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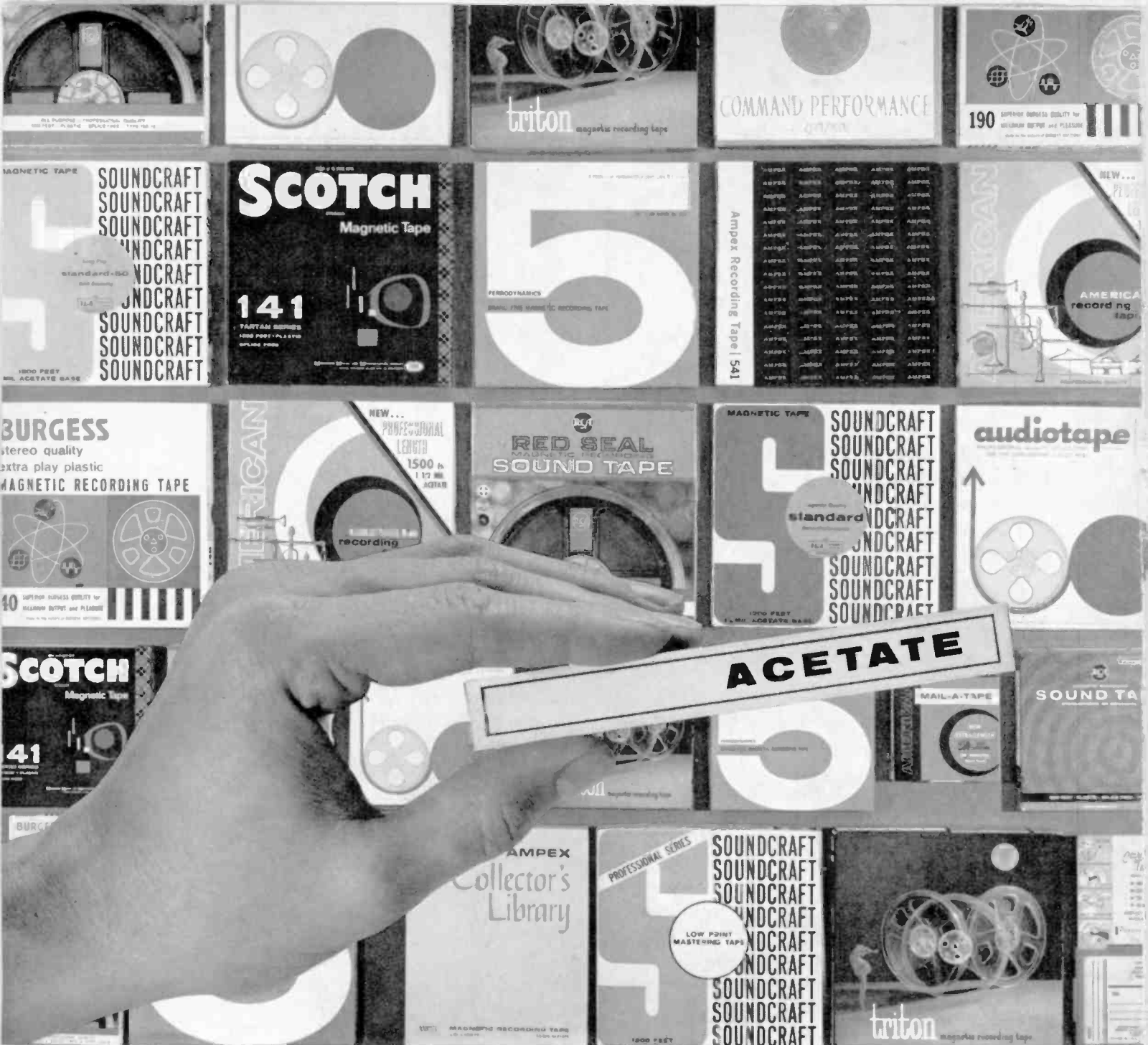
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OCTOBER, 1963

VOLUME 10 NUMBER 11

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TAPE RECORDING, OCTOBER 1963



# new tapes

★-fair   ★★-good  
★★★-very good   ★★★★-excellent

Classical—Robert E. Benson

Popular—F. Norman West

Jazz—George A. Heisch

## CLASSICAL

**STRAUSS: Also Sprach Zarathustra, Op. 30**

**Philharmonia Orchestra conducted by Lorin Maazel**

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

ANGEL ZS 35994

4 track, 7½ ips, 33 min. \$7.95

This is the third four-track stereo tape of this music and, unfortunately, not a very successful venture. Maazel's interpretation is impressive in the opening pages but not as successful afterwards, with exaggerated attention to orchestral detail.

The Philharmonia Orchestra plays well, but Angel's sound is hardly up to their usual standards. The organ at the opening definitely lacks bass, there is a prevailing thickness to the orchestral texture, and high frequencies are not clear. There is an electronic low frequency blurb shortly after the opening climax, a defect apparently in the master tapes, as it is heard in the stereo and monophonic disc versions as well.

It is difficult to understand why a work as short as this is issued on a tape with an interruption for the tape turnover, when it would make an ideal twin-pack coupled with something else, but all currently available tapes of this music have this unfortunate interruption. London's recording with Karajan and the Vienna Philharmonic Orchestra is one of their less-successful ventures, and the RCA Victor tape with Fritz Reiner and the Chicago Symphony (FTC 2115, \$8.95) is definitely the preferred version, although at its higher price it offers even less value.

**BRAHMS: Piano Concerto No. 1 in D Minor, Op. 15**

**Clifford Curzon, pianist, with the London Symphony Orchestra conducted by George Szell**

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

LONDON LCL 80126

4 track, 7½ ips, 50 min. \$7.95

This is one of the giants in the piano concerto repertory, and all of the participants on this new recording have been closely associated with it. Curzon recorded it twice before, once with the

National Symphony Orchestra of England conducted by Enrique Jorda, and once with the Amsterdam Concertgebouw Orchestra under Eduard van Beinum. Szell directed an old recording for Artur Schnabel, as well as a currently available fine stereophonic recording on the Epic label with Leon Fleisher as soloist. The London Symphony also has a recent recording of this concerto with Pierre Monteux conducting and Julius Katchen as soloist. The Fleisher recording is available on 4 track tape (Epic EC 802, \$7.95) as is the Katchen performance (London LCK 80070), also containing the same composer's Concerto No. 2, \$11.95).

This new release is superb in every way, with a mature and technically solid performance by the soloist, and powerful accompaniment by Szell and the fine orchestra. London's reproduction is exceptionally good, with orchestral textures vividly clear, and a wide dynamic range.

The only competition this new tape has is the Epic version by Leon Fleisher, which offers a more lyrical approach, recorded with a bigger concert hall effect and more resonant sound. Either tape offers a secure, satisfying account of this music. The Katchen tape is a better buy than either the Curzon or Fleisher as it also includes another complete concerto, but interpretatively and sonically it simply isn't in the same class.

**RAVEL: Complete Orchestral Works**

**Paris Conservatory Orchestra conducted by Andre Cluytens**

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

ANGEL ZS 36108, 36109, 36110 and 36111 (four separate reels)  
4 track, 7½ ips, \$7.95 each reel.

These four tapes contain all of the orchestral works of Maurice Ravel with the exception of his compositions for voice and orchestra and the two piano concertos. Much of this music is already available on four-track tape, but these attractive new Angel tapes offer strong competition to the older releases.

The first tape in the set (ZS 36108) contains three of Ravel's best-known works, *Bolero*, *Rapsodie Espagnole* and *La Valse*. The *Rapsodie Espagnole* is positively stunning, with a superior performance recorded exceptionally well,

As is the case with most performances of the *Bolero*, it is too fast, and the quality of reproduction isn't quite up to standard, with a blurred bass. A brilliant account of *La Valse* fills out this first tape.

Tape Two presents the complete ballet in one act *Daphnis and Chloe*. The chorus is the Rene Duclos Choir (ZA 36109). Cluytens offers a sensitive, vivid interpretation, and this tape is superior to the London tape conducted by Pierre Monteux, but is not in the class of the Munch performance with the Boston Symphony on RCA Victor (FTC 2089, \$8.95).

The third reel contains Ravel's complete score for *Mother Goose*, including the Prelude, Spinning Wheel Dance and four interludes seldom heard. This lovely music is wonderfully played, and the recorded sound is excellent. The less-important *Noble and Sentimental Waltzes* fill out the tape (ZS 36110). The final tape contains some of Ravel's shorter works, *Menuet Antique*, *Alborada del Gracioso*, *Une Barque sur l'océan*, *Pavane for a Dead Princess* and *Le Tombeau de Couperin* (ZS 36111).

A general high level of excellence prevails throughout these tapes, with the Paris Conservatory orchestra at its peak of performance, and fine interpretations from Cluytens. The horn section of this orchestra is quite disturbing to those accustomed to American and better European orchestras, sounding more like saxophones than horns. The solo horn in the Pavane is particularly uncomfortable to hear. However, there is much of value here; the tape process is fine with noiseless surfaces, and the four reels make an attractive set.

**RACHMANINOFF: Piano Concerto No. 3 in D Minor, Op. 30**

**TCHAIKOVSKY: Piano Concerto No. 1 in B Flat Minor, Op. 23**

**Vladimir Ashkenazy, pianist, with the London Symphony Orchestra**

**conducted by Anatole Fistoulari and Lorin Maazel**

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

LONDON LCK 80125

4 track, 7½ ips, 77 min. \$11.95

The Russian pianist Vladimir Ashkenazy was in the headlines several months ago when he and his British wife decided to live in Britain. London



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rushed to release two new recordings made by him (although since then he has decided to continue to live in Russia) in which he tackles two of the most demanding concertos for the piano. With Anatole Fistoulari conducting the London Symphony he plays Rachmaninoff's *Piano Concerto No. 3*, and with Lorin Maazel conducting the same orchestra, Tchaikovsky's *Piano Concerto No. 1*. Each is heard without interruption on this new London twin-pack tape.

Rachmaninoff's Third Concerto places extraordinary technical demands on the soloist and there are few pianists who can do justice to it. On the basis of this tape, Ashkenazy is not one of them. His approach is easy-going and lyrical, and his playing could hardly be called brilliant, although it is consistently beautiful. The Tchaikovsky fares somewhat better with an exhilarating finale, but neither of these performances are much more than routine. London's sound is lush and sonorous for the orchestra in the Rachmaninoff, less resonant in the Tchaikovsky, but in both the piano is distantly miked and unclear.

Although these performances are not the best on stereo tape (Van Cliburn's Victor recordings of both concertos are superior), those who want this music will find it here reasonably well played and recorded, and the tape is a good value in playing time.

**"MORE BEECHAM LOLLIPOPS"**  
**Sir Thomas Beecham conducting**  
**the Royal Philharmonic Orchestra.**

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

ANGEL ZS 35865  
4 track, 7 1/2 ips, 40 min. \$7.95

This is a most welcome tape, containing seven favorite encore pieces of the distinguished late conductor. Included are the Waltz from Tchaikovsky's "Eugene Onegin," the second Entr'acte from Mozart's "Thamos, King of Egypt," Juliette's Dream from Gounod's "Romeo and Juliet," Cortège and Air de Dance from Debussy's "L'Enfant Prodigue," the Dance of the Priestesses and Bacchanale from "Samson and Delilah" of Saint-Saens, and two works of Berlioz, the Minuet of the Will-of-the-Wisps from "The Damnation of Faust" and the March from "The Trojans at Carthage."

Needless to say, the performances are superior in every way, and the tape processing is superb, definitely superior to its disc counterpart. Angel's reproduction is natural and clear, with a wide dynamic range. This tape should be a part of every classical collection.

## JAZZ

### RHYTHM IS MY BUSINESS

**Ella Fitzgerald, with orchestra, arranged and conducted by Bill Doggett.**

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

Side 1: Rough Ridin'; Broadway; You Can Depend on Me; Runnin' Wild; Show Me the Way to Go Out of This World Cause That's Where Everything Is; I'll Always Be in Love With You; Hallelujah I Love Him So.

Side 2: I Can't Face the Music (Without Singing the Blues); No Moon at All; Laughing on the Outside (Crying on the Inside); After You've Gone.

VERVE VSTC 278

4 track, 7 1/2 ips, 37:15 mins., \$7.95

Ella Fitzgerald is herein presented in the realm of big band jazz—modern jazz at that. In this presentation she drives as hard as the excellent backing band of Bill Doggett. Her renditions, in many respects, are reminiscent of Ella's earlier years in the jazz field whereby she displays the talents of improvisation. Except for the modern arrangements, one gets the feeling of listening to Ella during the era of the big bands of the 30's and 40's.

Bill Doggett with his scoring and conducting proves that he is master of the big band jazz technique as well as being able to set the stage for a par excellence Fitzgerald session.

### THE TRIO, THE SOUND OF THE TRIO

**The Oscar Peterson Trio**

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

Side 1: Never Been in Love Before; (In The) Wee Small Hours; Chicago; The Night We Called It a Day; Sometimes I'm Happy; Whisper Not; Billy Boy. Side 2: Tricotism; On Green Dolphin Street; Thag's Dance; Kadota's Blues.

VERVE VSTP 287

4 track, 7 1/2 ips, 1 hr 29:55 mins. \$11.95

Oscar Peterson, Ray Brown, and Ed Thigpen comprising the Oscar Peterson Trio, give out with 1 1/2 hours of an "on location" performance which is driving, animated, and solid. The so called

"Trio" in this instance is a misnomer in that this album is one which shows the complete integration of the jazz thoughts and talents of these three artists into a oneness that can only be achieved under ideal conditions. The reviewer believes that the stage was set for this performance by the excellent response of the audience, the apparent relaxed nature of the musicians, and the environment of the London House where the session was taped.

Although all three of the artists are stylists, there is never a moment when one tries to outdo the other.

Of especial note are the renditions of I've Never Been In Love Before, Chicago, Sometimes I'm Happy, and Billy Boy. These tunes appear to be the most exhilarating of the presentation. Yet, this latter statement is not intended to detract from the other compositions played. By far this is one of the best performances offered by this group in the past few years.

**ELLA FITZGERALD Sings THE GEORGE And IRA GERSHWIN Song Book, With Arrangements and Orchestra Conducted by Nelson Riddle.**

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

Side 1: Soon; I've Got a Crush on You; Bidin' My Time; Aren't You Kind of Glad We Did?; Of Thee I Sing (Baby); The Half of It, Dearie Blues; I Was Doing All Right; He Loves, She Loves; Love Is Sweeping the Country; Treat Me Rough; Love Is Here to Stay; Slap That Bass; Isn't It a Pity; Shall We Dance.

Side 2: Love Walked In; You've Got What Gets Me; They Can't Take That Away From Me; Embraceable You; I Can't Be Bothered Now; Boy! What Love Has Done to Me; Fascinating Rhythm; Funny Face; Lorelei; Oh, So 'Nice; Let's Kiss and Make Up; I Got Rhythm.

VERVE VSTP 277

4 track, 7½ ips, 1 hour 27:30 mins. \$11.95

What more can be offered than Ella Fitzgerald, one of the greatest jazz singers, singing the tunes of George and Ira Gershwin, backed by the arranging and band of Nelson Riddle? In this recording we find Ella swinging in a smooth tempo displaying that she is still the queen of the female jazz singers. Riddle's fine support enriches Ella's artistry. The compositions are nostalgic of the twenties and thirties.

The overall qualities of the tape reviewed are excellent, stereo well balanced and pronounced. Followers of the Great Fitzgerald should have this recording. Also for those who like Gershwin, this session affords a somewhat different treatment.

**ELLA SWINGS GENTLY WITH NELSON RIDDLE**

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

Side 1: Sweet and Slow; Georgia On My Mind; I Can't Get Started; Street of Dreams; Imagination; The Very Thought of You; It's A Blue World.

Side 2: Darn That Dream; He's Funny That Way; I Wished on the Moon; It's a Pity to Say Goodnight; My One and Only Love; Body and Soul.

VERVE VSTC 283

4 track, 7½ ips, 41:15 mins., \$7.95

Ella Fitzgerald presents a stellar performance of "gentle swing" backed by the big band and arrangements of the inimitable Nelson Riddle. Those who have followed the career of Ella will find her far removed from the hard driving bands usually associated with sessions of this type. Instead, Ella is herein placed in a smooth modern jazz environment where she is perfectly at home.

Credits are due Nelson Riddle as his arrangements are such that it is quite apparent that he is fully aware of Ella's talents and has written the scores to enhance her artistry. The ensemble solo work of the band is worthy of note.

Devotees of Ella Fitzgerald as well as Nelson Riddle should have this recording in their collection.

**POPULAR**

**HOW THE WEST WAS WON**

**Original Sound Track**

**Alfred Newman, Conducting**

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

MGM STC 4201

4 track, 7½ ips, 41 mins., \$7.95

If you have dreamed of having Cinerama music in your own living room, the engineers have provided sound that is very close to the real thing. For those who have seen the film, it is a revelation; others who haven't will want to see it after hearing this tape.

The combined talents of Alfred Newman, who composed and conducted the magnificent score, and Ken Darby, who

made the arrangements for chorus and orchestra, provide authentic "folk lore" themes for this glimpse of Musical Americana.

Debbie Reynolds sings a few songs, and MGM's recording staff provide the distinctive presence of Cinerama Sound that makes this tape a thrilling listening experience. One of the best sound track tapes we have heard.

**BRASSY PIANO**

**Joe "Fingers" Carr**

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

Side 1: Dill Pickles; Maple Leaf Rag; Down Home Rag; Grandpa's Spells; Johnson Rag; Tiger Rag.

Side 2: Too Much Mustard; Cap D'Antibes; Stumbling; Bugle Call Rag; Entertainer's Rag; Notoriety.

WARNER BROS. WSTC 1456

4 track, 7½ ips, 27 mins., \$7.95

Joe "Fingers" Carr is perhaps one of the most gifted pianists in the field of Red-Hot Ragtime piano, and he pulls out all of his tricks on this tape. He has surrounded himself with some mighty powerful brass, and together they romp through a dozen of the good old all-time ragtime favorites.

Joe's ivory tickling is fast and furious. The brass section enters into the spirit and follows his style, and the whole session emerges as bright, happy music reminiscent of silent movie days of the 20's. Sound is recorded in brilliant sharp stereo.

**POPULAR PIANO CONCERTOS from the GREAT BROADWAY MUSICALS**

**George Greeley and the Warner Bros. Orchestra**

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

Side 1: You'll Never Walk Alone; I Could Have Danced All Night; The Girl That I Marry; Hernando's Hideaway; I Have Dreamed; We Kiss In a Shadow; Stranger in Paradise.

Side 2: I Love Paris; Dites-Moi; Guenevere; If I Love You; Come to Me; Bend to Me; Slaughter on Tenth Ave.

WARNER BROS. WSTC 1415

4 track, 7½ ips, 35:30 mins., \$7.95

George Greeley is a most versatile and talented pianist and arranger who has

the uncanny ability to take almost any type of music and play it to your complete satisfaction. He turns his attention to a group of Broadway favorites on this tape, and demonstrates that he is equally at home with show tunes, as he imparts emotion, feeling and sincerity to every number.

The unique arrangements, beautifully executed by Mr. Greeley and the Warner Bros. Orchestra, make this a thrilling listening experience. Impeccably recorded by the engineers; no trickery, just lovely music.

### AN EVENING WITH ROMBERG Carmen Dragon Conducts The Hollywood Bowl Pops Orchestra.

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

Side 1: Deep in My Heart Dear; The Riff Song; One Alone; Softly; As In a Morning Sunrise; Stout Hearted Men; The Desert Song.

Side 2: Drinking Song; Serenade; One Kiss; Lover Come Back to Me; Close as Pages in a Book.

CAPITOL ZW 1804

4 track, 7½ ips, 39:45 mins., \$7.98

Sigmund Romberg has written an exhilarating type of music that has wide appeal, and becomes even more attractive under Carmen Dragon's baton, as he conducts the Hollywood Bowl Pops Orchestra. When both are contained in one recording, the ultimate in tape music reproduction is the result.

This is a dynamic presentation of the ever popular Romberg melodies, elegantly performed in full symphonic orchestrations. Whether it be a romantic ballad or rousing drinking song, they are all beautiful, nostalgic and unforgettable, a delightful program for everybody.

### STAR DUST

Boston Pops—Arthur Fiedler

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

Sequence A: Star Dust; Stairway to the Stars; Wunderbar; When You Wish Upon a Star; You and the Night and the Music; Clair de lune.

Sequence B: Blue Moon; Tonight; Reverie; The Night Was Made for Love; Deep Purple; The Glow Worm.

RCA VICTOR FTC 2137

4 track, 7½ ips, 42 mins., \$8.95

It's always "Star Dust" when Arthur Fiedler and the Boston Pops play, and this tape has just the kind of music you would like to hear at an evening concert in the park.

This is another exhilarating offering by the "Old Master" of some of the best popular songs of the day. The selections will surely please even the most discriminating listener; great tunes such as Star Dust, Wunderbar, Clair de lune, Blue Moon and Deep Purple, acquire a new lustre with the symphonic arrangements by Richard Haymen and Jack Mason.

Recording technique and fidelity are excellent. Recommended for good listening.

### ALL THE HITS FROM "OLIVER!"

The Melachrino Strings and Orchestra

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

Sequence A: Overture; Boy for Sale; Consider Yourself; Where Is Love; It's a Fine Life; Be Back Soon.

Sequence B: As Long as He Needs Me; I'll Do Anything; Reviewing the Situation; Who Will Buy?; Finale.

RCA VICTOR FTP 1181

Although the original cast album of "Oliver" was an outstanding success, the musical score of Lionel Bart can very well stand by itself without lyrics as good entertainment.

The Melachrino Strings interpret the various moods of the songs, wistful, moody or gay, with beautiful tonal combinations, and wide dynamic range, due, of course, to Melachrino's skillful arrangements. The strings are vibrant and brilliantly recorded, with quality and stereo by RCA making the entire program a delight.

### AN EVENING WITH COLE PORTER

Carmen Dragon Conducts the  
Hollywood Bowl Pops Orchestra.

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

Side 1: Begin the Beguine; In the Still of the Night; Wunderbar; So In Love; Just One of Those Things.

Side 2: Night and Day; I Get a Kick Out of You; Easy to Love; I've Got You Under My Skin.

CAPITOL ZW 1805

4 track, 7½ ips, 40 mins., \$7.98

A welcome addition to any tape library is this program of the best Cole Porter tunes as played by the Hollywood Bowl Pops Orchestra. The selections are well chosen and representative of the unusual creative ability of Mr. Porter.

Carmen Dragon has arranged and conducted this beautiful and outstanding music with the grace and finesse it deserves. It is rich, full and just right in every detail.

The engineers and all concerned have carried out their responsibilities with such dedication that another masterpiece has been created. Well balanced stereo helps make this even more enjoyable.

### THE CASCADING VOICES OF THE HUGO & LUIGI CHORUS Hugo & Luigi Chorus

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

Sequence A: Moonlight and Roses; It Happened in Monterey; Look for the Silver Lining; Paradise; Marcheta; When Day Is Done.

Sequence B: For You; I Love You; Three O'Clock in the Morning; I'll See You in My Dreams; Remembering Time; Good Night Sweetheart.

RCA FTP 1193

4 track, 7½ ips, 40 mins., \$7.95

It is obvious that much thought and care went into the arrangements and recording of this release. The selections are some of the best out of the past, and are performed with a perfect blending of voices and orchestra that create a most pleasant and unusual effect.

The large chorus makes its presence felt with a six voice soprano group that virtually "cascades" melodic phrases right up to the skies. These are better than average offerings, that will probably have you singing along with them. Fidelity and stereo effects are fine.

### JALOUSIE

Boston Pops—Arthur Fiedler

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

Sequence A: Jalousie, Le Cid, Castillane, Aragonaise, Navarraise, Il Guarany; Overture, La Sorella-March.

Sequence B: Espana Cani, Brazilian Dance, Zacatecas-March, Jamaican Rhumba, Danze Piemontesi.

RCA VICTOR FTC 2134

4 track, 7½ ips, 41 mins., \$8.95



Arthur Fiedler continues to produce tapes, with regularity, that are uncontestedly tops. His offerings are so varied and numerous that there seems to be only one conclusion: if Fiedler and the Pops do it, it has to be of the best, and the subject matter or theme doesn't really make much difference.

This time, it is the Latin flavor, and even some of the Latins are bound to be surprised at the authenticity and realism. Starting with the album's title tune, "Jalousie," we hear a group of Latin favorites played as only the "Pops" can. Sound that is rich, full and overpowering, orchestrations filled with fire and rhythm, make a performance that is superb! Audiophiles will love this one.

## CAPSULE REVIEWS

**CAPITOL ZW 509, MUSIC, MARTINIS, and MEMORIES.** Jackie Gleason, 4 track, 7½ ips., 34 mins., \$7.98. When Jackie Gleason presents music he makes sure it is smart, smooth and enormously soothing. He is really a mood music man, and the numbers selected for this album are some of the best pop standards. If any criticism is eligible on this offering it would be because of lack of variety; too much sameness, and this includes Bobby Hackett's trumpet solos; may be tiresome to some. Regardless, here is sweet music impeccably recorded in fine stereo tradition.

**RCA VICTOR FTP 1197, ALOHA FROM NORMAN LUBOFF.** The Norman Luboff Choir, 4 track, 7½ ips., 28½ mins., \$7.95. Most of us who are accustomed to the smooth, soothing sound of Hawaiian music performed by native voices and instruments, may find the style of the Luboff choir somewhat different. Their arrangements and rendition provide a pleasing, though slightly less than authentic treatment, of these Polynesian melodies. Effective use is made of the orchestral accompaniment, particularly on the rhythm numbers. Recording, stereo and fidelity are good.

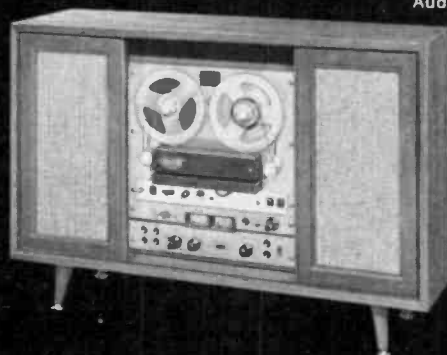
**VERVE VSTC 291, ELLA SINGS BROADWAY.** Ella Fitzgerald with Rodgers and Hammerstein; Lerner and Lowe; Adler and Ross, and Frank Loesser, 4 track, 7½ ips., 34:20 mins., \$7.95.

An excellent rendition of Broadway show tunes by Ella Fitzgerald. Not a jazz performance as usually associated with this artist. For those who have followed the career of Ella, this album will be an asset to the collection. The backing band and arrangements are very good, have a modern flavor, and set up an environment that is worthy of an artist such as Ella Fitzgerald. The selection of tunes is mediocre. Fidelity and stereo effect are above average.

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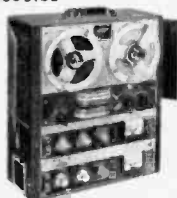
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# SERVICING THE BATTERY-OPERATED TRANSISTOR TAPE RECORDER

by John L. Russell, Jr.

**Presents the unique features of battery-operated recorders and discusses operational problems.**

The market is flooded with those small economic portable battery operated transistor tape recorders, and the buying public has responded favorably to their appeal. Ranging in price from a twenty dollar bill upwards to fifty dollars or more, they are a fine example of what can be done with miniaturization and transistors.

However, many of these units are becoming inoperative and are showing up in increasing numbers at repair shops. Electronic enthusiasts who have been fixing their own radios, hi fi's, and TV's are fascinated to dip into the back of the new tape recorders. In doing so they are often quite surprised to learn that in some ways the tiny units are the same as the conventional tape recorders, but in other ways they are quite unique and different.

The most important drive mechanism in the conventional tape recorder, for example, is the capstan which moves the tape at the desired speed. On rewind, the capstan is disengaged. The economy transistor tape recorder has no capstan at all. Reel-to-reel drive is used. A motor shaft drives the rubber rim of a turntable on which the 3-inch tape reels are placed.

When the tape is moving forward, the motor shaft presses on the rim of the takeup turntable and rotates it. The takeup reel pulls the tape off the supply reel and across the heads. The supply turntable spins freely. The diameter of the tape on the reel increases gradually. Because the take-up reel is rotating at a constant number of revolutions per minute, tape speed across the head increases as the tape is played. Consequently the tape speed on a typical machine may run from three and one quarter ips at the start of the tape to six and one half ips at the end.

In the conventional system the

tape speed is controlled by the capstan assembly so the drive to the takeup turntable only winds the tape on the takeup reel. So while the basic system is similar, the same thing occurring in both, the capstan is missing. The story is related about the technician who impatiently examined a portable transistor tape recorder and not knowing a thing about them only wished to get rid of the customer. He took a quick look into the set and exclaimed: "No wonder it won't work—there's no capstan!" He sent the customer, a pretty young girl out to get a new capstan. By the time she had made the rounds of electronic supply houses she wearily attempted to return her "defective" tape recorder to the place where she purchased it. After leaving with her new tape recorder the salesman, scratching his head commented to the manager: "Imagine—her tape recorder didn't have a capstan—damn imports!"

Another very unique feature of the small battery operated transistor tape recorders is the rocking assembly for the motor. The motor is mounted on a bracket supported at each end, so it can rock from side to side like a cradle. There are two shafts on the motor, one at each end. So by simply lifting up one side of the cradle, one shaft of the motor presses against the rubber rim of its associated turntable. This lifting is done by the motor switch, which moves against one of the control tabs. At the same time, the switch closes, starting the motor. Now the same switch controls the head pad as well. The pad is pulled off the head surface in the rewind and stop positions. Of course, the motor's rewind shaft has to be larger in diameter than the forward shaft so rewind is faster than forward. And there is no fast forward as there is on the conventional unit.

The amplifier is conventional, albeit small, and the record-play

switching merely turns the amplifier end for end so that it amplifies the head output in play, and the mile output in record. In recording, the speaker is disconnected so an earphone is used to monitor recording.

There is no bias oscillator—erasing is done by a permanent magnet on which the tape runs when recording. The erase magnet covers the top half of the tape, because the head is, in fact, half-track.

Now as in conventional recorders there are three types of troubles: mechanical, audio, and operational, but before even considering these difficulties the batteries must be checked to make sure they are installed properly, the tape may be on the wrong side of the tape head, or it may be twisted or misthreaded. Make sure the head is clean.

If the trouble is mechanical or associated with an inoperative motor the cure is effected by simply applying pressure with the fingers to alleviate pressure or to increase pressure. The tab which holds the fixed end of the motor cradle spring can be bent away from the cradle for more pressure or toward it for less pressure.

The dc resistance of the motor should run around 5 to 10 ohms and this is easily checked.

Now if the motor is running all right, but the machine simply won't record or play, apply an audio signal across the head terminals and turn the switches to play. If signal is heard from the speaker, disconnect the head and read its dc resistance. Testing the dc resistance of magnetic heads is not common practice in conventional recorders, but needs to be done in this case. Ohmmeter testing actually magnetizes the head, and increases the noise level of the tape machine. The noise level in these machines is high to begin with and no increase in noise is noticed after dc testing. The dc resistance of

the head should normally run somewhere between 100 and 1,000 ohms.

If the amplifier is suspect inject an audio signal at the base of each transistor to isolate the bad stage. A signal generator is fine, but you don't even need it. Touch one finger to a collector of the output stage and another finger to each base, starting with the first transistor. Your body forms a feedback loop causing the amplifier to oscillate around the good stages.

It is a good idea to check all the transistor leads to make sure they are not contacting each other. The ends of resistor bodies may short to the nearest object, so it is wise to check to see that each component is isolated properly.

If anything through the amplifier works properly, check the speaker line. Sometimes the contacts on the earphone jack open so they can be re-bent very simply.

If the machine plays but will not record, better check the mike. Apply an audio signal to it and listen for talkback. Crystal mikes are used for these recorders because they are cheapest.

If trouble persists in spite of the fact that the mike checks out, then test the recording system by injecting an audio signal across the head, with the machine in record position, of course. If this can be heard on playback, inject a signal at the collector of the output stage and the base of each stage, working towards the first transistor. Listen to the playback after each test. This is a bit time consuming and requires a bit of patience, but it is a good method.

If, after all this, you still can't get the darned thing to work and you are sure you have checked all the elementary possibilities, like making sure you turn the set on, making sure you are not using a blank tape, or making some idiotic mistake or oversight, it might be well to get another one to replace the defective one. Sometimes if a tape recorder is left in intense heat, in spite of the fact that most of them have a heat sink inside, it can be destroyed hopelessly. In spite of its claim to ruggedness, dropping one doesn't help matters either. Because these units are so light, compact, and easy to move around, they are often subjected to the most extreme abuses just in normal portable use.

# Crosstalk

from the editors

## Pre-recorded Tape Sales

Retail sales of pre-recorded tapes in 1962 reached new heights and have increased by more than 40 percent over the sales recorded in 1961, as reported recently by the Record Industry Association of America.

Sales in 1962 came to \$8.5 million for the previous year. In both years the Association reported that the classical repertoire comprised slightly more than 30 percent of the total sales.

The Association made these totals at list prices and they include only reel-to-reel tapes operated at 7½ ips.

## British Reader Answers Crosstalk

"With reference to the 'Crosstalk' section in February *Tape Recording*, which I have the pleasure of reading, thanks to the kindness of one of my American tape friends, I should like to pass a few comments in answer to your earnest plea for information on why local American tape clubs fail.

"Whilst there is no simple solution, the following suggestions may be of help. These suggestions are, of course, only my own opinions.

"In the first instance, I would say that it costs the average Englishman a substantially higher percentage of his salary to purchase his tape recorder than it costs the average American. Therefore, he buys it as a practical investment and not because it is the 'latest gimmick.' It is popularly believed over here that the American is very 'gadget minded!' I am suggesting here that the cost of equipment in England lessens the number of non-serious recordists.

"Secondly, I think that temperament plays a big part in the question. Having spoken with friends who have lived in the U. S., I have come to the conclusion that the American is inclined to indulge in strenuous outdoor entertainment, maybe because he has better weather, faster super-highways, etc. Anyway, the result

is the same—he has a 'dynamic' temperament.

"Conversely, the Englishman, due maybe to poorer weather, congested roads, etc., has developed a 'static' temperament.

"People with a dynamic temperament tend to be more independent in their outlook than the static type. Static people are more likely to band together for their mutual entertainment. This is symbolized in my Country by the many successful local face-to-face clubs of all descriptions.

"From speaking with my eight American tape friends it seems to me that the only section of the population that really likes community organization is the ladies!

"Finally, as food for thought, I would like to point out the difference in equipment trends between our two countries at the present time. Your popular image of a tape recorder is a multi-track, multi-speed stereo machine, whereas here the cheaper recorders have either two or four tracks and one speed. A better class machine would have one or two additional speeds. In both cases they would most likely be monoaural. Stereo is not popular. May I therefore dare to suggest that your average recorder is too complicated for your average user? Complexity could quite well kill a lot of enthusiasm.

"This, then, presents the problem as I see it.

"In conclusion the only suggestions that I can make to effect a cure are:

"1. Educate people to accept the tape recorder as a machine outside of the 'gimmick' class, to attract the serious recordist.

"2. Form clubs with outdoor interests and run projects that have individual beginnings but communal end aims, to attract the independent recordist.

"3. Provide simpler recorders, to attract the technically and mechanically limited recordist.

". . . . . and better luck in the future!"

John N. Davies  
19 Wythenshawe Road  
Sale, Cheshire, England

# TURN THOSE TAPE TRICKS INTO CASH

**Author discusses how to prepare and submit articles for publication. Easy, step-by-step process that should encourage tape hobbyists to share their knowledge with others.**

by John Berridge

There are a score of ways of turning the fun of tape recording to a small profit, enough to pay for tape and that extra piece of gear. You can record weddings, for instance, or set up a "Message to an Overseas Relative" bureau. You can record a sound album for people much as a photographer would make up a picture album, or you can interview all the prominent inhabitants of your town for the archives. The pages of this magazine in the past have carried details of any number of ways of increasing the scope of your taping as well as making it lucrative. And in that fact, alone, lies the clue to yet another way to rake in the green stuff. Write about it! Lots of people have, haven't they? No, it isn't as difficult as you'd think. In fact it can be a lot easier than some of the other successful methods. Let's deal with the objections in order.

How much do I charge? This is the biggest stumbling block to all those other enterprises. You don't particularly want to do the job for nothing even though you may only want to clear expenses and eventually accrue enough for that extra mike you've always wanted. Neither do you want to charge as much as the professionals, so you're in a quandry. With writing this is the *last* of your worries. Turn out a reasonable article and the editor will pay you a lot more than you expect (unless you're particularly greedy!). Just as an example, the first article I wrote some years back paid me quite a few times the amount I'd guessed at in my ignorance. So, you can forget the problem of setting prices.

How much will it cost me? Unlike other enterprises, practically nothing if you don't want it to. There are many ways of writing an article and naturally some are

better than others, but even the best rarely involve more than a small fraction of what it's possible to make on that article. The biggest outlay I've ever run into so far has been for photographs (more on that later). You'll have plenty left over to invest in even the most expensive accessories.

But I'm not a trained writer or an "expert" on tape recording? Neither am I, but magazines like this one are written largely by enthusiasts and not necessarily by trained journalists. Anybody who can write a letter is capable of writing an article, and a college major in English grammar may be no better off than anyone else. A grammatically perfect piece of prose is almost unreadable. It's too stilted, and we're not out to create literary masterpieces. The important thing here is to be able to *tell* readers something. If you can state it to a person standing next to you, then you can *write* the same thing in an article.

As for being an "expert," a knowledge of the subject is important, yes, but there's a great misunderstanding as to what this means. The dictionary defines an expert as "someone having special knowledge of a subject," and if you've developed certain tricks to help you in your own recording, then you're very much an expert as far as those tricks are concerned. You wouldn't hesitate to argue enthusiastically about them for hours to another tape fan and this is essentially what article writing is.

Let's assume then that you have a couple of methods you've developed, maybe a friend has a couple more, and you've seen a third person using a gimmick or two. Now, there's no doubt whatever that there'll be lots of people who'd like to hear about them, beginners perhaps (as we

all were once) to whom everything is new. What are some of the best ways of telling them your story?

Well, first of all, has anyone else written about anything quite similar in the last six months or so — in this or other magazines? If they have you'd likely remember the article since, as an enthusiast, you probably read as much on the subject as you can find. If they haven't (and an itemized search isn't *absolutely* essential; an editor will know) then query the editor first with your idea. This will save you a lot of work just in case he already has something similar in the works. Don't forget that stamped, addressed envelope; it helps create a favorable impression with the editor, quite apart from being the polite thing to do. When you get a go-ahead, then's the time to think about actually writing the article itself.

The good old-fashioned school essay method of writing is still one of the best. Start by making notes of everything on the subject that comes into your mind. Once you're satisfied that you've scribbled down just about all there is, then you're not likely to overlook any in the actual writing. Then write the article itself in the form of a rough draft. Divide it into three parts: (1) the title and opening paragraph; (2) the main body; and (3) the ending. The title and opening paragraph usually require a little thought so leave those for the moment and concentrate on the second and third segments. For the main body of your article, plainly and simply describe what you did and why, what you used and why, what worked and what didn't (the last so that your readers needn't cover the same ground as you had to) and why. If you used certain



components, include a complete parts list down to the nuts, bolts and wire. And *don't* elaborate; it takes very little to rack up three or four pages of copy. Just don't miss out on anything important or "you'll get letters." The ending is easy — just round off with one or two simple sentences suggesting the reader try your idea or something like that.

*Title and Opening.* An obscure title is useless and while a catchy one attracts the eye, you *must* tell what the article is about in your title. "How To Edit Tape" may be corny and uninspiring to you but it makes the point immediately—this is what counts.

The opening paragraph or two is the sales pitch for the rest of your masterpiece, and it's worth working at (it also helps sell the article). It must attract the reader's interest so that he'll read on or he will simply flip the page. A good way to do it is to explain to him that there are problems that he can easily run into with his brand new machine, and then go on to tell him that you've developed a simple and cheap way out of these problems that he's perfectly free to use. Not only do you offer him information he can actually put into practice but you also set the stage, as it were, for your more detailed data. Worry him with the possibility of troubles (which *do* exist, by the way), then offer him an easy way out and he'll be grateful that you

solved problems for him that he didn't even know existed. Your article is thus a tangible help to other enthusiasts.

*Submitting the Article.* Once you're satisfied with the rough draft, get it typed up on good quality paper. Double-space the typing both between words and between lines so that the editor has room to make any corrections he may see fit (which should only be minor anyway because if you're way off the beam, it'll bounce back to you to re-write), and if you make too many mistakes on a page, scrap that page and start it again (since the typesetting is done directly from your manuscript). If somebody else does the typing for you, mention these points to them. Add the title tucked away in the top left-hand corner of each page (after the first, which has it slap in the center, of course) and number them successively so that if they get separated they won't get lost. Make and keep at least one carbon copy so that you'll have a record of what you submitted (the rough draft may not be accurate, particularly if you've made a number of improvements during the typing, as I usually do). Don't staple the pages together or fold them; put them in a large-sized envelope along with a smaller, self-addressed and stamped envelope and mail it off. No letter is needed; the edi-

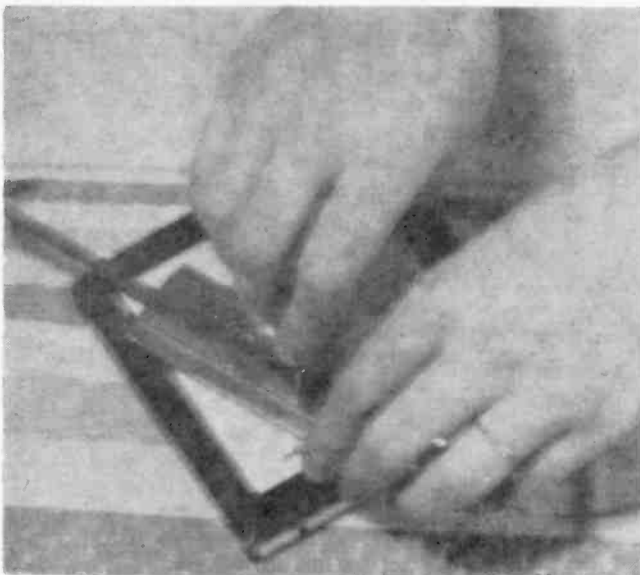
tor is interested only in the article at this stage; and please stick on *adequate postage*. All you do then is sit back and wait. Don't expect a fast answer as a magazine such as this would take about three weeks to get on to the stands (to be on the safe side) and articles are usually paid for after publication.

And there you have it — money and a certain amount of prestige, plus a whale of a lot of satisfaction for not too much hard work.

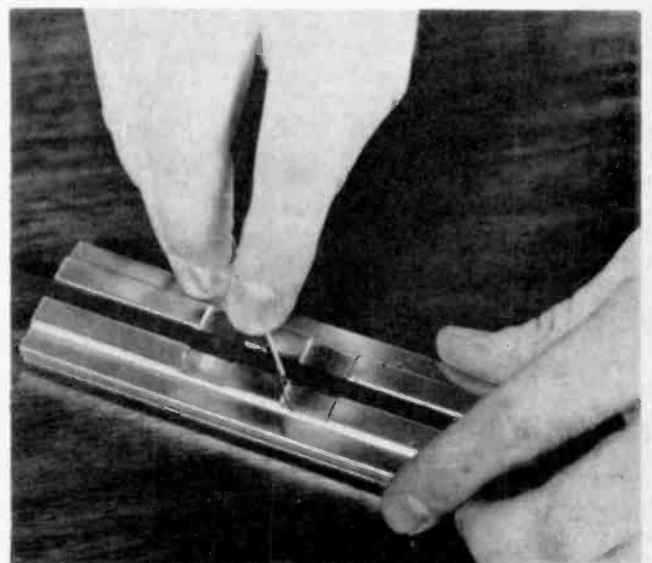
*Advancing from There.* You'll probably find, as I did, that once your first article has made its appearance and your friends have started showing new respect for your ideas (and the bank account looks somewhat less anemic), you get almost as much fun out of writing about recording as you do out of the actual recording itself. What's the next step?

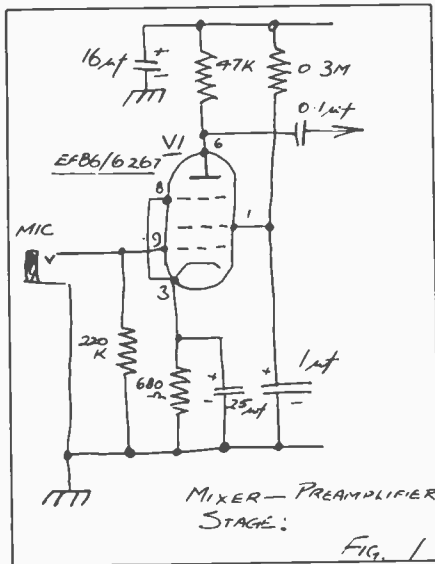
First, the question of rejected articles. *Nobody* clicks every time; everybody gets rejects for the simple reason that it's almost impossible for a free-lance writer to predict exactly what an editor is going to use (though a lot of those who have been at it a little longer than I seem to be pretty good second-guessers). Personally, I've been lucky but I'm forced to admit that it *was* luck (which increases the fun if anything). A rejected article or idea is never wasted. It may simply be turned down because it

*Don't turn in photographs like this, they won't get into print. Out of focus, and with a case of camera shake, against a confusing background with a poor placement of the hands and parts, this shot tells the reader nothing.*



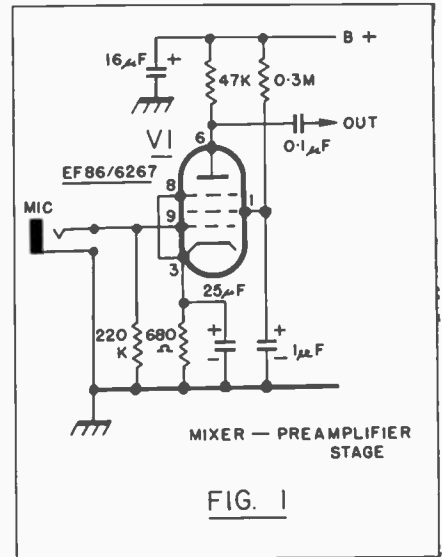
*The same subject, with dark tape on a light-colored splicing block against a dark background. It shows the simplicity of a splicing block and the diagonal cut made in editing. Careful focusing and elimination of unwanted detail avoids confusion.*





A rough sketch like this is enough to give an idea of the circuit used for your set-up. It includes the tube type together with the pin numbers and the value of all the other components. If you use more than one diagram include figure numbers so that you can refer to them in the text.

If you can turn out a proper drafting job like this so much the better. Unless time is particularly short or Editor wants your article in immediate print, the magazine will turn out the job from a rough sketch, but you'll improve your chances if you do it yourself.



doesn't interest enough readers, because it clashes with something else the editor has already scheduled, or because it's untimely (an article on outdoor recording won't be very popular in November or a "project-for-a-rainy-evening" in July). Rewritten from a different viewpoint or submitted at a more suitable time of year, and this same article could sell, even to the same magazine that turned it down originally. Only experience will help you work this one out. But never throw out a rejected article. File it away for a while and try with another idea; then pull it out and take a second crack later on.

With one article in print and paid for, you'll feel like trying again only better this time. Well, continue writing a couple more the way you did the first, just to get the practice in stringing words together. No need to worry about shortage of ideas, you're pretty certain to have come up with at least a couple of tricks, either your own or someone else's, since you started on that first item.

**First Improvement.** I mentioned the expense of photographs earlier for good reason. An article consisting of words only tends to make for rather a dull page, visually. Take a look at Tommy Thomas' articles, for instance. They're characterized by photos, lots of 'em, big fat, juicy ones and they're *not* taken by a professional either. They're not masterpieces of photographic art (pardon, Tommy!!); they *do* put over the necessary information exceedingly well, and the latter is what counts. He even photographs his diagrams, and

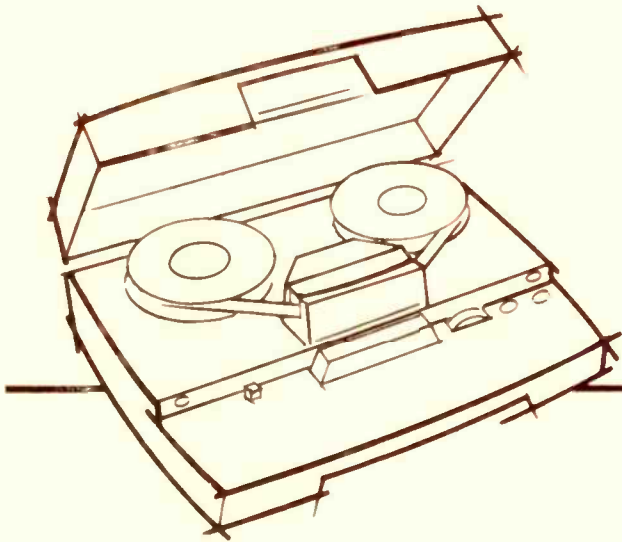
his letters, numbers, arrows and what-have-you that show up so clearly in his shots are simply commercial lettering products bought at the nearest stationery store. He probably uses household rubber cement to stick them to a whacking great sheet of heavy paper which also serves as a background. Clip a couple of ordinary 100 watt opal light bulbs on either side of the camera and you have it. Sure, it can be improved, and Tommy probably uses far different methods for other work, but this system is good for article illustration and that's the main thing. Even a cheap \$20 camera can be made to turn out respectable illustrations if you know what you're trying to tell the reader, and pointing to something in a photograph is every bit as effective as doing it in person.

Suppose you want to use photographs but aren't interested in taking them? Try teaming up with a local amateur photographer (who may already be a friend or relative). You may need someone to demonstrate in the shots anyway, and if you work as half of a team you can be your own model—a thoroughly informed one at that. Once you have the shots taken, get them enlarged to 8×10 inches prints. Ask the photo store (*not* the corner drug store, *please*) to do them with a glossy finish on double-weight paper (a heavier grade which stays flatter in handling). The enlargements will need some sort of caption written for each of them, on a separate slip of paper which is then stuck to the back of each print with a single piece of

Scotch tape (adhesive variety). They can go in the same large envelope as the manuscript, with a piece of thick cardboard for stiffening. Mark the outside clearly "Photographs, Do Not Bend." A couple of rubber stamps, one with this, the other with your name and address, are also a useful investment.

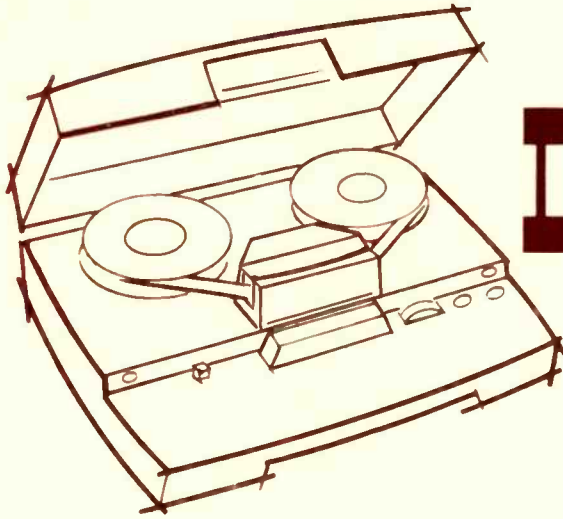
What about diagrams? You can use the approach Tommy Thomas does. Make a large diagram on a big sheet of art paper, using letters, arrows and such from an art or stationery store, then photograph it and make an 8×10 print. This is probably the quickest and easiest way. Alternatively, you can do a regular drafting job, using India ink on high grade paper or white Bristol board (construction cardboard available at art stores). The thing to watch here is to limit your paper or board to the same size as your enlargements or you'll have a problem getting it into the mail. Lettering, too, is far easier than it seems. You can use stencils for a starter, with a proper stencil pen, or you can go to something like the Leroy "Doric" lettering set, a sort of pantograph device using a lettering guide with three sizes of letter. Again, the manager of any store dealing in art, stationery or drafting supplies will have a ready answer for you.

And that's about it. From here in it's strictly up to you, and you'll find that the more tricks you pass on to others, the more you keep finding of the ways in which other tape fans do their recording. This gives you still more ideas on which to work and write about, yourself. Care to join us?



# WHICH PORTABLE SHOULD YOU BUY ?

**Tape Recording presents this Directory to aid you in selecting the portable, self-powered tape recorder which is best suited to your needs and pocketbook.**



# DIRECTORY

Specifications, features and price information contained herein were obtained from the manufacturers and are correct as of the date of publication.

**ALLIED IMPEX CORP.**  
300 Park Avenue South  
New York 10, N. Y.



**MIRANDA MIRANETTE:** Battery or AC operation. Speeds of  $1\frac{1}{8}$  and  $3\frac{3}{4}$  ips. Features built-in synchro disc that readily synchronizes the recorder with 8 mm movie projectors. Powered by four flashlight batteries. Has pushbutton control, simplified tape threading, and fast rewind. A stop-and-go control, built into the handle of the microphone, provides instant starting at the touch of a finger. Recording level indicator shows when recording is in the proper sound range, and also indicates battery condition. Frequency response is 200 to 6,000 cps plus or minus 5 db, signal to noise ratio is more than 40 db and wow and flutter are less than 0.8% Rms. Price: \$159.95.

**ALLIED RADIO**  
100 N. Western Avenue  
Chicago 80, Illinois

**Lincoln Model:** Two Speed, two track monophonic recorder lasts up to 128 minutes (both tracks) on one 600 ft.  $3\frac{1}{4}$  inch reel. Powered by four type "C" flashlight batteries. Response 150-7,000 cps at  $3\frac{3}{4}$  ips. Measures  $3\frac{3}{8} \times 8\frac{1}{4} \times 6\frac{1}{8}$  inches and weighs six pounds. AC sound adaptor available. Complete with carrying case, earphone, remote control mike, reel of tape, shoulder strap and take-up reel. Price: \$89.95.

**Lincoln Subminiature Model:** Battery

operated two "AA" and one 9v batteries, four transistor circuit plus  $2\frac{1}{4}$  inch speaker. Measures  $3\frac{3}{4} \times 5\frac{1}{8} \times 2\frac{1}{2}$  inches, weighs two pounds. Two track, variable speed and pushbutton function controls. Includes carrying case, microphone, reel of tape, batteries, take-up reel and earphone. Price: \$29.95.

**AMERICAN CONCERTONE, INC.**  
Subsidiary of Astro-Science Corp.  
9449 West Jefferson Blvd.  
Culver City, Calif.



**MODEL 400 COSMOPOLITAN:** Tape recorder-radio combination. Operates on four 1.5 v flashlight batteries and external AC. Has speeds of  $1\frac{1}{8}$  and  $3\frac{3}{4}$  ips. Includes 12 transistors plus diodes and rectifier. Head consists of two heads, the record-playback unit and the erase head. Features arbitrary counter, dual meter to monitor audio level and show condition of the batteries, plus the use of 5" reels, which prolongs recording and playing time. Weighs under ten pounds—including luxurious leather case. Accessories include start-stop microphone with stand, earphone, one reel of tape and one empty 5" reel. Price: \$197.50.

**AMERICAN GELOSO ELECTRONICS, INC.**  
251 Park Avenue South  
New York 10, N. Y.

**UNICORDER 61 (top):** Operates on 10 penlite batteries, or can be plugged in, 110-125 v AC, weighs 5 lbs. in case. Speeds of  $1\frac{1}{8}$  and  $3\frac{3}{4}$  ips. Has safety



lock for recording, frequency response 70 to 8,000 cps and less than .5% wow and flutter. Equipped with a fast-forward control and a VU meter. Also has an external speaker jack, a medium-impedance radio connection, a microphone jack and two remote control jacks. Includes AC line cord, batteries, dynamic microphone with On/Off control switch, earphone, one reel of tape and one take-up reel, and leather carrying case. Price: \$179.95.



**STENOTAPE TR-711 (bottom):** Powered entirely by six penlite batteries or AC current. Measures  $2 \times 6 \times 7$  inches overall and weighs four pounds. The two standard tape speeds of  $1\frac{1}{8}$  and  $3\frac{3}{4}$  ips are available with  $3\frac{1}{4}$  inch self-threading reels, affording a recording time of two hours. A front panel jack permits recording from outside sources such as



# OF BATTERY OPERATED PORTABLE TAPE RECORDERS

radio, television, hi-fi, telephone, etc. Equipped with a foot panel control. Complete with hand microphone, reel of tape, tape-up reel, stethoscopic dual earphone and carrying case, plus full year guarantee. Price: \$199.95.



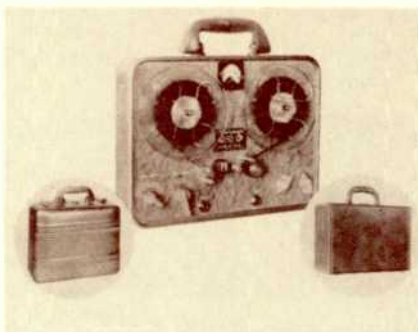
**SECRET RECORDER ASC-12:** Brown cowhide leather attache case for secret recording incorporates a newly designed, extremely sensitive built-in microphone hidden in the attache case. It has a special sound-proof compartment housing the Gelson miniature transistorized self-powered battery Sten-O Tape Model no. TR-711. Records sound 25 feet away from the case, up to two hours. Attache case also incorporates a built-in start-stop switch. The ASC-12 is applicable to the work of executives, detectives, psychiatrists, and is useful for recording interviews, meetings, reports. Price: \$264.95.

**AMPLIFIER CORPORATION  
OF AMERICA**  
An affiliate of Keystone  
Camera Company, Inc.  
396 Broadway  
New York 13, N. Y.

**TRANS MAGNEMITE SERIES 612:** Operates on small dry rechargeable batteries which have a life of about 125 operating hours. Double barrelled Swiss-steel spring-motor; high-speed rewind; ultra-precision balanced flyball governor; transistorized rewind indicator; push-

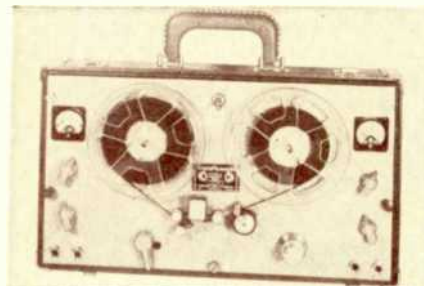


pull ultrasonic bias oscillator; eleven transistors; standard model size—11 x 10 x 7 inches; weighs 15 lbs; VU Model—14 x 9½ x 6½ inches, weighs 17 lbs. Other features include: high-speed VU meter, large precision capstan, take-up guide post, adjustable tension pressure pad, etc. Various models with different tracks and speeds are available, all with VU meters. Write for literature. Prices range from \$615-\$840 list, \$370-\$505 net.



**TRANS FLYWEIGHT Series 312:** Electric motor battery-operated portable available in various speeds and tracks. Has cast, machined, and dynamically balanced fly-wheel, separate rewind motor, twelve transistors, weighs 8 lbs., and is powered by six replaceable or rechargeable mercury batteries. 12 volt car

operation accessory available which enables motor to operate from cigarette lighter socket. Other features include long-life brushes and ball-bearing construction throughout, a VU meter for measuring recording and playback level and battery voltage, and a multiple shielded motor with special auxiliary noise suppressors. Furnished complete with batteries, tape, microphone plug, and instruction booklet. Prices range from \$417-\$529 net.



**STEREO TRANS FLYWEIGHT, Series 314:** Designed to fill the need for compact, light-weight, professional stereophonic recorders for unrestricted field use. Utilizes two clear channels for stereophonic recordings. Provides independent gain adjustment for each channel. Recordings may be fed into any dual-channel amplifier for stereophonic loudspeaker playback. Also usable for single channel recording and playback; or two channel stereo-recordings may be "non-stereo" played on any half track recorder. Ruggedly constructed. Electric-motor battery operated; operates anywhere from small dry replaceable or rechargeable batteries. Fully transistorized (22 transistor); 2 inputs; 2 VU meters for measuring recording and playback level and battery voltage; multiple shielded motor with special auxiliary noise suppressors. Models available with tape speeds from 1½ ips to 15 ips. Overall size: 4¾ x 9 x 15¾ inches; net weight 12 lbs. Prices from \$624 to \$644 net.

## PORTABLE SELF-POWERED DIRECTORY



**SECRET RECORDER Series 212:** Quiet running, concealed in false compartment of a standard-size genuine top-grain cowhide leather briefcase. Normal speech may be recorded at a distance of 25 feet. Starts and stops instantly by touching a patented combination slide-lock and switch. Continuous recording for 3 hours at 18 ips on a 5" reel. 12 volt car operation accessory available which enables motor to operate from cigarette lighter socket. Features similar to those of machines above. Available in varied speeds and tracks. All with VU meters. Prices: \$475-\$555, net.

### CINE-SONIC SOUND, INC.

485 - 8th Avenue  
New York 1, New York



**STEREOPAC:** Compact, rugged tape cartridge playback unit that is easily installed in your car by mounting under the instrument panel and connecting to the 12 v battery. Complete with four full-voiced speakers. Tape speed: 3¾ ips. All transistor, 2 channel stereo amplifier. Power output of 3 watts per channel. Dimensions: 9¾ x 3¾ x 9¾ inches. AC attachment is available for indoor use. Price: \$139.00 retail.

### CRAIG-PANORAMA, INC.

5290 West Washington Blvd.  
Los Angeles 16, Calif.

**CRAIG TR-505:** Gives up to 4 hours recording time, 17/8 and 3¾ ips speed, double track, and contains six transistors. Has an instant stop-pause control.

Battery powered by 6 flashlight cells. Features AC bias recording, speech and music tone control, radio-phono inputs, a 3" PM dynamic speaker, and a fast



forward switch. Weight is 10 lbs. Dimensions: 5 x 12 x 10½ inches. Includes earphone, microphone, full reel of tape, an empty reel and batteries and AC cord. Price: \$159.95.



**CRAIG TR-404 "POCKETTE":** Pocket size tape recorder, weighs 1½ lbs. Battery powered by 4 penlite batteries. Has built-in 2½" dynamic speaker, four transistors, one thermistor and a DC micromotor. Dimensions: 2 x 5 x 3½ inches. Accessories include: telephone pick-up and remote control switch. Includes leather carrying case, straps, full reel of tape, empty reel, batteries, earphone and microphone. Price: \$39.95.

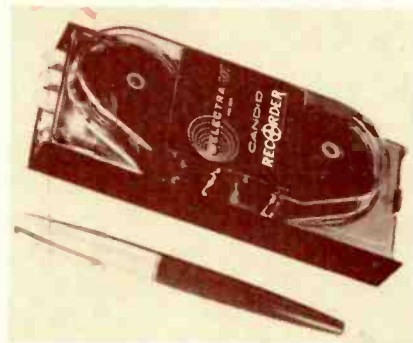


**CRAIG TR-403:** Portable and easy to

operate, it uses standard economical penlight batteries (six). Records up to 68 minutes on one tape. Has six transistors with tape speeds of 17/8 and 3¾ ips. Dimensions: 2¾ x 7½ x 67/8 inches and weighs 5 lbs. Accessories include leather carrying case, microphone, earphone, patch cord, splicing kit, and extra tape. Price: \$134.95.

### ELECTRA-INTERNATIONAL COMPANY

1346 Foothill Blvd.  
La Canada, California



**ELECTRA 707 CANDID RECORDER:** Fully transistorized and completely push-button controlled. All functions of stop, start, record, playback and erase are easily performed. Measures 1¾ x 2½ x 6¼ inches and weighs less than one pound. Included are batteries, tape and magnetic mike-speaker. Accessories are available at additional cost. Price: \$49.95.

### ELECTRONIC APPLICATIONS, INC.

80 Danbury Road, Route 7  
Wilton, Connecticut



**NAGRA III B:** Three Tape-Speeds. Power is supplied by a single bank of twelve 1.5 v flashlight batteries. Standard 5" reels can be used with the cover closed and 7" reels with the cover open. A 7" reel with extra-thin tape gives one hour's continuous recording at 7½ ips and two hours at 3¾ ips. Microphone input and two line inputs. A small built-in monitoring speaker. A rapid integration, damped-return recording level meter is provided. Dimensions: 14¼ x 9½ x 4¼ inches—weight: 15 lbs., 11 oz. Price: Contact manufacturer.

### ERCONA CORPORATION

432 Park Avenue South  
New York 16, N. Y.

**STUZZI MAGNETTE:** Battery operated; amplified system has seven transis-



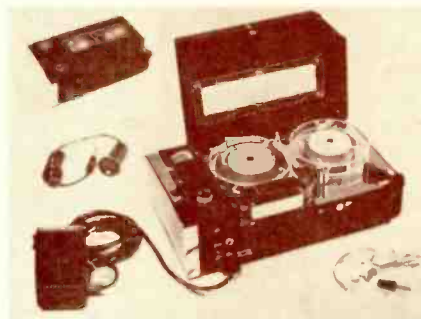
tors and two diodes; weighs 8 pounds; vibration proof; speeds of  $1\frac{7}{8}$  and  $3\frac{3}{4}$  ips; dual track; dimensions— $11 \times 4\frac{1}{2} \times 8$  inches; battery life up to 100 hours; maximum playing time up to 2 hours per reel; frequency range 50-9,000 cps at faster speed. Other features include battery life indicator, separate motors for fast wind/capstan drive, can be used as a portable PA system, velvet-touch push-button controls, VU level magic-eye, etc. Price: \$269.50.



Also available in a single speed ( $7\frac{1}{2}$  ips), gives increased frequency response to 12 KCS. Recording and playback time reduced to 16 minutes per track. Using 600 feet of thin tape on 4-inch spool. Wow and flutter content is in area of professional demands. Price \$369.50, less microphone. All other features same as other machine.

**FANON ELECTRONICS SALES**  
Division of Fanon Electronic Industries, Inc.

439 Frelinghuysen Avenue  
Newark 14, New Jersey



**MODEL FTR-2:** Battery powered with six penlight ("C" Size) batteries. Approximately five hours continuous use with batteries. Five transistors, one thermistor and one diode. Two tape speed with wow and flutter less than .4% WRMS. Permanent dynamic  $2 \times 4$  inch speaker. Accessories included: Magnetic earphone, dynamic microphone with remote switch, telephone pick-up, leather carrying case, 3" tape and reel. Dimensions:  $9\frac{1}{8} \times 5\frac{1}{8} \times 3\frac{3}{4}$  inches, weighs under five lbs. Price: Contact manufacturer.

**FREEMAN ELECTRONICS CORP.**  
729 North Highland Avenue  
Los Angeles 38, Calif.



**MODEL 550:** Three speed recorder with accuracy plus or minus three percent. Weighs just 5 lbs., operates on penlight batteries, has two-track recording heads, heavy duty transport mechanism, two speed capstan drive fast rewind, automatic tape, erase, push-pull audio output, transformer coupled amplifier, remote control dynamic microphone, record level and battery condition meter, tape indicator scale. Using 3" reels, plays in any position and will play or record for two hours. Can be used without removing from case. Included are carrying case, remote control mike, earphone, easy load cartridge of penlite batteries, roll of tape and take-up reel, and telephone pickup. Price: \$139.50.



**MODEL 660:** Three speed remote control transistorized unit, battery operated, two track monaural, 600 ft. reels, 70-15,000 cps. Four stage audio system with push-pull output. Includes accessories same as model 550. Optional AC Pak. Price: \$159.50.

**FUJIYA CORPORATION, LTD.**  
45 West 21st Street  
New York, N. Y. 10010

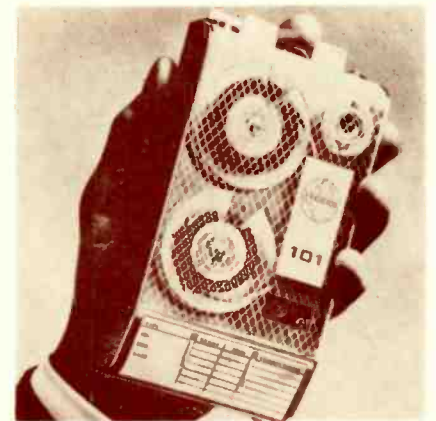
**JAPANESE MACHINES, Model TBR-31:** 7 pound, dual track, 4 transistors, 3" dynamic built-in speaker. Speed of  $3\frac{3}{4}$  ips. Frequency response 150 to 6,000 cps. Power source is six ordinary "D" cell flashlight batteries. Push-button controls. AC adapter-converter available. Standard 3" reel size. Price: \$79.95.

**MODEL MTR-252:** Completely transistorized, powered with penlite batteries, weighs 4.6 pounds, has pushbutton con-



trols. AC converter available. Dynamic speaker, standard 3" supply reel, speeds of  $1\frac{7}{8}$  and  $3\frac{3}{4}$  ips., record-lock safety button. Price: \$99.95.

**KARL HEITZ INC.**  
480 Lexington Ave.  
New York 17, N. Y.



**FI-CORD 101:** One-hand, one-finger operation easily fits into your hand. Size  $6\frac{3}{4} \times 3\frac{1}{4} \times 1\frac{1}{8}$  inches. Weighs only 27 ounces, has built-in microphone. Uses two 1.4 v leakproof Mallory mercury or other penlite batteries. Fast and easy loading, uses a self-cleaning tape which keeps capstan dust-free. Has speed of  $1\frac{7}{8}$  ips, fast forward and fast rewind, accurate counter, slip-on index cards. Each tape-spool is supplied with an individual shipping carton. Volume-controlled stethophone. Sturdy swiss precision mechanism carries world-wide guarantee. Price: \$199.50; carrying case: \$19.95.

**FI-CORD 202:** Two tape recording speeds, with 96 minutes playing time at  $3\frac{3}{4}$  ips and 48 minutes at  $7\frac{1}{2}$  ips. Com-

## PORTABLE SELF-POWERED DIRECTORY

compact size of  $9 \times 6\frac{1}{2} \times 4\frac{1}{2}$  inches, weighs  $6\frac{3}{4}$  lbs including batteries. Up to 60 hours recording time per set of mercury batteries. Digital counter permits accu-



rate place finding for playback and cueing. Sensitive VU meter and all controls in front. Price \$339.50; carrying case, \$34.95.

### HORNSTEIN INCORPORATED

320 West Ohio Street  
Chicago, Illinois, 60610



**FIDELITY ENGINEERS PT-8D:** Has 5" reels, all-metal construction, a push-to-talk microphone, reel locks which permit the machine to be operated in any position, and a capstan drive for constant speed operation. Fully transistorized with two speed operation. Uses four "D" cell batteries. Dimensions:  $11\frac{3}{4} \times 8\frac{3}{4} \times 3\frac{3}{4}$  inches.

### INTER-MARK CORPORATION

80-00 Cooper Ave.  
Brooklyn 27, New York

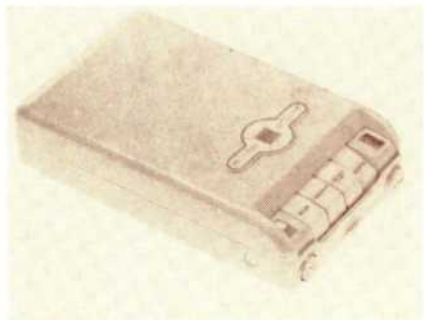
**GIPIER III:** Operates at either  $1\frac{1}{8}$  or  $3\frac{3}{4}$  ips using six standard  $1\frac{1}{2}$  v penlite batteries. Takes a standard 3" tape reel and provides continuous record or playback for 16 to 32 mins. or 32 to 64 minutes. Microphone features a thumb-controlled switching bar which stops, starts or locks the recording operation enabling the unit to be used as a dictating machine. Has an illuminated footage indicator; four large push-buttons control record, play, stop and rewind. Two heads are used in a double track



system. Frequency response at the faster speed is 200-6,000 cps. Unit has a 3" dynamic speaker. An AC adapter is available. Includes dynamic microphone, crystal earphone, recording tape and reel, rewind reel, radio patch cord and battery set. Price: \$129.95.

### INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION

P. O. Box 99  
Lodi, New Jersey



**MINIFON ATTACHE 178A:** Operates on battery, rechargeable accumulator, car battery or AC power. Magazine load.  $\frac{1}{4}$  inch tape for 30 minutes (2 by 15 min. dual track). Speed  $1\frac{7}{8}$  ips. 40-12,000 cps. Pocket size— $3-15/16 \times 6-11/16 \times 1-9/16$ ; weighs one pound, 12 ounces. Accessories include microphone, battery, stethoset and magazine-loaded tape. Price: \$259.50.

### INTERNATIONAL PRODUCTS CO.

1289 South La Brea Ave.  
Los Angeles 19, Calif.



**DIPLOMAT II:** Has three speeds of  $7\frac{1}{2}$ ,  $3\frac{3}{4}$  and  $1\frac{7}{8}$  ips. Operates 20 hours on six ordinary penlite batteries. Permanent magnet dynamic, oval speaker is built right into the case. One switch for record, rewind and play. Fast rewind. Automatic erasing. Safety switch

that prevents accidental erasure. AC adapter is available. Frequency range 150-6,000 cps. Double Track. Completely self-contained in long lasting durable metal case. Complete with cardioid mike remote that picks up 50 ft. away, earpiece, telephone attachment and foot pedal. Price: \$149.95.

### LAFAYETTE RADIO

111 Jericho Turnpike  
Syasset, L. I., N. Y.



**RK-152L:** Four transistor push-pull amplifier, weighs only  $2\frac{1}{4}$  lbs. Features push-button controls for Fast Rewind. Off and Play and Record level meter. Record safety interlock prevents accidental erasure of tape. Volume control is independent of "off" switch. Erasure is achieved automatically in record position (9 v and 1.5 v). Contains microphone and earphone inputs. Uses half-track head and standard 3" reel. The two-tone plastic case features a sloping speaker grill for optimum sound and a snap open top for easy tape loading. Price: \$15.99.

**RK-133L:** Four transistor push-pull amplifier and built-in oval  $2\frac{1}{2} \times 4"$  PM speaker. Weighs  $2\frac{1}{4}$  lbs., has push-button controls, record safety interlock. Has inputs for microphone and earphone, employs a half-track head and plays 10 mins. per side with standard tape, longer with  $\frac{1}{2}$  mil. Power is supplied by one standard 1.5 v standard flashlight cell and one 9 v transistor battery. Supplied with crystal lapel microphone, magnetic earphone, batteries, 3" reel of tape and an empty reel. Price: \$29.95.





**TECHNICORDER—RK-126L:** Has 3 simple push-button controls, VU meter, and a specially designed Synchro-rod is provided, which, when screwed into the capstan, allows synchronizing the speed of the recorder with that of an 8 mm projector. Speeds of  $1\frac{7}{8}$  and  $3\frac{3}{4}$  ips, dual track heads, recording time at slower speed is 32 mins. per track. Has  $2\frac{3}{4} \times 8\frac{1}{4}$ " oval speaker and AC recording bias system, with a signal/noise ratio of -49 db. Complete with shoulder strap, vinyl carrying case, dynamic microphone and case, 3" reel of tape and empty reel, batteries, splicing tape and extension speaker cord. Price: \$79.50.



**RK-160:** Four transistor push-pull amplifier gives plenty of volume. Front panel controls. Battery powered by two "C" batteries and one 9 v battery. Dimensions  $8 \times 3 \times 5\frac{1}{4}$  inches and weighs less than two pounds. Complete with crystal lapel microphone, earphone, 3 inch reel of tape, empty reel and batteries. Price: \$19.95.

**MAGNETIC SALES CORPORATION**  
1147 North Vine Street  
Hollywood, California 90038



**STELLAVOX SM 5:** Four sealed batteries (2 volts, 1 ampere-hour) run the recorder. Rechargeable, with automatic charger included. Standard tape reels up to  $3\frac{3}{8}$  inch diameter. Speed  $7\frac{1}{2}$  ips. VU-meter indicates level of modulation during both recording and play-back. Frequency response: 40-12,000 cps. Dimensions:  $10 \times 5\frac{1}{2} \times 2\frac{1}{2}$  inches, weighs approximately six pounds. Accessories include case, carrying strap, batteries, battery charger, microphone, panel illuminator and output cord. Price: \$610.00.

**MAJESTIC INTERNATIONAL SALES**  
Division of the Wilcox-Gay Corp.  
743 N. La Salle Street  
Chicago 10, Illinois



**GRUNDIG NIKI:** Battery operated ( $4 \times 1.5V$ -Flashlight plus two 1.5 penlites), approximately 15 hours on one set of batteries, jack for car battery 6 volts-DC, dual track, recording time approximately 30 minutes, frequency response 150-6,000 cps. Other features 2XOC71, 2XOV72, OC602, special transistors, 3 way jack, jack for car battery, and a durable moulded plastic case with carrying strap. Weighs approximately 5.5 lbs. Price: \$99.95.



**GRUNDIG MAJESTIC TK-1 DELUXE:** Operates on  $6 \times 1.5 V$  flashlight (4 large-2 small) batteries; recording time—30 minutes; seven transistors; dual track;  $3\frac{3}{4}$  ips; frequency response is 80-10,000 cps; has permanent dynamic speaker, 5 ohms; has 3-pin jack (input/output) for microphone, radio, phono and 2-pin jack for 6 V car battery. Controls consist of single knob selector to start, stop, play-back, record, fast rewind; temp. stop; recording safety; record level control with magic indicator; and volume control. Price: \$129.95.

**MARTEL ELECTRONICS**  
645 N. Martel Avenue  
Hollywood 36, California



**UTHER "4000" S:** German import. Re-

quires only four flashlight cells as a power supply, or can be operated from a rechargeable "dryfit" storage battery, or can be mains operated. Permits use of reels up to 5" and provides a playing time of up to 8 hours per reel. Has four speeds:  $15/16$ ,  $1\frac{7}{8}$ ,  $3\frac{3}{4}$  and  $7\frac{1}{2}$  ips. Frequency response at the faster speed is 50-22,000 cps. Has two tracks. Has pushbutton controls, electro-magnetic start/stop remote control, high-speed wind and rewind, electric meter with disconnectable illumination to indicate recording level and battery condition, printed-circuit amplifier, built-in microphone amplifier, and standard sockets for radio, phono, multi-channel mixer, telephone attachment, loudspeaker and earphone. Complete with leather carrying case, accumulator, AC power supply, and remote microphone. Price: \$399.95.



**MARTEL R1 119K:** Powered by four ordinary D size flashlight batteries, or AC. Up to 2 hours of recording time at its speed of  $3\frac{3}{4}$  ips. Frequency response 70-15,000 cps. Standard half-track erase and record/play heads. Complete with microphone, AC power unit, audio cable. Price: \$149.95.

**MATSUSHITA ELECTRIC CORP. OF AMERICA**  
41 East 42nd St.  
New York 17, N. Y.

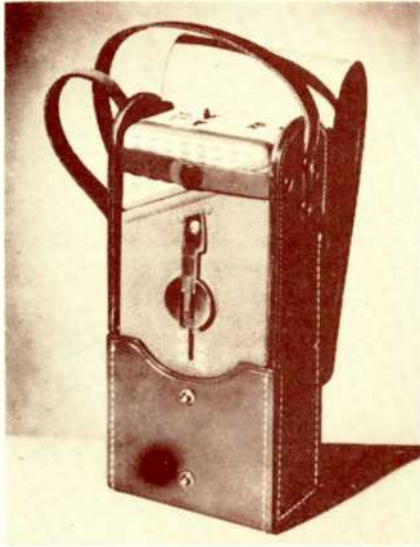
**PANASONIC, MODEL RQ-114:** Fully transistorized, 5 transistors plus diode and thermistor, speeds of  $1\frac{7}{8}$  and  $3\frac{3}{4}$  ips frequency response 200-5,000 cps. Powered by  $6-1\frac{1}{2} V$ . penlite cells—amplifier;  $6-1\frac{1}{2} V$ . penlite cells—motor. Dynamic, permanent magnet speaker, magic meter recording indicator, magic meter battery output indicator and 35 KC separate oscillator. Supplied with recorder: one dynamic microphone and one earphone, one leather carrying case for recorder, one leather carrying case for microphone and earphone, 12 batteries, one reel, one roll splicing tape and one roll recording tape. Price: \$129.95.

**MICHIGAN ELECTRONICS, INC.**  
1744 N. Damen Ave.  
Chicago 47, Illinois

**TRAVEL-CORDER:** All transistor,  $1\frac{7}{8}$  ips speed, needs only one motor

## PORTABLE SELF-POWERED DIRECTORY

battery and filament pack. Insert cartridge of recording tape, clip tiny mike to your lapel and you are ready to record. Rechargeable battery can be used.



Prices: Model T-14A, complete with dynamic, playback microphone, one hour recording tape cartridge (including tape), carrying case and battery—\$289.50. Model T-100, complete with pushbutton, playback microphone, automatic dictation level control, one hour recording tape cartridge, carrying case and battery—\$310.00. Model T-120, same as Model T-100, but with built-in loudspeaker and amplifier for playback to large groups, includes battery—\$359.50. Model T-130, voice-activated, same as Model T-100 otherwise—\$499.00.

### MOHAWK BUSINESS MACHINES CORP. 944 Halsey Street Brooklyn 33, N. Y.

**MIDGETAPE CHIEF 400:** Operates from a small battery pack or from regular AC lines; weighs 3 lbs; motor batteries last 25 hours and amplifier batteries 60 hours; records for one hour on two tracks at 1 7/8 ips; the tape is contained in a cartridge; has automatic volume control; frequency response is 150–5,000 cps. Four transistors with output of 10 milliwatts at 2,000 ohms. Complete with combination microphone, speaker, one hour tape and battery. Price: \$269.50. Accessories available. Professional Model 500, Price: \$359.50 w/microphone.



### NORTH AMERICAN PHILIPS CO. INC. 230 Duffy Avenue Hicksville, N. Y.



**NORELCO CONTINENTAL 100:** Handles both 3" and 4" reels, provides up to 2 hours record/playback time, weighs 8 lbs. Powered by 6 ordinary ("D") flashlight batteries. Speed of 1 7/8 ips, dual track. Three self-locking push-buttons handle all recording and playback functions. Self-contained, with 4" speaker and dynamic microphone. Combined volume control for recording and playback. Combined indicator for modulation level and battery life. Input for mike/radio/phonograph. Output for external amplifier. Frequency response 100–6,000 cps; signal-to-noise ratio better than -40 db. Price: \$129.50.

### RADIO SHACK CORP. 730 Commonwealth Ave. Boston 17, Mass.

**REALISTIC R90L551:** Records up to 30 mins. Speedy forward and rewind, inputs for mikes, phones and remote control. Powered by 4 penlite batteries. Has 2 1/4" built-in speaker, slide on/off switch. Comes in moulded case. Includes batteries, earphone, mike, tape, 2 1/2" take-

up reel and remote switch. Price: \$49.95.

**REALISTIC R90LX558:** Built-in speaker, record level and battery voltage indicating meter, 3" reel of tape, take-up reel, mike, earphone, leather case, 6 penlite batteries. Speeds of 1 7/8 and 3 3/4 ips, frequency response 200 to 5,500 cps. Dual track recording—60 mins. playing time at slower speed. Price: \$69.95.

**REALISTIC R90LX531:** Speeds of 1 7/8 and 3 3/4 ips, governor controlled motor. On/off switch at mike, built-in speaker, fast forward and rewind, record level indicator, battery voltage meter. Up to 2 hours recording. Frequency response 200–5,500 cps. Complete with leather case, batteries, tape, earphone. Price: \$99.95.

### RICOH INDUSTRIES 432 Park Avenue, South New York 16, New York



**RICOH RECORDER:** Two speed recorder contains seven transistors and operates on 4 penlight batteries. AC adapter available at extra cost. Recording possible through microphone or radio tuner. Measures 5 x 9 x 3 inches and weighs less than five pounds. Unit should run for approximately five hours on set of batteries. Volume control and sound level indicator built in unit. Tape running time 3 3/4 ips half track is 17 minutes at 1 7/8 ips half track time is 34 minutes. Includes carrying case, batteries, and microphone accessories. Price: \$109.95.

### ROSS ELECTRONICS CORPORATION 320 West Ohio Street Chicago 10, Illinois

**Mark 45:** Portable transistorized tape recorder equipped with spring loaded spindles which allow operation in any position. Other features include push button operation, VU meter for recording level and battery condition, and two motor drive. Complete with earphone, batteries, 3 inch reel of tape, reel, and carrying case. Price: \$34.95.

### THE SAMPSON CO. 2244 South Western Ave. Chicago 8, Illinois

**MODEL TRQ-399:** Seven transistor re-





corder at speeds of  $3\frac{3}{4}$  and  $1\frac{7}{8}$  ips. Maximum recording time 68 min. Two way operation on batteries, four ordinary flashlight cells. Level meter for accurate recording and determining remaining battery life. Weighs 4.4 lbs—dimensions:  $8\frac{13}{16} \times 3\frac{3}{8} \times 6\frac{7}{8}$  inches. AC power adaptor available. Price: \$119.95. MODEL TRQ-398: Portable radio tape recorder enables recording direct from radio while listening. Two speed operation with maximum recording time—80 minutes. Uses four standard dry cells. Weighs 6.6 lbs, dimensions— $10\text{-}7\frac{1}{16} \times 4\frac{3}{8} \times 8\frac{1}{8}$  inches. AC power adaptor available. Price: \$159.95.

**SOUTHERN PRECISION INSTRUMENT COMPANY**  
Division of Optex, Inc.  
710 Augusta Street  
San Antonio 15, Texas



APOLEC RA-11 #2544: 4 transistor. Price: \$29.95.



VICTORIA #2548: 6 transistor, 2 speed capstan drive. This unit operates on 6 penlite batteries, includes an AC adaptor, foot pedal and telephone pickup. Price: \$119.50.

**THE STANCIL-HOFFMAN CORP.**

845 North Highland Avenue  
Hollywood 38, California



MINITAPE M9 SERIES Available in any of four standard speeds— $15\frac{1}{16}$ ,  $1\frac{7}{8}$ ,  $3\frac{3}{4}$  or  $7\frac{1}{2}$  ips. Half track, full track, two track stereophonic, and synchronous versions for motion pictures are available as standard. Electronics are completely transistorized. The nickel cadmium battery provides over four hours recording time before requiring recharge. Utilizes 5" reels, regularly equipped with automatic gain control amplifiers in either the single channel or the two channel versions. Single channel versions may be equipped with a manual gain control and VU meter in addition to having the standard automatic gain control feature. Eight precision ball bearings are incorporated in the vital moving parts of the unit to permit operation over wide temperature extremes from  $20^{\circ}$  F through  $180^{\circ}$  F. Prices: \$499. to \$925.

**STANFORD INTERNATIONAL**

569 Laurel Street  
San Carlos, California



BUTOBA MT 5: German-built. Fully transistorized (7), weighs 12 lbs., uses  $8\text{-}1\frac{1}{2}$  V flashlight cells, handles 5" reels, half track, frequency range 50–13,000 cps at faster speeds. Speeds are  $1\frac{7}{8}$  and  $3\frac{3}{4}$  ips. Can also be operated on mains. Features push button operation, fast forward and rewind, quick start and stop switch, and separate tone and volume control. Price: \$249.95. BUTOBA MT 7: Fully transistorized, uses 4 ordinary 1.5 V batteries. Can also



be operated on car battery and mains. Built-in remote control facility and stop-start switching on microphone. Two speeds— $3\frac{3}{4}$  and  $1\frac{7}{8}$  ips. Magic eye recording level indicator and built-in loudspeaker that is automatically cut off when external speaker is plugged in—weighs: 7 lbs with dimensions  $12\frac{1}{2} \times 8\frac{1}{2} \times 3\frac{1}{2}$  inches. Price: \$149.95. BUTOBA MT-7F: Same as MT-7 but includes start/stop switch on microphone. Price: \$159.95.

**STAR-LITE ELECTRONICS CORP.**

37 West 23rd Street  
New York 10, N. Y.



STARLITE RA-11: Four transistor battery operated portable tape recorder. Economically priced but including all the features found in more expensive units, such as: built-in  $2" \times 3"$  oval P.M. speaker, dual track recording, automatic erasing, safety recording switch, volume control, microphone and earphone jacks, removable cover. Accessories included at no charge are: 3" reel with tape, empty reel, 9 volt battery, strap handle, microphone and earphone. "C" cell battery optional. Approximately  $8 \times 6 \times 2\frac{1}{2}$  inches. Price: \$18.95.

STARLITE RA-44: Lightweight, all-transistor battery-operated tape recorder with  $2\frac{1}{4}$ -in speaker. Dual track recording using standard 3-inch reel and speed of  $3\frac{3}{4}$  ips. Controls are easily accessible with cover closed and provisions are available for use of external amplifier. Batteries required—three UM3 and one 9 V. Measures  $5\frac{1}{8} \times 3\text{-}5\frac{1}{6} \times 4\frac{3}{4}$  inches



## PORTABLE SELF-POWERED DIRECTORY



and weighs 2 lbs 3 ounces. Price: \$25.95.



**STARLITE TT-37:** A lightweight, modern styled, portable, remote control, 6 transistor tape recorder. First high quality tape recorder at a low price. Beautifully designed in a fabric covered wood cabinet with chrome and brass highlights. This trim unit operates at 2 speed levels, 3 $\frac{3}{4}$  ips. and 1 $\frac{7}{8}$  ips. Operates on 2 tracks, capstan drive. Features: record level indicator, 3 $\times$ 6 oval



“up-front” speaker, uses 3” or 5” reels and is adaptable to A.C. current with use of A.C. adaptor model #AC-10; monitor, radio, remote control and ear-

phone jacks appear on top panel board. Frequency response 150-13,000 cps. Approximate size: 11 $\frac{1}{4}$ ” $\times$ 5” $\times$ 10.” Price: \$99.50.

**STARLITE TT-42:** Here’s the sister to Model TT-37. She’s more powerful, with 10 transistors, plus 5 diodes, and built-in 2 band AM/SW radio. All this, plus all the features of Model TT 37. Record when you want or listen to music. All in one dynamic unit. Also AC adaptable. Approximate size: 11 $\frac{1}{4}$ ” $\times$ 5” $\times$ 10.” Price: \$139.95.



**STARLITE TP-40:** Here’s a streamlined, portable, 4 transistor, high quality tape recorder. Features: 2 motors, new balance rocker switch for “forward” and “rewind,” safety accidental erasure lock, high impact molded plastic cabinet. Operates on one 9-volt and 2 “C” cell flashlight batteries. Completely portable. No tubes to burn out or replace. Includes: microphone, tape, take-up reel, earphone and batteries. Uses standard re-usable tape, unit erases automatically. Color: 2 tone, turquoise and ivory. Approximate size: 9” $\times$ 7” $\times$ 7”. Price: Under \$32.00.

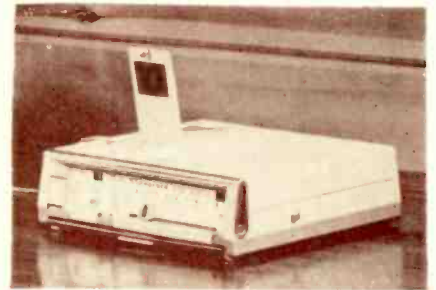


**STARLITE RN-501:** A completely dual motor portable 5 transistor tape recorder. Plays anywhere—indoors or outdoors—without plug-in electricity. Ideal for the businessman on the go, students, teachers, lecturers, and children. Fun for everyone. It’s the world’s tape recorder of its class. The “501” features 5 transistors plus 3 diodes, single knob operation, instant pause button, rheostat speed control knob, re-

cessed swing-out carrying handle, reel snap-on clips and high-impact plastic cabinet. Accessories include: telephone induction coil, dynamic microphone, earphone, 6 penlite batteries and 3 “C” cell flashlight batteries. Approximate size 8” $\times$ 7 $\frac{3}{4}$ ” $\times$ 8”. Price: Under \$37.00.

## STENOCORD DICTATION SYSTEMS

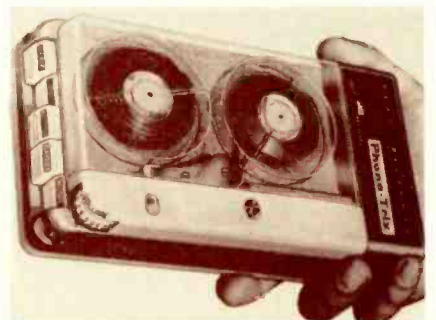
940 N. Fairfax Avenue  
Los Angeles 46, Calif.



**STENOCORD “EXPLORER”:** Portable dictating machine uses a magnetic dictating belt. Has a built-in charger which permits recharging of a permanent, nickel-cadmium battery. Has a power supply indicator. Weighs 6 lbs. Has an all-purpose, built-in microphone, with start-stop, lock-on switch and pilot recording light. Has adjustable front panel volume control. Playback is through the microphone. A disappearing front panel slides into the machine prior to dictation. Has a special dictating belt compartment with a signal bell that sounds 30 seconds before the end of dictating time. Also contains an automatic push button marking device for indicating the end of letters. Price: \$249.50.

## MATTHEW STUART & CO., INC.

156 Fifth Avenue  
New York 10, N. Y.



**PHONO TRIX 88-B:** Small enough to fit in the palm of your hand. Weighs only 2 $\frac{3}{4}$  lb. Can be battery or AC operated. Batteries: 3 “C”-cell, 1.5 v each, and 3 penlite, 1.5 v each. Speed of 1 $\frac{7}{8}$  ips. Running time is 70 mins. on dual track tape. The motor is a governed “Distler Electromatic” battery motor. Frequency response is 100-6,000 cps. Accessories include carrying case, desk-top amplifier-speaker, telephone adap-



tor, remote microphone, earphone and reels of tape. Price: \$99.95.



**CONFURETTE:** Powered by 4 standard flashlight batteries. Full remote control (Record/playback/stop/reverse) on the microphone. Weighs 6¼ lbs.; uses ¼" dual track tape; built-in loudspeaker; fast rewind; tape index meter; built-in monitor system; up to 90 mins. of recording time; battery level indicator. Includes automatic microphone, two empty take-up reels, full reel and log pad. Price: \$169.95.

**SUPERSCOPE INCORPORATED**  
Audio Electronics Division  
8150 Vineland Avenue  
Sun Valley, California



**SONY MODEL 801A:** Battery powered, two speed (3¾ and 1⅞ ips), dual track monophonic portable with full 5 inch reel capacity. Takes 6 flashlight batteries type D. Variable back-spacing lever, VU meter, push-button operation, built in amplifier and speaker and self-storing microphone with remote stop/start switch. Accessories available including AC converter. Weighs: 13 lbs and measures 12-4/5 x 10-4/5 x 3-17/20 inches. Price: less than \$250.00.

**TELECTRO**  
Division of Emerson Radio Inc.  
680 Fifth Avenue  
New York 19, N. Y.



**TELECTRO MODEL MR511:** Two-

speed, two-track operation, up to 1½ hours a reel. Microphone input. Power supply: 7—1½ v, size AA penlite batteries or N46 (or equal) nickel-cadmium rechargeable cells or ZM-9 (or equal) Mercury Cells. Function control for rewind, stop, play/record and volume control for record and playback. Speeds of 1⅞ and 3¾ ips, 6¼" x 2¼" oval, wide range, sensitive dynamic microphone, governor-controlled motor. Frequency response 100—6,500 cps, four transistors. Price: \$129.95.

**TRANSISTOR WORLD CORP.**  
513 West 24th Street  
New York 11, New York



**DOKORDER MODEL PT4K:** Two-speed, 3¾ and 1⅞ ips, with six high quality transistors. Push button controls all operations. Recording time 32 minutes at 1⅞ ips. Uses five standard penlight batteries. Has recording level and battery capacity indicator. Output equals 120 mw maximum, wow and flutter—0.7 percent. Dimensions: 3⅞ x 2¼ x 7¾ inches and weighs 3.3 pounds. Complete with leather carrying case, earphone, microphone and batteries. Price: \$129.95.



**DOKORDER MODEL PT-18:** Two speed, 3¾ and 1⅞ ips regulated by governor. Four transistors and three inch speaker. Frequency range 250—5,000 c/s. Operates on four "D" flashlight cells. Double track recording and playback with one knob operation. Dimensions: 10 x 7½ x 3½ inches and weighs less than 4½ pounds. Complete with microphone, batteries, earphone and two ¾ inch reels. Price: \$49.95.

**WARMAN PRECISION**  
PRODUCTS CORPORATION  
172 Madison Avenue  
New York 16, New York



**MODEL R-119-K:** Battery operated, with six transistors and three diodes. Constant tape speed and instant operation assured by special type fly-wheel de motor. Uses four standard "D" batteries. Can use AC with adaptor or battery car system. Tape speed 3¾ ips standard double track. Frequency response 90—10,000 cps. Dimensions: 9¼ x 4 x 9¾ inches and weighs 5 pounds. Luminous recording level indicator eye. Permanent—dynamic 3 x 5 inch speaker. Complete with microphone and empty reel. Price: \$129.95.

**WBCOR**  
5610 W. Bloomingdale Ave.  
Chicago 39, Illinois



**MICROCORDER MODEL 2404:** Operates on six penlite cells and one 9 v battery—also operates from 110 v AC or 12 v car battery. Uses 3" reels; takeup spindles are equipped with spring-loaded retainers that hold the reels on in any position. Controls are grouped on one end of the case. Has speeds of 1⅞ and 3¾ ips, frequency response at the higher speed is 250—5,000 cps. Has its own 2½ x 3¾ inch PM dynamic type speaker. Has a 6 transistor amplifier. Recording level and battery condition meter. Has a jack for making a connection to a power amplifier and another to take a remote switch or remote controlled microphone. Price: \$129.95.

*Photographs and product data not available for these manufacturers.*

**AMERICAN SANKYO CORPORATION**  
95 Madison Avenue  
New York 16, N. Y.

**CONTINENTAL MERCHANDISE CO., INC.**  
236 Fifth Avenue  
New York 1, New York

**DAN-BAR CO.**  
209 Sealy Street  
Brooklyn 18, N. Y.



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**TAPE RECORDING MAGAZINE**

1077 W. GLEBE ROAD, ALEXANDRIA, VA., 22305

TELEPHONE 548-5205

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# MAGNETIC TAPE — REPLACEMENT FOR RECORDS

Will magnetic sound tape replace the phonograph record?

The answer is yes, but probably not for some time. The tip-off lies in the big rise last year in the sale of pre-recorded tapes—a 20 percent increase in the sales of tape recorders in 1962, and the introduction of the 3M Company's stereo tape cartridge system.

What does this mean? The music industry admits the tonal quality and fidelity of musical tape recordings far surpasses that of the phonograph record—one reason why every phonograph record is cut from a master tape recording. But until now pre-recorded tapes could not compete at a retail cost with that of a long-playing record. Retail prices for the average LP are \$3.98 to \$5.00 and higher. Average pre-recorded tape prices start from \$5.50 and go up. But because of consumer response a price cut is in the cards. According to the Magnetic Recording Industry Association, one company in 1962 registered a 55 percent increase in pre-recorded tape sales over 1961, another scored a whopping 75 percent increase.

Another factor in the sound tape versus phonograph record battle is that the tonal quality of a phonograph record decreases with each playing, much like the resale value of an automobile, but the playing and replaying of a tape recorded musical number detracts little from its original tonal quality. Magnetic tape also has the advantage of lasting indefinitely while records will fall prey to warping and cracking.

The introduction this year of the new 3M stereo tape cartridge system inaugurates the playing of hi-fidelity music at the hitherto unheard of speed of  $1\frac{7}{8}$  inches per second—a speed used previously only for voice recordings. The  $1\frac{7}{8}$  speed enables

four times as much music to be played on a 45-minute tape as was previously possible on the  $1\frac{1}{2}$  inches-per-second speed.

The  $1\frac{7}{8}$  inches per second speed is a major breakthrough in the field of tape technology. According to 3M engineers, it was made possible by the development of a new tape with extremely low noise characteristics. With conventional recording tapes, noise level is increased three decibels with a 50 percent reduction in the recording speed. The first recording tapes were so crude that they had to be recorded at speeds of 30 inches-per-second in order to achieve fairly good results. Improvements in tapes and recorders made possible increased fidelity along with reductions in recording speeds to 15 and then  $7\frac{1}{2}$  inches per second. The latter has been considered the standard for quality recording of high fidelity music.

The new "Scotch" brand tape was developed with a signal-to-noise ratio six decibels better than previous conventional tapes. This makes it particularly suitable for the recording of music at slower speeds without loss of fidelity. It also has extra long play, long wear and low rub off properties.

Although the new pre-recorded tape cartridges are relatively expensive, they are also virtually indestructible as the 1-mil thick polyester base is reinforced by tensilized pre-stretching to give a strength comparable to tapes with a 1.5-mil thick polyester base. The blank tape cartridges now on the market are priced on a par with the LP and will record 48 minutes of music at a speed of  $1\frac{7}{8}$  inches per second, more playing time than found on the average LP.

With the advent of four-track stereo tapes in 1959, pre-recorded tapes have become more competitive than ever with the equivalent

material on two stereo discs. This is particularly true when the equivalent of two stereo discs is sold on one reel of tape.

The combining of two discs on one tape demonstrates an outstanding advantage of four-track. Not only is there a big saving in cost, but the listener can enjoy as much as 43 minutes of play in each direction without interruption.

Four-track stereo is simple to understand. Four separate tracks are used—either in pairs running in each direction for stereo, or, individually, for monaural. For stereo, the first and third tracks are recorded during the tape run in one direction; the second and fourth tracks in the opposite direction. The same is true for monaural, with only one track being recorded at a time.

The field of music is actually one of the lesser areas of industry which use magnetic tape in one way or another. It is used for such diverse purposes as answering telephones, locating oil underground, flying airplanes and guided missiles, machining metal casings, running off payrolls, operating typewriters, storing computer data and teaching languages, or communicating with satellites in outer space.

In the field of instrumentation, tape has become the major data storage medium. A computer does the actual figuring and clacking of gears but its heart beat is magnetic tape. Used in accounting departments for jobs ranging from payroll computing right down to the printing of checks, tape handles a two or three day job in a matter of two or three hours. At the same time, as magnetic tape turns out more and more of the nation's paychecks, it also watches over what people do with the money for Uncle Sam. Even our income tax returns are now being recorded on magnetic tape for checking at a new computing center opened by the Internal Revenue Service at Martinsburg, West Virginia.

The tape industry is understandably optimistic about the future. Particularly in the music field, the industry looks to the day when a prediction made by Dr. W. W. Wetzel, vice president of 3M's magnetic products division can be fulfilled. Observes Dr. Wetzel: "Music on tape—stereo music especially—will eventually largely replace the phonograph record."

# ORGANIZING YOUR TAPED LETTERS

by Rolland Morris

**You'll be surprised  
how much more you can say  
on a reel of tape that is organized**

As the number of tape recorders increases in home use, it is not inconceivable that taped "letters" will be the preferred method of social correspondence within the next decade. Certainly, every present owner of a recorder wishes fervently that everyone he knows would "wise up" to the pleasure and often heart-warming values inherent in this effortless and relatively inexpensive method of communication!

Welcome as they invariably are, taped letters can often "grow like topsy"—undisciplined, disorganized and carelessly rambling in structure. Some folks quickly conquer their initial mike-fright and, falling in love with the sound of their own voice (and the fact that they're never interrupted), gab away with little or no concern over the total effect of their taped letter. They forget that it should be a well-rounded informative production that was worthy of the time spent on recording it, to say nothing of the valuable listening time of the addressee.

Unfortunately, it is rare that the casually taped letter is really organized in any way at all! This informality is part of its charm and appeal, since it is much more like a personal visit in this respect. But it is a risk and boredom must be contended with. If your tapes aren't receiving the hoped-for reception and quick response you expect from them, take an objective view of their content and general format.

After several years of enthusiastic tape-sponding, the following outline has proven so helpful that it has been copied by many friends and is herewith passed on for further development by readers, who are welcome to adapt it to their individual requirements. To do so may help further the acceptance of this novel activity within your own circle.

To be especially noted and considered is the order of the various categories. This has been established with a third party in mind, making it unnecessary to play through preliminary chit-chat in order to reach the most

important news of interest for an additional listener or a group.

## ***Friendly Folks from Far Away***

This is a corny title meant to cover the conveniently recorded greeting from any visitor or friend other than the actual taperspondent. By splicing it at the very beginning, it is thereby kept separate from the main body of the letter and can be removed for filing on a "master reel" that may contain cherished voices of distant relatives, friends, children, etc. This area is also the best for inclusion of special music selections, study notes, sound effects or novel material of any kind.

## ***Salutation and the Date— Including Year and Place***

This should be obvious, but is skipped much too frequently, to the detriment of tapes that, for one reason or another, are kept for reference and replay through the years. It provides the dimension of time, and on later play-



*A former Hollywood radio actor, The Author, is no stranger to a microphone. He is an enthusiastic owner of two tape recorders, which he uses for correspondence and for making narration to accompany a vast collection of color slides and movies.*



back, often subtly accounts for mood, certain statements and content.

### **Headline News of the Week or Month**

This is "the grabber"—and again, by setting it up near the beginning of the reel, makes replay for additional listeners a much easier arrangement.

### **Activities of the Week or Month**

An amplification of the above, it provides further news that sets up what is to follow and provides a springboard for mutual discussion and an eventual exchange.

### **News of Special Person, Project, Problem**

This is a very elastic heading that can also spotlight a hobby or business, the job and how it's going, the children, a pet, the home, church or club activity and special interests of all kinds. Keeping all this separate and

apart from the other categories aids in the eventual reply and discussion, if required.

### **Letters Received**

This is often overlooked as a source for added worth to tape-spondence. News from a mutual friend can give "spice" to any tape short on personal news angles.

### **Questions and Answers**

Saving questions for one-lump-asking also insures that they won't get over looked and remain unanswered!

### **General Discussion—Personal and Private**

As the supply reel pares down, this is the time to tie up all loose ends that defy a pigeon hole. It's also a good area for any personal or private greeting and discussions, being a section easily erased, if necessary, to prevent any accidental "eavesdropping" on a later playback.

No treatise on tape recorded

letters should close without an additional plea to take notes. It is dismaying to learn that some people have an inflated respect for their memory and inconsiderately disregard this important rule of the game. Happily, by organizing the format of a taped letter, notes for reply are automatically systematized for the listener! Moreover, the notes make better sense and are more easily utilized.

If you have access to a duplicating machine at your office, school or church, invest in a ream (144 sheets) of paper and, using the outline suggested above, design a form with headings relating to your specific needs. You'll find paper stock  $8\frac{1}{2} \times 14$  inches perfect for the purpose. Keep a sheet handy in your desk and fill out a category from time to time as thoughts come to mind, rather than wait until the day of the recording session. You'll enjoy a new satisfaction in following an outline, and you will probably be surprised to see how much more you can say on one reel that is organized!

# tapespondents wanted

This column is a service to our readers seeking tape correspondents or swaps of tape, etc. If you wish your name listed send us the following information on a post card: 1) Name; 2) Mailing Address; 3) Kind of recorder, speed and numbers of tracks; 4) Subjects on which you wish to tapespond or items wanted; 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, 1077 West Glebe Road, Alexandria, Va.—22305. Tape Recording Magazine assumes no responsibility for any inquiries between persons listed in this column which are not answered.

**KEN MUNRO**, 47 N. Lime St., Lancaster, Pa. Recorder: Roberts 1057, stereo, 4 track, 7½ and 3¾; Interests: I am an elementary school teacher and would like to tapespond with someone in Mexico, to exchange local color and sounds. Adult.

**ALLAN E. FINEBERG**, 76 Seventeenth Ave., Paterson, N. J., 07513. Recorder: Wilcox-Gay, 2-track, 3¾ ips. (non-teenager). Would like to correspond with fellow Esperantists about current world problems, specifically the sharpening of interclass frictions. I will be glad to answer any questions anyone may have about Esperanto, the international language, in a complete, factual manner.

**MARILYN KAUFFMANN (Miss)**, 4151-A N. 20th St., Milwaukee, Wis., 53209. Recorder: Norelco "400" 4-track, full stereo, 1⅞, 3¾ and 7½ ips. Interests: Would like to tapespond with anyone who plays pop organ. I have a Lowrey Lincolnwood. Or anyone interested in photography, especially portrait. I do my own enlarging and photo oil coloring, also take 35-mm slides and recently started enlarging from colored negatives. (29).

**E. McWHERTER**, 612 Malden E., Seattle, Wash. Recorder: Uher & Viking, all speeds, 2-track. Interests: Prewar bands, Latin-American music and dialogue, country, western music and humor, and VOA BC's.

**MARTIN MATHAMEL**, 6615 Luana, Allen Park, Mich. Recorder: Airline, 3.75 and 7.5 IPS, 4-track mono R/P, 4-track stereo playback. Interests: Rock and Roll music, organ and bongo music, all phases of electronics experimentation, general science, sound effects on tape, making humorous skits, and general tape recording. Will answer all tapes sent (14).

**PHILIP LUTHRAN**, 1450 So. 52nd St., Philadelphia 43, Pa., 19143. Recorder: Norelco stereo 3 speed. Have authentic English, Scottish, Irish folk music; would like to exchange for American folk music (Not sung by professionals).

**ROBERT STARRETT**, 1522 N. Serrano, Hollywood 27, Calif. Recorders: Tandberg and Grundig, half or quarter track, 1⅞, 3¾, and 7½ ips; Interests: Would like to exchange recordings of radio broadcasts from 30's and 40's. Am particularly interested in Al Jolson and have many of his shows; Adult.

**JACK J. WAITE**, 6324 Revere St., Philadelphia 49, Pa. Recorder: Webcor Coronet, 3¾ and 7½ dual track. Old Bing Crosby records, books, criminology, general interests, history, movies, music, people, home movies, politics, reading, records, religion, hiking, wrestling, television, travel, world affairs, writing, Gregorian Chant. Would appreciate your photo. Will answer every tape; please do not write first, send a tape recorded at 3¾. Would like to hear from single females as well as men. Adult (31).

**ERIC J. HAWKINS (24) and ALAN HAWKINS (19)**, 15 Gloucester Road, Bedford, Bedfordshire, England. Recorders: Truvox ½-track stereo. 1⅞, 3¾, 7½ IPS; Brenell ½-track mono; 1⅞, 3¾, 7½, 15 IPS. Interests, Photography, short wave; Music: Jazz, Classics, Swing, Sinatra. Will correspond with anyone with similar interests.

**STEVE JOHNSON**, 3009 Guilford, Rockford, Ill. Recorder: Pantron TX-1, 1⅞, and 3¾ duo-track mono. Like Mood, Dixieland, documentary and big band tapes and records. Interests: Ham radio (call K97XW), all phases of commercial broadcasting, old tapes and recordings; an avid interest in the "Classic" series of MG sports cars. Please send first tape. (Teenager.)

**FRED JUNGREN**, 7 Alpha Place, New Rochelle, N. Y. Recorder: Roberts 1040, 2 and 4 track stereo and monaural record and playback; 7½ and 3¾ IPS. Interests: Go-Karts, sports cars, stereo, all types of music, psychology, hypnosis, all sports, especially track and field, freshwater fishing, especially trout fishing. Adult (24).

**WALLACE R. ELY**, 2336 Hamilton Street, Allentown, Pa. My 4th grade Sunday school class wants to contact other Christian children groups anywhere in the world to exchange short tapes.

**CHARLES Q. BERKEY, JR.**, P. O. Box 3461, Hayward, California. Recorder: Roberts 1057, 3¾ & 7½ ips, 2 & 4 track stereo, 1, 2, 4 track mono; Interests: Commercial photography, sound effects, pre-recorded music. I am starting to learn Spanish. Would like to talk to any of Jehova Witnesses, any country; Adult (27), married.

**SID FINLEY, JR.**, P. O. Box 1709 Asheville, N. C. Recorders: Telefunken-85, dual track, 3¾ & 7½ ips; Korting-158S, 4 track, 3¾ & 7½ ips; stereo/mono, record/playback; Norelco-100, dual track, 1⅞ ips only; Interests: Women, recorders, C.B. radio, motorcycles of all kinds, music of all kinds except opera, sports cars, women; Adult (single).

**ROGER FEINGOLD**, 2055 Cruger Avenue, Bronx 62, N. Y. Recorders: V-M 722 and 714, 3¾ & 7½ ips, 1, 2 and 4 tracks, stereo record/playback; Interests: Hypnotism, music—all kinds, people from other countries, science-fiction, all forms of E.S.P., mental telepathy and other phenomena of this kind, just talking in general about anything, debating, photography, occult, anything I left out? I will answer all tapes from boy or girl, man or woman, any age, from this country or any other. I speak a little Spanish; Teenager (17).

**MARY VICTORIA MONROE**, 116 Drake Avenue, South San Francisco, Calif. Recorder: Sony 300, 7½ or 3¾ ips, 2 or 4 track; Interest: Would like to tapespond with anyone interested in poetry and/or camping; Adult.

**JOHN GUIBORD**, 196 Charlotte St., Ottawa 2, Ontario, Canada. Recorder: Philips 401, 4 speeds (15/16), 4 tracks; Interests: Would like to correspond with anyone, especially with French-speaking Cub Scout or youth movement group leaders in connection with Folksongs, poetry, religious songs, healthy philosophy and psychology (discussion of records) and singers, and the truth.

**RANDALL LEADMAN**, 5425-101 St., Jacksonville 10, Florida. Recorder: V-M, 3¾ & 7½ ips, dual track; Interests: Travel, home movies, historical subjects, pets, most sports; Would prefer tapesponding with single women between 25 & 35; Adult, (Single-36).

**JOHN LIQUORI, 4563 N. Colorado St., Phila. 40, Pa.** Recorder: Revere 3¾ and 7½ ips, 2 and 4-track mono. and stereo; Interests: Anything by Russ-Columbo (crooner of the 1930's), Movie soundtracks, off-the-air shots, radio transcriptions of his old NBC Radio Shows, photos, sheet music, stories about Russ Columbo in old movie and radio magazines; Also want soundtrack or tape of NTA's "Play of the Week," TV show starring Shelly Winters called "A Piece of Blue Sky," 1960; Also want disc or air shots of Gus Arnheim's Coconut Grove Orch. 1929 era; Will exchange tapes; Adult.

**LYLE MARTIN, 205 West Holly St., Pasadena, Calif.** Recorders: Grundigs, Uher, Butoba, Ampexes: 3.75 and 7.5 ips; Monophonic; Interests: Automatic pianos and orchestrations in fine tape transcriptions; Looking for old piano rolls; Adult.

**LESTER NELSON, c/o Benjamin Feuer, Terminal Business Machine Co., 301 West 42 St., New York 36, N.Y.** Recorder: Bell-O-Matic cartridge 4 track, Stereo-Mono, 3¾ and 1⅞ ips; Interests: Swapping general information and ideas; Will answer promptly; No need to write; Also boys or girls; Adult (28).

**WILLIAM I. CAMPBELL, Holt, Rinehart and Winston, Inc., 383 Madison Ave., New York 17, N. Y.** Recorder: Wollensak 7½ or 3¾ dual track; Interest: Wants to borrow tape recordings in Spanish of radio broadcasts from Spain and Latin America; Will give foreign-language-learning books, tapes, or records in exchange of such tape recordings.

**CHARLES HARDING, 1919 Laurier Ave., Lafleche, Quebec, Canada.** Recorder: Sony Model III, 2 track monaural, 1⅞ & 3¾ ips; Interests: Archery, Western music, swimming, camping, general corresponding, tapes of Allen & Rossi, Martin & Roland, or any other comedy team; Teenager (18).

**"BUCK" GREENLEE, 3006 Knorr St., Philadelphia 49, Pa.** Recorder: Webcor "Royalite," 2 track, 3¾ & 7½ ips; Interests: I am interested in contacting Scoutmasters or anyone in Scouting with a desire to exchange tapes with old and new Scout songs on them. This is one of the best ways to learn new camp songs, yells and skits. I know lots of Cub and Scout songs and wish to learn more. You can help me and I can help you. I have been in Scouting 22 years and I'm always looking for new material to use at District Events and Camporees; Adult (32).

**PATSY FEYER, Box 457, Homer, Alaska;** Telectro taperecorder. No need to write, will answer all tapes. Teenager (15). General teenage interests, 2 and 4 track, 1⅞ speed, 3¾ and 7½. Will tape boy or girl.

**JUNE FEYER, Box 457, Homer, Alaska;** Telectro taperecorder. Interests: Swimming, sports, horse riding. Teenager (14). 2 and 4 track, 1⅞, 3¾, 7½ speed.

**WALTER NASSO, 5611 8th Ave., Brooklyn, N. Y.** Recorder: Wollensak, 3¾ and 7½ ips, 4-track mono and stereo. Interests: All types of music, especially popular and jazz piano, theater, singing. Interested in exchanging tapes of music and conversation. Adult, single.

**RAY MOFFITT, Route 3, Box 130-A, Olympia, Washington.** Recorders: Concertone 505 and Uher 4000 Report (battery portable). Speeds 7½ to 15/16. Play ½ and ¼ track mono or stereo; record ½ track mono or stereo. Interests: Symphonic music in 2 and 4 track stereo, tape-slide programs, color photography, national parks, audio-visuals, and education. Interested in conversing with 5th or 6th grade teachers on adult level as well as student exchanges from U. S. schools or English-speaking countries, especially New Zealand. Will answer all tapes. Adult (31), elementary teacher.

**CLIFFORD JOS. SHERRY, P. O. Box 20, Naperville, Ill.** Knight KN-4300, 2 and 4 track, 1⅞, 3¾ and 7½. Interests: Studying psychology (in college), science fiction books, photography, books on the strange and unusual, sound effects, music (classical and jazz), and any controversial subject. Adult. Send tape, will answer.

**WILLIAM SWISHER, Box 705, Dunedin, Florida.** Recorders: V-M Tape-O-Matic 730 and Webcor 2711, both 2-track, 1⅞, 3¾ and 7½ ips. Interests: Would like to swap tapes of 78 rpm records by Glenn Miller, tapes of broadcasts by Miller and by Ray McKinley with the new Glenn Miller Orchestra. Teenager (17).

**JAMES A. CLARKE, 506 Carver Ave., N. W., Massillon, Ohio.** Concord 4-track Model 880. 3 speeds—1⅞, 3¾ and 7½. Interests: Electronic organs, theatre organ, travel. Would like to tape with immigrants from England. I am from Lanc's., England, Will answer tapes from anywhere. Adult. Married.

**DICK ARTHUR, 2217 Winterwood Lane, Topeka, Kansas, 66614.** Recorders: Ampex 1260, 4-track Mono and Stereo. Wollensak T-1515, 2-track mono and stereo, 3¾ and 7½ ips. Interests: Electronics, popular music, Kay Starr recordings, tape recording techniques, sound effects, drafting, square dancing, comedy, adult humor, general gab, Hi-Fi stereo, etc. Would like a few foreign tapespondents. Send a tape, any size, any speed. Will answer immediately.

**ROBERT L. SPERO, 1263 Ranchland Drive, Mayfield Hts. (24), Ohio.** Sony 300, 3¾ and 7½ ips, 2 and 4 track. Interests: Dixieland jazz and big band swing, primarily in stereo. Interested in buying or will trade copies of tapes and/or magazines for Volume 1 and 2 (12 issues) of "Tape Recording," known then as "Magnetic Film & Tape Recording." Adult (38).

**FINEBERG, ALLAN E., 76 Seventeenth Ave., Paterson 3, N. J.** Webcor-Gay Recordio, dual track, 3¾. Want Esperanto-speaking tapespondents. Would be glad to fill tape sent by any interested person with complete information on the international language, Esperanto. Adult.

**LOUISE WASHBON, 545 W. Rose, La-Habra, Calif.** Concord tape recorder with dual track recording, 3¾, 7½ and 1⅞ speeds. Want lots of tape exchanges with single girls and women, also servicemen, and especially foreign and Spanish speaking pals. Young, single woman, aged 28.

**JOE DIMAGGIO, 84 West Jackson St., Wilkes-Barre, Pa.** Recorder: Webcor-Regent, 2 track mono, 7½, 3¾ and 1⅞ ips. Interests: European music and films, art (in general), languages, musical shows, piano, operas, Flamenco and mood music. Would like a few foreign tapespondent people with European aspects of life. Professional dancers welcome. Lots of records to exchange. No need to write; will answer all tapes. Adult (29).

**TOM MURRAY, JR., 1 Brentwood Drive, Holden, Mass.** Recorder: Wollensak 1580, 3¾, 7½ ips, 2 and 4 track, stereo-mono record-playback. Interests: Would like to hear from modern jazz fans. Interested in procuring tapes of unissued (on records) concerts, radio-TV programs. Main interests: John Lewis, MJQ, Miles Davis, Mulligan, etc. Also African folk music, photography, stamps. Teenager (14).



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## 'Win a Tape' Contest

Tell us in your own words why your recorder is important to you. 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: Tape Contest, Tape Recording Magazine, 1077 West Glebe Road, Alexandria, Va.—22305.

"Gentlemen:

My tape recorder is important to me because it has released a new world of friendship and knowledge for me. I am a teenager (15) in high school and have had my recorder for one year.

I am in my third year of Spanish in which language labs are being used greatly where I learn pronunciation, grammar, and vocabulary by listening and repeating after tape recordings bought by the school. I can now copy and save these recordings so that I can review any tapes I have problems with in school as well as having a permanent library of tapes that anyone who hears and studies, can gain a full education of the Spanish language.

My recorder has brought me many new friends as well as keeping a few old ones. By sending tapes through the mail I have met and learned about people from other parts of the country without ever needing to leave my own town. Recently, a friend who I have known for over ten years moved to California. I haven't seen him since? No, instead our recorders bring us into each other's home at the rate of about once a week, with an occasional photograph we are about as close to being neighbors again as any coast-to-coast friendship will ever be.

My recorder also brings me all the musical recordings, etc. that I need at an obvious saving of money plus many priceless recordings from T. V., radio and home life, that will never be sold as records.

My tape recorder is no longer important—it is essential." MILE BERMAN, 13 Pickwick Road, DeWitt 14, New York.

"Sirs:

My recorder is important to me in so many ways. Being a member of the Voicespondence Club, my recorder has given me many new friends, and is such a pleasant way to spend my free time. This past winter was outstandingly cold and bad here in West Virginia and my recorder helped us to entertain our friends, for to most of them it is something new and they are simply thrilled and sometimes puzzled when hearing their voices played back to them. And I have access to books on tapes which I would not be able to read if I did not have my recorder.

But the most important use that my recorder has been to me, and a mighty important one, is being able to hear my letters. I am blind, unable to read the print and sometimes it is not convenient to get folks to read my mail, so my recorder steps in. My sister in New York, different members of my family in southern West Virginia, and my brother who is stationed in Germany voicespond with me, and oh, how nice to be able to thread up the tapes, sit back and hear their voices. And while my husband was in the hospital for eight months, a minister friend lent him a recorder and we voicesponded with each other. I certainly would not want to be without my recorder. It is no moneymaker for me, but it certainly is a means of great pleasure." PAULINE MARTIN, 103 Smith Street, Clarksburg, West Va.

"Gentlemen:

I use my recorder every Sunday to record the church service. I record the entire service from beginning to end and then I take along the bulletin for this Sun., a hymn book, and the recorder with the tape to play for shut-ins. They can take the bulletin and hymnal and follow right along as though they were in the service, thus it allows them to participate. This method has become very popular and I'm sure others will find it so, too.

I attend the main church functions during the year and tape the speakers and along with this, pictures are taken which are later made into slides. Then at the end of the year we have a year in review program using the slides and portions of each of the tapes I have made. We use two machines to do the editing and the final tape has the commentary between the program sections.

I record from my turntable and put many records that I have borrowed from the library on tapes for continued listening. I also have a children's library of both music and stories that is repeated many times for both my own children and in the summertime, they are played through a speaker on the patio to children who are gathered out there and have exhausted all peaceful means of play. It is a wonderful help for a baby sitter, too.

A year ago I taped some Easter music for an early morning sunrise service and took the recorder and an amplifier out

to the park where the service was to be held. The choir was supplied by tape.

I also use my recorder to send tape letters back and forth both to my brother and to my mother.

I have recorded Christmas morning at our house for years as the children open their presents and a part of each year is saved and put on a master tape which I continue to add to every year. This will be a very important tape for many years and will continue to keep the children young. Another thing along this line, I record bright sayings, songs, etc. that I am able to catch and keep them for future years.

I doubt that anyone loves his tape recorder more than I and I'm always looking for new uses, therefore I enjoy this section of your magazine very much. I might also say that it is the only magazine that I read from cover to cover." C. W. KOENIG, *W. 3415 Queen Place, Spokane, Washington.*

"Dear Sirs:

I use my tape recorder extensively in three separate areas.

I. At home.

(a) I borrow from the record department of the public library classical music, Broadway shows, and talking books which I record and play back for my 5 children.

(b) I read children's Golden Books onto a tape and my first grade daughter follows in the book what she hears my voice read.

(c) My wife is bi-lingual and I am using my recorder to learn Spanish.

(d) Some people have a family-photo album. I have a family tape album. On every important occasion I record my family's voices, which the children should enjoy immensely when they grow up and hear themselves as children.

II. Tapesponding.

(a) I have about 8 tapespondents overseas and I enjoy learning of the customs, conditions, and attitudes of people overseas 'direct from the horses mouth.'

(b) I am learning more about education, literature, art, and music from friends all over the world who have studied these things and can discuss them.

(c) My six year old daughter is taping to a 7 year old boy in New Jersey. Last month the 21 members of my daughter's class made a tape to the class of this boy.

III. In My Work. I am a ballroom dance instructor for the Arthur Murray Studios and I use my recorder in three ways.

(a) It is essential that a beginner learning to dance has music which is exactly the right tempo and that has a

clear and distinct beat. Often a 12 selection 33 $\frac{1}{3}$  album will have only 2 or 3 really ideal selections for dancers. I tape the good ones and ignore the rest.

(b) I am often called upon to create ballroom dance exhibitions or spotlights, which I teach my students. With my tape I can stop a song in the middle and practice dancing to a particular phrase or group of measures without going through the whole record.

(c) It is convenient to have my own dance music with me when I am called upon to do outside dance exhibitions.

As if these uses were not enough, I am setting myself additional ways of getting the most from my recorder. I plan to work my way through five years of college and I am seeking new ways to speed up my education via the use of tape recorder.

Oh yes, one more benefit my recorder gives me—strong arms—from carrying it back and forth from work to home to work." DAVE BURHANS, JR., 233 $\frac{1}{2}$  E. Congress, Tucson, Arizona.

"Gentlemen:

When I say that my tape recorder is important to me, that's just putting it mildly, because actually it's a real gem, a priceless treasure, an Aladdin's Lamp. I rub on it, no nothing like that, but it has opened up to me new horizons, hitherto before thought impossible, letting me know what a wonderful world we live in and of the many fine people who, like ourselves, are eager to make friends in other lands. Many things about how those people live, that is, their likes and dislikes, what their countries are like, so that every day I wonder what the mail will bring from some tape pal in a far distant country who, like myself, needs that companionship through the medium of tapesponding. Lonesome? I should say not, with a tape recorder. Why, my recorder is important to me and is, like my wife and dog, a constant companion, always ready and willing to serve to the best of its ability. I can assure you that it will never be put away in some closet to rot and rust away, as one so often hears about, when it brings me so much happiness, in the way of the spoken word or music. Again, I say that my recorder is priceless to me, a real treasure, fit for a king.

Aside from its entertainment value, it has assisted me in my studies in elocution, languages, Morse code, and now I am finding it of inestimable value in sleep learning, to name just a few of its varied and useful uses that it can be put to. Therefore, in conclusion let me say that my recorder is my true and faithful servant, my genii, that's why my tape recorder is important to me." JOHN W. HOWE, 84 Sproat, Detroit 1, Michigan.

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# letters to the editor

To the Editor:

One of the recurrent problems in home tape systems is to determine the amount of tape on a given reel without tediously running it off at normal playback speeds and timing it. Marked reels are imprecise and, in fact, useless if the thickness of the tape is not known.

Consequently, I should appreciate learning about currently available devices that measure tape at higher speeds such as the usual "rewind" or "fast forward." **Richard B. Thomas, 3607-35th Street, N. W., Washington, D. C.**

To the Editor:

My main request for writing is to answer the letter by Mr. P. Hardt, of Sunnyside, New York, regarding recorder speed.

The only reliable way to copy music is to use recorders which are operating at the correct speed. Using professional or semi-professional machines fitted with hysteresis synchronous motors, this is no problem. But with most home machines the speed is off. Therefore, the best procedure would be to get each machine operating properly.

Step one is to clean and lubricate each machine thoroughly, replace worn or defective parts and adjust to optimum operation. This is necessary in order to ensure that the recorder's speed is not off due to the need for maintenance.

Step two involves operating the machine from a Variac or similar variable voltage transformer, with an A.C. voltmeter across the output. Be sure the unit has sufficient power rating to handle all equipment to be used with it simultaneously. Connect the recorder to the output of the Variac instead of directly to the power line, adjust the supply voltage, using the meter, until it reads exactly 117 Volts r.m.s. Turn on the recorder and allow the motor to run for about half an hour to warm up. Reset line voltage.

Step three: Determine the speed accuracy by means of a tape with a recorded tone, and a tuning fork or a very accurate audio oscillator. Ampex has an alignment tape with a level set tone of 250 cps which is quite accurate. 440, A above Middle C would be best, but I know of no tape with that tone on it. The important thing is that you use a tuning fork of the same frequency. Start the tape and strike the tines of the fork simultaneously and compare them, listening for the "beat" tones if they are very close. If you have an accurate audio oscillator and mixer, combine the signal from the tape and from the os-

cillator and listen for beats. If your sense of pitch is so good that 5 percent speed accuracy is not good enough, it's good enough for this test.

Probably the speed will be fast. To slow it down, file down either the capstan or the turret on the motor shaft, depending on the type of machine you're using. This is done by bringing a straight cut medium file against the rotating shaft or capstan, and grinding down *a little bit at a time*. Check the speed as before, making sure your line voltage is still 117 V. Repeat the whole process until the speed is correct.

Adjust each machine separately, then, when copying, operate them both from the Variac at 117 V and your speed will stay on. DON'T operate directly from the power line; if the line voltage changes it may have a different effect on the speed of each machine, so you're right back where you started.

If you wish you can do this with any turntable you have, only using a standard strobe disk. Measure the turntable speed while the pickup is tracking a record. Thereafter, operate all equipment from the Variac. Amplifiers, too, generally perform better at the correct line voltage, even though some deviation is permitted.

Instead of a Variac you could use a line voltage regulator, but a 500 Watt unit costs almost as much as a professional recorder with speed accuracy of 1 percent, so it would be poor economy; better to buy a new recorder.

A few more words about dubbing. Although record and playback equalization in most home machines is at least adequate for normal use, the process of dubbing tends to magnify any deviation. Therefore, if possible, adjust both record and playback equalization of *all* equipment to as close tolerances as possible. Adjust playback response with the alignment tape you used for speed calibrating, also adjusting head azimuth, then adjust record equalization for flat response when played back through the recorder's own playback system.

Two tricks which are useful if your machine will run at 7.5 and 15 ips: Try mastering at 15 ips with the record equalization set for 7.5. Play back through the NAB equalizer as usual, but copy onto the second machine at 7.5 ips with the equalization set for 15 ips. The pre-emphasis introduced during mastering helps to overcome the increased noise level encountered when copying, and copying at 7.5 using the higher speed equalization exactly complements the pre-emphasis originally used. When

trying high speed duplication, use the playback equalization of the original speed of the master, and the record equalization of the speed at which the copy will be played. Thus, copying a 7.5 tape to a 7.5 using 15 ips copying speed, use 7.5 record and P/B equalization. If the original is 7.5 and the copy to run at 3.75, play the master at 15 ips, NAB playback equalization, run the copy at 7.5, with 3.75 ips record equalization. **W. James Parsons, 524 Church St., Toronto 5, Ontario, Canada.**

To the Editor:

Our program of reading Tape Recording Magazine on tape has grown by leaps and bounds since its inception in 1958.

At the beginning, we were circulating *one* tape to six persons. As of August 1, 1963, we were circulating *six* tapes to some 60 persons.

As a result of this rapid growth, it has become necessary to investigate outside sources of duplication of the master tape and distribution of the dubbings.

In line with this, The Library of Congress, Division for the Blind, Washington, D. C., has agreed to assume the project of making dubbings (from a master tape supplied to them by me) and mailing these tapes to addresses we will supply.

We are initiating this new program effective with the next issue of Tape Recording Magazine.

We hope this new plan meets with your approval.—**Edgar R. Violette, 110 Oakland Terrace, Hartford 12, Conn.**

To the Editor:

I have been a subscriber to Tape Recording for about the past six months and have enjoyed many of the do it yourself articles and other features, but I feel you do not do justice to your readers with your articles on new materials, recorders and accessories.

When you show a picture of something new, you always give the specifications and claims of the manufacturer, in regard to the operation of the device being shown.

Why don't you test run or try out these new devices and machines yourself, and give us, your readers, your unbiased opinion and findings, no matter what the manufacturer states in his advertising brochures?

I think your testing and checking new equipment as it comes out on the market, together with your impartial reports on same, would do much to keep your present readers better informed and perhaps attract new readers and subscribers.

I subscribed to Tape Recording because it is the only magazine on the market dealing solely with tape recorders and related equipment, but I find



that I am beginning to feel that the manufacturers and advertisers own and operate the magazine. It reminds me greatly as being but a price list and descriptive brochure, which is mailed to my home each month. In fact, I believe the number of pages in each issue are always exactly the same.

Yours for a more interesting magazine in the future. Albert Krause, 190-12 39th Avenue, Flushing 58, New York.

To the Editor:

I enjoy your magazine, and would like to make two comments on your issue (March 1963) concerning noise pick-up in copying from a battery machine to a standard model. I have had very good success, as far as I am concerned, in copying from a battery-operated machine to a standard model—and also the other way; and I have found that the trouble is caused by overloading the tape in the copying process. Also I find it best to use a shielded cable—as short as possible; and it is a ticklish task making up the cable, because the battery machines have such small connectors. But what causes the objectionable noise has been that I was playing back with too much volume. My procedure is: with no connections attached, test the material, and adjust the volume on the playing recorder so that it can just be barely heard; then in the ear-phone jack, plug in the connector to the other recorder, and record as usual, letting the recording machine volume control give the gain necessary to prepare the copy. In recording the other way—from the standard machine to the battery model—I follow the same procedure: on normal playback, with no connector attached, the volume should be set so that the tape can just barely be heard; then, without changing the volume on the play-back machine, connect across to the recorder, and set the recorder's volume control so that a good recording is made. In short, in copying, play back with the least volume possible in the playing machine; and boost the signal to adequate recording level with the amplifier in the recording machine; for it seems to me that the objectionable noise is caused by overloading the copying machine.

There is an article by Tommy Thomas describing a slide synchronizer. Mr. Thomas always gives a good article, well written, and prepared. But I have tried a slide synchronizer that works with metal tabs (but I have never tried Scotch sensing tape 51—this may make quite a difference) and I do not like the performance. The tabs that I used were almost unremovable. Their adhesive stuck the tape together on the reel so that it unwound with a jerk causing very uneven playback. The bleeding of the adhesive sometimes caused the tape to

stick to the synchronizer head (if the synchronizer was placed between the capstan and the take-up reel, and the tabs adhered to the synchronizer, then, in the dark, the tape piled up on the floor). The adhesive oozed across on the adjoining oxide side of the tape while wound on the reel, and then fouled the head. It may well be that Scotch 51 has overcome these difficulties, but this has been my experience with adhesive metal foil tabs.

I write to you because I thought that perhaps I had the answer to the question forwarded by R. J. H. of California.—Kenneth J. Crawford, Post Office Box 48, Omeme, Ontario.

To the Editor:

You know I have been with your magazine since it began in Oct., of 1954. But I must say it seems this last couple of years you went backwards instead of forward. Like so many others that have written asking why the magazine reaches us two months behind the date it is supposed to be received. I know you don't answer this sort of letter, but I wanted you to know that has been the reason for my renewal. Perhaps the magazine is going out of business.

You got us over a barrel as it is the only magazine of its type published. Anyway, enclosed is my check for another year. I do hope you are able to get magazines to us sooner than in the past.—Howard S. Burns, 1002 Lincoln Way West, Mishawaka, Indiana.

To the Editor:

On page 17 July-August Tape Recording, Mr. Edward Drayton, Brooklyn, N. Y., spoke about cleaning the heads with the so-called "ribbon cleaner." Well, I bought one of these about two years ago. It may clean the heads OK but it sure wears out your pressure pads that press against this cleaning ribbon. If this ribbon had a glazed non-abrasive material on the back side (that comes in contact with pressure pad material) it would be all right. I don't advise using it.—Charles Huseman, 470 Greenlee Ave., St. Bernard 17, Cincinnati, Ohio.

To the Editor:

I have been a subscriber to your magazine for a number of years. I received my first copy (Vol. 1, No. 5) in August 1954.

I have enjoyed each issue and always look forward to receiving it.

I am somewhat disturbed about the present quality of your magazine. It just doesn't seem to be as interesting as it has been in the past.

One thing that makes me believe there is a down-hill trend is the repeating of articles that have appeared in previous issues, e.g., "Beat the Horses," which

appeared in January 1957 and again in your last issue. This is just one of a number of repeats that I have noted. In addition, I have noticed that a number of your good columns have been discontinued.

Of course, there is nothing wrong with repeating a good article. No doubt there are a great number of people who will find them interesting but I feel that this indicates a possible lack of new material for articles. . . .

Of course I realize that finding someone to write a good article is a problem, but I do think that new and interesting subject matter is an important thing for your magazine and should not be neglected.

I have been a tape recording buff for about fifteen years and believe that your magazine more than anything else, has helped keep my interest in tape recording. Therefore, I think that there is a real need for a magazine such as yours to keep the average tape recording enthusiast informed. I'd sure hate to see anything happen to make you discontinue your magazine. I hope to be a subscriber for a long time.

Please keep up the good work and thanks for the many pleasant hours of reading and information your magazine has given me. John C. Cash, Pearl City, Hawaii.



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## New Sections in WTE

The two most recently organized Sections within the framework of WTE, Scouting and Round-Robins, have met with good response, according to WTE Executive Director Harry Matthews, of Dallas, Texas.

Don Traina of Louisiana, coordinator of the Scouting Section, emphasizes that this service is for Girl Guides, Brownies, Girl Scouts, and Cub Scouts, as well as Boy Scouts.

Round-Robin groups are being organized by Cletus J. Schneider of Vergennes, Ill., for friendly conversation and discussions on specific topics.

The Handicapped Section of WTE announces a new director, Dr. James Oliver, of Lafayette, La., who is replacing Steve Florescu of Lincoln Park, Mich. Steve recently won international acclaim a second time at the annual Stokes-Mandeville (England) Paraplegic Games. Dr. Oliver has worked previously with Bob Brunson, Director of WTE Services for the Blind, and the two will cooperate in their services for handicapped.

Dr. Theodore Gordon, Director of Youth Services, Los Angeles City Schools, is meeting many WTE members during his 6-months sabbatical tour of Europe. Dr. Gordon recently spent an interesting evening with the new WTE Representatives for Germany, Hans Hupfeld and Erhard Mokel, both of Hamburg.

## Tape Catalog

World Tapes for Education, sponsor of World Tape Pals, has issued a revised catalog of tapes in its WTE Library, containing 270 taped programs on a wide variety of subjects. WTE Library Director, Ed Cumbie, of Homestead, Fla., says he has another 100 programs ready to add to the library.

WTE headquarters is rapidly bringing the six branches of the WTE library up to full strength, with the addition to its equipment of a tape duplicating machine. One copy of each WTE program is being furnished each of the libraries in England, Israel, South Africa, Japan, New Zealand, and Australia.

All members of WTE/WTP may order programs from their nearest library. Outside the U. S. and Canada, the programs are copied onto the individual's tape. The U. S. library operates on a loan basis, with a small fee being charged for use of the tapes.

Members are urged to submit programs for addition to the library, stresses Mr. Cumbie. He says that most of the WTE programs are compiled by individuals, rather than professional teachers or educators.

## New Secretary

The English Speaking Tape Respondents' Association has announced the appointment of a new general secretary, Sir Mark Dalrymple, Bart., Secretary & Treasurer, English Speaking Tape Respondents' Association, Newhailes, Musselburgh, Scotland. Membership in this organization is open to tape enthusiasts in all parts of the world.

## Club Reorganization

Bob Piedot writes that he would like to keep the Tapeworms International in existence, and ground work has been laid to do so, and he would like the Tapeworms' name still listed in the Tape Club Section.

Although it may change in a few months as the club is reorganized, Bob may be reached at the address below and says he will follow up all leads until something concrete is done.

Bob Piedot,  
105 N. Church St.,  
Neenah, Wisconsin.

## Memorial Fund

Tarver Memorial Fund is the major special activity of The Voicеспondence Club, and its operation is fully provided for in the Certificate of Incorporation. Not one single penny of the Club's regular income has ever been diverted to the Fund's operations, however.

The Tarver Memorial Fund is the means by which this club offers aid to handicapped members and other worthy handicapped people who want and need facilities to voicеспond but cannot afford them. It also offers help to their blind members in many other ways, including the financing of purchases of recorders, furnishing them tapes and accessories at less than cost, and operating a tape library for the blind.

Services of the Fund. The Fund acts as an agent to purchase for a handicapped member or prospective member a tape recorder at the very lowest wholesale discount cash price. It then permits the handicapped member to repay the Fund, in small monthly payments, the money advanced for this purpose. No interest or carrying charges are involved,

and this service is completely free, as are all the Fund's services. Sometimes the Fund donates part of the cost of a recorder to certain worthy handicapped persons. It also purchases tapes, mailing envelopes, accessories, and other supplies and sells them to blind members of the Club at less than cost. It gives a free tape to each new blind member with a complete listing and description of all the special services available to him and containing directions for voicеспonding.

Tape Library for the Blind. Another service of the Fund is the operation of its Tape Library for the Blind. This contains interesting fiction, non-fiction, the Club magazine, "The Voicеспondent," a special magazine "Just Between Us," "Good Housekeeping magazine," and "Tape Recording Magazine." There is no charge for this service, of course, and it is available to any blind person who has a way to listen to tapes, although some of the material is restricted to members of the Club only. The Tarver Memorial Fund Tape Library for the Blind has at present: 114 fiction tapes; 126 non-fiction tapes; 105 tape copies of "The Voicеспondent"; 51 tape copies of "Just Between Us" 42 tape copies of "Good Housekeeping"; and 85 tape copies of "Tape Recording."

These books and magazines are read by us for the most part and are circulated to hundreds of blind borrowers as fast as they can travel through the post. Our modest library has become one of the major sources of reading matter for the blind in this country, and we are constantly striving to make it even better. Our taped course in Fundamentals of Electronics has been read by many blind people who would never have been able to obtain such easily digested information on the subject otherwise, and our new Homemaking Series is beginning to fill a real need in the lives of most blind homemakers.

## New Director Announced

American Tape Exchange, Clarence J. Rutledge, Director, has announced the appointment of a new Teenage Director, Miss Deborah Heagy of East St. Louis. She is 15 years old, very interested in tapesponding and very active in school affairs.

The Exchange also announces that as of October first it has ready for members a tapeslide show of Mexico that should be most interesting. A.T.E. Member George Ahrens of Houston, Texas, has a new idea for people without slide projectors. He calls it his poor man's tape slide show. This is color post cards with pictures of the city which has been visited. He then numbers them and seals them in plastic so that they can be used over and over again. This then accompanies the tape.

# JOIN A CLUB

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

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

## AMATEUR TAPE EXCHANGE ASSOCIATION

Ernest Rawlings, President  
5411 Bocage Street  
Cartierville, Montreal 9, P. Q., Canada

## AMERICAN TAPE EXCHANGE

Clarence Rutledge, Director  
1422 No. 45th Street  
East St. Louis, Illinois

## CARTRIDGE CORRESPONDENCE CLUB

George C. Ekmalian, Sect.-Tres.  
45 Haumont Terr.  
Springfield, Mass.

## CATHOLIC TAPE RECORDERS OF AMERICA, INTERNATIONAL

Jerome W. Clarrocchi, Secretary  
26 South Mount Vernon Avenue  
Uniontown, Pennsylvania

## CLUB DU RUBAN SONORE

J. A. Freddy Masson, Secretary  
Grosse Ile, Cte, Montmagny,  
P. Que., Canada

## INDIANA RECORDING CLUB

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

## INTERNATIONAL VOICES OF YOUTH

P. 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-INTERNATIONAL

Jere A. Pankhurst, U. S. Director  
37 East Avenue  
Cortland, N. Y.

## TAPEWORMS INTERNATIONAL TAPE RECORDING CLUB

Bob Piedot  
105 N. Church Street  
Neenah, Wisconsin

## 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

Eiml 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.

Harry Matthews, Exec. Director  
P. O. Box 15703  
Dallas, Texas

## OVERSEAS

### AUSTRALIAN TAPE RECORDISTS ASSOC.

Graham Lowe, Hon. Sec./Treas.  
P. O. Box 67, Eastwood  
New South Wales,  
Australia

### ENGLISH SPEAKING TAPE RESPONDENTS' ASSOCIATION

Sir Mark Dalrymple, Bart.  
Secretary & Treasurer  
Newhailes, Musselburgh, Scotland

### INTERNATIONAL TAPE FELLOWSHIP

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

### NOR-TAPE INTERNATIONAL

Lille Frogner Alle 3  
Oslo, Norway

### 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

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35 The Gardens, Harrow  
Middlesex, England

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# SHOP OR SWAP

Advertising in this section is open to both amateur and commercial ads. TAPE RECORDING does not guarantee any offer advertised in this column and all swaps, etc., are strictly between individuals. RATES: Commercial ads, \$.30 per word; Individual ads, non-commercial, \$.05 per word. In figuring the number of words in your advertisement, be sure to include your name and address, Count each abbreviation, initial, single figure or group of figures as one word. Hyphenated words count as two words. The name of your city, local postal zone and state count as two words. Maximum caps first four words. Proofs are not submitted on classified ads. Remittance in full must accompany copy. No exceptions permitted. Ads will be inserted in next available issue. Please print or type your copy to avoid error. Address ad to Shop or Swap, TAPE RECORDING Magazine, 1077 West Glebe Road, Alexandria, Va.

LP'S PROFESSIONALLY MADE FROM TAPES. Hot Stylus cut for full range, 12"—45 min. \$7.50, add 50¢ total postage. Other sizes, speeds, write: Artistic, Box 3774, Oak Pk., Mich. 48237.

BUY DIRECT AND SAVE on stereo tape decks, tape recorders, speaker systems, custom cabinets. Particulars on request. Norse Crafts, Box 63, Skjeberg, Norway.

TAPE SALE—1800' Mylar ten plus \$1.70 Postpaid/single \$1.95. Bayla, Box 131TP, Wantagh, N. Y.

AMPEX RECORDING TAPE 1800 ft Mylar on 7" reel. 12 for \$24.96. Money-back guarantee. Lowest quotations on all components. Recorders all brand new in original cartons. Write for catalog. Pofe Electronics, 1716 Northfield, Muncie, Indiana.

BOOKHUNTING? All subjects searched free! No obligation! Write Cambridge Book Service, Box 18B, Cambridge 40, Mass.

SELL: PENTRON STEREO TAPE Recorder Model XP60S and Companion Amp/Speaker. Excellent condition. \$100.00 or best offer. J. Sherman, P.O. Box 475, Palatka, Florida.

WANTED: WEATHERS SE60 Harmony Trio speaker system (ebony) with amplifier. Offer \$80 plus expressage. J. Newhouse, 560 Spaulding Ave., SE, Grand Rapids, Mich. 49506.

WANTED: "FATS" WALLER RECORDINGS. Robert Kumm, 32 Bryson, Staten Island 2, New York.

USED MYLAR TAPES—1800 foot—7 inch reels. \$1.00 each postage prepaid. Send check or money order. B. Freeman, 800 W. 87th St., Kansas City 14, Mo.

USED 3M TAPE SPECIAL—1200 foot—7 inch reels—12 for \$5.50, postage prepaid. Send check or money order to Danny Sloan, 7 Orchard Parkway, White Plains, New York, 10606.

WRITE for lowest quotations, components, recorders, No Catalogs. Hi-Fidelity Supply, 2817-SC Third, New York City 55.

WANTED: MIDGET MOHAWK Tape Recorders. Give Model etc. 1st letter. Nick T. Leiker, 532 South Market, Wichita, Kansas.

LEARN HYPNOTISM, SELF HYPNOSIS from recorded tapes! Other amazing Tapes, Books, Records. Complete Sleep-Learning information! Free Catalog! Philanthropic Library, Drawer TR 400, Ruidoso, New Mexico.

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STEREO TAPES, 50% off, send for free literature. P. O. Box 3603, Wichita, Kansas.

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GOON SHOWS. Enthusiast who wanted Goon Show tapes please write. Maybe I can help. Hal Speer, 255 Clinton St., Brooklyn 1, N.Y.

CHRISTIAN TAPE LIBRARY—GOSPEL singing, Organ music, gospel sermons. Also write about free tape slide shows of The Bible. Samuel Fry, Box 500, Selinsgrove, Pa.

BRAND NEW WEBCOR TAPE Recorder No. EP2457 Squire \$209.00. Sony No. 500 Used Two Weeks, Full Guarantee \$279.00. Siger's, 127 Main Street, Hudson, Massachusetts.

FOR SALE: VIKING 85' tape deck, ¼ and ½ track heads, \$60; Viking RP83 record/playback amplifier, \$30; Heath TE1 record/playback amplifier, \$15. Larry Polsky, 4304 Chestnut Street, Philadelphia 4, Pa.

WANTED: DeJur Stenorette office tape recorders. Nick T. Leiker, 532 South Market, Wichita, Kansas.

MAGNECORD 728-44 Professional Stereo Tape Recorder. 1st Class Condition. Only \$665.00 complete. B. K. Balch, 611 Livingston Rd., Linden, N. J.

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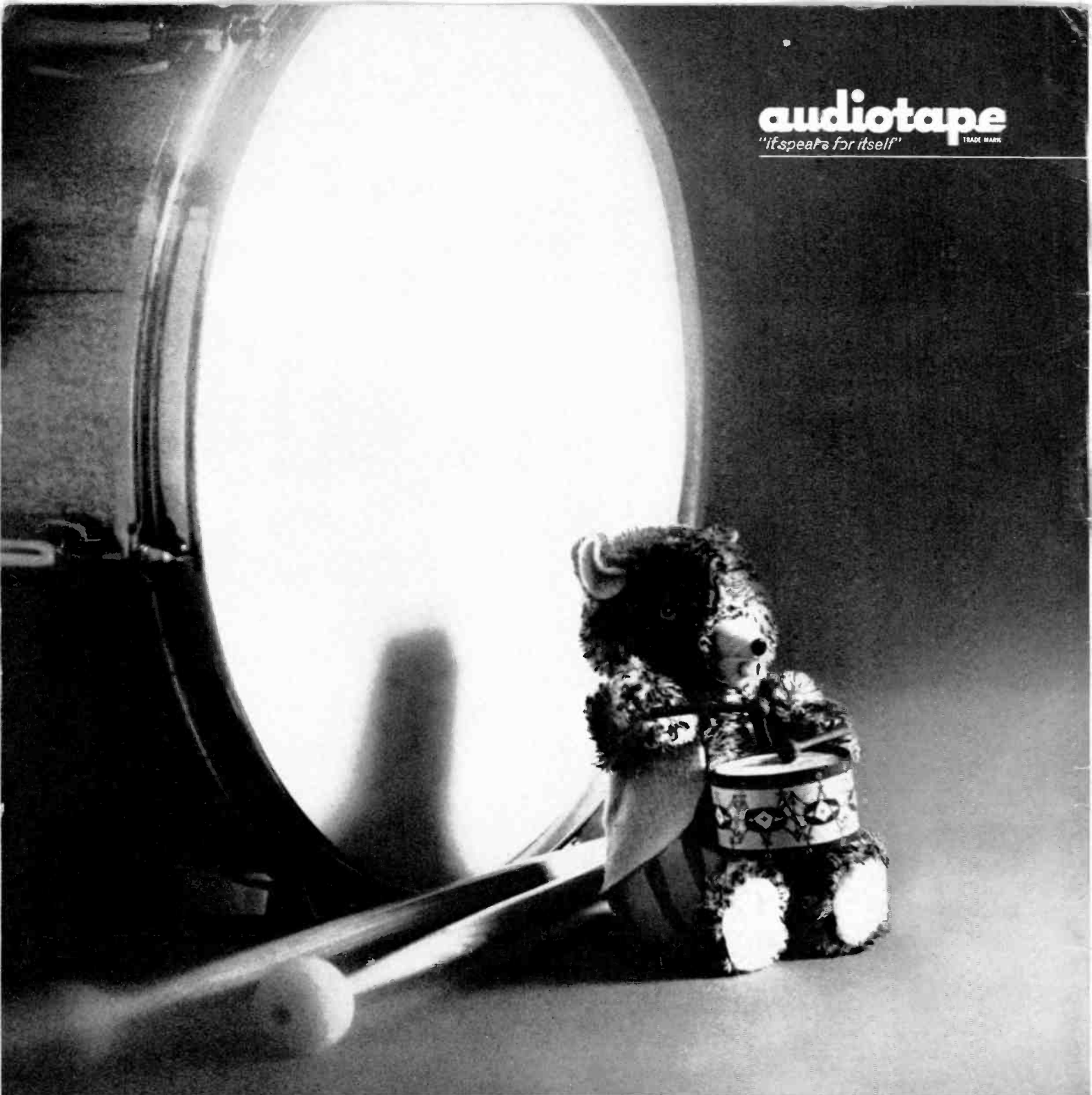
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