completely breaks the mood and is quite irritating, but the tape is good value in playing time.

#### **POPULAR**

THE TWIN PIANOS OF FRED HARTLEY

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

Side I: Play a Simple Melody, April Showers, Indian Love Call, Paddlin' Madelin' Home, Wonderful One.

Side 2: Toot, Toot, Tootsie, Mon Homme, I May Be Wrong, The Wedding of the Painted Doll, In A Little Spanish Town.

RICHMOND PERCUSSION STEREO RPX 49003

71/2 ips, 4 track, 25 mins., \$5.95

Fred Hartley's piano offerings are pleasant, simple and melodic. He is a clever pianist, not given to the supremely fantastic, but capable of playing in a way that soothes jangled nerves.

You will like his directness in interpreting the old favorites as listed above. Using rhythm accompaniment effectively, Fred gets the most from each composition in his easy-to-listen-to style.

Recording is good, with sufficient stereo effect to be interesting.

#### DANCING UNDER PARIS SKIES

Ernie Heckscher and his Fairmont Orchestra

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

Side I: La Vie en Rose, My Man, Valentine, and Medleys.

C'est A Hambourg, Milord, Poor People of Paris, La Mer, Under Paris Skies, and Medley.

MGM Stereo STC 4024 4 track, 71/2 ips, 37 mins., \$7.95

Ernie Heckscher offers his newest dance album of Parisian favorites done with an American accent.

Twist to Mon Homme, cha-cha to Valentine—whatever the tune, the French perspective survives, as Ernie and his Fairmont Orchestra play gay, danceable music in a bright, bouncing style that makes an enjoyable tape for dancing or listening.

While it may lack the full big band sound at times, the music is well recorded, with very good fidelity, separation and stereo effect. You'll like it.

#### HAWAIIAN WEDDING SONG

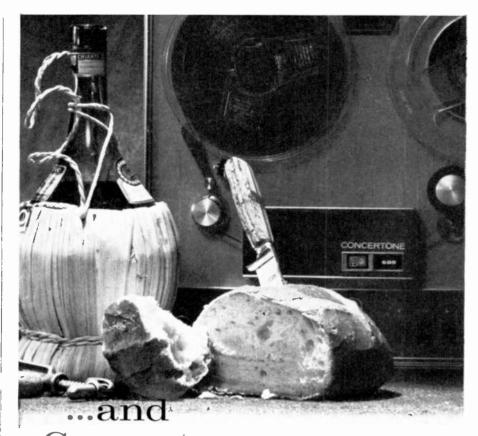
and Other Sounds of Paradise Gordon Jenkins and his Orchestra with the Ralph Brewster Singers.

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

Side I: Beyond the Reef, Blue Hawaii, Now Is the Hour, To You Sweetheart, Aloha, Sweet Leilani, Hawaiian Paradise. Side 2: Ke Kali Nei Au, The Moon of Manakoora, Moonlight on Diamond Head, Heavenly Islands, Honolulu Honeymoon, Aloha Oe.

COLUMBIA CQ 461

4 track, 71/2 ips, 39 mins., \$7.95 Gordon Jenkins conducts his Orchestra



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and the Ralph Brewster Singers in his own interpretation of the music of Hawaii, but strangely enough, he does it without our really being aware that the customary native Hawaiian guitars and ukes are missing.

Using different strings and regular band instruments, the melodies and counter melodies acquire a new lustre when played with Jenkins' imaginative arrangements.

Well balanced stereo and good fidelity help make this beautiful music that is relaxing, soothing, and thoroughly enjoyable.

#### DISNEY MEETS THE WIZARD

Roger Ericson and his Men

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

Side 1: Whistle While You Work, We're Off To See The Wizard, Someday My Prince Will Come, If I Only Had A Brain, When You Wish Upon A Star, Heigh-Ho. Side 2: Give A Little Whistle, Bibbidi-Bibbidi-Boo, Zip-a-Dee-Doo-Dah, Over The Rainbow.

#### **RICHMOND RPX 49005**

4 track, 71/2 ips, 31 mins., \$5.95

Roger Ericson and His Men have succeeded in catching and recording much of the spirit of these famous melodies which have graced and enhanced Disney's movie classics and delighted movie audiences for years. They are all favorites of everyone, and hearing them again brings back many pleasant memories.

These are gay and happy tunes that benefit from sparkling sound effects and brilliant recording. Children of all ages will enjoy this one.

#### BORGE'S BACK

Victor Borge

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

Side I: Introduction, Inflationary Language, The Blue Danube Waltz.

Side 2: Requests, Duets.

MGM STC 3995

4 track, 71/2 ips, 43:50 mins., \$7.95

Victor Borge has been touring the country with his one man show, Comedy in Music, for several seasons, and this tape was recorded "live" at one of his successful performances. Highlights from his lengthy stage appearance are necessarily shortened to about 43 minutes of unrestrained laughter, because, when Borge is on stage, his audiences do nothing else but laugh.

Having seen this show, we can assure you that the only thing this tape lacks is the

sight of this clown performing his antics. Without this visual impact, we do have a recording that is Borge, Plus!

All the unique chatter, the fumbling pianistics, the unpredictable bits of humor that characterize this musician and comedian, are found in this interesting tape. And, for the first time, Victor has taken unto himself a pianist companion, Leonard Hambro, and with profound effect. (Their duet is hilarious.)

The recording has remarkable presence, although stereo is somewhat limited. If you are a Borge fan, we think you will like this one.

#### POCKETFUL OF HITS

Pete King Orchestra & Chorale

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

Side 1: Stranger on the Shore, Would You Like To Take A Walk?, Half as Much, and 9 others.

Side 2: Surrey With the Fringe on Top, One, Two, Three Waltz, Trolley Song, and 9 others.

#### KAPP, KTK 45011

4 track, 7½ ips, 63 mins., [Twin-Pak], \$11.95 Among today's rash of sing-alongs and chorale music available on tape, the present release of Pete King's group is refreshingly different.

They have combined a wide variety of tunes and alternated their vocal and instrumental offerings in a way that overcomes monotony. Voices are used to explore the best possibilities of stereo and the result is thoroughly enjoyable.

This is a well recorded twin-pak with 63 minutes of good orchestral and vocal music.

#### THE GOLDEN TOUCH

Frankie Carle, His Piano and Orchestra

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

Sequence A: Roses in the Rain, Deep Purple, Diane, Falling Leaves, Missouri Waltz, The Golden Touch

Sequence B: Sweet and Lovely, Sunrise Serenade, A Lover's Lullaby, Penthouse Serenade, If You Were the Only Girl, Rumors Are Flying

RCA KPS-3097 4 track, 3¾ ips, cartridge \$5.95 . . . 32 mins.

There could only be one Frankie Carle, because no one else would dare to play so conventionally and with the ease and abandon of a homespun pianist playing in his own living room. No real flares, nothing fancy, just plain sweet music in the popular vein.

Regardless of whether it is "Roses in the Rain," Falling Leaves, Sweet and Lovely or what have you—it all comes out smooth and easy to listen to.

Frankie is a "natural" at the keyboard and as he plays maybe you'll sing along and perhaps reminisce a bit for that's what Frankie Carle magic does to you.

OUR MAN IN BOSTON

Arthur Fiedler—Boston Pops Orchestra

Music
Performance
Fidelity
Stereo Effect

★★★

★★★

★★★

Sequence A: Mack The Knife, March of the Charioteers, Theme from "Exodus," Never On Sunday, Hey, Look Me Over, Theme from "The Apartment."

Sequence B: "And Now A Word from Our Sponsor," Guys and Dolls, Smoke Gets in Your Eyes, Bugler's Holiday. RCA VICTOR FTC 2108

4 track, 71/2 ips, 29:20 mins., \$8.95

There seems to be no limit to Arthur Fiedler's ability to arrange and present a never-ending variety of classical and popular music to appreciative audiences everywhere, and this album is no exception.

This time it is Hollywood Movies, Broadday Shows, and TV Programs, but, whatever the medium, under Fiedler's baton, the Orchestra's performance is superb.

The Sequence "And Now A Word From Our Sponsor" hits a new high in originality and interpretative creativity, while the spectacularly performed Bugler's Holiday becomes a real high spot.

Beautifully processed in big-hall stereo sound, this is one you most certainly will enjoy.

#### FIRE AND JEALOUSY

Andre Kostelanetz and his Orchestra

Music
Performance
Fidelity
Stereo Effect

★★★
★★★★

Side I: Jalousie, Cielito Lindo, Malaguena, Cordoba, Adios, Spanish Dance No. I. ("LaVida Breve")

Side 2: Ritual Dance of Fire, Caminito, Bolero.

COLUMBIA CQ 501 4 track, 71/2 ips, 33:42 mins., \$7.95

Andre Kostelanetz conducts a colorful and exciting program of Spanish music in a brilliant performance that makes this tape one of his best. His well chosen selection are played with fire, imagination, spectacular dynamic range, and tonal beauty beyond description.

Columbia's superb processing of the tape imparts exceptional fidelity and well balanced stereo separation to enhance every subtle sound.

We've been waiting for one like this for a long time: the kind you can spring on your guests when you want to show off your hi-fi rig. It's a beauty.

#### IAZZ

COMBO! COMBO! COMBO!

Henry Mancini

Music 大大
Performance 大大大
Fidelity 大大大
Stereo Effect 大大大

Sequence A: Moanin; Sidewalks of Cuba: Dream of You; Swing Lightly; Castle Rock; A Powdered Wig.

Sequence B: Playboy's Theme; Tequila; Far East Blues; Charleston Alley; Scandinavian Shuffle; Everybody Blow.

RCA VICTOR FTP-1046 4 track, 71/2 ips, 36:25 mins., \$7.95 RCA VICTOR KPS-4032 Cartridge, \$5.95 Personnel: Pete Candoli (Trumpet), Dick Nash (Trombone), Ted Nash (Alto Sax and C Flute), Art Pepper (Clarinet), Ronny Long (Baritone Sax and Alto Flute), Johnny Williams (Piano and Harpsichord), Bob Bain (Guitar and Bass Guitar), Rolly Bundock (Bass), Larry Bunker (Vibes and Marimba), Ramon Rivera (Bonga), Shelly Manne (Drums).

Mancini has brought together many of the greats of the jazz world for this session. The boys have really come through with stellar solos as well as terrific ensemble performances.

The harpsichord normally thought of as a long-hair instrument and featured throughout this recording, is used in both a solo and rhythm capacity. The harpsichord lends a refreshing flavor to the tunes, several of which are Mancini originals.

Mancini arranging coupled with superb artistry of the musicians makes for good listening jazz. Although listed as a combo, the overall effect is that of the big band sound. This recording is a real treat for Mancinites and devotees of modern jazz.

HORN A-PLENTY

AL HIRT with orchestra arranged and conducted by BILLY MAY

> Music \*\*\* Performance \*\* **Fidelity** \*\*\* Stereo Effect ★★★★

Sequence A: Holiday for Trumpet; That Old Feeling; Easy Street; Baby Won't You Please Come Home; Till There Was You: Margie.

Sequence B: Swing Low, Sweet Chariot; Theme from "Carnival"; Do Nothin' Till You Hear From Me; Rumpus; Memories of You; I'll Take Romance.

RCA VICTOR FTP-1109

4-track, 71/2 ips, 33:20 mins., \$7.95

Personnel: Frank Beach, Conrad Gozzo, Mannie Klein, Uan Rasey (Trumpets): Ed Kusby, Milton Bernhart, Bill Schaefer, Richard Noel, Tommy Pederson (Trombones): Ted Nash, Wilbur Schwartz, Harry Klee, Jules Jacob, Charles Gentry (Saxes); Jack Cave, William Hinshaw, Jim Decker, Arthur Frantz, Sinclair Lott (French Horns); Jimmie Rowles (Piano); Al Hendrickson (Guitar); Ralph Pena (Bass); John Kitzmiller (Tuba); Irv Cottler (Drums); Lou Singer (Percussion); Verlye Brilhart (Harp).

Here is Al Hirt backed up by a large aggregation of top musicians playing Billy May arrangements, a combination hard to beat. Al is at his best in this recording. The tunes selected give Hirt the opportunity to run the entire range of the trumpet which he does with the apparent ease always associated with a Hirt performance.

The arrangements of Billy May, without a doubt, enhance Hirt's solo work. The voicing of the instruments, the loose swinging rhythm section, and excellent ensemble passages, provide a media for Al to display his talents.

This recording is not only a tribute to Al Hirt but is also ever mindful that Billy May is still a master of distinctive styling when it comes to arranging for a swing session.

#### CAPSULE REVIEWS

UNITED ARTISTS UATC-2228, FOOT-LIGHT PERCUSSION - TERRY SNYD-ER. 4 track, 7½ ips, 31:02 mins., \$7.95. This is a presentation of percussion backed up by reeds and brass. The overall performance is pleasing and entertaining. A good recording to show off stereo equipment. The musical treatment given the show tunes well establishes Terry Snyder as a master in the art of combining his talents with those of the performing musicians at this session.

RCA VICTOR FTP-1135, Sing Along With IONATHAN and DARLENE ED-WARDS. 4 track, 71/2 ips, 26:35 mins., \$7.95. Want some fun? Unusual entertainment? A challenge to your musical sense of timing? Here it is in the form of a "sing along." This recording is a departure from the usual sing along in that it dares you to sing along, A real inspiration to the most downcast soul. A performance such as this could only be made by the most talented entertainers in the field of music.

KAPP KTL 41052, WHAT NOW MY LOVE, Jane Morgan, 4 track, 7½ ips., 34 mins., \$7.95. Jane Morgan has always been tops in this reviewer's ratings, because of her showmanship, her warmth and sincerity, and her sensitive rendition of songs. Therefore, it is regrettable that she let herself become involved with a program in which she sings such a miserable group of "laments." The selections are the finest collection of tear jerkers we've heard in many a moon, but are definitely not Jane's type. There is no change of pace and although she gives them all she has, the sameness of mood and tempo make a dull program. Otherwise, the tape has good presence, well balanced stereo and exceptional fidelity.

CAPITOL ZW 1830, CHAMPAGNE CANDLELIGHT AND KISSES. Jackie Gleason. 4 track. 7½ ips., 33:30 mins., \$7.95. Jackie Gleason has been well established as a band leader who plays the sweet dreamy love songs in a slow moody style, designed for the romantically inclined. This time the program is decidedly varied, with ballads alternating with Dixieland or Jazz numbers to provide a welcome change of pace, without boredom. The music is full range, with mellow strings of the large orchestra making a nice contrast with the bright brass of the rhythm section.

RCA VICTOR FTP 1164, OUR MAN IN HOLLYWOOD. Henry Mancini. 4 track, 7½ ips., 33 mins., \$7.95. A relief from the multitude of Hollywood theme offerings, this tape has some new selections from recent films and TV shows, including several of Mancini's own compositions. His arrangements give a modern jazz-flavored touch to much of the music, which benefits from good solo work by various artists, such as Ted Nash, Shelly Manne, Jimmy Rowles and others. Excellent stereo and recording.



## **NEW GIBSON GIRL®** STEREO 4 TAPE SPLICER

The new GIBSON GIRL® STEREO 4, is especially designed to meet the precise requirements of splicing 4-track tape. A new streamlined Gibson Girl shape protects program material on the tape. yet leaves tape edges free of adhesive. Splices glide past your tape head with never a hint of their presence. See the new GIBSON GIRL® STEREO 4 at your tape recorder and hi-fi dealer.

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Tennesses Indiana Other areas also. Send \$1 (refundable) for complete Literature Packet and Tape if sincerely interested.

ARTISTIC



recording systems Box 3774, Oak Park, Mich.

RCA VICTOR FTP 1003, THE AMES BROS., SING THE BEST IN THE COUN-TRY, with Hugo Winterhalter and His Orchestra, 4 track, 715 ips., 31 mins., \$7.95. The widespread interest in country music has brought a new group of singers of folk tunes to today's pop music field. Using the simplest arrangements, the songs of the plain people are performed with a similarity of style by most of the singers. However, the versatile Ames Brothers have selected a dozen of the best tunes, given them their own individual treatment, and make listening to country and folk music a distinct pleasure. Good arrangements with excellent musical background and well balanced stereo.

## CROSSTALK

from the Editors

THE MAGNETIC RECORDING industry has never, in its more than ten years of existence, come up with anything like accurate sales figures. Those figures which have been given by some individuals were no more than educated guesses and some of the guesses were on the fantastic side.

AT ONE TIME the Electrical Industries Association (EIA), which compiles monthly sales of phonographs and radios, by securing reports from the manufacturers, tried to get the same sort of information from the magnetic recording industry. After three months they threw in the towel and called it quits. Only a few firms replied and not enough of them did so to make the figures significant.

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

SALES FIGURES ARE important to an industry for a number of reasons. For one they are an indication of whether an industry is growing or declining, for another, they enable the various firms in the industry to determine their share of the market and thus be able to program and plan their production. The figures also serve to spark sales efforts on the part of companies who wish to earn a greater share of the total market by greater effort, better quality, lower prices, more promotion, etc. All of these ultimately benefit the consumer.

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

THE FIGURES ARE also important to the dealers who sell tape recorders. Dealers keep their shops stocked and open to the public for one purpose—to earn a living, just as any of us do, each in his own line of endeavor. But unlike many people, the dealer has a choice as to what he will or will not sell. Obviously he is interested in making as good a living as he can and thus he will tend to push items that are popular, which show a fair return for the investment of his time in handling them and are items which the public will buy. In many cases he bases his judgment upon sales reports for these are irrefutable proof of whether an item is hot or not.

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

THE TAPE RECORDING industry has been doing itself a disservice by not applying the spurs to itself. While the potential has never been greater, the lack of promotional effort and the lack of accurate figures to lend wings to promotional efforts has impeded its growth to some degree.

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

A SURVEY WAS made recently which attempted to secure some accurate figures. In some cases reports were secured from companies. In cases where the companies refused to report, the surveyors asked competing firms to estimate the production of the non-reporting firms.

INDUSTRY CLAIMS WERE usually in the neighborhood of from 500,000 to 750,000 recorders sold per year, and these were the figures which generally were given out to the press year after year. But when the results were counted up on the survey mentioned, it was found that instead of the 500,000 to 750,000 machines sold per year the sales apparently were running up to 1,200,000 a year. And this figure did not include the sales of recorders under \$50.00.

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

IF THESE FIGURES ARE even reasonably accurate, and there is no reason to assume they are not, then sales of recorders have apparently been double what they were said to be!

WE THINK IT is time that the industry awoke to its responsibilities and began to realize its potential. The move is up to the Magnetic Recording Industry Association, we would believe.

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

# **INDUSTRY NEWS**

REEVES SOUNDCRAFT, Danbury, Conn. has developed a new merchandising package to stimulate the sales of their magnetic tape.

The package, the size and shape of a hatbox, holds 300 three-inch reels of tape packaged in individual plastic bags. The tapes, 200 feet in length on a 1-mil Mylar base, are especially handy for use on portable, transistorized recorders.



Reeves Merchandiser

WEBCOR, INC. will celebrate its 50th Anniversary this year according to Titus Haffa, president and chairman of the board. The Golden Anniversary slogan for Webcor is "50 Years of Sound Leadership."

Mr. Haffa said, "Over these 50 years we have pioneered in automatic record changers, portable phonographs, wire recorders and tape recorders—ranging from popular priced miniatures to 22-channel FAA installations for airports." To celebrate the anniversary, Webcor will introduce a revolutionary line of recorders including a range of instruments from a miniature tape recorder which weighs only 11 ounces and can be carried in a shirt pocket, to a professional type touch-button recorder with automatic reversing at the end of the reel.

CHANNEL MASTER, Ellenville, New York has entered the tape recorder market with a six transistor, capstan drive unit with a retail price of \$129.95. The Model 6545 recorder has two speakers, fast forward, telephone pickup, recording level indicator and a vinyl carrying case. Accessories are available.

SUPERSCOPE, New York, distributor of Sony recorders will fair trade its 1964 line and following lines. At the same time the firm announced a new coop ad program for dealers with the company footing 75% of the bill. The firm also has brought out seven new recorders, a sound system and a group of accessories. No cartridge unit is contemplated at present, according to Fred Tushinsky, national sales manager.

AUDIO DEVICES, New York has begun the production of a new instrumentation tape specifically designed for analog and telemetry recording. The tape features an oxide which requires less bias current, a superior print-through level, and an improved thin coating which has higher resolving power at short wavelengths. The reduced overall thickness of the tape gives a smaller diameter wind on standard reels or 15% greater length per reel.

VIKING OF MINNEAPOLIS has introduced two new models, the 220 and 220T Retromatic tape recorders. Both recorders will automatically play back and forth indefinitely, have two 6-watt, self contained power amplifiers and have hyperbolic heads, eliminating the need for pressure pads. The recorder tips the scales at 45 pounds and remote control and playback apparatus can be purchased extra. The vacuum tube version will list for \$860. Neither model will be available until September.

MINNESOTA MINING AND MANU-FACTURING has announced a new "triple length" sound recording tape at an economical per foot cost. The tape, designated Scotch Brand No. 290-36 comes in 3600 foot lengths on 7-inch reels. The longest standard length previously available was 2400 feet per reel. The tape will fill a long felt need for a tape which will provide a lengthy, uninterrupted recording time, according to W. H. Madden. distributive sales manager. It is especially suitable for recording long symphonies and conferences. The tape will provide 90 minutes of recording per track at 71/2 ips. Recording time will double at 33/4 ips. Base material is 1/2 mil tensilized polyester with a .18 mil coating.



New Scotch Brand Tape

VICTOR COMPANY OF JAPAN, Tokyo, has developed a prototype of what the firm hopes will be a home-type video tape recorder. It measures 25 x 14 x 12 inches. It is not expected that the recorder will be available for a few years yet as much development work remains to be done on the unit. While practicable, the units must be able to be made and sold at a price which would make it attractive to home users. Present professional video recorders cost many thousands of dollars.



#### 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 Opera-Son, 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 iliustrations to supplement the spoken word. It is unique, enjoyable and instructive.

7½ IPS, 7" Reel, Dual Track \$6.95 3¾ IPS, 5" Reel, Dual Track \$5.95 Including a 28 page manual of illustrations

TAPE BOOK DEPT.

TAPE RECORDING MAGAZINE

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Severna Park, Md.

Gentlemen:

						About
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	3 3/4	IPS	5"	reel	 	 5.95
Nar	ne	-			 	 
Ado	lress			••••••	 	 

C≧y ..... Zone .... Stote ......

# TAPE CLUB NEWS

Organizations Unite

In order to better serve the interests of its members with a more expanded program, the organization known as Worldwide Friends By Tape, has been made a part of International Tape Fellowship. Activities are being expanded to further promote fellowship through recorded tape. Mr. George A. Benton, 3rd, Manager of World-wide Friends By Tape has been appointed the International Tape Fellowship representative for the United States.

The Friendly Tape Network

In a small white bungalow at Cloquet, Minn., there is a 6 x 14 foot room that is used as the MV2CW tape station and also as the center of the "Friendly Tape Network".

This station, operated by Charles W. Ingersoll of Magneto-Vox Club, looks very professional with three tape recorders, a 16" transcription player, a three dimensional stereo phonograph and a Hammond Organ. It is in this studio Charles spends his spare time and produces the Network which is designed for shut-ins. No membership fee is charged and it is sent out on a round-robin basis.

Charles is a Veteran of World War II and has been interested in sound since a small boy. During the war he was associated with the Armed Forces Radio Service and with two stations in Alaska. Upon his discharge, he built and operated his own commercial radio station at Ely, Minn.

which he later sold, and at present he is employed by the Wood Conversion Co. of Cloquet. Together with his wife Marie. Charles brings much happiness to less fortunate folks. They love to share their extensive record and transcription library.

The Magneto-Vox Club is proud to have MV2CW in its ranks and congratulate him for the very valuable work he is doing with the Network. We would like to add our congratulations also.

#### More Join Round Robins

Two more club members have joined one of the round robin groups of Club Du Ruban Sonore, Harold C. Smith and Emile Garin. The club welcomes them and extends a wish to all those who would like to be included in these round-robins. To do so, one has only to get in touch with J. A. Freddy Masson, Grosse Ile, Montmagny, P. Que. Can.

Portable Recorder Group

In March, the Portable Recorder Activity Group of Indiana Recording Club met at the home of Mazie Coffman in Indianapolis. Each member had been invited to bring, on tape, a mystery sound around his home, to be guessed by the other tapers.

Such questions as "Did that sound come from the kitchen?" or "Is that something I have in my home?" were allowed before writing guesses on scorecards. Inside sounds included a mike in a clothes drier, closing SAXITONE RECORDING TAPE



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draperies, faucet running, door slamming, alarm clock, dropping coathangers, electric toaster, brushing teeth, clocks, wristwatches, clocks and more clocks, including a cookoo and a musical alarm clock. Dan Shattuck and Jim Herdman also contributed some outside sounds: cars, motorboat, a calliope on the Ohio River, a buoy, seagulls and carborns.

Marilyn Freeman received the prize for guessing the greatest number of sounds; Jim Cook and Jim Herdman shared a prize for producing the most mysterious sounds. And did you ever sing a four part Three Blind Mice all by yourself? Dan Shattuck did, using the add-a-track on his recorder.

This is a very good idea for any group of members to use at a friendly gettogether.

#### JOIN A CLUB

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

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

CARTRIDGE CORRESPONDENCE CLUB George C. Ekmalian, Sect.-Treas. 45 Haumont Terr. Springfield, Mass.

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

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

INDIANA RECORDING CLUB Rosemauri Brickens, Secretary R.R. 4, Box 384 Indianapolis 27, Indiana

INTERNATIONAL VOICES OF YOUTH ?. O. Box 3041-T San Mateo, California

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 INTERNATION

Jere A. Pankhurst, U. S. Director

37 East Avenue

Cortland, N. Y.

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

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

THE VOICESPONDENCE CLUB Charles Owen, Secretary Noel, Virginia

UNION MONDIALE DES VOIX FRANCAISES CM MONDIALE DES VOIX FRANCA'
Emile Garin, Secretary
c/o Romance Languages—Rm. 1617
Cathedral of Learning
University of Pittsburgh
Pittsburgh 13, Pa.

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

WORLD TAPES FOR EDUCATION, INC. (Sponsors of World Tape Pals)
Dallas 15, Texas

#### **OVERSEAS**

AUSTRALIAN TAPE RECORDISTS
ASSOC. ASSOC.
Grahame Lowe, 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

> STEREO TAPE CLUB P. J. Kruger, Secretary
> 3 Clan Building
> 181 Main Road
> Diep River
> Capetown, South Africa

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

WORLD WIDE TAPE TALK Charles L. Towers, Secretary 35 The Gardens, Harrow Middletex, England

## "WHY MY RECORDER IS

## IMPORTANT TO ME" CONTEST

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

#### Gentlemen:

I always read "Why My Recorder Is Important to Me" column first when I pick up the new TAPE RECORDING magazine. It's interesting to find how many imaginative uses people can find for standard equipment. Most all of the replies, I notice, fall into two classes. The recorder is used either for pleasure or business. Of course, I use my recorder for pleasure to listen to stereophonic music on commercial tapes, to play back radio or TV programs of an entertainment nature, and to correspond with absent members of the family. All of these methods yield great enjoyment.

But my tape recorder has become more important to me as I use it in my work. It helps me keep in touch with area leaders located in many parts of the country. First, I send a reel of tape explaining the course of instruction they will be teaching in summer schools. On the tape I ask them to evaluate the course after they finished items that occurred during the school year. Then when the taped replies come back, teaching and to relate any special interest I splice them together with a new commentary and send them out on the second round.

Splicing is a fascinating art. By commenting on what is said and splicing in firsthand evaluations, you can almost carry on a long distance interview. In this way the tape recorder helps me to brief these leaders as to new methods of instruction and also lets them share their successes and failures with one another. Communication between all of us becomes a reality even though we are separated by thousands of miles. We have a feeling of working together in a significant, common enterprise. Incidentally, the course of study improves, too, through the use of the recorder since the course is actually field tested by this method.

After reading in your columns all of the fascinating ways people find to use their tape recorders, may I suggest you compile these suggestions with a descriptive paragraph on each one. This would make a little booklet of "reel" interest to all those who own tape recorders, and their name is legion.—Edward A. George, Counselor in Audio-Visual Education, The United Presh)terian Church in the U. S. A., Philadelphia, Pa.

#### Gentlemen:

As a student of vocal music I find my Roberts 1057 tape recorder important to me. What a mammoth understatement. Previously I had to hire a pianist to ac-

company me in practicing scales and vocal selections. This, needless to say, was very expensive. I just couldn't afford to pay for the time I really needed. Now I just get a friend to go over all of this material for me while I tape it. (I don't mind asking a friend to do this—he finds it fun too.) Now I can spend as much time as needed and not worry about the cost. By recording the piano accompaniment on track one and then playing back while recording on track two, I can practice over and over again, analysing each time the amount of improvement made.

My recorder is important also for listening enjoyment. I can buy pre-recorded tapes with the money I have saved with it.

I have joined a local tape club and exchange tapes with the other members. It is an added source of enjoyment just meeting with these other tape enthusiasts and discussing similar interests.

My recorder has really opened up a whole new world for me.—B. Eadger, Salt Lake City, Utah.

#### Gentlemen:

Having been a tape recording enthusiast for years, I have explored it's many uses. The usual recording of records and radio, study of a foreign language and commentary for slides and movies. All these with great pleasure.

However, I now have a new use for my portable Buroba tape recorder. PRE-DATOR CALLING! The usual set up is done with a transistorized record player which costs \$125.00. This is a bit steep for such a specialized one purpose piece of equipment. I buy the records of crow calls and rabbit squeals and transfer them to tape on my Concertone home unit. Then we are off to the field for the thrill of seeing a coyote, bobcat or mountain lion come to within a few feet of our hideout. Thanks to tape recording.

I hope this idea may be of use to other hunters and photographers.—Dr. A. T. Green, Glendale, Arizona.

#### Gentlemen:

This is one of those questions that is quite difficult to answer to someone who does not own one. To add a quote "you never miss something you don't have" and this was the way I felt about a tape recorder quite some time ago, about a year ago I had none and since I had been record collecting my collection had been record collecting my collection where next I would store them and then I got my initial tape recorder and since then I have been collecting tapes. I usually tape from the FM tuner and now have things



that are on tape that I would and could never get on the discs that I used to acquire and not only this but, the scratch problem one gets on wear and tear of recordings sometimes meant that a disc that one was quite fond of one had to get a replacement but, this now has been eliminated with the tape. Now I certainly would change that quote to "you do. miss something that you once had" and this is the way that I feel about it and I now have two tape recorders and a tapedeck Through the medium of tape recording I have also joined a few clubsand have contacted people who ordinarily I might have never known and thisis really an asset.

There is really nothing more to say on this matter and to bring this to an end all I can say to others is ask the man or woman who owns one.—Thomas Harens, Wayne, N. J.

#### Genrlemen:

My recorder is important to me, first of all for the countless usual reasons, such as recording my baby son's voice. Needless to say it is invaluable to me to have the progression of his vocabulary recorded from "goo goo" to his latest word "baby." My parents are always the big social events in our neighborhood, for where else can the neighbors go to have their voices recorded singing duets with voices of television stars. Naturally like all other tape recorder enthusiasts, I have originated tapes which I cannot buy. One tape I have entitled "Songs from Laurel and Hardy movies." I have incorporated on one tape songs from various Laurel and Hardy films shown on television from time to time

The biggest reason for my recorder being so important however, is the fact that I am going to college and find it very difficult to study from books at night, after working in an office all day. My eyes are far from being perfect and the constant reading and paper work is a great strain for me. My wife, therefore, records the chapters which were assigned as school reading, while she is home during the day. When I arrive home at night I merely relax in my favorite easy chair, after supper, turn on my recorder and so study with absoutely no strain or stress on my eyes.

Since I'm managing to obtain good grades at school, due to this method, my tape recorder is certainly important to me.—P.S. so's my wife.—Stephen Lambiase, Brooklyn, N. Y.

### 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.

- Jim Oser, 5 Young Path, Newton Center, Mass.; Recorder: Realistic 999, mono record, stereo playback, 1%, 3¾, and 7½ ips; Interests: Music, R & R, Coins, Social Science, Politics, Sports (I have recordings of some professional basketball games and some world series game); Teenager.
- Charles Torre, 1552 Rake Court, San Leandro, Calif.; Recorder: Airline 3801 two and four monaural track record, two and four track stereo playback; Interests: All kinds of music, especially Latin, organ, and special recordings of electronic music. Have rather an extensive library of records of all kinds, will record the type of music wanted (if available) on any tapes sent. Like playing the organ, have a Baldwin spinet with percussion. Looking for recordings of the Hammond Sideman, and of home organists; Teenager (16).
- Herman Berliss, 61 North Ridgewood Road, South Orange, New Jersey; Recorder: Norelco 300, speeds of 176, 334 and 71/2 ips, 4 track; Interests: Photography, tape recording, tennis, mathematics, humorous sketches, and candid conversations. I will answer all tapes sent to me; Teenager (15).
- Howard G. Mayer, 263 Biltmore Ave., Elmont, L. I., N. Y.: Recorder: Lafayette, 4 tracks; Interest: Want tapespondence with collectors of Bing Crosby and other personalities. Lots of material. Send tape or write; Adult (58).
- Liza Paszamant, 43 Harrison Ave., Highland Park, N. J.; Recorder: Concertone, 2 track, monaural, 71/2 ips; Interests: Music, sports, movies, arts and crafts, Girl Scouting; Age 9, 4th grade.
- L. Kennedy, 89, Ashville Avenue, Birmingham 34, England; Recorder: 3 speed on which I can "multi" record, this being my big interest in recording, and I would like to tapespond with someone similarly interested.
- Dino de Vries, Seranostreet 26, Willemstad, Curacao, Netherlands Antilles; Recorder: Uher Stereo-Record III, 2 and 4 track, stereo and mono recording and playback abilities with speeds of 178, 334 and 71/2 ips; Interests: Looking for strange and unusual tapes, sound effects, taped scripts for plays (mellerdramas), music and original soundtracks from great movies and popular music (Dixieland, Jazz), meeting opposite sex, short stories (all tapes promptly answered); Adult (20).

- Jeffrey Kurland, 23 Terri Road, Framingham, Mass.; Recorder: NEC-RM70LB, 2 track mono, 3¾ & 7½ ips; Interests: All phases of electronics, radio, etc., general talk with anyone, pop music, especially twist and R-n-R, Jazz, tapesponding, will help people in training for first class F.C.C. phone license, will talk to anyone, anywhere, and would like to make friends in foreign countries and all over the U. S., but I can only speak English. No need to write, will answer all tapes; Teenager (15).
- Richard J. Arthur, 2217 Winterwood La., Topeka, Kansas; Recorder: Wollensak T-1515, 3¾, 7½ ips, 2 track, monaural or stereo; Interests: Square dances with calls. We are forming a 10 member (10 different states) round robin tape club. Each month you send one singing and one patter call (of professional or good local called) to one person. You should receive nine tapes, to be copied and sent on to the next person. If interested, send tape with information about yourself followed by one tape of dances, strictly non-commercial; Adult.
- Dermot A. Connelly, 3 Westley Avenue, Ivanhoe, Victoria, Australia; Recorders: 2 Japanese National, 2 or 4 track, speeds of 1%, 3%, 7 7½ ips; Interests: Business, home life, humor, movies, music (most types), pets, theatrical photography, color photography and slides, public affairs, Rotary International, amateur radio, stereo and stereo records, science taping, T.V., travel, world affairs, receiving and answering tapes, English only spoken; Adult, wife, Bee; daughters, Julie (21), Sue (20).
- Aaron Kaback, 1162 Riderwood, La Puente, Calif.; Recorder: V-M 720, 4 tracks, speeds of 3¾ and 7½ ips; Interests: Very, very interested in sightings of flying saucers or other information in this field. Interested in tapesponding with women and men my age, 19-25, on any subject that you are very interested in. Also interested in things that can't be explained, the supernatural or ghost stories that you have heard or witnessed. People with bowling problems that can't make that easy spare or other bowling troubles; Age 20, single—every tape answered promptly.
- Mike Berman, 13 Pickwick Rd., DeWitt 14, N. Y.; Recorder: Wollensak T-1500, 2-track mono., Speeds 71/2 and 33/4 ips; Interests: Natural Science, science in general, science fiction, sound effects, 35mm photography, optics, music of all kinds in-

- cluding jazz, especially D. Brubeck, A. Previn and H. Mancini, T.V. recordings especially of important news events (also radio), general conversation; Can speak Spanish fairly well; will answer all tapes; Teenager (15).
- David Ross, P. O. Box 225, Pomeroy, Ohio; Recorder: Lafayette 4-track, RK-137, 33/4 and 71/2 ips; Interests: Popular & classical music: would like to meet someone who plays piano or organ using the chord method, dancing, new steps, photography, sound effects; would like to tapespond on any and all subjects; will promptly answer all tapes; Confirmed bachelor; (27).
- David Howell, 18930 Ringling, Tarzana, Calif.; Recorder: Wollensak T-1500, monaural, 2 track 71/2, 33/4, access to various other machines for copying, etc.; Interests: Politics, Sociology, Philosophy, opera, symphonic & contemporary music, foreign affairs, religion, science fiction, French & Russian, comedy, collectors vocals (78s and cylinders, 1895-1935); enjoy controversy and argument; Teenager (16).
- H. B. Behrendt, 431 Steves Ave., San Antonio 10, Texas; Ampexes, portables battery operated. Any speed and tracks according to need including professional; Interests: Creativity, novel ideas and information exchange; unusually good materials of all kinds—music, sounds, education, historical, documentaries, business and industrial; make tape recording best medium for spreading the world's outstanding knowledge and entertainment, including the German and Spanish languages; Adult, but anyone is welcome.
- Betty Kerr (Miss), 1162 Riderwood, La Puente, Calif.; Recorder: Voice of Music Model 720 7½ ips and 3¾ ips, 4 tracks; Interests: people with a vast knowledge on human nature, evolution, any subject that interests you also like to tapespond with someone who can prove that men are not all alike, also interested in E.S.P. Wishes tape-contact with single men and/or women between ages of 25-38; Adult (23).
- William D. Wallace, II Air Postal Sq. AF12970953, APO 239, San Francisco, Calif.; Recorder: AKAI Longplaying stereo, 178, 334, 71/2 ips 4 track; Interests: Amateur radio, documentaries, bagpipe & organ music and any subjects of general interest; Adult (24), Single.
- Derek Craig, & Gordon Dr., Woodview Pk., Brampton, Ontario, Canada; Recorders: Robuk, R.C.A., Phillips, Petron, 11/8 and 31/4 ips; 71/2 ips, Mono, 2 track & 4 track, playback Stereo (4 & 2); Interests: Like to converse on anything of a general nature; Like all kinds of music; Have over 56 tape pals throughout the world; By all means send tape first; Personal answer guaranteed by return mail; Member of W.T.P. & A.T.E.A.; Have own studio; Adult (19).

## **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

To the Editor:

This letter is in regards to the "Electronic Mixer" by Walbert T. Gompertz in the April 1963 issue of Tape Recording.

I think this mixer is a thing of the past and is too expensive to build, also it has the chance of producing hum. Let me give you the reasons why this mixer is not practical to build. For a tape recording fan 1 don't think that everyone would take the chance to build one of these, but that is not saying that they wouldn't want one. I am sure that there are a lot that are waiting for one of these but don't know where to get one that is not to expensive to buy. If you own a recorder you should own a mixer, so that is why I had to write this letter to you.

When using a recorder and you want to blend in music from a phono, AM, FM or TV receiver you need a mixer to do a good job. Now there is a 1 transistor mixer on the market that has 4 inputs on it, this means that you can use 2 mikes, 1 phono, 1 amp, all at one time, that is fading in on one and coming in on another or using 4 mikes all at one time. The price of this mixer is \$4.99 from radio warehouses. These mixers are very good and I have owned 2 of these now for 2 years with no trouble. If a person should have trouble with one after a length of time, and it should need repairs, you don't have to have it repaired because it is so cheap to buy you just throw it away and buy a new one. The reason for this is that if you take it to a service shop it will cost you at least \$3.50 for a service charge and for \$1.49 you can own a new one. Doesn't that make sense? This mixer operates from a small 9 volt battery that costs about 18 cents and will last for a long time.

I have built mixers of this sort when they first came out and I had to pay (wholesale) about \$11.00 for the parts, so now it is cheaper to buy one all built. How can this be done? Get one and you will ask yourself the same question. I want to say that the projects that you publish are very good and are helpful but a mixer is a must for any one that has a tape recorder and this is one way that every one can have one with no trouble at all. There are two places that these can be purchased: Olson Electronics, Inc. 260 S. Forge St. Akron 8, Ohio and Lafayette Radio 110 Federal St. Boston, Mass. Would you please help these recording fans and print this letter in your magazine? I am sure they will appreciate this.—Larry Duhamel, E. Douglas, Mass.

#### To the Editor:

I am inclined to be more passive about the FTC's definition of high-fidelity than most are. I feel that the component people have little to worry about as far as losing sales to package units once they have been branded "FTC approved high-fidelity." The package people sell equipment to a market which has no interest whatever in true high fidelity. These are the people who couldn't care less about cycles, decibels, or noise specs and merely want a box that they can carry about. The only requirement they place on the equipment is that it have "Hi-Fidelity" stamped somewhere on the lid (preferably in ostentatious gold lettering). For them a \$4000 component system would be a complete waste of money, much as buying a child a very expensive camera would be.

The high-fidelity addict, however, is aware of these petty deceptions and will continue to purchase the same high quality equipment he has in the past. He will, if he is a true fidelity-fan, in fact discount these small atrocities and merely smile as his non-audiophile 'friends demonstrate their newly-purchased "stereo."

Thus we see that there are two separate worlds of high-fidelity: the beast meant to pacify the public ("We have a stereo-hi-fi!"), and the unit meant for the dyed-in-the-wool enthusiast. Live and let live, for there is "a sucker born every minute" and the package unit manufacturer appeases him.—Joseph Dzeda, Cleveland Heights, Ohio.

#### To the Editor:

After reading your comments in "Crosstalk" in the April edition I thought of a few comments in rebuttal. It is given in the friendly spirit of open discussion since I like your magazine very much. First, I think that the action contemplated by the FTC is necessary and that instead of being terrified by 'Big brother' we should be thankful that one is around. Your comments concerning those who 'do not know' seem rather callous. I'm quite sure that 'reading a book' will not solve their problem. To adequately test complicated electronic equipment requires expensive testing equipment together with skilled technicians to operate them. I feel quite sure that many people with a limited amount of time to pursue their hobby would balk at having to take an electronics course in order to enjoy their equipment.

I further take exception to your comment that every American has the right to be gypped. I consider it highly Un-American for one citizen to try and gyp another using the profit motive as an excuse. The fact that our hearing response changes in relation to our age is certainly no excuse for passing off inferior equipment on us. Using our highly individualistic ancestors of the west as an example that should be imitated is quite fallacious. Their problems were important but simple. It was one of survival. Complicated mechanical and electronic gear would have caused them as much concern as it does us. Perhaps they would have been even more 'concerned' since the dollar was much harder to come by in those days.

#### RECORDING TAPES

high sensitivity and higher frequency response at 15 KC than others.

Selected for FM recordings and theatrical sound cues and effects. All 7" reels are guaranteed splice free with 15 day money back guarantee.

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1800' 1200' 1800'	?" 7"	Mylar Mylar	regular tensilize	d ''.		1.59 1.47 1.79	1.21 1.57 1.45 1.77	1.19 1.56 1.43 1.75 2.83
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Diotating machine tape and reels available. Speed winders, any size reel 3" to 14" combination standard spindle or NARTB hub. \$69.50 each. Aluminurs construction.

R S. DECH, R. No. I, Allentown, Pa.

Regarding the problem of 'package' and 'component' equipment I can see where there might be some difficulty. One answer might be in calling a spade a spade. Somewhere along the line a third disinterested party is needed to evaluate equipment in an objective manner. As of now, it appears, only the FTC and a few non-commercial testing laboratories fill this need.

In closing I wish to say that your magazine is doing an excellent job in serving the needs of all of us tape recording enthusiasts.—E. H. Fuehr, Pittsburgh, Pa.

#### To the Editor:

I have been intending to write you for a long time, am only now getting to it. First I want to thank you for the roll of recording tape which you sent me after you published my letter in which I stated the reasons my recorder is important to me. Incidentally, I used this roll of tape to copy a record which contained a concert played on the Allen organ in the Church of the Mediator at Allentown, Pa. Although this organ is of the electronic sort and has no pipes, it sounds ALMOST like a big pipe organ . . . I think it would fool almost anyone. In case you people are not familiar with the Allen organ, you may buy the demonstration record of the Allen Organ Co. for a measley \$2. It is truly a Hi Fi record, LP monophonic. It is very well recorded and obviously a beautiful organ. The organist is Berj Zamkochian . . . and he really "gets over" the instrument VERY well. Record number is GRT 1162.

Now I want to tell you how glad I am that I wrote you in the first place . . . as a result of this, I received inquiries . . . twelve in all, from all over the country, from people who wanted my "whistles." So far I have sent copies of my sounds to all twelve. These are scattered from Oregon, California, Texas as well as some closer to home. It shows me that your magazine has a rather widespread circulation. I have become acquainted, through the medium of tape, with some very nice people. I want to thank you again for the tape and also congratulate you for publishing such a fine magazine.

So, as I sit and look out over the frozen Saint Lawrence river on this beautiful winter day, we are thinking that spring is just around the corner. You may have read that Warertown, N. Y., had 160 inches of snow, and the cost of getting snow out of the roads in Jefferson County alone has been \$270,000. Maybe we should move to Maryland!—Leonard F. Blanchard, Clayton, N. Y.

We froze too!-Ed.

#### **PLANNING A PARTY??**

Here's the answer to the oldtime question of what can we do that's different?



# SEND FOR A TAPE FUN KIT

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

#### 10 SCRIPTS INCLUDED

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

#### TAPE KIT NO. 1-\$2.00

Order yours today. Use the handy form below.

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

#### TAPE RECORDING

Severna Park, Maryland

Please send me Tape Fun Kit No. 1, 1 enclose \$2.00. {☐ Send First Class, 1 enclose ....... additional.}

Name												٠				•		
Address																•	•	

City ..... Zone .... State ......

# **NEW PRODUCTS**

#### CONCORD DECK



A new four-track stereo tape deck has been introduced by Concord Electronics Corp., 809 N. Cahuenga Blvd., Los Angeles 38, Calif. It features monitoring power amplifiers and transistorized preamps. Model 550-D with chrome trim is available for horizontal mounting in custom cabinets, and Model 550-DW is self-contained in its own cabinet. The solid state, transistorized circuitry of both models provides a good signal-to-noise ratio. The accessory power amplifiers allow monitoring of recordings directly from the deck through stereo earphones or speakers. They will also drive a pair of accessory speakers. A special accessory jack panel permits direct connection of microphones or stereo earphones without the necessity for special adaptors when the jack panel cannot be conveniently reached in a cabinet mounting. The 550-DW is priced under \$300 and the 550-D is priced under \$230. For all details, contact the manufacturer.

#### CITROEN ACCESSORY KIT



An accessory kit developed for Citroen Electronic Corporation's Model 660 remote control tape recorder includes an AC adapter, foot control and an automobile cigarette lighter adapter. The complete kit sells for \$39.50 or items can be purchased separately: the AC adapter sells for \$21,50; the foot control is \$14.50, and the automobile cigarette lighter plug-in adapter is \$8.50. The Model 660 recorder offers an hour and 10 minutes of playing time, an l standard equipment includes a leather case, remote control mike, earphone, battery cartridge, roll of tape and take-up reel, and telephone pick-up. It has double play recording heads, two speed capstan tape drive, push-pull audio output, and record level and battery condition meter. Literature on the kit and Model 660 are available from Citroen, 832 N. La Brea, Los Angeles 38, Calif.

#### V-M TUNER-STEREO AMPLIFIER



V-M Corporation, Benton Harbor, Michigan, has announced a self-powered combination high fidelity FM Stereo, FM-AM Radio Tuner-Stereo Amplifier Model 1467. According to the manufacturer, this is a unique combination of four functions in one trimly styled component. It has complete versatility to provide the whole world of broadcast music plus true high fidelity stereophonic record reproduction. For all details and price, write to the V-M Corporation.

#### THREE SPEED TAPE DECK



Paco, the consumer products division of Precision Apparatus, Inc., 8000 Cooper Avenue, Glendale 27, N. Y. will introduce a three speed stereophonic tape deck and preamp combination at the 1963 May Parts Show in Chicago. This new deck is ideal for rack mounting or custom installation. Featuring a completely integrated dual preamplifier, it permits 4 track sterco and mono record/play, 2 track stereo and mono playback and facilities for sound with sound recording. Other features include two (2) separate VU meters, individual volume controls for each channel, digital tape index counter, automatic tape shutoff and fast forward and rewind controls. Frequency response is 30-15,000 cps, plus or minus 3 db at 71/2 ips and flutter and wow is less than 0.4% @ 71/2 ips. Takes 7" reels. For further information contact the manufacturer.

#### NEW MIKE GUIDE

A new, highly definitive "Fact and Fiction" Guide detailing specific unidirectional characteristics and performance features that should be expected from a true cardioid microphone has been announced by Shure Brothers, Inc., Evanston, Illinois. The Guide explains common claims for, and misconceptions about, so-called cardioid microphones with facts based upon a precise mathematical formula which limits and defines the term "cardioid."

In addition, it describes six common sound problems caused by inefficient microphone rejection of unwanted sounds and microphone ineffectiveness in picking up the desired sound. Specific information on how these problems can be solved through the use of a quality cardioid unidirectional microphone with a uniform pickup pattern is also provided. Information contained in the Guide should be of interest to anyone who regularly uses a microphone for professional or non-professional purposes, and to individuals who have the responsibility for purchasing or specifying microphones for sound installations. Copies are available free of charge from Shure microphone dealers or by writing directly to: Shure Brothers, Inc., 222 Hartrey Avenue, Evanston, Illinois. Ask for Folder No. 184.

#### GELOSO ATTACHE CASE



American Geloso Electronics, Inc., 251 Park Avenue South, New York 10, N. Y., has announced the design of a brown cowhide leather Attache Case for secret recording, incorporating a newly designed, extremely sensitive microphone which is built in and hidden in the attache case. It has a special sound-proof compartment housing the Geloso miniature transistorized self-powered battery StenOtape Model No. TR-11. Records sound 25 ft. away from the attache case up to 2 hours. The attache case also incorporates a built in start/stop switch. The ASC-12 secret recording device fills a demand for law enforcement agencies, executives, business men, detectives, psychiatrists, hospitals, personnel department, salesmen, for recording interviews. sales training, reports, etc. Price and details available from American Geloso.

#### NEW ELECTRONIC WIRE CATALOG

The Belden Manufacturing Company,

415 S. Kilpatrick Avenue, Chicago 44, Illinois has announced its 1963 Electronic Wire Catalog #863. New items featured include: Two miniature retractile 4 conductor microphone cables (1) two conductors individually shielded and 2 unshielded; A two parallel coaxial cable for stereo, hi-fi and headphone sets and a totally shielded hi-fi interconnecting cable: Four different neoprene jacketed retractile (coiled) power and control cables; Seven new multiple pair individually shielded audio and sound cables ranging from 3 pair to 27 pair using the exclusive Beldfoil Z' fold 100% shield and polypropylene insulation for excellent high frequency properties and mechanical toughness; A 60 KV direct current coaxial high voltage cable; and A catagorized Instrumentation Section. Write to Belden for a copy,

#### NORELCO 4-SPEED RECORDER



A new Norelco Continental '301' transistorized 4-track, 4-speed tape recorder featuring two preamps for stereo playback through any radio, TV or hi-fi system, has been announced by the High Fidelity Products Division of the North American Philips Company, Inc. It features the new fourth speed of 15/16 ips for up to 32 hours of recording on a standard 7" reel. It includes two preamplifiers, power amplifier and speaker and comes furnished with a Norelco dynamic full frequency cardioid patrern microphone. The machine has inputs for recording from microphone, tuner and phono with facilities for mixing and a special input jack for a foot control. A unique parallel operation feature permits tracks 1 and 3 or 2 and 4 to be played back simultaneously. It has a Philips head which has a gap of only 0.0001 inch and makes possible extended high frequency response even at lower speeds. Further information may be obtained from North American Philips Company, Inc., High Fidelity Products Division, 230 Duffy Avenue, Hicksville, L. I., N. Y.

#### AUTO-HOME STEREO SET



Diamond Electronics, Inc., 26<sup>-9</sup> Freewood, Dallas 20, Texas, has introduced a new auto home stereo set that also may

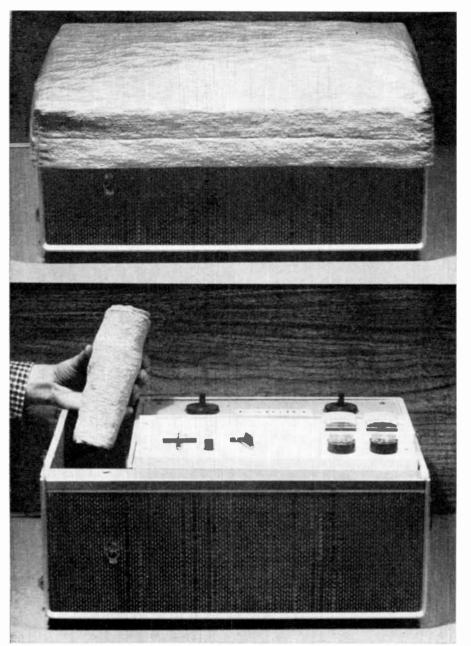
be installed in boats, trailers, and airplanes. The Diamond in-car installation includes the basic Model 100 set having four 4 inch speakers, two in back and two in front. Its overall dimensions are 914' wide, 3"8" high and 858" from front to back It is completely transistorized having 10 transistors, a 12-volt system that will operate on 9 to 14 volts, drawing less than 1 ampere. Tape speed is 33/4 ips with response levels from 200 to 9000 cps, plus or minus 2 db. Output is 3 power watts or 8 music watts per channel. Speaker output is 8 ohms per channel. Cost of the set including installation approximates \$150.

The standard Diamond home adapter includes a converter element which houses the auto/home stereo and transforms 110-120V, 60 cycle ac to 12V plus or minus 2V dc; plus two attractive walnut speaker housings that sit on table or hang on wall. Cost of this optional home adapter assembly approximates \$70. Further information is available from Diamond.

#### ROBERTS STEREO RECORDER



Roberts Electronics, Inc., Los Angeles 16, Calit, is marketing their new 1057-PS stereo tape recorder with photo-sound-sync. The built-in, fully automatic synchronizer adapts to all automatic slide projectors. It utilizes a strip of special sensing tape on the shiny side of the recording tape to activate a "sensing" post (at the left of the tape head cover). This automatically advances each slide in the projector. With the 105"-PS, live stereo can be recorded as pictures are taken or added later from tape or record libraries to supply a musical background to slide narrations. For on-the-spot recording, the 1057 is easily portable for it weighs just 2712 pounds. It offers stereo and monaural record/play; speeds of 3%, and 712 ips, with 15 ips available at extra cost; sound-with-sound; sound-on-sound; sound-over-sound; four stereo outputs; 24 slot wave wound motor; full stereo record/ playback system; sterco preamp outputs; stereo power amplifier outputs; dual professional type VU meters; stereo self-contained speakers; vertical or horizontal operation; automatic tape shut-off; and the 105" is FM/stereo multiplex ready. All details are available from the manufacturer listed above. The cost of this machine is 5369.95.



# Repairman, Stay Away from My Door!

Tommy Thomas

Fig. 1. What do you do with the lid of your recorder when you take it off? Gets in the way, doesn't it? That's why all my machines have CLOTH COVERS instead of regular lids (which are all in the attic). A cloth cover, which can be as fancy as you like, is instantly removable and better still, tucks away almost anywhere.

STITCH IN TIME . . ." goes the old saying. Well, I'm all for it when it comes to preventative maintenance for tape recorders. Even from a lazy man's point of view, it makes sense to put out a little effort now and then "ahead of time" if it'll keep bad things from happening to your recorder most likely just when you need it most.

Take microphone cables, now, a most vital and sensitive link in the chain of recording. I like to make recordings at parties and people were forever running into my stretched-out mike cable So now I hang a silly sign or two (See Fig. 13) on the wire. People see them, smile and stop in time to avoid possibly snapping off the poor defenseless little plug sticking into the recorder. Of course, that doesn't keep careless old *me* from tugging too hard at that same cable, so that's another problem. Fig. 2 illustrates help in the form of reinforcement. When making up my

plugs, I first slip a short length of soiled spring over the end of the cable. You can get these little springs at most any hardware. Then, after soldering my wires on carefully, I fill the entire phone plug with Epoxy adhesive, screw the whole works together and let it harden. This helps mightily to keep the delicate wiring inside the plug from evenutally breaking loose from too much twisting and turning when using the mike. Fig. 3 illustrates still another way to remove undue strain from the plug.

A super-sensitive part of my recorder that always receives my tender loving care is the Record/Playback Head. These heads wear out all too easily and replacement is expensive, so I treat them most cordially at all times. That's why, as I illustrate in Fig. 4, I've mounted an auxiliary tape guide post between the two reels. This way I can keep the tape running smoothly even when I race it back and forth directly, reel-to-reel, completely by-passing



Fig. 2 (upper left). It's a sad occasion when a microphone "goes dead" suddenly, as always, without a bit of warning. So since it's the PLUG that gets the most abuse, I relieve the strain quite a bit by adding a small spring over the end of the cable that goes inside the plug, and I fill the plug itself with gobs of heavy-consistency Epoxy. F.g. 3 (upper right). Another sure-fire way of avoiding strain on mike (and other) cable plugs attached to your recorder, is to form a SMALL LOOP in the cable itself, about ten inches or so from the plug end. Plastic tape will hold this loop securely. Then, whenever you plug in the cable, anchor this loop under one "foot" of the recorder. Fig. 4 (lower left). With my recorders that don't have automatic tape lifters, I try to cut down on extra head wear whenever I have to race a reel of tape from one side to another, by by-passing the heads completely. This works fine except that the wind-up is then rather sloppy, unless you install an AUXILIARY TAPE GUIDE between the rases. Fig. 5 (lower right). Here are some of my favorite recording accessories. Until I switched to using COLORED REELS and COLORED LEADERS I was having a terrible time keeping the different types and thicknesses of tape separate. Now, along with adhesive labels and even special marking inks to also aid me, my tapes are automatically identified.

the main head assembly. Most likely your local hi-fi shop can supply you with a guide post, but if not you can get one from Allied Radio, 100 N. Western Ave., Chicago 80, Ill. It's a NORTRONICS TG-5 Tape Guide Post for 70¢, Cat. No. 81R962. Either have the hi-fi people securely bolt it in place for you, or you can do the job yourself with a bit of Epoxy adhesive ... being sure to shim the post up with washers to the correct height.

If you constantly record with different thicknesses of tape, as I do, I can highly recommend colored tape reels as a logical way to keep from getting mixed up. These are put out by AUDIO DEVICES, INC., and are available (if not locally) from Allied. The 5" reels are 39¢ each and the 7" reels are 49¢ each: plastic, empty, supplied in boxes. The colors are clear, red, yellow, green and blue, and the AUDIOTAPE reels have a convenient "C-Slot" way of gripping your tape end that has long been a favorite of mine for easy threading. I keep each different thickness tape on a different color reel (for example, I keep all my blank 1½-mil tapes on RED reels) and it's im-

possible for me to make a mistake no matter how much of a hurry I may be in. NOTE! When a reel is finally completed, fully recorded upon, I then transfer the tape back to its original reel for storage, the colored reel by then having served its purpose.

(Something fairly new (?) is a colored Mylar leader tape put out by the REEVES SOUNDCRAFT CORPORATION. I've never been too partial to leader tape before because it makes a soft "scraping" noise when it slides under the pressure pads, but this new Mylar-base tape is great. Not a whisper! It comes in blue, gold (which is really yellow), red and white for \$1.10 a 150-ft. roll. If not available locally, send to Burstein-Applebee Co., 1012 McGee St., Kansas City, Mo. It's their Cat. No. 11B315, and I recommend it highly. And it looks especially terrific when used together with color reels.

People with vertically-running recorders need *reel locks* to hold the reels from falling off. I use similar reel locks, made of rubber and illustrated in Fig. 7, on my horizontal machines whenever I'm using an old and wobbly plastic reel.



Fig. 6 (upper left). Both the plastic reels (which come in 5" and 7" sizes) and the Mylar leaders come in four colors: blue, yellow-gold, red and green. There's also a white leader to go with the clear reels. And with these new WRITE-ON-ANYTHING FELT PENS being sold everywhere now, it's a snap to write directly on the leader tape. Fig 7 (upper right). After lots of use, some plastic tape reels become a bit sloppy around the hub. They've been put on and taken off so often the center hole has become enlarged to the point where the reel fits on the spindle in a rather loose and wobbly way, finally affecting tape movement. A set of REEL LOCKS will correct this. Fig. 8 (lower left). If you have an unmarked reel or portion of a reel of tape, it's difficult to know how long it will run without slow-running it through your recorder to find out. A much quicker way to find out is to run it on FAST FORWARD through your machine, then compare the seconds elapsed to a previously made correlated table. Fig. 9 (lower right). Ever pick up an old reel of unidentifiable recording tape and wonder WHAT THICKNESS TAPE it was? You can make a quick check in no time flat by fast-forward running the tape onto a 3" reel. Starting with the index counter at "000," I know immediately by the time the reel is full just what thickness the tape has to be.

This saves me from having to throw the reel away as useless. Reel locks, 59¢ for a set of two, Cat. No. MS-564, Lafayette Electronics, 111 Jericho Turnpike, Syossett, L. I., New York.

Every once in a while someone comes over with an old reel of tape and they want to know what "kind" it is. So I pull on it and if it breaks clean I figure it's acetate. If it stretches, it's very likely Mylar (Polyester). Then I run it on fast-forward onto to an empty 3" reel to measure its index length (Fig. 9). With my Knight recorder, if the index counter goes from "000" to around "281" when the little 3" reel is completely full, it can only be 1½-mil tape. If the odometer reads around "417" then it is 1-mil tape and if around "560" its gotta be ¾-mil tape. You will have to determine your own index figures, of course, but once you know them it's a handy shortcut way of quickly determining the thickness of any stray tape you come across.

I've long wished for an index counter on my recorder that could be set anywhere I wish, rather than only back to zero. Many times when editing and indexing tapes, being able to do this is of great help, so Fig. 10 shows how I

manage. With the two odd-sized reels in place and a large rubber band "belt" (from a hobby store) connecting the two, it's but the work of seconds to race the index counter backward or forward to whatever number I want.

Figures 11 and 12 show two different approaches toward accomplishing the same result: determining reverse index numbers. That's right! REVERSE index numbers. I put all of my monaural recordings endlessly on 7" reels of 4-track tape. After years of keeping my various subjects isolated on separate reels, with the coming of 4-track I switched over to putting everything on one reel: TV, radio, family stuff, party fun, tapespondence I want to save everything! I re-record it all onto my endless 4-track reels. Which is fine and dandy, except I was always getting exasperated when I had to locate a selection on the #2 or #4 tracks. This meant first running my tape all the way to the other end, then starting back on the reverse track to finally locate the particular selection I was after. I decided that there MUST be a better way.

And there is a better way, by far. The "setting up" is a bit of a chore, but the results are well worth it. To do it the easiest way, you'll need an "open-face" reel (see

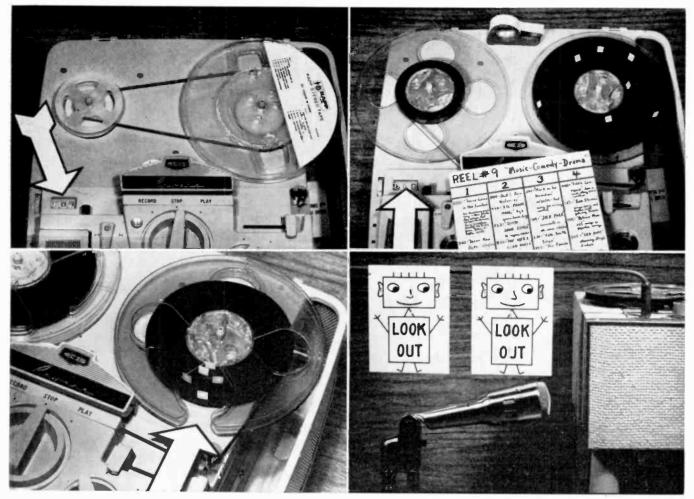


Fig. 10 (upper left). For those of you who do a lot of editing, here's a handy way to set your index counter TO A CERTAIN NUMBER (not just back to zero) when the occasion warrants. Hook a 3" reel and a large-hub 7" reel up as shown here, then run your tape recorder on fast forward or fast rewind until you reach the number you want. Fig. 11 (upper right). Ever hear of REVERSED index numbers? On monaurally recorded 4-track tape it takes time to locate a certain passage on the 2nd or 4th track because you first have to run the tape all the way from one end to the other, so the index numbers will work out. Unless, of course, these tracks are indexed in reverse (see text). Fig. 12 (lower left). Reverse-indexing is a bit of a chore, but once it's accomplished for a particular 4-track reel of recorded tape, it's pure pleasure finding ANY passage, no matter on which track. To aid you in backing up to the 2nd and 4th track positions, you can use either an "open-faced" reel or a "cut-into" reel as shown here. Fig. 13 (lower right). If you're like I am about recorder troubles, you pretty well ignore them until they actually come a-knocking. But since they surely will, here's one LAZY MAN'S APPROACH to foreseeing and forestalling a few of them, along with some other helpful hints.

pg. 30-31 of the August-1961 issue of TR, to see how they're made easily from any regular plastic reel by simply removing one flange). Actually, though the Fig. 11 photo here shows two open-faced reels, you only need the one on the right. Just use a regular reel on the left side. Then it works like this: (A) Arrange your tape so the #2 track is playing. (B) Stop the recorder every time you come to a new selection and "spot" this place with a tab of lightly-stuck-on splicing tape. Continue all the way through the #2 track, right to the end (which is really the beginning, if you think about it a minute). (C) Now you should have an empty reel on the left and a full reel of tape on the right, so thread your tape again and set the index counter to "000." Shift into fast rewind. REWIND. NOW! (D) Every time you get to one of the white tabs, stop, write down the "new" index number, remove the tab of tape, and go on to the next one. Backtrack all the way through Track #2, noting all the index numbers and removing the tabs as you go. (E) Do the same with Track #4. NOTE! The special open-faced reel is only used during this initial "locating" stage, to make it easy to spot the tabs wherever necessary. Naturally, once you've

noted the reverse-index numbers, special reels are no longer needed.

It'll take you a while the first time, until you get the hang of it, but it's not at all difficult. In fact, I find it rather fun in a way. But best of all, forevermore you'll be able to locate selections on the even-numbered tracks just as readily and quickly as those on the odd-numbered tracks. The only difference is that with the #2 and #4 tracks, you put the full reel of tape on the right and you BACK-TRACK (rewind) to where you want to go.

How about that? I guess it sounds almost silly on paper but it really works. I'm just sorry I didn't figure this out a long time ago because it speeds things up considerably . . . and it was certainly the sure cure for my exasperation. If you don't have an open-face reel around handy, or don't wish to make one up, almost any regular reel will do, though of course not as well—mainly because the upper reel flange gets in the way of the tabs. At least saw out a small portion of the outer rim as shown in Fig. 12, so it won't get completely in the way of locating the last few tabs. And you can even use small bits of paper for tabs instead of splicing tape, to further simplify matters.

# Recording Vocals With Piano

#### by L. L. Farkas

.... proper microphone technique can make your recordings tops.

THERE has been much written on the placement of the microphone for piano pickups, taking into consideration the characteristics and tone of the various types. Very little has been written about the problems of voice-piano pickups. If good recording results are desired, such pickups also require special attention, for the combination of the singing voice with the piano requires special treatment.

Let us assume, for the time being, that the piano set-up has been made and is satisfactory. The next step then is to locate the vocalist in relation to the microphone.

The best and quickest way to find the correct working distance is for the vocalist to take any comfortable singing position in front of the microphone and sing a selection which covers both his high and low ranges. The recorded characteristics of his voice can then be easily checked. If the volume at the two extremes seems approximately the same as that of the middle register, and the tones do not distort, the singer's position is probably correct. However, since very few voices have uniform volume over their full range, a compromise must generally be made: the singer should take the position from which the greater part of his tonal range is recorded without distortion and with fairly uniform volume. This can be called his average or normal position at the microphone. For the remainder of his range—that portion which is either too loud or too soft-the singer will have to make adjustments while performing. The way in which he does this is called microphone technique.

More specifically, microphone technique may be defined as the best utilization of a singer's voice characteristics relative to the type of microphone and recorder used. Such complex explanation may make this technique sound like a highly difficult procedure, and perhaps this is the reason why so many professional vocalists on radio and television, and even on recordings, have disregarded it. Actually microphone technique, based upon common sense, is simple, easy to learn, and beneficial to any performance over a microphone.

In order to illustrate it let us take, as an analogy, water being forced through a hose into a bucket. When the water comes out of the hose with too much pressure or too suddenly, it spills out of the bucket. To prevent this the pressure must be reduced. Substituting a microphone and recorder for the bucket, sound for the water, and volume for pressure, we obtain the effect in which sound, transmitted with too much volume for the microphone and recorder to handle, will actually "spill over" or distort. The size of the hose, which will affect the water pressure, may be likened to the vocal cavity of the singer which determines the volume of the various notes produced while the size or shape of the bucket may be said to correspond to the different types of microphones in use. Now microphone technique does nothing more than prevent sound from spilling out of its particular bucket by reducing its pressure on the microphone and recorder.

The way to do this is obvious: the singer backs away so that his tones reach the microphone with reduced volume. This occurs because the volume of sound decreases by its square as the distance from its source increases. For example, the volume of sound reaching the microphone from a singer six feet away will be four times less than that received when he is only three feet from the microphone. Of course the vocalist could maintain a set position and reduce his own volume, but in singing, particularly with full voice, this is not a very easy thing to do, also especially without affecting the quality of the voice recorded. While there are a few exceptions, the majority of singers prefer to back away from the microphone on crescendos.

One additional point in our analogy: if the water pressure is too low, the water will probably not reach the bucket. Similarly tones too low in volume will not be picked up by the microphone or will come through poorly and often buried in the background noise. Microphone technique therefore also consists of boosting the tones too soft for normal recording. This means that the singer will have to move closer during pianissimo passages, when his voice volume is low.

An immediate protest will undoubtedly be raised that



CBS Radio Photo

Rosemary Clooney and Bing Crosby using the "on mike" singing technique. Note that Bing, with his soft tones and low register must work very close and across the face of the microphone. The knowledge of how to "work" a mike is a necessary part of any singer's stock in trade. A shift of a few inches toward or away from the microphone will take care of most variations in a singer's volume in the high or low registers.



CBS Radio Photo

"On mike" position used by Jo Stafford while singing over CBS radio. When the singer works close to the mike listen for sibilances, popping or breathy effects which will interfere with a good recording. Always run a test before taping.

all this curtailment of volume variations will kill the musical expression in any selection. Were all tones levelled, this would be true, but actually microphone technique deals only with the extremes of a singer's volume range, preventing peaks from being distorted when they are excessive, and soft passages from not being heard at all when their volume is too low. In reality the range of volume variations possible within the limits of volume handling capabilities of the microphone and recorder is sufficiently wide to cover almost all of the gamut of musical expressions.

Perhaps the most difficult thing about microphone technique is to learn not to overcontrol. When the vocalist goes back too far on a crescendo, the result is not the desired smooth swelling of tones without distortion, but a sharp fade accompanied by a change in the timbre of the voice. On the other hand, moving too close will cause the voice to boom, destroying its quality and intelligibility.

The exact distance to move in or out on very soft or loud tones depends upon both the voice and the microphone characteristics. For instance, the very low notes of a bass singer may resonate, at close range, with a portion of the microphone structure, thus causing the notes to boom through and distort. In this case the singer would have to back away, whereas with a different type of microphone, without the low frequency resonance, the same low notes might be too soft to pick up and the singer would have to move closer. A similar effect also can be caused by a difference in microphone sensitivity. For example, a soprano backing away on a crescendo of high frequency notes would

lose her effect when using a microphone of reduced sensitivity because the response of the microphone to her voice would drop off faster with the increased distance than with the first microphone. Of course these results would probably occur only when first using a new or unfamiliar microphone, for with usage the characteristics of the unit will become evident and the right technique used to compensate for them. However, as a rule of thumb, it may be said that with non-operatic types of songs, a variation of two to six inches from the singer's average position should be sufficient to handle most changes in volume, while in operatic singing variations up to a foot may be required.

Some vocalists have been instructed to turn their head sideways on crescendos. While this may work very well on a microphone with a wide pick-up angle, the effect becomes objectionable when using a microphone with a fairly narrow beam, such as the ribbon type. With the latter the voice volume will drop very rapidly as the singer turns away, but his tones will also lose their fullness and quality. It is therefore advisable to go straight back from the face of the microphone, thus precluding any possibility of moving away from the center of the pick-up beam.

At this time is should be pointed out that very few singers, with the possible exception of some basses, have excessive volume on their low notes. In many performances, when the passage with the low notes is reached, the listener will notice a decided drop in volume. This can easily be avoided by leaning forward slightly when singing the low tones. A movement of no more than two or three inches is



For the operatic type of voice a distant perspective is better. In this position distance changes of up to a foot may be necessary to equalize the volume. The equalization is necessary to prevent poor recording, or actual tone distortion.

generally sufficient to provide the necessary reinforcement in volume.

In all these movements toward or away from the microphone, the final check of the technique must naturally be the recording. For this reason a test run should always be made with the vocalist singing his selection and using the same microphone technique which will later be utilized during the actual performance. In this way such faults as "blasting"—caused by singing staccato passages too close to the microphone, booming on low notes, excessive changes in either the volume or quality of the voice: essentially all defects introduced by moving in too close or backing too far away, can be noted and remedied.

In some instances a singer will observe all the rules and still fail to obtain good recording results. This is frequently caused by unusual characteristics of his voice. One such type is the singer whose tones sound very harsh and breathy. Using normal technique the effect is very noticeable and objectionable; nevertheless it can be reduced and sometimes entirely eliminated simply by making the vocalist sing at an angle of approximately forty-five degrees from the face of the microphone. This deflects the full blast of his breath away from the diaphragm or sound pick-up element, thus reducing the breathy effect as well as decreasing the harshness of the tones. Slight fuzziness sometimes present in the voice, like sibilance, usually can also be remedied by this method. The angle used will undoubtedly vary with each type of voice, the amount of defect, and the kind of microphone utilized for the pick-up, but again the exact

angle can be determined very quickly by checking the results on a recording.

Another type of voice presenting a pick-up problem is that of the contralto or bass with low volume. A singer with that kind of a voice cannot come in too close because the bass response of the microphone will cause most of the tones to boom; and when he or she stands at the minimum working distance, the voice is too weak to be picked up correctly. The best way to remedy this condition is for the vocalist to take a position on the "dead" side of the microphone, that is, completely outside its pick-up beam, and then sing directly across the face of the microphone from a distance of about two inches. This will bring the source of sound very close in and thus produce increased volume without introducing the booming effect caused by the low frequency tones hitting the microphone directly.

A few words of caution should be added. Since various movements are required for microphone technique to handle extremes of volume, some vocalists have deduced that they must always move around a great deal while singing. Nor is this movement restricted to forward and back variations, for some artists have been known to weave sideways as much as a foot. Somehow they seem to think that this will put more feeling into their performance. Now this may very well be true of the visual portion of their act, but for sound recording, the effect of any such extreme and repeated variations is more like that of a person jumping in and out of a spotlight. This is opposite to the levelling tendency previously decried, but just as objectionable. The recording

will sound "spotty," with the sound volume increasing and decreasing abruptly during passages when the level should remain the same, while the quality and intelligibility of the voice will be greatly impaired.

Movement then, while singing over a microphone, must not be indiscriminate, but very much as in acting, must be motivated. And to repeat: the main reason for any motions while performing is to counteract excesses in volume caused either by very soft or very loud tones. In the singer's normal range very little movement is advisable. If expression is needed, it should be introduced by voice control, and not by abuse of microphone technique.

The above comments on motion while singing bring up a bad habit which many vocalists acquire quite innocently. You have undoubtedly seen the singer who, particularly while using a sound system in a hall or night club, will frequently raise his microphone up or lower it, will move it about, lean on it, and generally handle the unit roughly. Now disregarding the damage caused to the sensitive elements of the microphone—this will vary with the ruggedness of the unit, his singing is generally punctuated by loud crashes and other types of noise which are definitely detrimental to his performance. Sometimes, when the vocalist has walked over a thick rug, grasping the microphone will cause a spark of static electricity to jump from his fingers to the microphone stand. In such cases the audible crackle is reinforced by an electrical noise which can mar any recording. To prevent any such defects it is best not to handle or even touch the microphone during a performance; but if handling cannot be avoided, then it should be done slowly and carefully in order to keep any resultant noise down to a minimum.

Thus far the discussion has dealt with the position a singer must assume and the microphone technique he must use in order to display his normal voice to best advantage. But the question sometimes arises: what is the singer's normal voice for recording? Should he sing in a soft voice or with full volume? The answer of course depends entirely upon the singer's type of voice and the kind of performance he wishes to give; yet there is not always a choice. A person with a weak voice cannot sing in the manner of the operatic star who uses full voice. Neither can the same operatic star sound good nor use his voice to full effect in crooning. These two examples are extremes but they indicate how a person must be guided by the characteristics of his voice in choosing the kind of singing he will do. In a few instances a singer can work equally well with either a soft or full voice and cannot decide which type to select. He should then record a selection using first one method and the other. By comparing the results on the playback he should be able to judge their relative qualities and decide which type he prefers.

Now that the question of voice pick-ups have been explored, there still remains the problem of picking up the voice and the piano together so that they are blended properly. Whether the singing is picked up over a separate microphone or on the same unit that picks up the piano is unimportant. It is true that with a separate microphone a greater control is obtained over the volume of both the voice and instrument and in this way the balancing of the two sound levels is slightly easier, but with a bit of care equally good results can be attained with each set-up.

In each case a recording must be made of the selection in which the voice and piano accompaniment appear. When the voice is picked up over a separate microphone, its volume can be adjusted by varying the setting of the mixer control until the desired balance, in relation to the volume of the piano, is obtained. Roughly, the voice level is adjusted so that it is about twice as loud as the piano. When the singing is done over the piano microphone, then the singer must either set the volume of his own voice or, more practically, he must fix his position so that he obtains the desired volume. This is simple for all he needs to do is turn his head slightly, thus varying the amount of sound which will reach the microphone. However, should this action affect the quality of his voice, then he will either have to move straight back from the microphone or, if this makes playing the piano too awkward, the whole setup will have to be changed to obtain the required volume balance of voice and piano.

But balancing sound levels is not enough to produce a good pick-up. Sound perspective, one of the basic and probably most ignored principles of microphone technique must also be considered.

Sound perspective is quite similar to visual perspective. As a person sees an object close by or far away, so a sound can appear to originate from a close or distant source. By listening intently to a selection whether on a recording or over the radio, and trying to visualize from the sound heard the positions of the persons and instruments, it is usually quite easy to differentiate the close from the distant sounds, very much as a person can tell in darkness whether a sound is close to him or distant.

Now when a vocalist sings fairly close to the microphone and also sounds through the loudspeaker as though he were standing close to you, he is said to be in an intimate or "on mike" position. If he sounds far away, then he is in a distant or "off mike" position. When considering a double pick-up, such as a voice and a piano, the important thing is that these two sources of sound should seem to originate from the same point; that is, they should have the same perspective. Then and only then can it be said that the voice and piano are truly balanced.

There are some people who will say that this is really going to extremes, that most listeners cannot tell nor care about perspective balance. Perhaps not everyone can detect such defect, just as in a painting the average person may not be able to point out an error in perspective; still most people will feel that something is wrong and this sense of disharmony, small as it might be, may be enough to mar a good artistic rendition.

On the other hand, extremes of perspective unbalance can be not only glaring but irritating. Pick-ups that produce a close-up of the singer while maintaining a distant perspective on the piano definitely show poor microphone technique. The vocalist is prominent, but the accompaniment, instead of acting as solid support for the singer, seems disassociated from him and is often lost, particularly during vocal fortissimo passages. When the opposite situation occurs—the piano is "on mike" and the singer is heard in a distant pick-up, there is again a severe distortion of the musical picture. The voice appears to come from somewhere behind the piano and very often will be drowned out completely by the heavy notes of the instrument. It seems reasonable, therefore, that, in order to obtain good recording results, perspective balance should be sought and maintained as much as possible.

Thus if the piano has been set up for a distant pick-up, the singer should take a distant position; if the piano has been set for a close pick-up, then the singer must perform "on mike." Of course, you can always start out with the



Hoagy Carmichael on a close pick-up for a combination of voice and piano. Here, only the front beam of the ribbon microphone is used to get better balance between voice and music. The correct position will vary from person to person.

singer, fixing his position either close or distant and then moving the piano to maintain the same perspective. It is really not important which one determines the pick-up position, provided that they are both the same.

Once the pick-up and the recording have been made, the most accurate way to check both volume and perspective balances is to play back the selection with the recorder loudspeaker adjusted for normal volume. Then take a position in the direct beam of the loudspeaker, about four to five feet away from the cone. Close your eyes or turn them away from the source of sound. By listening intently to the sound of the voice and instrument you should be able to tell very quickly whether the volume of one or the other is incorrect; and as indicated before, by using your imagination to visualize the singer and the piano, you can check whether their separate tones seem to originate from the same relative distance.

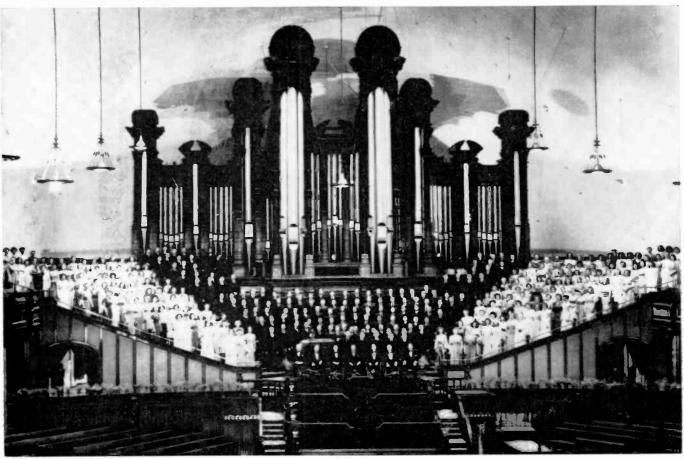
From all the factors mentioned, microphone technique may truly appear to be difficult to master, but progress can really be made quickly by keeping the following points in mind:

- 1. Find the correct working distance on the microphone for your particular type of voice.
- 2. Move the correct amount forward or backward, to compensate for soft or loud passages; and check the results

on a recording to make sure that you do not over- or undercontrol.

- 3. Do not weave or make abrupt and unnecessary changes in your position while singing into the microphone.
- 4. Do not handle the microphone roughly during your performance, or at any time for that matter.
- 5. Choose the type of singing which will present your voice to best advantage.
- 6. Check the recording of your selection for the desired volume balance between voice and piano; then make the necessary corrections.
- 7. Make sure that the voice and piano perspectives are the same.

Remember that the above suggestions will not teach you how to sing; they only summarize the factors which you must observe when singing with piano accompaniment in order to keep your performance free from preventable defects. At first such defects may be numerous, but as you become more and more familiar with the inherent characteristics of your voice and its effects upon the particular microphone and recorder you are using, you will discover that your microphone technique will improve rapidly and the results obtained in your recordings will become more and more professional in nature. Here again practice is the way to perfection.



The swelling choruses of the world-famed Mormon Tabernacle choir can now be heard by all visitors to the Tabernacle in Salt Lake City, Utah. A unique sound recording tape playback system realistically reproduces the music of the choir and organ for each group of visitors.

# TAPE RECREATES FAMOUS CHOIR AND ORGAN FOR VISITORS

. . . now every visitor can hear the Mormon Tabernacle Choir and Organ regardless of the time of his visit to the historic church

MONG the great sounds of America is the music of the Mormon Tabernacle choir and organ. And one of the great tourist attractions of the West is the Tabernacle, the home of the choir and organ, on Temple Square, Salt Lake City.

But most tourists who visited the Tabernacle never heard the choir and organ. The choir could be heard only on Sundays and at Thursday evening rehearsals. Organ recitals are given each noon and (in summer) early evenings; but tourists came at all hours.

Now, however, all tourists can hear the choir and organ at the rouch of a button by a guide.

It is as if he waved a wand and the choir and organist had suddenly materialized, filling the acoustically-renowned Tabernacle with majestic music.

It is achieved by a unique sound tape playback system, which was developed by sound engineers to meet several requirements.

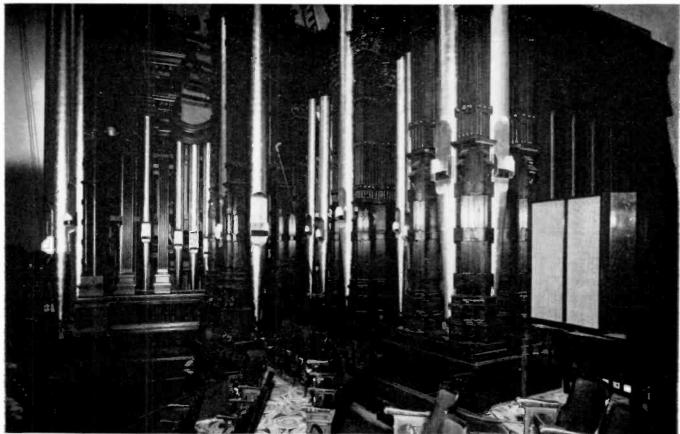
Of first importance, was the requirement that the system had to reproduce sound most realistically. It had to be capable of producing a variety of music so there would be a minimum of duplication during the 17-hour-day tourists

are guided through the Tabernacle during summers. The system had to be instantly ready for play. It had to be capable of being operated automatically. It had to be trouble-free; needing little maintenance.

The requirement for instantaneous play was achieved by modifying a Presto 625 four-track stereo playback unit to play four-track recorded tapes without rewinding.

The mechanism is equipped with two staggered playback heads, one for each set of stereo channels. The drive mechanism was modified so that capstans and take-up reel spindles are automatically reversed at the end of the tape. When the end is reached, the playback head which has been in use is cut out, and the other head is cut in. Relays reversing the drive, and switching heads, are triggered when metal foil at each end of the tape passes over contacts. These modifications ready the machine for re-play within 20 seconds after the end of the tape is reached; instead of several minutes which would be required for a usual rewind.

Twelve selections, each about three minutes long, were recorded stereophonically at  $7\frac{1}{2}$  ips in opposite directions on "Scotch" brand No. 111 tape, the standard tape for professional recording. The music is especially selected to





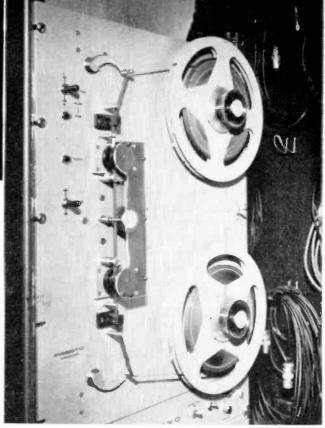
Top: Stereo loudspeakers are placed high in the choir loft at each side of the II,000-pipe organ to fill the Mormon Tabernacle with recorded music by the Tabernacle choir and organ, Lower: A guide touches a button to start the stereo tape recording playback system for the benefit of visitors. The playback unit is located in a basement room.

demonstrate the dynamic range of the choir and organ. The selections consist of religious, classical, patriotic and seasonal music.

A 25-cycle tone is recorded between each selection to automatically stop the machine and cue it for the next selection. The unit is started remotely by depressing one of two buttons hidden at strategic points in the Tabernacle.

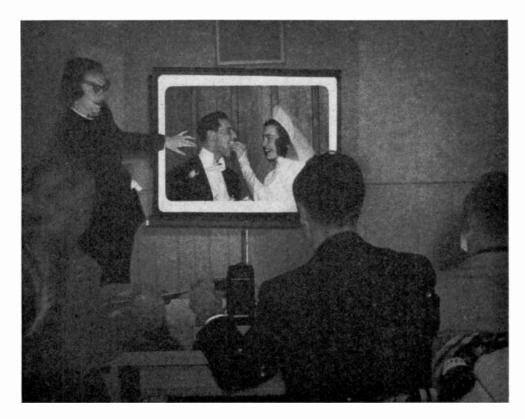
The loudspeaker system consists of two 15-inch woofers, a multi-cell horn and an 800-cycle crossover for each channel. The speakers, after extensive experiments to achieve the most realistic results, were placed high in the choir loft at each side of the pipe organ.

As the music fills the Tabernacle, the visitor marvels. He shuts his eyes and envisions the choir as he could see it on a Sunday morning. His visit to the Tabernacle is complete.



A sound system which operates automatically and unattended brings the majestic music of the Mormon Tabernacle choir to visitors to Temple Square in Salt Lake City, Utah. This modified Presto 625 four-track stereo playback unit plays four-track recorded tapes without rewinding.

# GIVE YOUR SLIDES A VOICE



by C. M. Waite

# Your color slides take on added interest if you use a tape-recorded commentary.

THE PROBLEM facing my cousin Chet was one that is common to amateur photographers. Week-end excursions and longer vacation trips had filled boxes and cabinets to overflowing with hundreds of color slides. They were excellent pictures and he enjoyed showing them to his friends. Occasionally he was asked to give an illustrated talk to neighborhood clubs, church groups and school classes. He had the projector, screen and all necessary paraphernalia to make up a score of lectures. Properly presented, they might even bring him paid engagements, or at least expense money.

But although other camera fans had praise for his pictures it was obvious that their interest was not always shared by less expert viewers. In time the reason became plain. Good as the slides were, they needed to be vitalized by an effective story of their background and significance. The off-hand, rambling "talk" about them left a letdown feeling.

Chet decided that if he wanted to provide the fullest measure of entertainment for his audience it would be necessary to (1) organize his travel facts and experiences into a bright, coherent story and (2) present it smoothly, with no dragging or awkward lapses. Sketchy notes, even a fully developed script, read aloud under the handicap of poor light proved to be only partially satisfactory. After much consideration he decided that there was only one way to achieve the results he wanted. That was with a synchronized tape-recorded commentary. So after some investigation into the tape-recorder market he bought a Revere recorder and was ready to go to work.

As I had a better knack than Chet at putting words together and reading them aloud I undertook to assist with preparing and recording the script. There were two essential facts we tried to keep constantly in mind. First, there must be no tiresome rambling of repetition. The description and informative matter on each individual picture must be written as concisely and entertainingly as possible. Second, the phraseology must be plain and uncomplicated so that the script would read smoothly when being taped.

This meant starting at the very beginning, with careful selection of the slides. Critical editing seems to be hard for amateurs. It tears their hearts to throw away shots they had labored so diligently to take, even though they came out light-struck, over- or under-exposed, cock-eyed or just plain uninteresting. If you are that way, why not ask some

forthright friends to do the job? People don't enjoy seeing a poor picture, not even when a strained apology is made for it. "My exposure meter had a bug and on top of that a dog ran in front of the camera, and Aunt Sue who is behind the rock was blowing out cigarette smoke so it made Bald Hill look like a volcano." No. If you have to make excuses for a slide, better not show it except to friends intimate and understanding enough to share your feelings.

Having selected the best slides we tried to arrange them so that each sequence of views tied in naturally with those next to it. In some cases this was a chronological arrangement, in other cases geographic. Knowing that your script is to be recorded and will always sound the same inspires you to pay more attention to this detail. About the tenth time around you can get very tired of hearing your own voice saying, "This is the speed boat on old Mud Lake—remember, I told you about it when we were looking at the pictures of Mud Lake Dam?" Better put all the mud in one place and make a single puddle of it.

After selection and sequence there came the question of length. We decided as a starter to run two half-hour scripts. This would provide flexibility in showing to groups of varied interests. Each half-hour recording would be a complete, finished show but the two could also be presented as an entity.

Next were interlocking problems—how many slides to use and how long to talk on each. For our own particular purposes we decided that a half-minute average for each slide was long enough. Some were eventually allotted forty seconds, others only twenty, but most of them were close to the half-minute average. This meant sixty pictures for the half-hour show, 120 for the hour, and they were arranged accordingly.

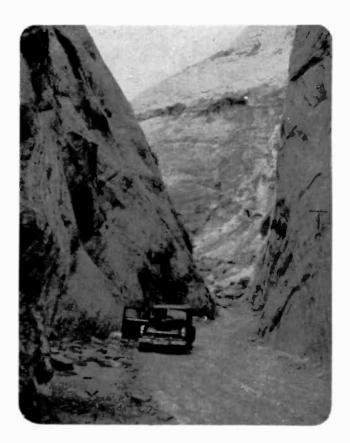
For some people thirty seconds may seem a pretty short space of time to comment on a slide. In some cases it is. But it is also a positive fact that the average person giving an unplanned talk is prone to wander, repeat himself and go into too much tiresome detail. If you write your speech, then read it aloud, you will see many passages that can be eliminated and others that can be condensed.

This is not to suggest an arbitrary time limit of thirty seconds to a slide. The time element depends on many factors. But never forget that the most important factor is the audience itself. You are trying to capture their attention and hold it. It is—or should be—the picture that tells most of the story. The narrator merely illumines it with information or description.

For example, one of our longer sequences comprised fourteen views taken along the famous auto road up Mt. Evans in Colorado. The series shows the trees near timberline, the snowfields a little higher up. Here is the comment on them:

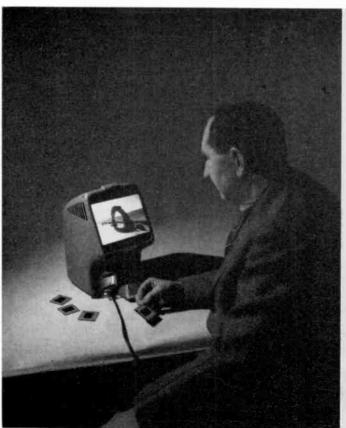
"The trees in this region of howling gales and polar temperatures manage to survive only by adapting themselves to a hostile environment. It is a grim and difficult

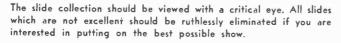
Top: About the narrowest four miles of highway in the United States, It is in the Capitol Reef National Monument. A summer shower can turn it into a river one to ten feet deep in a few minutes. Center: The trees near the timberline region manage to survive only by adapting themselves to the hostile environment. It is a grim and difficult war, never entirely won. Lower: After timberline a region of unbroken rock and then snowline. These are partial examples of the interesting facts that keep the audience listening to your recording and looking at your slides—with great pleasure.

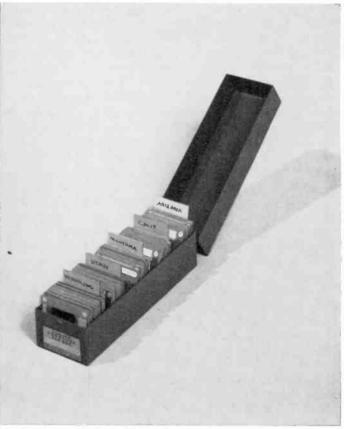












After the slides have been selected they should be grouped together and filed in a slide box. All should be thumb-spotted and in order, to match the sequence of comments that you have recorded on tape.

war, never entirely won. The wounds of battle show in broken, twisted limbs and stunted growth. The trees will hang on tenaciously for a few hundred feet more, continually becoming more dwarfed and deformed. But inevitably they must surrender and leave the fight for life to the shrubs and lichens and mosses.

"After timberline, a region of unbroken rock, then snowline. Here is the place where you wish you had brought along an overcoat. When you look at the depth of the snow, and then stop to think that this is early in summer, you realize what a brief time is given the tourist to take advantage of this unusual trip. It doesn't look like the firecracker season of July Fourth, but this picture was taken during that week. The road had then been open only five days."

Some of this is merely fill-in material. With seven minutes to talk about Mt. Evans, a somewhat leisurely pace was indicated. On the other hand there were only four slides of Capitol Reefs National Monument, so a greater amount of information had to be packed into each thirty-second period.

(A road winding through a deep canyon.) "Our next objective is Capitol Reef National Monument and to reach it requires an additional forty-five minute drive from Hanksville. Take a look at just about the narrowest four miles of highway in the United States. A summer shower can turn this road into a river one to ten feet deep in a few minutes. Signs are posted warning drivers not to enter the canyon if a shower seems imminent. There were a few clouds in the sky but we took a chance and made it

safely. The cliffs crowding the edge of the road reach heights up to twelve hundred feet.

Of course, the commentary would get pretty dull without an occasional spicing with humor, anecdotes or lively stories which, however, should be pertinent to the subject. For example, while looking at the passenger motorboat crossing Crater Lake our audience is given some of the customary tourist spiel:

"The homeward-bound boat carried more passengers and we had fun exchanging notes. We learned that monsters of all kinds once lurked about this place—at least according to Indian legends. Among them were giant crawfish that could reach clear from the lake to the top of the cliffs and drag down any luckless mortal. These fearsome gods once had a war with equally terrible gods from distant lands. A chief deity was killed and his head thrown into the lake, where it still remains in the form of Wizard Island."

When completed, our script was carefully typed double-space. Three descriptive paragraphs, for three slides, were typed on each page. No sentences were carried from one page to the next. These steps helped to insure easy reading, with no sentences running together or left dangling while a page was being turned. The tape recorder is ruthless in showing up the tiniest stumble or hesitation.

In the course of making up the story I had read it several times. At its completion I did so again for a final check. There were still two or three involved sentences that needed to be changed for smoother reading. Some tricky words were deleted or substitutes found. Here and there were a

succession of sibilants that needed attention. Overlong phases were chopped down.

Before "shooting," another matter occurred to us. There must be some unobtrusive way of telling the projectionist when to switch slides. It wasn't practical to expect him to follow the recorded talk on a duplicate script. Experimenting with various objects we finally found a metal ashtray that gave out a soft, musical ping when tapped with a pencil. It was a sound that could be heard easily by the operator of the projector, but went unnoticed by the audience after two or three tinkles.

At last we were ready for some trial runs on the tape recorder. The quietest place in the house was the basement rumpus room where the only noise hazards would be the hardly discernible ones from above—the possible sound of doorbell or telephone bell, or unpredictable Polly, the parrot. Polly proved to be quite cooperative. She only let out one squawk penetrative enough to require wiping off the tape.

I sat at a table with the mike about sixteen inches in front of me, trying to remember not to crackle the paper as I read. Across from me cousin Chet engineered the recorder. At the end of each descriptive paragraph I raised my finger and he gave the ashtray a single light tap. We experimented and played back a few times until the various effects seemed as perfect as we could make them.

Now we set sail. Everything went smoothly for three or four pages. Then, "unaccustomed as I am to public speaking," I bobbled a couple of words. The "Grand Canyon" became something like the "Canned Grunion." Had the talk been "live" that would have wrecked me. Spoken into the recorder it was no more than a laughing matter. Chet flipped the switches, wiped the tape clean of the offending paragraph while I straightened out my diction. Then we made a fresh start.

To a novice this feature of the tape recorder is easily its most comforting. Mistakes are so readily erased and corrected. You can go back a dozen times if necessary to get just the result you want. I went back many more times than a dozen! Mine was mostly throat trouble. It got scratchy with the strain of steady talking. But no matter. Did I cough, wheeze, croak or rasp? Chet patiently wiped

the tape clean of the offending paragraph while I sipped water or chewed a cough lozenge. Then we repeated, and went on with the tale.

Oh—I forgot the music. Before the script was read, Chet put a few strains from the electric organ on the tape. The same thing was done at the end. The final slide was a crimson sunset, with fade-out music. Old stuff but still effective.

The whole scripting-recorder project took quite a bit of time but it was lots of fun. I had never even seen any of the places I wrote about, but Chet had brought home plenty of literature as well as his store of personal experiences so there was more than enough material to work with.

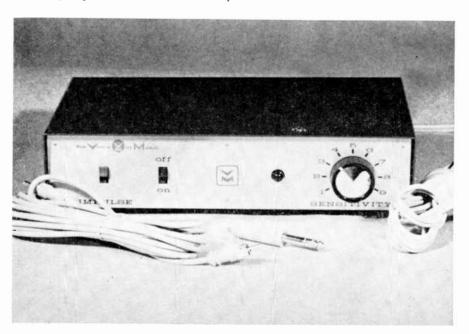
As most of Cher's shows are a solo performance he has found it convenient to set the recorder and projector handily on the same table. There are times, however, when the recorder is placed near the screen, for which purpose an extension cord is needed.

Was it worth the trouble? Definitely! The reaction of the audience now borders on enthusiasm instead of polite attention. So try a tape recorder if your slides are gathering dust. Then your friends won't have other engagements when you say, "Come over to the house and I'll show you my vacation pictures." You will soon understand why they used to shy away after you have recorded one of your impromptu, long-winded repetitious "slide talks" and then listened to it played back. But work up a smooth interesting commentary that will give your slides a voice and they will keep free of dust at least until you return with more from your next vacation.

The method we used to signal a change in slides is, of course, applicable to any recorder, new or old, monaural or stereo. If you plan to give many slides presentations it would be wise to consider the purchase of one of the synchronizers which will automatically change the slides on a signal from the tape.

There are quite a few of these on the market and generally they fall into two types, 1—those which depend upon the spotting of a piece of metallic tape on the recording tape where changes are desired and, 2—those which operate from an electronic signal. Both work very well and the choice is yours.

Typical of the automatic slide synchronizers on the market is this V-M unit which uses an electronic signal recorded on the tape to actuate an automatic slide projector. Other types employ conductive foil tape attached to the recorded tape itself. The conductive tape passing over contacts operates the projector. Both types are available at dealers.







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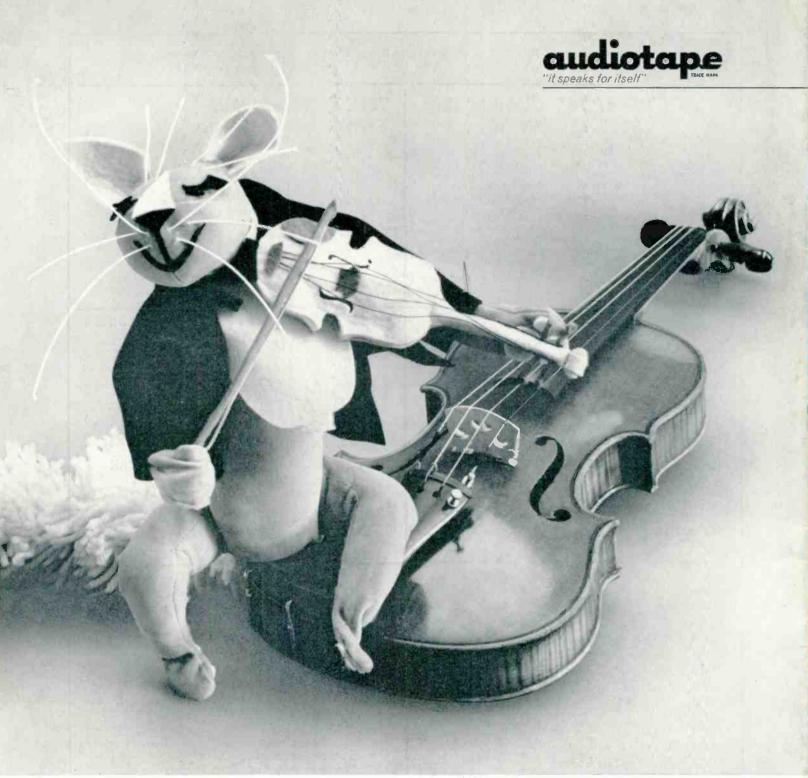
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