

# Stereo Review

MARCH 1976 • ONE DOLLAR



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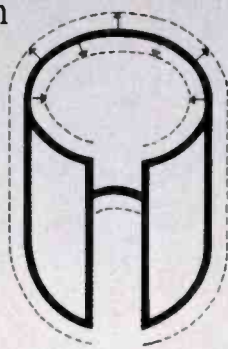
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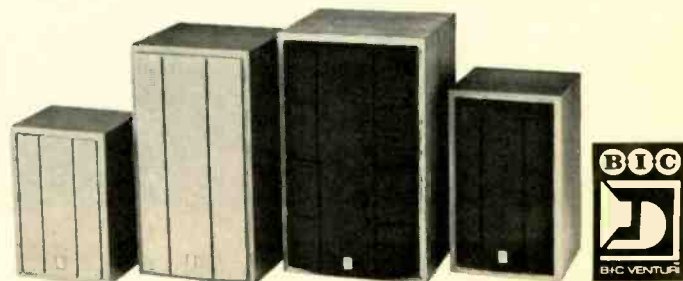
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# Stereo Review®

MARCH 1976 • VOLUME 36 • NUMBER 3

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## EDITORIALLY SPEAKING

By WILLIAM ANDERSON

### CROSSOVERS

As at least half the world must know by now, recordings of classical music do not sell very well in these United States; though their total quantity may be high in comparison with figures for other countries, they amount to a mere 5 per cent or so of all the records sold. Things might be different, however, if this place were run along the lines of Plato's Republic: the philosopher-authorities would see to it that the music of moral uplift (whatever that might be) would preempt most of the market space, leaving little room for the degraded, fiber-sapping strains of pop. (This system has had a salutary effect on the classical percentage in Russia, though I would hesitate to extend the comparison with Plato any further.) But Draconian measures may not be necessary; it might pay American classical record producers to investigate, say, how it is that classical music manages to retain an 18 per cent share of the market in Germany, or how it is that France has been able to double classical music's share (to a hefty 20 per cent) over the last decade.

What American classical marketers do instead is to rely on the kindness of the Tooth Fairy to bring them a Magical Crossover Album. It is usually more than a little difficult to spot a crossover album before the fact—which is to say before it has crossed over—for the simple reason that it is not an aesthetic concept (the music could be almost anything, the performances vile) but a marketing one. The necessary conditions are simple: it must be "classical" music (and we all know what that is, don't we?), it must sell like the surprising dickens in places where classical music never sold before (and probably won't again), and it should ideally make the Top Forty charts. You can be sure Columbia didn't know it had one of the all-time champion crossover albums in Walter Carlos' "Switched-On Bach" of several years ago—just as sure as you can be that RCA *hoped* it had one in Isao Tomita's more recent copy-cat album of Debussy called "Snowflakes Are Dancing." It would appear, however, that these two, like many others, obey the Law of Novelties: one freak is enough, and follow-ups never do quite as well.

The Tooth Fairy does not rely solely on the Moog, however, to launch her crossover albums; she is equally fond of the movies. Disqualifying such pseudo-classical items as the *Warsaw* and *Spellbound* Concertos, we have had in the recent past two rather startling examples of the real thing in Mozart's Piano Concerto No. 21 (*Elvira Madigan*) and Strauss' *Also Sprach Zarathustra* (2001). A third entry has just now bobbed its head over the turntable, and it may outsell them both. The score for Stanley Kubrick's *Barry Lyndon* is a veritable feast, an oblectation, a smorgasbord of classical dishes ranging from the sarabande from Handel's D Minor Harpsichord Suite No. 12 (I do not know of any complete recording of it in the catalog right now), Frederick the Great's *Hohenfriedberger* March, a march from Mozart's *Idomeneo*, Schubert's German Dance No. 1 in C Major, the cavatina from Paisiello's *Il Barbiero di Siviglia*, Vivaldi's Cello Concerto in E Minor, the adagio from Bach's Concerto for Two Harpsichords and Orchestra in C Minor, to the second movement from Schubert's E-flat Piano Trio, Op. 100. There are, in addition, a gargle of traditional Irish airs for harp, pipes, drum, and all. These are winningly performed by the Chieftains, a fine bunch of buckos who, coincidentally, have an album reviewed in this issue. They also do *Lilliburlero*, a late-seventeenth-century protest song sometimes attributed to Purcell and thought to have been influential in uniting public opinion against King James II, who was ousted in 1688 in favor of William and Mary. It is a little early for the period of *Barry Lyndon*, which is set in Handel's mid-eighteenth century, but this odd little musical relic reminds us that Catholic James subsequently crossed over to Ireland where, in 1690, he met the Protestant armies of William in the Battle of the Boyne, which seems to be going on still. Could they still be singing *Lilliburlero* too?





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## LETTERS TO THE EDITOR

### Avant-Garde

● I'd like to correct a few statements Jack Somer made in his article on avant-garde music (January). The only recordings in the Vox Productions catalog of American contemporary music that were "subsidized" are those that came out under a Ford grant two or three years ago. We are presently applying to the Ford Foundation for a partial subsidy (partial because according to the new Ford Foundation rules they will not subsidize any technical expenses).

Also, the examples mentioned among the "Survey" series are totally erroneous. The recordings of the Kohon Quartet with the exception of the Mennin quartet were financed by Vox Productions entirely. As far as the Concord Quartet is concerned, there was no request for a subsidy (and none was received) for Crumb's *Black Angels*. 80 per cent of the three-record set being financed by Vox. And there is not a single record in our catalog which was paid for either by the composer or the performer.

GEORGE H. DE MENDELSSOHN-BARTHOLDY  
President, Vox Productions  
New York, N.Y.

*Music Editor James Goodfriend replies: I take upon myself the responsibility of replying, as Jack Somer, at this moment, is apparently somewhere in the South Seas. Mr. Mendelssohn-Bartholdy certainly knows better than I who paid for his records, and we are pleased to convey his statements to our readers. Still, there seem to be a few inconsistencies in what he says. For example, he points out that the only subsidized recordings of contemporary American music in his catalog derived from a Ford grant. But he also admits that recordings by the Kohon Quartet were not entirely financed by Vox and that the Concord Quartet set was 80 per cent financed by Vox. Assuming the remaining costs were not covered by the Ford grant (for he does not say they were), some sort of other subsidy is obviously involved here, whether it be foundation, publisher, performer, composer, or private individual. At any rate, no foundation but Ford was mentioned in connection with Vox in Mr. Somer's article.*

*Mr. Mendelssohn-Bartholdy also says that the new Ford grants will not cover any technical expenses. But Mr. Somer never said they would. He said only that Vox had "drawn well*

*from the Ford program," and that does not imply that Vox had received benefits not also available to other companies. His comment about Vox's "balancing subsidy and self-support in very selective quantities" was meant to be an admiring one, and certainly no one in the record business can feel less than admiration (and perhaps envy) for the way Vox/Turnabout is able to record and market quantities of interesting and relatively unfamiliar music (both contemporary and old) so successfully. The fact that subsidies, in whatever form (minimum recording fees, for example), may be involved in this does not in any way impugn the quality of the recordings or the importance of the accomplishment.*

● I thoroughly enjoyed Jack Somer's survey of the avant-garde on LP and will make use of some of his information. However, there was one mistake in the article which really rubbed salt in a wound of mine. The Elliott Carter Piano Concerto does *not* remain "one of the few modern works recorded but not (yet) deleted by RCA." It was, in fact, deleted over a year ago. I make my living selling deleted LP records, but this is one item I would most happily forgo my sales on, and I pray for its eventual reappearance—perhaps on CRI.

LESLIE GERBER  
Phoenicia, N.Y.

● I would like to question two aspects of Jack Somer's "modest proposal" concerning the recording and dissemination of avant-garde music (January). The first concerns the possibility of the large record companies establishing a cash pool for use by the smaller firms "without restrictions." Mr. Somer may have some insight into this which I lack, but wouldn't the very concern for profits on the part of the big companies about which he complains on several occasions tend to preclude the feasible expectation of such an act of generosity?

The second deals with the matter of distribution. The fact that RCA or Columbia might help distribute the new-music discs of a smaller label certainly does not mean that retailers must carry the line. Decca/London's inability to persuade a number of retail outlets to stock its *Headline* series of new music is a case in point. Likewise, there are many stores that now refuse to carry Louisville, CRI, Desto, or Orion discs, not to mention Opus One

or Chatham Square. Thus, the nonprofit distribution of such records by the large company hardly guarantees their success.

In the meantime, I, for one, welcome the all-too-few ventures into new music on the part of Columbia, Angel, DG, London/Argo, *et al.*, for they offer us—if admittedly for a limited time only—recordings of works we would otherwise not have. Realities being what they are, that is better than nothing.

CHRIS ROUSE  
Ithaca, N.Y.

● Being a contemporary and avant-garde music enthusiast for about five years, I enjoyed Jack Somer's January article on avant-garde recording labels and completely agree with his discussions about the plight facing many of these companies—that is, if Foss won't sell, Funk will. However, I can't help but scold many recording companies about the way they get their product out in the open market. I've searched in Houston and Dallas for many contemporary recordings only to find out that the stores will almost refuse to order records I choose because they appear on labels that seemingly never ship or supply the professional distributor and salesman upon their demand. I would particularly like to throw my scornful eye on Desto and Golden Crest. They have many things I would like to get hold of but can't due to some hang-up in their business methods and distribution. I don't know how much money Louisville is making, but at least they have a clear-cut procedure for how to obtain their product.

C. D. RUSCIANO  
Denton, Tex.

### Hearing the Specs

● Thank you for Mitchell Cotter's outstanding article, "Can You Really Hear Those Hi-Fi Specs?" (January). Mr. Cotter's approach to studying hearing seems to offer more benefit than simply comparing technical specifications of audio products. The question "Am I getting more *real* audio value with increasing technical specifications and dollar outlay?" is difficult enough to answer, but without an understanding of that final transducer, the human ear/brain system, it is completely unanswerable. To pursue this further, I'd like to see a bibliography on the subject.

HARRY R. MCKINLEY  
Southampton, Mass.

*A bibliography on acoustics and psychoacoustics can be obtained by sending a stamped, self-addressed envelope to STEREO REVIEW, Dept. MC, 1 Park Avenue, New York, N.Y. 10016.*

### Junior Readers

● Like reader Wayne Brown, I too belong to that small portion of STEREO REVIEW's readers who are under eighteen (January). I became an audiophile at age thirteen in the fall of 1973. I like your magazine so much that I have extended my subscription to May of 1979.

JONATHAN LEVY  
Bronx, N.Y.

● I am thirteen years old, but I was interested in audio equipment before that and was thrilled to find a magazine on that subject exclusively (I bought my first issue of STEREO REVIEW in May 1972). My interest in audio (as opposed to the broader category of elec-

*(Continued on page 8)*

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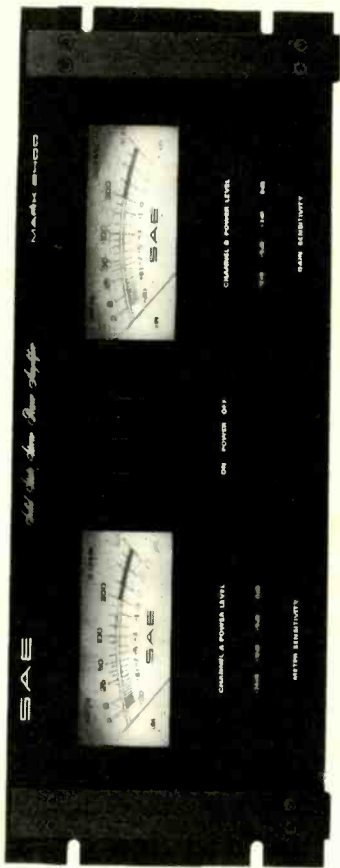


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tronics, which has fascinated me for as long as I can remember) probably developed when I was about twelve and a half. I helped pay for a \$250 Panasonic compact that I received Christmas 1972.

STEVE PROCTER  
 New Holland, Pa.

● I read in STEREO REVIEW about fourteen-year-old Wayne Brown (January). Well, I am eleven years old, and I have been getting STEREO REVIEW for a few months, and I really like it.

BRIAN JOHNSTON  
 Hampton Bays, N.Y.

## Hall of Fame

● How can one resist answering the concluding question put by William Anderson in his "Hall of Fame" editorial (January)?

Tops in my musical pantheon? No contest at all: the slow movement of the Bach Concerto for Two Violins. It is, quite simply, a dialogue between angels. In vocal music, I find the *Abschied* from Mahler's *Das Lied von der Erde* does for the profane what Bach does for the sacred. I find each to be the ultimate of its kind: earthly weariness, divine rest; ultimate sadness, ultimate joy.

LEONARD MALLECK  
 Huntington, N.Y.

● The Editor's column "Hall of Fame" (January) has inspired me to offer a personal commentary:

I well remember the day in 1949, at the ripe old age of sixteen, when I entered Schirmer's and a clerk who knew I collected vocal records asked me if I had heard the two recordings of tenor Aksel Schiøtz, "Comfort ye" and "Every valley. . . ." He sent me to the listening room (oh, the happy days of listening rooms!), and I was stunned! "Comfort ye" was great, but "Every valley. . . ." was a revelation. I purchased the 78 then and there. My collection now has over 6,800 titles of vocal records, many of them on original 78's, and listening to them has helped sharpen and mold my critical standards.

First, perhaps the greatest vocal artist on record: a voice of the first rank, a technical skill that frequently beggars belief, and an interpretative art that ranks with the best are exemplified on the many recordings of John McCormack—the technical skill displayed in "Il mio tesoro" (how well I remember when HMV released the 78 of that aria coupled with "Una furtiva lagrima"! I bought twenty copies on the spot and distributed them free to my friends; fanatics are anxious to spread their gospel, and McCormack was, and is, mine), the beautiful legato and breath-control of "Oh sleep. . . ." the rare interpretative power of *In Waldeseinsamkeit*, the magical ending to *Macushla* or "Per viver vicino a Maria"—the list is lengthy.

And there are others. One is left amazed after hearing Louisa Tetrazzini's rendition of "Ah non giunge." Schipa's "Ah non credevi tu" is a thing of matchless beauty. Jussi Bjoerling was, perhaps, the most consistently thrilling tenor on record. A list of just his most memorable records would fill the rest of the page.

My favorite among sopranos is Muzio; among lieder singers, Schumann and Fischer-Dieskau (though, for all his marvelous interpretative skill, he has not the sheer vocal opulence of a Kipnis or a Schlusnus); among basses, Pinza and Kipnis; Ferrier is superb,

and her singing of *I Will Walk with My Love* is great; John Charles Thomas' rendition of *Lord Randall* still terrifies me; Caruso's unreleased 1905 version of "Di quella pira" is incredible—again, the list is almost endless.

NEIL P. O'DOHERTY  
 Forest Hills, N.Y.

● The concluding question in William Anderson's January editorial, "What is tops in yours?" is simply too challenging to be left unanswered.

I collect just about everything classical, shying away from the "Moderns," particularly those composers whose music is completely atonal, often sounding like what the Germans call "Katzenmusik" (music of cats, probably during the mating season).

I'm very fond of Jussi Bjoerling, too, but at present I'm suffering from having too many performances of "Che gelida manina" as I have most Camden records and just about every tenor does that one. I am also quite fond of Aksel Schiøtz, and one of my treasured possessions is "The Art of Aksel Schiøtz" on Victor LM-1968, as well as his *Die Schöne Müllerin* on Seraphim 60140.

PAUL W. SAMUEL  
 Dobbs Ferry, N.Y.

## Performers I Hate

● Although most of the artists selected in "Ten Performers I Hate" (December) are overpublicized and do lack talent, it's too bad the staff at STEREO REVIEW is hung up on comparing every performer to a well-established superstar. Please tell me this article was published just to increase circulation!

MARK ROSNER  
 East Lansing, Mich.

Yes—of the blood.

● "Ten Performers I Hate" (December) was a rare treat indeed. Chris Albertson's succinct dismissal of Sammy Davis and Peter Reilly's even more concise and devastating put-down of Tony Orlando alone establish the December issue as a collector's item. However, I was a bit disappointed by the seemingly inexplicable omission of two of my own favorite non-talents: Connie Francis and Neil Sedaka. The mere thought of encountering the shrill, steely twang of Ms. Francis is enough to strike terror in the hearts of even the most courageous music lovers. And Neil Sedaka and his ilk were responsible for the decline and fall of the American popular song.

JIM WILKINS  
 Binghamton, N.Y.

● I and many of my friends were amused by some of the critics' choices in "Ten Performers I Hate" (December). In particular, the fact that Emerson, Lake and Palmer (whom I consider to be one of the most innovative and talented bands in rock today) were included in three lists. And I was somewhat disappointed to find such large-scale criticism of jazz-rock. But I found consolation in one selection by Noel Coppage. Though I rarely agree with Mr. Coppage's reviews, I couldn't agree more with his explosion of the Elton John myth. I'm sure you will receive many more letters in defense of Elton John than those praising Mr. Coppage for his honesty and taste. I therefore nominate Noel Coppage for the "Most Courageous Reviewer of the Year Award."

JIM JORDAN  
 Endwell, N.Y.

# **How (and how not) to buy a loudspeaker.**

Every year thousands of high fidelity customers are put through a variety of "demonstration" rituals on their way to choosing loudspeakers. It's enough to make a tire-kicker blush.

We're going to tell you how to buy a loudspeaker.

We're not going to tell you which one, because loudspeakers are very personal. One man's nice is another man's noise. Still, there are some common sense (and not-so-common-sense) things you should know. For instance:

**Enjoy yourself.**

You're not getting tetanus shots. You're searching for love. Enjoy.

**Bring your own music.**

Bring a favorite record or tape; something you know by heart. There's no quicker, simpler way to tell the difference between

speakers. If you've been listening in black and white you'll know it when you hear Technicolor.

Also, don't evaluate any speaker by listening to radio—AM or FM. By the time a radio signal comes out of a speaker, it's been strained through generations of electronics and the signal has been clipped on both ends. It's just not a test of high fidelity sound.

**Listen to the speakers through the kind of electronic system you plan to have at home.**

No point listening through \$5,000 worth of pre-amp, amp and turntable at the store unless that's

what your speakers are going to live with, right? Right.

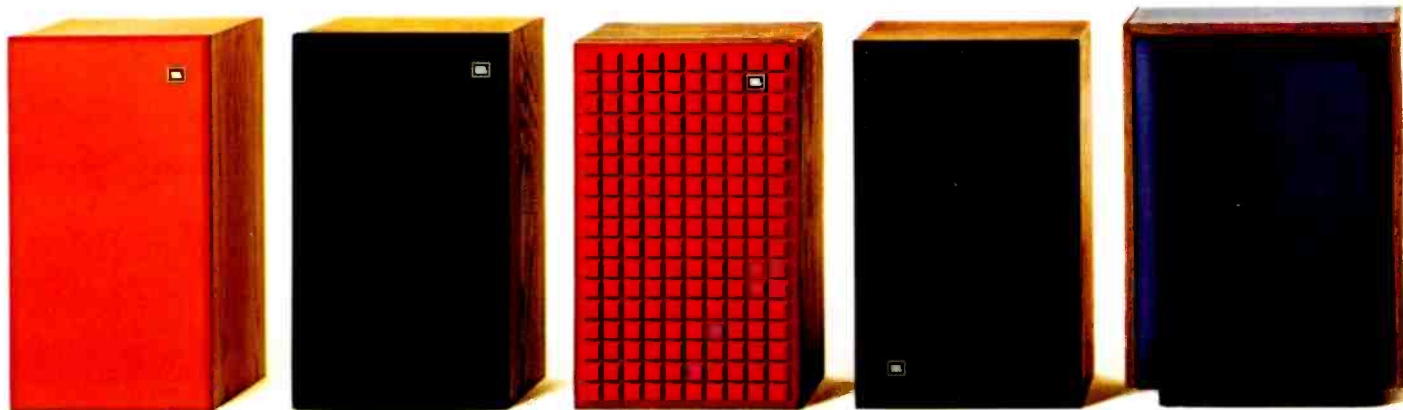
**Turn it up!**

Way up. Loud loud. Kid-next-door loud.

You don't have to live with loud music, but you ought to visit there. Loudness magnifies the imperfections that will scar your subconscious at regular listening levels.

Do you like the sound? Is it clean? Is it clear? Does it hum? Does it splatter?

Loudness tells you what time will do to your ears, your head, your disposition. So, turn it up!



**Decade L26.**  
JBL's best selling two-way system. Natural oak cabinet. **\$156 each.**

**Decade L36.**  
JBL's least expensive three-way system. Natural oak cabinet. **\$198 each.**

**Century L100.**  
JBL dressed up their compact studio monitor and turned it into the most successful loudspeaker they've ever made. **\$318 each.**

**Horizon L166.**  
JBL's newest. It has more power handling capability, definition, and range than any bookshelf loudspeaker JBL has ever made. **\$375 each.**

**Jubal L65.**  
The smallest floor system we make. Oiled walnut finish with smoked glass top. **\$426 each.**

### Turn it down!

Right to the edge of silence.

Are all the textures and details and harmonics of the music still there or does only the melody linger on?

No one wants to live with a loudspeaker that can't make its point unless it yells. So, turn it down.

### Don't stand right in front of it. You're not taking batting practice.

One way to spot a not-so-good loudspeaker is to listen to the way it handles high frequency sound. If the sound narrows as the tones go higher, if there's a peashooter

effect that requires you stand right in front of the speaker to hear the highs, that's not so good.

A good loudspeaker will disperse the sound throughout the room.

So, stand to one side, then the other. If you don't get all the music, move on.

### One demonstration isn't a demonstration.

Expect to listen to three, four, five different pairs of speakers. Be critical. Be opinionated. A little honesty never hurt a courtship.

### Last point: Most of how is who.

One of the more expensive bits

of nonsense is that all great products sell themselves. That's just not true with loudspeakers.

You're going to be better off if you can find someone to help you take a speaker through its paces.

And you just can't do any better than an authorized JBL dealer. He's one of the nicest know-it-alls you'll ever meet.



High fidelity loudspeakers  
from \$156 to \$3210.



#### Aquarius Q L120.

Sound in the round. 360° sound to match its 360° good looks. Oiled walnut or satin white finish. \$633 each.

#### Studio Master L200 B.

A home version of JBL's two-way professional studio monitor. \$696 each.

#### L300.

The beautiful twin of JBL's newest three-way professional studio monitor. \$897 each.

**Now that you've gotten  
the word, try the number.**

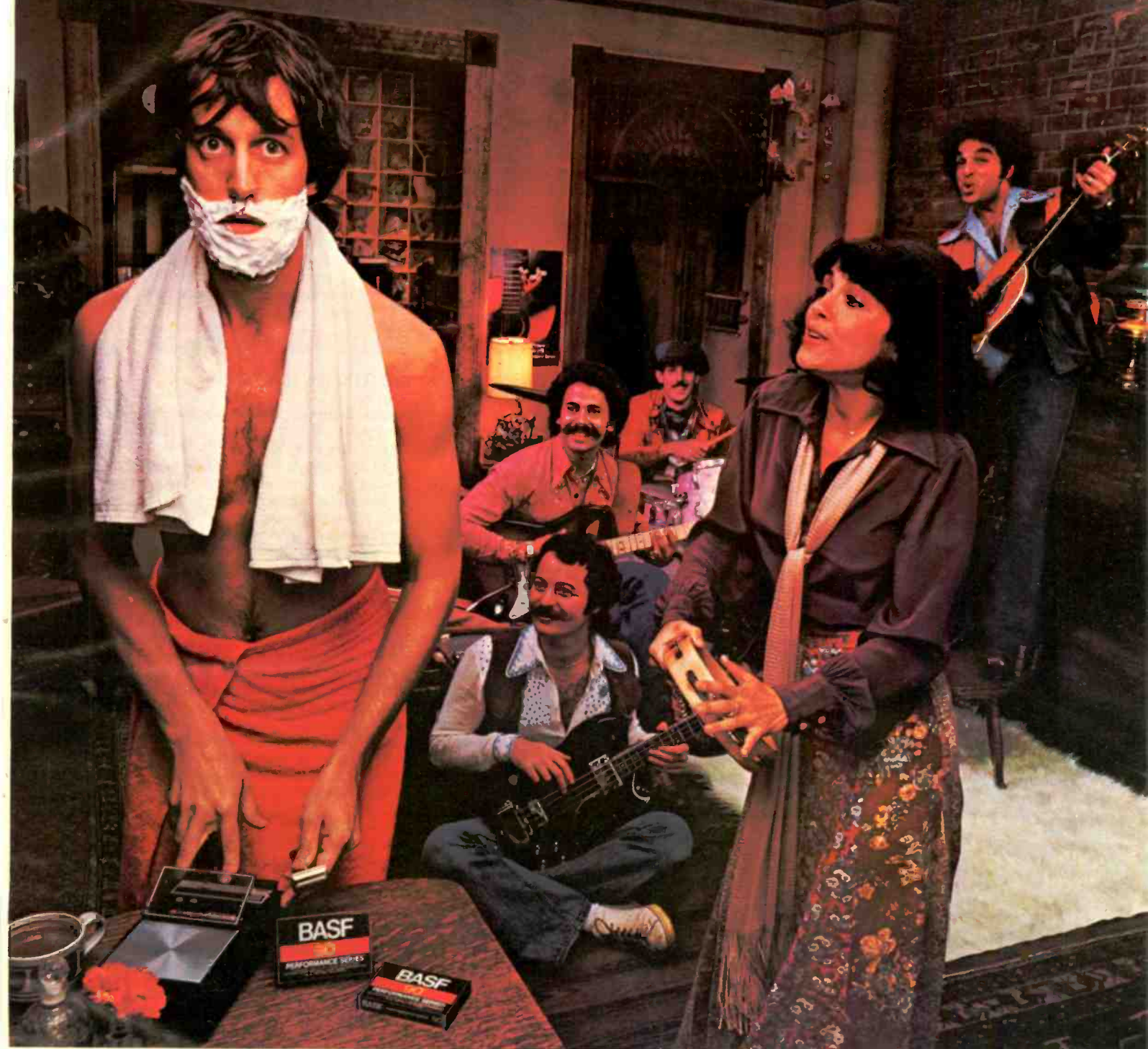
Call (800) 243-6100 for the JBL dealer nearest you.  
In Connecticut, call (800) 882-6500



James B. Lansing Sound, Inc./3249 Casitas Avenue/Los Angeles 90039



# There are still some surprises in audio tape.



BASF sound is so clear, it's like the musicians are right there.

What you experience with BASF tape is simply this: the music. Pure and clear.

Why this extraordinary clarity? BASF polishes the tape. Literally. Getting rid of most of the thousands of tiny surface bumps that can cause background noise. (Get rid of most of



them, you get rid of most of the noise.)

So what you're left with is sound so rich and clear, you don't just hear it. The music happens.

Which really isn't that surprising. After all, BASF invented audio tape in the first place.

**BASF** We sound like the original because we are the original.

# NEW PRODUCTS

THE LATEST IN  
HIGH-FIDELITY  
EQUIPMENT

## Marantz Model 5420 Stereo Cassette Deck

The new line of cassette decks from Marantz is now available, headed by the Model 5420, which features built-in Dolby-B noise reduction for cassettes and straight-through Dolbyized FM decoding, plus mixing controls (including pan pots) for two pairs of line and microphone inputs. Correct bias and equalization settings for "standard," chromium-dioxide, and Ferri-chrome tapes are provided, each selectable by means of a single pushbutton. Frequency responses for the three tape types are 30 to 17,000 Hz (Ferri-chrome), 30 to 16,000 Hz (chromium dioxide), and 45 to 14,000 Hz (standard), all  $\pm 3$  dB. Signal-to-noise ratios are typically 60 dB with Dolby noise reduction and 52 dB without. Wow and flutter are 0.07 per cent (NAB weighted).

The Model 5420 employs a servo-controlled d.c. motor with complete disengagement of the tape-drive mechanism at the end of the cassette. There are five slider-type recording-level controls in total. Four of these (two for each channel) can be switched between microphone and line inputs. The fifth control is a master level adjustment that affects the other four in unison to set overall recording levels. Two of the input channels have pan pots associated with them, so that their signals can be distributed between the stereo channels laid down on the tape according to the desires of the operator. All these facilities can be used for recording cassettes with the 5420, and are available as a mixer to feed some external component.

Other special functions of the 5420 include a switchable peak-limiter circuit that prevents excessively high recording levels from reaching the tape and peak-indicator lights that augment the recording-level meters, which have VU characteristics. A memory-rewind feature works in conjunction with the three-digit index counter. The microphone jacks have an



input impedance of 10,000 ohms and a sensitivity of 0.23 millivolt. The stereo-headphone jack is intended for 8-ohm phones. In their FM-decoding mode, the Dolby circuits introduce equalization to match the 25-microsecond pre-emphasis used in Dolbyized FM broadcasts. Dimensions of the deck are approximately  $17\frac{1}{4} \times 12\frac{3}{4} \times 6\frac{1}{2}$  inches. A special integral stand tilts the front panel 20 degrees forward to accommodate a seated operator. Price of the 5420: \$399.95. The same machine without Dolby circuits is available as the Model 5400 for \$349.95.

Circle 115 on reader service card

## Pioneer RT-2022 Open-reel Tape Deck

The new RT-2022 is Pioneer's most advanced tape deck, featuring replaceable head assemblies (half-track stereo, quarter-track stereo, or, with an optional second set of electronics, quarter-track four-channel). Other features include track synchronization on all channels and recording bias and equalization fully adjustable at the front panel. The basic trans-



port is a three-head, three-motor, two-speed (15 and  $7\frac{1}{2}$  ips) design with half-track stereo heads provided as standard equipment. Reel sizes up to  $10\frac{1}{2}$  inches are accommodated. Transport functions are solenoid switched through light-touch pushbuttons; there is also a lever-operated pause control and a cueing system that permits the tape to be heard as the reels are rotated by hand (to locate editing spots). Alignment adjustments for the record and playback heads are located right on the head cover. Just below are the bias and equalization adjustments, plus a test-tone generator that provides a choice of 1,000- or 10,000-Hz frequencies, and knobs that adjust the level of the test tone in up to four channels. A clear plastic plate protects these controls from unauthorized handling.

The electronics of the RT-2022 are in a separate module that clamps to the bottom of the transport. The module has two large recording-level meters (calibrated from -40 to +6 dB), separate recording-level controls for left and right microphone and line inputs, and concentric output-level controls for the two channels. Front-panel phone jacks accept the microphone inputs, and the rear-panel line inputs and outputs are also duplicated on the front panel. Pushbuttons for the two channels reduce the sensitivity of the microphone inputs by 20 dB to prevent overload with loud input signals. Recording-mode switches have positions for recording, playback, and playback via the recording-head gap for track synchronization.

With standard tape, frequency response of the RT-2022 is 30 to 22,000 Hz  $\pm 3$  dB at 15 ips, and 40 to 20,000 Hz  $\pm 3$  dB at  $7\frac{1}{2}$  ips. The signal-to-noise ratio exceeds 57 dB, and wow and flutter are under 0.04 and 0.08 per cent (weighted rms) for the two speeds. Distortion is under 1 per cent for a 0-dB recording level at 1,000 Hz. The microphone inputs will accept microphone impedances ranging from

600 to 50,000 ohms. The headphone jack is designed for phones with impedances of 4 to 16 ohms. The transport section of the RT-2022 has dimensions of about  $18\frac{1}{2} \times 16\frac{1}{4} \times 8\frac{1}{4}$  inches. The electronics section measures about  $18\frac{1}{8} \times 5\frac{1}{2} \times 8\frac{1}{4}$  inches.

Price of the ensemble, with half-track stereo heads: approximately \$1,250. An optional quarter-track head assembly for two- or four-channel operation costs approximately \$125. An additional electronics module for four-channel operation is approximately \$250, and a remote-control unit duplicating the transport controls is approximately \$75.

Circle 116 on reader service card

## 3M CTR-3 Eight-track Cartridge Deck

A truly de luxe stereo eight-track cartridge record/playback deck is now available from the CTR division of the 3M Company. Designated the CTR-3, the machine has solenoid-switched transport controls with mode-indicator lights on all the light-touch push keys. Dolby-B noise-reduction circuits can process recording and playback signals, decode "straight-through" Dolbyized FM broadcasts, or record and decode such broadcasts simultaneously. Bias and equalization of the CTR-3 is adjustable for both standard eight-track cartridges and the Scotch "Classic" high-performance cartridge; a tape-select switch chooses the right characteristics for each. Other features include a cueing function that rapidly locates the beginning of a cartridge and a REPEAT switch that can be set so as to replay one or all programs on a cartridge indefinitely. A switchable peak limiter sets the recording levels reaching the tape to values below what would cause severe overload. The built-in tape counter reads out in minutes and seconds.

The CTR-3's transport has a fast-forward that is five times the normal  $3\frac{3}{4}$ -ips playing speed. Wow and flutter are 0.1 per cent

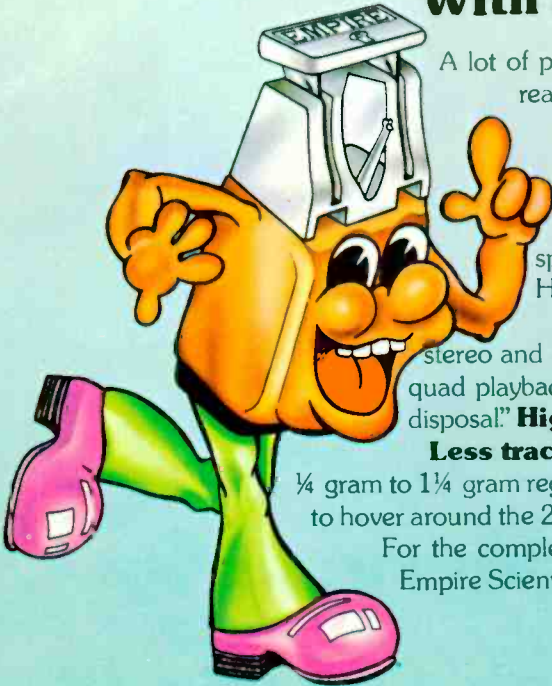


(weighted rms). An automatic shutoff acts to disengage the tape fully from the transport in both recording and playback at the end of a cartridge. There are separate recording-level controls for each channel and two large recording-level meters. Frequency response is 30 to 15,000 Hz with Scotch Classic tape (30 to 12,000 Hz with "standard" tape), and playback distortion is under 1 per cent for a recording level of 0 dB. The signal-to-noise ratio exceeds 60 dB with the Dolby circuits, 50 dB without. Microphone inputs have an impedance of 5,000 ohms and a sensitivity of 0.25 millivolt. The stereo headphone jack will drive either high- or low-impedance phones.

(Continued on page 18)

# Keep on trackin'

## With an Empire wide response cartridge.



A lot of people have started "trackin'" with Empire cartridges for more or less the same reasons.

**More separation:** "Separation, measured between right and left channels at a frequency of 1 kHz, did indeed measure 35 dB (rather remarkable for any cartridge)." **FM Guide, The Feldman Lab Report.**

**Less distortion:** "...the Empire 4000D/III produced the flattest overall response yet measured from a CD-4 cartridge—within  $\pm 2$  dB from 1,000 to 50,000 Hz." **Stereo Review.**

**More versatile:** "Not only does the 4000D/III provide excellent sound in both stereo and quadriphonic reproduction, but we had no difficulty whatever getting satisfactory quad playback through any demodulator or with any turntable of appropriate quality at our disposal." **High Fidelity.**

**Less tracking force:** "The Empire 4000D/III has a surprisingly low tracking force in the  $\frac{1}{4}$  gram to  $1\frac{1}{4}$  gram region. This is surprising because other cartridges, and I mean 4 channel types, seem to hover around the 2 gram class." **Modern Hi Fi & Stereo Guide.**

For the complete test reviews from these major audio magazines and a free catalogue, write: Empire Scientific Corp., Garden City, N.Y. 11530. Mfd. U.S.A.









# EMPIRE

### Choose the Cartridge Designed to Play Best in Your System

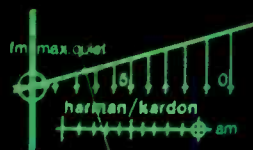
Plays 4 Channel Discrete (CD4)  
and Super Stereo

Plays 2 Channel Stereo

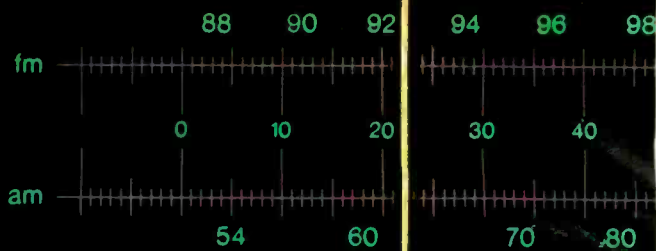
Plays All 4 Channel Matrix Systems (SQ, QS, RM)

Model	4000 D/III	4000 D/II	4000 D/I	2000 E/III	2000 E/II	2000 E/I	2000 E	2000
Frequency Response in Hz.	5-50,000	5-45,000	10-40,000	5-35,000	6-33,000	8-32,000	10-30,000	10-28,000
Output Voltage per Channel at 3.54 cm/sec groove velocity.	3.0	3.0	3.0	5.0	5.0	5.0	5.0	5.0
Channel Separation	more than 35dB	more than 35dB	35dB	35dB	35dB	35dB	30dB	30dB
Tracking Force in Grams.	$\frac{1}{4}$ to $1\frac{1}{4}$	$\frac{1}{2}$ to $1\frac{1}{2}$	$\frac{3}{4}$ to $1\frac{1}{2}$	$\frac{1}{2}$ to $1\frac{1}{2}$	$\frac{1}{2}$ to $1\frac{1}{2}$	$\frac{3}{4}$ to $1\frac{1}{2}$	1 to 3	1 to 3
Stylus Tip:	miniature nude diamond with 1 mil tracing radius *4 Dimensional	miniature nude diamond with 1 mil tracing radius *4 Dimensional	miniature nude diamond with 1 mil tracing radius *4 Dimensional	nude elliptical diamond 2 x 7 mil	nude elliptical diamond 2 x 7 mil	nude elliptical diamond 2 x 7 mil	elliptical diamond 3 x 7 mil	spherical diamond .7 mil
For Use In:	turntable only	turntable only	turntable or changer	turntable or changer	turntable or changer	turntable or changer	changer only	changer only
	 (White)	 (Yellow)	 (Black)	 (Clear)	 (Blue)	 (Green)	 (Red)	 (Smoke)

## harman/kardon 730 twin powered



stereo



power



phones



spkrs-1



tape mon-1



hi-cut



contour



bass



spkrs-2



tape mon-2



lo-cut



mono



# The attitude is consistent.

High fidelity engineering, to justify its name, has one goal: to reproduce music in the listening room with unqualified accuracy. Undistorted. Undiminished.

At Harman Kardon, we explore new technical directions not solely for their inherent challenge, but as methods of predicting and improving music quality.

Specifications are supposed to serve the function of predicting performance. Yet two competitive instruments with exactly the same set of conventional specifications often sound vastly different. Obviously, the reasons for this difference lie elsewhere. Conventional specifications are necessary. Necessary, but not sufficient.

Our 730 receiver meets specifications equalling or surpassing those of the finest individual component units. Yet it achieves a

quality of transcendent realism which these specifications alone cannot explain.

To predict musical accuracy, we have found it necessary to go beyond conventional specifications. We test, rigidly, for square wave response. We monitor, strictly, slew rate and rise time. These tests account for the sound quality of the 730—not in place of conventional specifications, but beyond them.

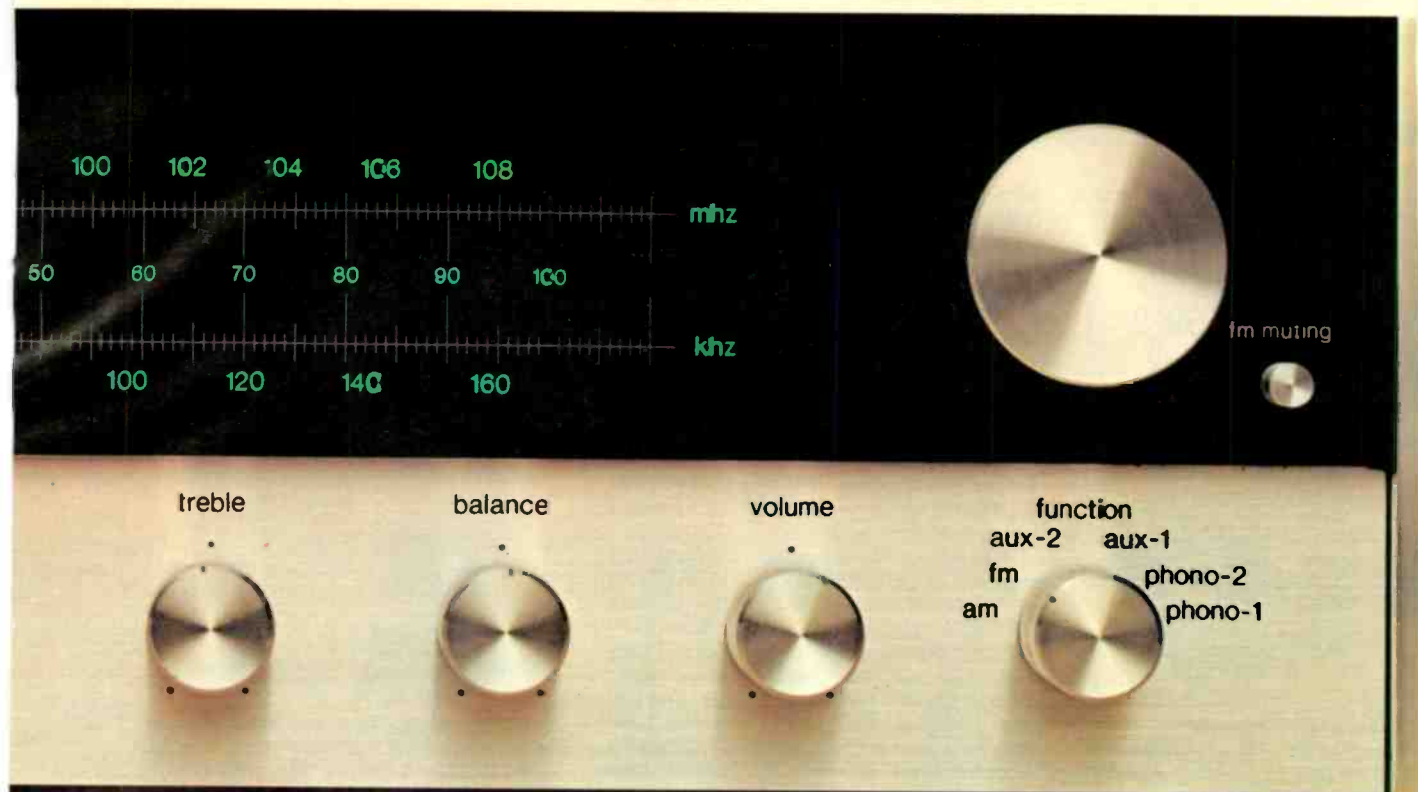
The 730 goes beyond the conventional in other ways. It is driven by two complete, discretely separate power supplies, one for each channel. Even when music is extraordinarily dynamic, the energy drawn by one channel will in no way affect the other. The music surges full. Unconstrained.

Any fine tuner measures signal strength. The 730 incorporates a

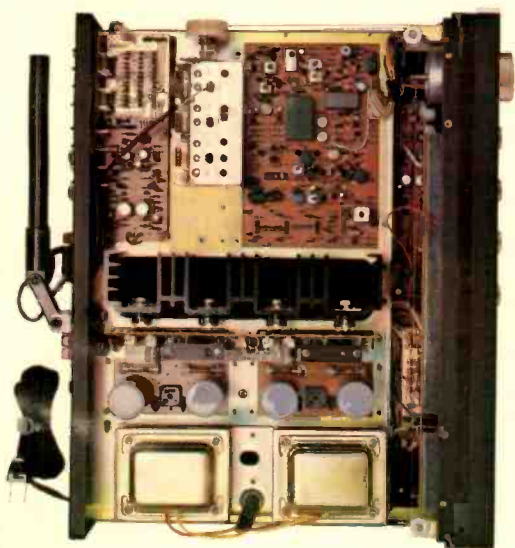
patented system which measures not strength, but signal-to-noise ratio. As a result, it can be tuned to the precise point where the signal is purest for listening or recording.

Equally important, the twin-powered 730 has all the basic design elements that identify it as a Harman Kardon instrument: wide bandwidth, phase linearity, ease of operation and a wide range of input and output elections.

All of this suggests further discussion. If you are interested in such an exploration, please write us (directly, since we imagine you are impatient with coupons and "reader service" cards, and so are we). We'll certainly write back, enclosing a brochure also unconventional in its detail. Just address: The 730 People, Harman Kardon, 55 Ames Court, Plainview, New York 11803.



# The expression is new.



## SPECIFICATIONS

<b>Power Output</b>	40 Watts Min. RMS per channel both channels driven into 8 ohms from 20Hz to 20kHz, with < 0.1% THD.	<b>Preamp Output Impedance</b>	600 ohms
<b>Power Bandwidth</b>	From 10Hz to 40kHz at < 0.1% THD into 8 ohms, both channels driven simultaneously at 20 watts per channel	<b>Phono Overload</b>	>95 mV
<b>Frequency Response</b>	20-20 kHz $\pm$ 0.5 dB	<b>RIAA Equalization</b>	$\pm$ 1.0 dB
<b>System Rise Time</b>	1.5 $\mu$ sec	<b>Tone Control Action</b>	
<b>System Square Wave Tilt</b>	< 5%	a. 50Hz	$\pm$ 12 dB
<b>Total Harmonic Distortion</b>	< 0.1% from 250 milli-watts to 40 watts RMS, both channels driven simultaneously into 8 ohms, 20Hz to 20kHz	b. 10kHz	$\pm$ 12 dB
<b>Intermodulation Distortion (40 watts—SMPTE)</b>	< 0.12%	<b>Contour Effect (50Hz)</b>	+10 dB
<b>Intermodulation Distortion (1 watt—SMPTE)</b>	< 0.15%	<b>High Cut Filter (10kHz)</b>	-10 dB
<b>System Hum and Noise</b>	Better than 60 dB below rated output (unweighted)	<b>Low Cut Filter (50Hz)</b>	-6 dB
<b>Damping Factor (1kHz @ 1 watt)</b>	> 30	<b>FM Sensitivity</b>	
<b>Power Amplifier Input Sensitivity</b>	< 1.2V	a. IHF	1.9 $\mu$ V
<b>Power Amplifier Input Impedance</b>	33 kilohms	b. -50 dB (mono)	3.5 $\mu$ V
<b>Power Amplifier S/N (40 watts)</b>	> 90 dB	c. -50 dB (stereo)	35 $\mu$ V
<b>Power Amplifier Square Wave Rise Time</b>	< 1.5 $\mu$ sec	<b>Ultimate S/N</b>	-70 dB
<b>Preamp Input Sensitivity</b>		<b>Capture Ratio</b>	2 dB
a. Aux	< 150 mV	<b>Image Rejection</b>	-80 dB
b. Tape Mon.	< 150 mV	<b>Spurious Response Rejection</b>	-80 dB
c. Phono	< 2.5 mV	<b>IF Rejection</b>	-90 dB
<b>Preamp Input Impedance</b>		<b>AM Rejection</b>	-60 dB
a. Aux	30 kilohms	<b>Alternate Channel Selectivity</b>	80 dB
b. Tape Mon.	30 kilohms	<b>Multiplex Separation (1kHz)</b>	40 dB
c. Phono	47 kilohms	<b>FM Harmonic Distortion (1kHz)</b>	
<b>Preamp Input S/N</b>		a. Mono	0.3%
a. Aux	> -75 dB	b. Stereo	0.4%
b. Tape Mon.	> -75 dB	<b>Pilot Suppression</b>	-55 dB
c. Phono	> -67 dB	<b>De-Emphasis</b>	75 $\mu$ sec
<b>Preamp Harmonic Distortion</b>	< 0.15%	<b>Mute Level</b>	Variable
Crossstalk		<b>Mute Suppression</b>	-65 dB
a. Aux	-47 dB	<b>Stereo Indicator Threshold</b>	
b. Tape Mon.	-47 dB	(Pilot signal expressed as % of base band.)	
c. Phono	-37 dB	a. "off"	< 3%
		b. "on"	> 6%
		<b>Audio Output</b>	0.5V
		<b>AM Sensitivity</b>	> 250 $\mu$ V/m
		<b>AM Signal for 1 watt Output</b>	< 150 $\mu$ V/m
		<b>AM Selectivity</b>	35 dB
		<b>Alternate Channel Selectivity</b>	55 dB
		<b>Image Rejection</b>	-75 dB
		<b>IF Rejection</b>	-60 dB
		<b>Hum</b>	-40 dB

# harman/kardon

# NEW PRODUCTS

THE LATEST IN  
HIGH-FIDELITY  
EQUIPMENT

The CTR-3 measures 22¼ x 7¼ x 6 inches.  
Price: \$399.95.

Circle 117 on reader service card

## JVC Model CD-1669-2 Stereo Cassette Deck

The CD-1669 cassette deck from JVC has been updated to incorporate the company's



recently developed "Sen-Alloy" record-playback head. The Sen-Alloy (or Sendust Alloy) material is said to virtually equal the hardness and wear resistance of the better types of ferrite and to exceed permalloy in most important magnetic characteristics.

The CD-1669-2 is a two-motor machine employing a d.c. motor for tape spooling and a synchronous unit for the capstan. Other features include JVC's ANRS noise reduction system (similar in principle and effect to the Dolby B-Type system) and recording-level meters augmented by peak-indicating lights for the two channels. The transport is solenoid switched by means of non-latching light-touch pushbuttons. Tape bias and equalization switches have positions for chromium-dioxide, high-performance, and "standard" tapes. The more prominent controls include slider adjustments for recording and playback levels, full calibration facilities for the ANRS, and a memory-rewind feature working in conjunction with the three-digit index counter. The machine has a pause control and a stereo headphone jack.

Frequency response is 30 to 16,000 Hz  $\pm$  3 dB for chromium-dioxide tape, with a signal-to-noise ratio of 54 dB without ANRS. The ANRS improves the signal-to-noise ratio by as much as 10 dB above 5,000 Hz. Wow and flutter are 0.07 per cent (weighted). In fast forward or rewind a C-60 cassette can be run through in 80 seconds. The JVC deck measures 16⅞ x 12⅞ x 5⅝ inches. Price: \$499.95.

Circle 118 on reader service card

## Teac A-2300SD Stereo Tape Deck

The new A-2300SD is a Dolby version of a popular Teac machine, providing quarter-track recording and playback at speeds of 7½ and 3¾ ips. It is a three-head, three-motor deck accommodating reel diameters up to 7 inches, with full solenoid operation of transport functions. The Dolby circuits are usable for recording from microphone, high-level line sources, and Dolbyized FM broadcasts; a special switch introduces the appropriate 25-

microsecond de-emphasis for such broadcasts, which can also be listened to without recording.

The principal controls of the A-2300SD are push keys for transport operation (including PAUSE) and rotary controls for playback levels and microphone and line recording levels. There are separate, concentrically mounted knobs for each channel. Toggle switches adapt the record bias and equalization to standard or high-performance tape and handle tape-monitor and recording-status switching for the two channels. The microphone jacks are located on the control panel along with a stereo headphone jack.

With high-performance tape, the frequency response of the A-2300SD is 40 to 24,000 Hz at 7½ ips and 40 to 16,000 Hz at 3¾ ips, both  $\pm$  3 dB. Weighted signal-to-noise ratios for 3 per cent distortion are 65 dB without Dolby processing and 74 dB with. Wow and flutter are 0.08 per cent (7½ ips) and 0.1 per cent (3¾ ips). Harmonic distortion is less than 1 per cent for a level corresponding to 0 VU on the recording-level meters. The meters have standard VU characteristics. The microphone jacks are suitable for microphones with impedances ranging from 600 to 10,000 ohms. The stereo headphone jacks are intended for 8-ohm phones. Overall, the A-2300SD measures about 17¼ x 15½ x 8¼ inches, including



its walnut side panels. Weight is 39½ pounds.  
Price: less than \$750.

Circle 119 on reader service card

## Harman/Kardon HK2000 Stereo Cassette Deck

The HK2000 cassette deck from Harman/Kardon incorporates the excellent electronics of the company's previous Model 1000 in a new transport with wow and flutter of 0.07 per cent or less. The transport also has a memory-rewind feature that works in conjunction with the three-digit index counter. The pushbutton transport controls are conventionally set up, and they include a pause function. Signal levels are adjusted by sliders for recording and playback, with separate knob controls for the microphone inputs (which may be mixed with other inputs).

The HK2000 has built-in Dolby B-type noise-reduction circuits that may be calibrated from the front panel with the aid of recording and playback calibration controls and a built-in Dolby-level test tone. The recording-

level meters are peak-indicating devices augmented by an LED overload-warning light. A single switch changes bias and equalization from "standard" to chromium-dioxide settings while another switch disables the multiplex filter when the deck is not recording from stereo FM sources.

Frequency response is 30 to 17,000 Hz with chromium-dioxide tape (40 to 12,500 Hz  $\pm$  2 dB with low-noise iron-oxide tape), and the signal-to-noise ratio is 58 dB with the Dolby



circuits operating. Harmonic distortion is under 1.5 per cent for a recording level of -2 dB on the machine's meters. The deck's output level is approximately 1.3 volts for a 0-dB recorded level. The auxiliary input will accommodate high- and low-level signals, and it presents input impedances of 50,000 and 30,000 ohms, respectively. The headphone jack on the control panel is designed to drive 8-ohm phones. The size of the HK2000 is 15⅝ x 10¼ x 5⅝ inches. Price: \$399.95.

Circle 120 on reader service card

## New Advent Prerecorded Cassettes

A dozen new releases have been added to the Advent roster of Process CR/70 prerecorded cassettes. As in the past, the material has been drawn from the catalogs of Nonesuch and Connoisseur Society as well as from original recording efforts by the Advent Corporation. Most of the titles are classical, with emphasis on early and late works, although several offerings include piano pieces of Scott Joplin, Artie Matthews, James Scott, and George Gershwin, songs of Stephen Foster, and turn-of-the-century popular songs.

All Process CR/70 cassettes are recorded on chromium-dioxide tape with duplicating equipment custom designed by Advent. Each cassette receives an individual quality check to ensure that the recording meets prescribed standards. Many of the Process CR/70 cassettes contain up to two LP records' worth of recorded material. Typically, the shorter cassettes are recorded in one direction only, leaving side two available for recording by the purchaser. Prices range from \$5.95 to \$7.95 for the new offerings. A complete Advent catalog can be obtained from: Janet Shapiro, Advent Corp., Dept. SR, 195 Albany Street, Cambridge, Mass. 02139.

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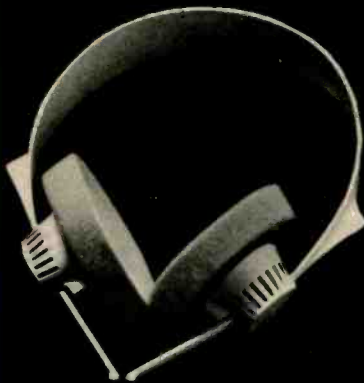
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Stereo Review

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CIRCLE NO. 40 ON READER SERVICE CARD

## AUDIO BASICS

By RALPH HODGES



### BUYING A TAPE RECORDER

**T**APE recorders are the most complex components likely to be found in a home audio system, but there is nothing very complex about buying one once you have decided what you want it for. There are three formats to choose from: open-reel, eight-track cartridge, and cassette. The cassette's popularity dominates for the ordinary dubbing (copying off the air, from a disc, or from another tape) and playback activities of the casual recordist. Its convenience is undeniable, and through a technical tour de force on the part of many machine and tape manufacturers it has been turned into a medium of astonishingly high quality.

Today, open-reel is usually thought of as the format for *serious* live recording. True, there are some who insist that a good cassette deck is fully up to this kind of service, and they even have some live-performance tapes to back them up. But it is still a Procrustean fit at best, and for the type of recording discussed in John Woram's feature article this month, as well as after-the-fact tape editing, the cassette is hopelessly unsuited.

Certainly there is nothing to prevent a non-live-recordist from choosing an open-reel machine, and if he does he will get the bonus of being able to play the very high-quality prerecorded stereo and four-channel tapes offered by such small outfits as Sonar and Quadratrak. But he will find the pickings in other prerecorded material very slim, and soon the bother of tape threading and handling that an open-reel deck entails is likely to discourage him from using it much.

Eight-track can be adequate for playback use, but it is an awkward format for recording, the ingenuity of several innovations on eight-track recorders notwithstanding. The tape cannot be re-wound, the fast-forward mode is not very fast, and the periodic interruptions as tracks are switched can be very frustrating. Those who have existing libraries of eight-track tapes, or who want to record material for their car's tape play-

er, might check out eight-track. Also, it's worth noting that this format boasts the widest selection of prerecorded four-channel material.

The specifications for tape machines will not be unfamiliar to those who have researched record players and other audio components. However, there are a few points that might be highlighted:

A tape recorder really has *two* frequency responses—a record-playback response and a playback-only response. The playback-only response (rarely specified by manufacturers) reflects the machine's compatibility with tapes made on other machines. However, since most of these tapes are commercially prerecorded products notoriously mediocre in frequency response to begin with, precision in playback response is not of overriding importance to most users. *Record-playback* response is, but the specification is meaningless unless it is referred to a specific brand and type of tape. And the recording level used should also be indicated or implied.

Signal-to-noise ratios must also be referred to a specific tape type. Furthermore, the distortion imposed on the signal during the noise measurement should be noted. What good is an excellent signal-to-noise ratio if the signal has been intolerably distorted by a too-high recording level?

There is no need to put up with audible wow (low-rate speed variations) and flutter (high-rate variations) in a modern tape machine; even most cassette decks have flutter figures close to 0.1 per cent or below, and this is perfectly acceptable to most listeners. (Incidentally, slow piano music, recorded and played back, provides a fine listening test for flutter.) Wow should never be heard from a tape deck. In the case of eight-track tape machines, some of which "wow" terribly, the ailment is usually traceable to the cartridge itself. If you detect any wow and the cause is not trivial, it's best to beware of the model concerned.

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So, we at Sony decided to do something about it. And what we've come up with is our new \$400 V-FET integrated amplifier, the TA-4650. The TA-4650 is quite an advanced little piece of equipment. Because the V-FET isn't just another combination of gadgets, or a souped-up version of the same old thing. It's a completely new device that combines the good points of both bi-polar transistors and triode vacuum tubes. Without suffering the drawbacks of either. Because it's made with V-FETS, the TA-4650 gives you a new level of highly defined triode sound; along with the efficiency and stability found only in solid state devices. The TA-4650 delivers 30 watts per channel, minimum RMS at 8 ohms, 20Hz-20kHz with no more than 0.1% total harmonic distortion.

It has a direct coupled power amplifier stage. As well as direct coupled FET amplifiers in the tone control and buffer stages.

Its bass and treble controls have a turnover frequency selector that starts at 250Hz/500Hz for bass and 2.5kHz/5kHz for treble.

Its volume control is equipped with a switch for 20dB muting. And it has a level control memory device so volume can be set at any predetermined point.

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Our ST-4950 AM/FM stereo tuner, for example, has a MOS FET front end, uni-phase solid state filters and IC's in IF stages. This allows an FM capture ratio of only 1.0dB, selectivity of 80dB and an S/N ratio of 70dB. The ST-4950 also has a phase-locked loop

(PLL) MPX section. Which means you get excellent stereo separation and low distortion.

Of course, if you're going around looking for a turntable, by all means take a look at our PS-4750 (cartridge sold separately).

It has a direct drive servo motor with a wow and flutter rating of only .03%.

Its base and platter are made from molded compound instead of metal, so resonance has been greatly reduced. It also has air-damped cushions, which compensate for warpage in records (again reducing resonance). The end result is a much cleaner sound.



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CIRCLE NO. 46 ON READER SERVICE CARD

# The Dual tonearm.

## Some of the ways that "precision makes the difference."

The essential beauty of a tonearm is not in its appearance, but in the performance of its critical role in the interaction of stylus and record. The conversion of groove modulations into music—as well as the life of one's records—is significantly influenced by every aspect of tonearm design: geometry, balance, mass, resonance, bearing friction and the application of stylus pressure and anti-skating.

Serious music lovers know this. And some who are now Dual owners tell us they wish they had understood more about tonearms hundreds of dollars in ruined records earlier.

If you are uncertain about the quality of your present tonearm, here are some guidelines to consider. They are the design principles that allow every Dual tonearm—even on Dual's least expensive model—to produce optimum performance from today's finest cartridges and maximum longevity from all records.

### Why a straight line is the preferred shape

The effective length of any tonearm is the distance between the pivot and the stylus tip. A straight line—the shortest distance between these two points—achieves maximum rigidity and lowest mass. Both highly desirable characteristics.

Tonearms whose shape deviates from the straight and narrow may appear interesting, but their unnecessary mass and hence increased resonance can only detract from the quality of music reproduction.

### Why stylus force must be applied perpendicular to record.

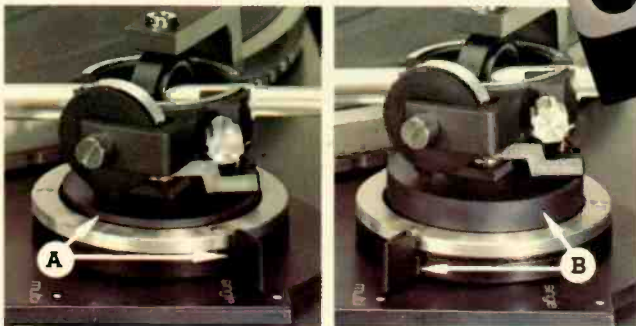
Stylus force should be applied in such a way that there is equal pressure on each groove wall. This balanced pressure should then be maintained throughout play, independent of groove velocity, location, or turntable leveling. Further, tracking force should be constant even under (all-too-frequent) record-warp conditions.

All these requirements are met by Dual's technique for applying stylus force: a long coiled spring centered around the vertical pivot. With this system, the tonearm tracks flawlessly even under such extreme conditions as the chassis being tilted 45° or more.

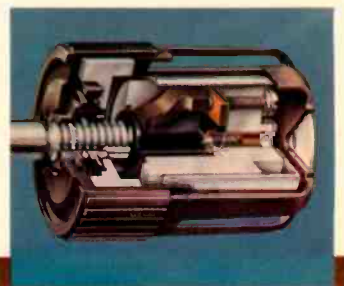
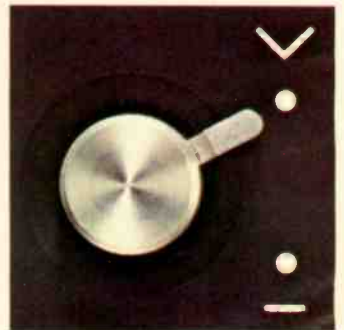
Mechanical sensor indicates when Dual 510 semi-automated tonearm is positioned precisely over 12" or 7" lead-in groove.

(A) Mode Selector of Dual 1249 parallels tonearm to record in single-play for perfect vertical tracking.

(B) Tonearm moves up to parallel center of stack in multi-play.



Unique counterbalance of Dual CS701 houses two separately tuned anti-resonance filters which absorb resonant energy in the frequency ranges of the tonearm/cartridge system and the chassis to minimize acoustical feedback.





Tonearm of Dual 1249 pivots in four-point gyrosopic gimbal, suspended within a rigid frame. Each gimbal is hand-assembled, and special gauges assure that each will conform to Dual's stringent specifications. Other Dual models with gimbal-mounted tonearms: 1228, 510, 601 and 701.

Dual's anti-skating system also contributes significantly to maintaining equal stylus pressure on both groove walls. In addition to the three separate precise calibrations for conical, elliptical and CD-4 styli, there is automatic adjustment during play for the inherent change in skating force that occurs as the stylus moves toward the record center.

**Why bearing friction should be both low and consistent.**

Dual uses the best (and most costly) way to manufacture precision low-friction bearings. The metal is first hardened, then honed; a process which

produces microscopically smooth surfaces. All pivots are hand-assembled and individually checked with gauges specially designed by Dual. The extremely low bearing friction thus achieved is compatible with the finest cartridges, which are usually designed for ultra-light tracking. Further, the high standards of production consistency in unit after unit assure highly accurate stylus pressure and anti-skating calibrations.

**Dual owners who know the difference**

These are a few of the reasons why serious music lovers—record reviewers, hi-fi magazine editors and their readers—own more Duals than any other turntable. This may be all you need to know in order to select a Dual. But which Dual?

Until recently, all Dual turntables were fully automatic and could be used in both single-play and multi-play. There are now four such models. Three other Duals are single-play only (two fully automatic, one semi-automatic). Dual also employs all three types of drive systems: belt, rim, or direct.

There's no need to decide on a specific Dual model right now. The best time and place for that is when you're at your United Audio dealer, where you can have demonstrated all the differences that Dual precision does indeed make.



**The Dual 1225.**  
Fully automatic, single-play/multi-play. Viscous damped cue-control, pitch-control, 10 1/2" platter, less than \$140.00, less base. Dual 1226, with cast platter, rotating single-play spindle, less than \$170.00. Dual 1228 with gimballed tonearm, synchronous motor, illuminated strobe, variable tracking angle, less than \$200.00.



**The Dual 1249.**  
Fully automatic, single-play/multi-play. Belt-drive, 12" dynamically-balanced platter, less than \$280.00, less base. Full-size belt-drive models include: Dual 510, semi-automatic, less than \$200.00. Dual 601, fully automatic, less than \$250.00. (Dual CS601, with base and cover, less than \$270.00)



**The Dual CS701.**  
Fully automatic start and stop, single-play. D.C. brushless, electronic direct drive motor, tuned anti-resonance filters. Electronic pitch-control (8%) for each speed (33 1/3 and 45 rpm) with illuminated strobe, less than \$400, including base and cover.

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CIRCLE NO. 14 ON READER SERVICE CARD

# TAPE HORIZONS

By CRAIG STARK



## MEASURE FOR MEASURE

GOOD editing (on paper, not tape) has, from time to time, saved this writer (and others) from all manner of verbal follies, but once in a while the editing/type-setting process works in the opposite direction. I must correct, then, an error that appeared in an earlier column devoted to the problems of evaluating cassettes. In warning against the temptation to rely exclusively on meter readings as compared with what we actually hear when recording and playing back music, I discussed the case of two tapes, one of which had very high intermodulation distortion while the other measured far lower. What I wrote at the time was that "Listening to music recorded on the tapes may not show up even that dramatic difference . . ." which was quite true. Somewhere in the editorial processing my cautious "may not" unfortunately became "certainly did not," which is not quite true. The degree of audibility in music of what shows up as IM distortion on test tones is a matter I still have under investigation.

This leads naturally, however, to the subject of the role of ears and instruments in testing generally. One persistent school of thought denounces the significance of objective measurements altogether, boldly proclaiming that the ear alone is both the necessary and the sufficient tool of discernment. The simplicity of this claim is appealing: ears come free, for one thing, while both a lot of money and "establishment" type learning go into a laboratory test facility. Moreover, in the end, it is unquestionably our ears, not our instrumentation, that must be satisfied with the recording and reproduction of music. Considering the reproduction quality that most people seem to be satisfied with, one might judge that nature uses a goodly amount of tin in the making of some of her ears—except, of course, in the case of Guru X's ears, for he can clearly perceive differences between the Thingummy MK VI and Whatsit Z-2500A when lab tests say the measured perform-

ance of one is just like that of the other.

Now, since I operate an independent test lab professionally, my natural home is in the other camp—the meter men, you might call us. For one thing, I happen to find a *generally* good correlation between what I hear and what I measure—at least up to the point where instruments become far more discriminating than even the best of human ears. (No one, I suspect, would ever claim to be able to hear the difference between 0.001 and 0.005 per cent second harmonic distortion, for example.) But, like the eye, the ear *can* be fooled; in a broad way, that's what the science of psychoacoustics is all about. On the other hand, I'm quite prepared to believe that the Golden Ear may sometimes be right and be hearing a real, albeit subtle, difference our measurements have not yet been able to quantify or even identify, provided only that more than one person claims to hear the fault. What I'm convinced of, however, is that we must learn how to measure "it" before we're likely to discover how to fix "it." Indeed, it's probable that it has only become audible now because engineers have been chipping away at previously known, repeatably measurable imperfections that formerly masked it. Tape modulation noise is a greater problem today than in years past not because tapes have gotten worse, but because other sources of tape noise have gotten better, largely through the efforts of the "meter men."

Most consumers don't have a lab, however, and particularly where tape is concerned, much of what is measurable—and audible—depends on machine-tape interaction and on internal adjustments you can't control. In that circumstance, you *must* experiment and be guided by ear. All I can prophesy is that if you select from among the products that test well objectively, the *probability* of your finding satisfaction is greater. But if you must have certainty, you'll have to find a Guru. And (to quote Mr. Dylan) it ain't me, babe.

You make a tape with time and thought. Carefully chosen selections recorded in the sequence that most pleases you. The musical coherence and perception is yours, a personal expression. And when the time is right to share



that experience with someone you care for, having to stop and turn the tape over can break the mood you worked to create. Interruptions like that don't happen with the A-4300. You

can enjoy continuous music on both sides of a tape with the automatic reverse function. And with automatic repeat, a favorite tape will play as long as you like. Whether you want the music up front or in the background, the A-4300 can give you solid music for the better part of an evening.



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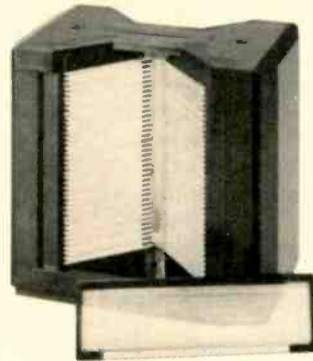
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# TECHNICAL TALK

By JULIAN D. HIRSCH

## ● A DECADE OF TAPE PROGRESS:

Given the regular announcements of new developments in tapes and recorders, it is not always easy to attain a proper long-term perspective on the rapidly changing tape scene. To see where we are and where we have come from, I stepped back a bit (temporally speaking) and examined my test files on the tape recorders I reviewed a decade ago. In 1966 there were no stereo cassette recorders (the monophonic Philips Carry-Corder had only recently made its appearance) and no one dreamed that the cassette medium would ever even come close to attaining high-fidelity status. That year, I tested about a dozen open-reel machines, ranging from a \$125 battery-operated portable (distinctly "lo-fi") to the \$500 semi-pro Revox G-36. All of these machines have long since been supplanted, although most of the brand names are still with us.

When I tabulated the key performance measurements of these machines, several things became apparent. Most of them, like today's recorders, had very little wow (0.02 to 0.03 per cent), and their flutter measurements were between 0.04 and 0.11 per cent (averaging about 0.08 per cent). Unfortunately, in those days our signal-to-noise (S/N) measurements were referred only to the individual recorder's 0-dB meter readings instead of the level corresponding to 3 per cent playback distortion, but the readings averaged 46 to 47 dB, with little difference in performance between operation at 3¾ and 7½ ips. Most of the recorders had a reasonably flat frequency response from 35 to 17,000 Hz at 7½ ips, and at 3¾ ips the frequency response was about 40 to 11,500 Hz.

Apparently, most of these machines were capable of very adequate home recording performance. This is especially interesting in view of the fact that most of them were adjusted for the "standard" tape of that time, Scotch 111. A couple required improved tapes, such as

the Scotch 203 for which the Revox G-36 was biased.

From our 1976 vantage point, it is plain that neither the demise of the open-reel tape recorder, predicted by some, nor its complete dominance, predicted by others, has come to pass. True, cassette machines dominate the home tape equipment market today, and there are a host of cassette recorders which can rival, or surpass, a good home open-reel deck of ten years ago in practically every aspect of their performance. Nevertheless, open-reel decks have moved up to a secure and unchallenged position for the serious recordist who cannot or will not

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## TESTED THIS MONTH

●  
**Luxman L-100 Amplifier**  
**Miracord Model 825 Turntable**  
**Frazier Concerto Speaker**  
**Realistic STA-90 AM/FM Receiver**

---

make the compromises inherent in cassette recording.

A growing number of today's open-reel machines are four-channel types capable of making and playing four-channel recordings. However, this does not signify a resurgence of interest in quadraphonic taping, if ever such an interest existed. The major application for these recorders is for "building up" a stereo tape by successively recording one or two tracks at a time, in synchronism. To make this a relatively simple process, many of the four-channel decks are designed for synchronous recording, a portion of the recording head being used to play back a previously recorded track while one or more of the other sections of the same head are in the record mode.

Today's open-reel machines are quite expensive, in comparison with those of 1966. In those days one could buy a rather good single-motor, two-head recorder for \$150 to \$250 and a three-head machine for \$300 to \$400. The deluxe semi-pro machines, which had three motors and three heads, usually cost \$500 to \$600. In 1976, one can expect to pay almost \$600 for the least expensive stereo recorder whose quality substantially surpasses that of a good cassette recorder, and prices of \$1,000 to \$2,000 or more are not uncommon for more advanced machines.

Although inflation is responsible for the major part of that price increase, substantial performance advances have affected costs as well. The *best* recorders of today do not have specifications strikingly better than their counterparts of yesteryear, but the *average* performance level has improved noticeably.

Today it is the rule, rather than the exception, for an open-reel tape recorder's frequency response at 3¾ ips to closely approach, or even exceed, 20,000 Hz. Machines with a 25,000- to 30,000-Hz frequency response at 7½ ips are not at all uncommon, and a few are nudging the 50,000-Hz mark. Contrast this with the old maxim of "1,000 cps (now Hz) per inch per second of tape speed," which was universally accepted as a "natural law" in the late 1940's and early 1950's. (To translate: you could expect a top of 7,500 Hz at 7½ ips, 15,000 Hz at 15 ips.)

These dramatic improvements in tape-recorder frequency response and dynamic range are due largely to parallel developments of new tape heads and new tape formulations. Although these are completely separate items, usually designed by different people, they are functionally inseparable. A modern tape head, with its microscopically narrow gap, extreme hardness, and efficient magnetic structure, would be of little help if it were to be used with the old 111 tape formulation. To derive the max-

imum benefit from today's heads, the tape should have the improved homogeneity (which translates into low noise and fewer "drop-outs") and magnetic properties of the premium tapes available from a number of manufacturers. On the other hand, the use of one of today's top tapes would be of little help to someone trying to prod an older machine into a magnetic equivalent of the "sow's ear to silk purse" conversion. If the machine were rebiased and re-equalized, it might be improved, but not to the performance level of newer models.

When the tape and recorder are properly matched, the full impact of the decade's technical developments can be appreciated. The S/N of any good modern open-reel recorder is likely to be near 60 dBA (without a Dolby or other noise-reduction system) instead of the 45 dB typical of 1966's machines. Part of this results from advances in solid-state electronics, but the major credit belongs to the magnetic specialists who created the tape and the heads.

As I and others have stated on numerous occasions, the interdependence of

tape and machine is almost total in the cassette medium. The open-reel enthusiast can experiment with different tapes and perhaps find worthwhile differences, but reasonable success is assured with most good-quality tapes. Not so with cassettes—some of the best tapes will deliver mediocre (or worse) performance in the best machines if the recorder's bias (and equalization, in some cases) are not matched to the tape's recording or playback requirements.

What about the next ten years? It would be foolhardy indeed to predict the nature of magnetic recording in the home in 1986. After all, literally no one in 1966 foresaw the impact of the cassette, even though it was already on the scene. There are, however, some very interesting possibilities, even if the odds on their becoming real are slim. The incredible advances in digital microcircuitry (especially in the calculator, watch, and computer fields) suggest that digital tape recording may become a commercial reality in time. It is a present-day reality, in fact, but not in a form suitable for use directly by the consumer. A digital record-

ing offers, at least in principle, the possibility of reducing distortion and noise to predictable and negligible levels. It is, at present, extremely expensive by consumer product standards, but I recall that the first electronic calculators, bulky and crude compared with those sold today for as little as \$10, cost \$300 and more only five years ago. At the same time, digital watches were introduced for many hundreds of dollars, yet today one can be bought for under \$50. Why not, then, a home digital tape recorder with fantastic (by current standards) performance at a price comparable to that of the better open-reel decks of 1976?

Digital recording requires more bandwidth than analog recording. The performance of some open-reel recorders is not too far from what would be required, but a quantum jump in cassette bandwidth would be needed to make high-quality digital recordings. Nothing is impossible, but I would be very much surprised to see *this* become a reality in the next few years. Remind me to re-read these words, and perhaps eat them, in 1986!

## EQUIPMENT TEST REPORTS

By Hirsch-Houck Laboratories

### Luxman L-100 Integrated Stereo Amplifier



● THE Lux audio components, long familiar to Japanese audiophiles, are now available in this country, and we have had the opportunity to evaluate their Model L-100 integrated stereo amplifier. The Luxman L-100 is rated to deliver 110 watts per channel into 8 ohms from 20 to 20,000 Hz, with no more than 0.05 per cent total harmonic distortion (THD).

As befits one of the most expensive integrated amplifiers on the market, the L-100 combines exceptional flexibility with distinctive and tasteful styling. Across the center of the satin-finish front panel is a row of seven three-position lever switches. In normal operation, all are aligned horizontally in their center positions. The first switch (at the left) by-

passes the tone-control circuits, which are inserted in the signal path when the switch is either up or down. When up, the switch inserts a fixed low-frequency boost (not to be confused with loudness compensation).

The next two switches control the low- and high-cut filters, providing a choice of roll-offs at 10 or 70 Hz and 7,000 or 12,000 Hz, respectively. The switches that follow are mode selectors; the first feeds either left or right inputs to both speakers, and the other reverses the channels or parallels them for mono listening. The remaining switches control the tape-recording functions of the L-100. The first interconnects two tape decks for dubbing from either one to the other, while the other

provides tape monitoring or playback from either recorder.

The bass and treble tone controls, located to the left of the switch group, are detented to give ten positions of boost and ten of cut, with a definite center "flat" setting. Below each tone-control knob is a three-position turnover selector switch whose setting determines the frequency above (or below) which the tone-control effect begins. The bass turnover frequencies are 150, 300, and 600 Hz, while the treble frequencies are 1.5, 3, and 6 kHz. Depending on the choice of tone-control and turnover settings, and whether the low-frequency boost is used, several thousand different frequency-response curves are available (not including the effect of the filters).

To the right of the switches is a continuously adjustable ATTENUATOR (a level control with a limited range). Concentric with it is a center-detented rotating lever that operates the BALANCE function. The two large knobs at opposite ends of the panel are the INPUT SELECTOR (on the left) and the VOLUME control. The available inputs include three high-level sources (two AUX and a TUNER) and two magnetic PHONO inputs. The volume control, somewhat larger than the others, operates a step switch that changes volume in 2-dB steps over the uppermost 34-dB range, with larger steps of 3, 5, and ultimately 8 dB at the lower settings, and a final OFF position. Since the volume control is most effective in the range

(Continued on page 36)

**This is what happens  
every time you play a record.**



Photographed at 200X magnification with 1.5 grams tracking force on an Empire E98III turntable.

**This is what happens  
after you apply Sound Guard.™**



Photographed at 200X magnification with 1.5 grams tracking force on an Empire 598III turntable.

# Introducing Sound Guard.™

**The first product ever that protects records against wear, without resulting loss in frequency response or fidelity.**

Every time you play a record you destroy some of its sound. The culprit is friction. An inevitable result of a hard, diamond stylus tracking soft, vinyl grooves.

Under 200X magnification you can see the damage occur. Tiny shavings of vinyl curl off the record like metal off a lathe.

You literally see sound being worn away. After repeated playings your ears begin to confirm what your eyes have seen.

Until now, no product could protect records against wear without interfering with sound fidelity.

## **An answer from outer space**

From Ball Corporation research into dry lubricants for NASA's Orbiting Solar Observatories came a breakthrough in micro-coatings that can function for long periods under extreme conditions.

One derivative of this new technology is a microscopically thin, dry film that molecularly binds itself to vinyl. Developed into a record preservative this product is now known as Sound Guard.\*

## **How Sound Guard works**

Just spray Sound Guard on (it has a non-aerosol pump sprayer). Then buff it with the soft, durable velvet buffing pad provided in the kit.

Sound Guard puts an ultra-thin, dry film on the groove surfaces to substantially reduce wear. (It's self-limiting and may be applied repeatedly without buildup. The film thickness is less than 0.000005".) One bottle will protect about 20 LP's.

Sound Guard is *dry*—not wet



over this new product. Along with audio experts who've tested it, we believe Sound Guard is the long-awaited breakthrough in sound

and sticky like silicone-type products—so dust or dirt won't accumulate on the stylus or in the grooves. And since it has an anti-stat built in, Sound Guard actually prevents records from attracting dust.

But does Sound Guard adversely affect frequency response or fidelity? For conclusive proof, we asked the most respected of the independent audio laboratories for an exhaustive evaluation. Their results were astounding!

## **Test results**

1. The application of Sound Guard to a stereophonic or CD-4 quadraphonic disc does not in any way degrade audible frequency response.

2. Sound Guard increases the life of the records by significantly reducing record wear.

3. Sound Guard significantly retards increases in random noise content (surface noise) and total harmonic distortion caused by repeated playing.

4. Records treated with Sound Guard do not attract dust as readily as untreated discs.

(Complete test results will be mailed with every order.)

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Name \_\_\_\_\_

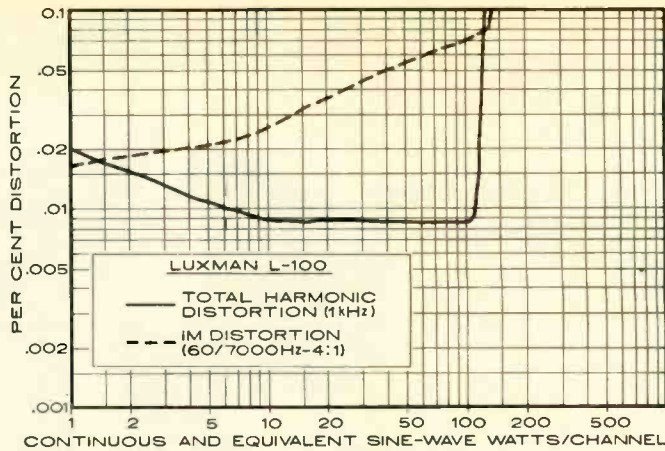
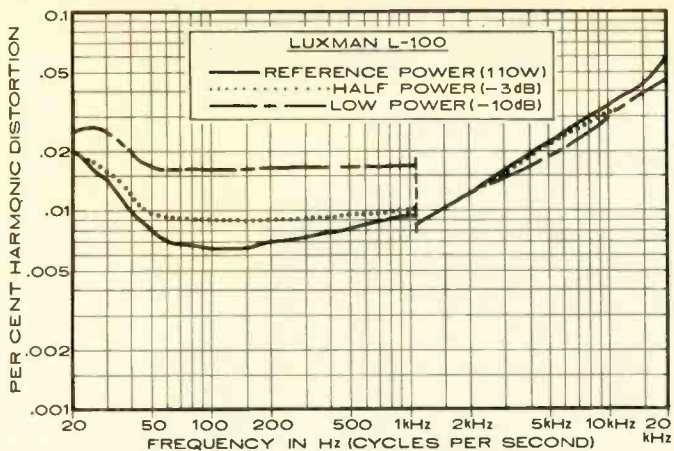
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\*Sound Guard is Ball Corporation's trademark for its record preservative. Copyright ©Ball Corporation, 1976.



The dashed vertical line on the left-hand graph indicates where, for measurement purposes, a filter was introduced to eliminate inaudible hum.

of its 2-dB steps, the attenuator is used to adjust the program level accordingly.

What appears to be a decorative rubber ring around the volume-control knob is actually an insulator dividing it into two electrically isolated sections. When the flat face of the knob is touched lightly, the audio level instantly drops by 20 dB for temporary listening interruptions. A second touch, on the round rim of the knob, restores normal volume. An adjacent indicator glows when the "Touch-Mute" function is activated. The circuit can be disabled, if desired, by a switch in the rear of the amplifier.

The lower portion of the panel contains several controls, some so inconspicuous that they might be overlooked on casual inspection. A front-panel screwdriver adjustment varies the phono gain over a  $\pm 5$ -dB range about its detented center setting. Another selects a PHONO 1 input impedance of 30 k (30,000), 50 k, or 100 k ohms (PHONO 2 is fixed at 50 k ohms). Two small pushbuttons energize the two sets of speaker outputs individually. A larger black button is the power switch, and next to it is the headphone jack. When the amplifier is first turned on, a yellow light above the balance control blinks on and off at a rate of about once per second for some 15 seconds, after which it remains on. This indicates the action of the time-delay/output-protection circuit, which mutes the speakers until all turn-on transients have subsided. In the event of an overload or a short-circuited output, the amplifier goes silent and the flashing light then indicates that the protective circuit is activated. (It resets automatically when the fault is corrected.)

The remaining front-panel control is a small black LINEAR EQUALIZER knob at the lower left. This five-position switch tilts the entire response curve slightly about a mid-range

"pivot point," producing a rather subtle alteration in the audible sound balance. It operates in addition to, and independently of, all other controls and filters, but can be used only on the phono inputs.

In the rear of the L-100 there are jacks for pre-amplifier outputs/main-amplifier inputs, joined by jumpers, and all the necessary input and output connectors. A small knob controls the sensitivity of the tuner input, and a DIN connector duplicates one set of tape-recording input/output jacks. Insulated spring connectors are used for the speaker outputs, and one of the two a.c. outlets is switched. Most of the rear apron is devoted to the massive output-transistor heat sinks. The protective fuses for the speaker and power line are recessed into the bottom of the amplifier.

The Luxman L-100 comes in a handsomely finished rosewood-veneer cabinet. Its overall dimensions are approximately 19 inches wide, 13 $\frac{3}{4}$  inches deep, and 7 inches high; it weighs 42 pounds. Price: \$995.

● **Laboratory Measurements.** Following a one-hour preconditioning at one-third rated power and five minutes at full power, the power output at clipping of the L-100 was measured at 136 watts per channel into 8 ohms. It was 185 watts with 4-ohm loads and 86 watts into 16 ohms. The harmonic distortion (THD) at 1,000 Hz and 10 watts output was 0.0087 per cent, and it remained at that figure for power outputs up to the rated 110 watts, increasing to 0.018 per cent at 120 watts. With less than 10 watts output, the distortion could not be measured since it was below the (inaudible) noise level of the amplifier. The intermodulation distortion (IM) was 0.016 per cent at 1 watt, rising smoothly to 0.072 per cent at 110 watts and 0.1 per cent at 140 watts. At very low outputs (a few mil-

watts) the IM never exceeded 0.15 per cent, indicating the relative absence of crossover-distortion components. At full rated power, the THD was 0.02 per cent at 20 Hz, dropping to less than 0.01 per cent from 40 to 1,500 Hz and increasing smoothly to 0.06 per cent at 20,000 Hz. The distortion went no higher at powers down to one-tenth of rated output.

Through the high-level inputs, with the attenuator control set for maximum gain, a 48-millivolt (mV) signal drove the amplifier to a reference output of 10 watts with an 80-dB signal-to-noise ratio. The measured range of the attenuator was 19 dB. The phono sensitivity (in the middle of its adjustment range) was 0.84 mV, with a signal-to-noise ratio (S/N) of 73 dB. Phono overload occurred at an impressively high 450-mV input. If this for some reason is not enough (!), setting the phono sensitivity to  $-5$  dB with the front-panel adjustment increases the overload point to 770 mV, while sensitivity is still a very good 1.5 mV.

Our measurements of the tone-control response curves confirmed the indicated turn-over frequencies. The maximum control range was typically about  $\pm 10$  dB at the frequency extremes. When the tone controls are switched into the circuit, the overall gain drops by 2.5 dB. In the LOW BOOST mode, the response begins to rise below 200 Hz, to  $+1.5$  dB at 100 Hz and  $+4.5$  dB at 20 Hz. The low-and high-cut filters had desirable 12-dB-per-octave slopes, with the  $-3$ -dB response frequencies being 85, 6,000, and 11,000 Hz. The 10-Hz filter reduced the response by 1 dB at our lower measurement limit of 20 Hz.

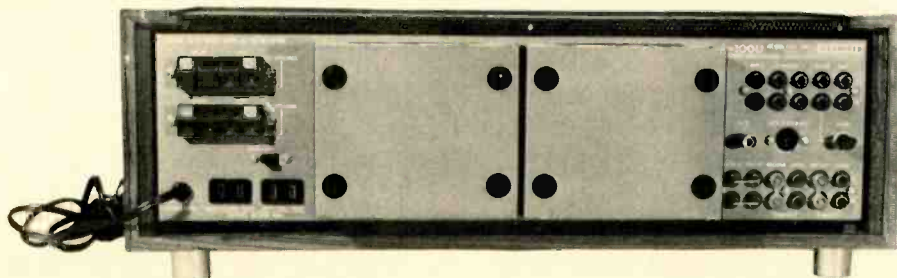
The RIAA phono equalization was as accurate as we have ever measured—within 0.5 dB of the ideal response from 20 to 20,000 Hz. There was no detectable interaction with phono-cartridge inductance. The LINEAR EQUALIZER produced approximately the stated effect, with its action hinged at 1,500 Hz. The effect was that of a "shelved" response, with a maximum range of  $\pm 1.5$  dB between 50 and 700 Hz and  $\pm 1.5$  dB above 3,000 Hz.

● **Comment.** Obviously the performance and operating characteristics of the Luxman L-100 require the use of superlatives for an adequate description. Everything worked exactly as intended, and there was a remarkable smoothness and positive action on all the controls. The "tactile" characteristics of this amplifier set a mark for others to aim at.

The high price of the L-100 (and other Lux components, including their \$3,000 power am-

(Continued on page 42)

The square covers centered in the L-100's rear panel protect the power transistors. Note the push-clamp speaker connectors and (lower right) preamp-out/main-amp-in jacks with jumpers.



# The Beogram<sup>®</sup> 4002. A turntable unequalled in concept, performance, and design.

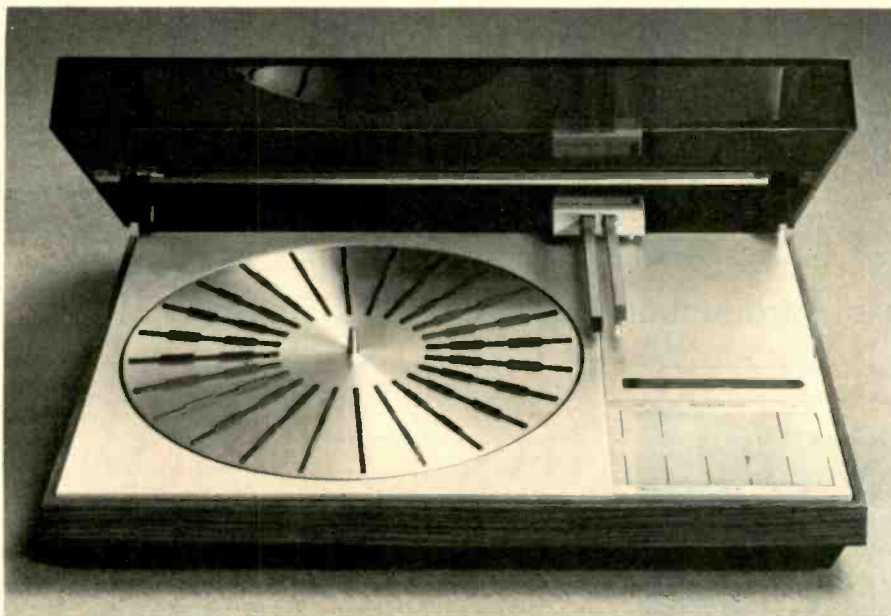
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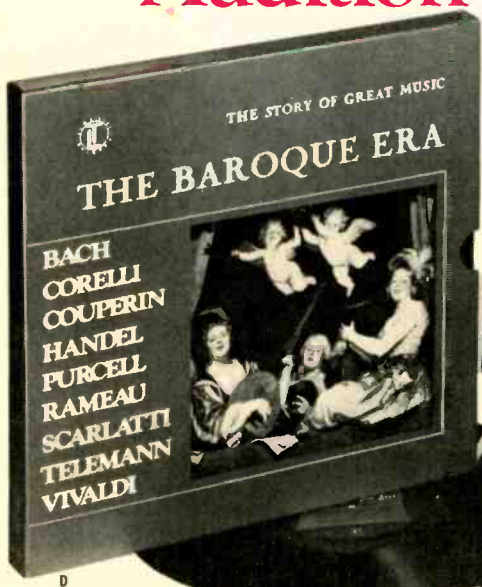
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B  
A Listener's Guide to the Recordings

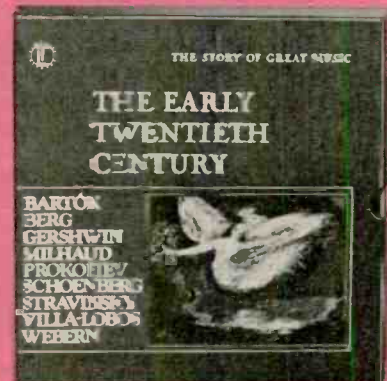
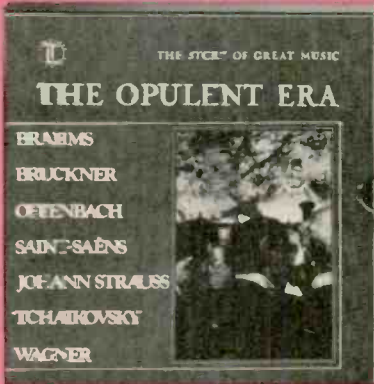
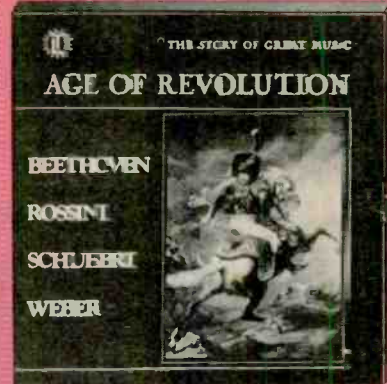
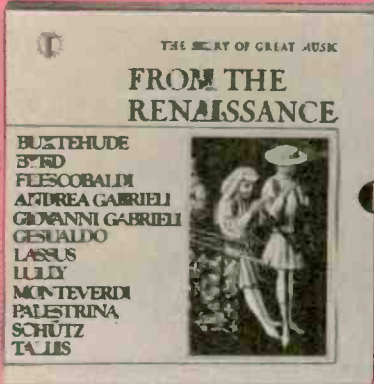




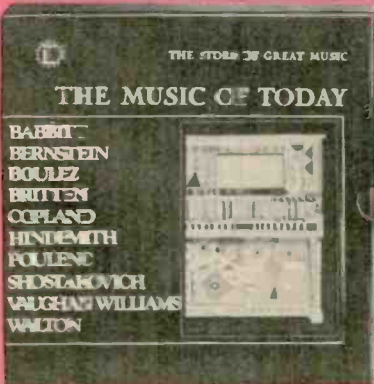
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Yes, I would like to examine *The Baroque Era*. Please send it to me for 10 days' free examination and enter my subscription to THE STORY OF GREAT MUSIC. If I decide to keep *The Baroque Era*, I will pay \$15.95 plus shipping and handling. I then will receive future albums in THE STORY OF GREAT MUSIC series, shipped an album at a time approximately every other month. Each is \$15.95 plus shipping and handling and comes on a 10-day free-examination basis. There is no minimum number of albums that I must buy, and I may cancel my subscription at any time simply by notifying you.

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plifier) can be justified by the unusual standards of performance and construction. We would not expect to *hear* any differences between this amplifier and some others with comparable ratings and usually lower prices. On the other hand, at this price level we would be intolerant of any malfunction, however slight. Happily, there were no unpleasant surprises in our extensive use and testing of the L-100. It never gave any audible indication of its presence unless we chose to use its

very fine filters and tone controls. Anyone who appreciates subtle response corrections should especially enjoy using the L-100. Even the "Touch-Mute" proved to be a practical, if unconventional, audio-muting device, and not at all in the "gimmick" category. The LINEAR EQUALIZER, about which we had some initial theoretical reservations, made a definite if unobtrusive alteration in the tonal balance from phonograph records. We do wish that it could be used on *all* input sources, however.

We have not discussed the circuit design of the Luxman L-100, which is described in some detail in the manufacturer's brochure. It appears that the same attention to detail that we observed in its external characteristics was lavished on its internal circuits and construction. Externally, internally, and in respect to performance, the Luxman L-100 integrated amplifier must be considered a simply beautiful product.

Circle 105 on reader service card

## Miracord Model 825 Automatic Turntable



● **THE Miracord Model 825** automatic turntable operates at 33 $\frac{1}{3}$  and 45 rpm, with a vernier speed adjustment (concentric with the speed-change lever) providing a nominal control range of 5 per cent about each speed. The speed-change lever also sets the tone-arm indexing to 12 inches at 33 $\frac{1}{3}$  rpm and 7 inches at 45 rpm. Other combinations of disc size and speed must be played manually.

The rubber turntable mat carries two rows of stroboscope markings near its outer diameter. The inner ring is used to adjust the speed to 33 $\frac{1}{3}$  rpm, and this simultaneously sets the 45-rpm speed. Although it is not specifically stated in the instruction manual, the outer ring is used only with a 50-Hz power source.

Like other Miracord turntables, the 825 has interchangeable spindles for single- and multiple-play operation. A stack of discs (up to ten according to the catalog description and up to eight according to the manual) can be loaded on the long spindle and played automatically in sequence. The spindle must be removed in order to take the records off the turntable. The familiar pushbutton operating controls featured on Miracord turntables for years are retained in the Model 825, and they can be used to control automatic operation with one disc or with a stack. When the START button is pressed, the motor comes on and the tone arm indexes to either a 12-inch or a 7-inch diameter, depending on the selected speed. At the end of play, or whenever the STOP button is pressed, the arm returns to its rest and the motor shuts off. With the multiple-play spindle in place, the next record is dropped and played when the START button is pressed,

while the STOP button shuts down the unit without dropping another record.

Manual operation is also possible, since lifting the arm from its rest starts the motor. A cueing lever next to the arm operates with a damped motion in both directions of arm movement. The arm itself is a slim aluminum-alloy tube with a threaded counterweight for balance. A small dial on the pivot axis, with calibrations at 0.25-gram intervals, adjusts the tracking force between 0 and 4 grams. Another dial on the motorboard with a similar calibration range (separate scales for conical or elliptical and CD-4 styli) applies anti-skating correction. The cartridge mount slides into the end of the arm and has a mark on its edge for setting the correct stylus overhang.

The catalog specifications for the Miracord 825 include a combined wow and flutter of less than 0.11 per cent, a DIN-B weighted rumble of -58 dB, and the ability to operate with cartridges tracking as low as 0.8 gram. The two-piece stamped platter, which is driven from the four-pole induction motor through a rubber idler wheel, is 10 $\frac{3}{4}$  inches in diameter and weighs about 2 $\frac{1}{2}$  pounds. The overall dimensions of the Model 825, mounted on its optional molded plastic base with the dust cover lowered, are 17 inches wide x 13 $\frac{3}{4}$  inches deep x 8 $\frac{1}{4}$  inches high, and it weighs 14 $\frac{1}{2}$  pounds. The easily removed dust cover is supported positively at any angle by an arm on its right side, resting in a notched track on the base. However, it is necessary to use two hands to lower the cover, since the support arm must be held free of its retaining notches to do this. Price: Miracord 825 (less base)

\$129.95. A molded plastic base is \$16.95 and a wood base is \$20.95. Two types of dust cover are available, both priced at \$16.95.

● **Laboratory Measurements.** The Miracord 825 supplied to us for testing was equipped with an Empire MC-1E cartridge. The actual tracking force, after the arm had been balanced according to instructions, was slightly higher than the dial indications. At the recommended 1.5-gram setting, which we used for our tests, the true force was 1.9 grams, and this increased by an insignificant 0.05 gram at the top of a stack of records. The anti-skating was optimum when set at 2 grams, corresponding closely to the actual tracking force if not to the dial setting of the force adjustment. The arm had a low tracking error of less than 0.4 degree per inch of radius, typically between 0.2 and 0.3 degree per inch. The cueing action was smooth and well damped, with no sign of lateral drift during the arm descent.

The unweighted rumble was about -33 dB. With ARLL (audible rumble loudness level) weighting it improved to -50 dB. The wow and flutter were 0.06 and 0.04 per cent at 33 $\frac{1}{3}$  rpm and 0.08 and 0.04 per cent at 45 rpm. The 33 $\frac{1}{3}$ -rpm speed was exact when the stroboscope pattern was stationary (which corresponded to a center setting of the speed vernier control), and the 45-rpm speed was 0.5 per cent fast at the same setting. The vernier range was from +2.8 to -3.3 per cent. The speed changed by 0.8 per cent with line-voltage shifts from 95 to 135 volts, with most of the change taking place at low voltages. The automatic record-changing cycle required 12 seconds at 33 $\frac{1}{3}$  rpm and 9 seconds at 45 rpm, typical of most changers.

Although no specifications were available for the Empire MC-1E cartridge, it appears to be typical of today's lower-price magnetic stereo cartridges in its tracking requirements and compliance. The low-frequency arm/cartridge resonance was measured and found to be centered at 12 Hz, although it was quite broad and produced an increase in output of 3 to 5 dB between 10 and 20 Hz. The output dropped very rapidly below 8 to 10 Hz. We believe that most comparably priced cartridges would give similar results in this arm.

● **Comment.** Although the Miracord 825 might be considered a relatively inexpensive record changer in today's market, it has many of the qualities that have characterized the  
(Continued on page 44)

# TOSHIBA CASSETTE DECKS PLAY GREAT MUSIC. STANDING UP OR LYING DOWN.

If you're looking for a great front loader, check out our PC5060 and PC6030.

There's nothing to load or switch or fiddle with on top. So you can squeeze our front loaders between two shelves.

But it's what's inside that makes these machines really special. Features like DC Servo motors that cut down on wow and flutter. And, of course, Dolby noise reduction.

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But most important it comes with specifications that one trade paper called the "best anyone had seen."

If you want to buy a great top loader without paying top dollar there's Toshiba's PC4030.

It's got features found on machines costing twice as much. Like a cassette compartment that can open a full 90° for easier access to the head for cleaning.

It also has a DC Servo motor. Nonslip control surfaces. Ideally located switches. Two VU meters built at an angle for easy checking. Discreet lighting from the light emitting diodes. And, of course, built in Dolby.

So, if you're in the market for cassette decks that play great music, see your Toshiba dealer soon. He's got just what you want. Standing up or lying down.



**TOSHIBA**

Toshiba America, Inc. 280 Park Ave., New York, N.Y. 10017

CIRCLE NO. 56 ON READER SERVICE CARD

more expensive players from Miracord and others. Perhaps the most obvious concession to price was in the mechanical "feel" and quietness of the mechanism. The pushbuttons, like those of the other Miracord models, operated with a light pressure, though not quite as smoothly as we remember from earlier tests. However, the mechanical noises associated with the cycling of the mechanism were plainly audible, in contrast to the quietness and overall smoothness of operation of Miracord's higher-price record players.

The difference between our rumble meas-

urement of  $-50$  dB and the Miracord rating of  $-58$  dB is explained by the different weighting systems employed. The DIN-B measurement always gives lower (better) rumble readings than the ARLL weighting, since it attenuates low frequencies further. The one-piece molded-plastic base supplied with our test sample had several resonant modes when excited by external vibration, making it quite sensitive to acoustic feedback particularly at frequencies in the vicinity of 100 and 300 Hz (in addition to the low frequencies from 65 Hz down). To avoid prob-

lems from this source, the record player should be well isolated physically from the loudspeakers. Although we did not test the wood base, we suspect it would be better in this regard.

All in all, though, the Miracord 825 does its job—playing records with good fidelity and handling both records and pickup gently—in a very satisfactory manner. Its controls are easy to operate, and the measured performance was equal to (or better than) its ratings as well as to those of many competing models.

Circle 106 on reader service card

## Frazier Concerto Speaker System



● THE Frazier Concerto three-way, floor-standing speaker system is so proportioned that it can be used as an end table, or in close proximity to an end table, without causing any aesthetic problems. Its cabinet dimensions are 16 inches square by 21½ inches high, including a black recessed base section that raises the bottom of the walnut veneered cabinet about 3 inches from the floor. The system weighs about 50 pounds.

The Frazier Concerto is a bass reflex system with a 10-inch woofer crossing over at 2,000 Hz to a compression-horn tweeter with a 2- by 6-inch rectangular mouth. At 4,000 Hz there is a second crossover to a horn-loaded ceramic piezoelectric tweeter. The piezoelectric tweeter needs no external crossover

elements, since it cannot be damaged by low-frequency signals; it operates in conjunction with the compression tweeter over most of the higher audio-frequency range. A continuously variable high-frequency level control is located on the front of the speaker just below the piezoelectric tweeter. The plastic-foam sculptured grille is held in place by Velcro fasteners.

The Frazier Concerto is a nominal 8-ohm system, and it is rated to handle 30 watts continuous input. This, combined with its relatively high efficiency (rated to produce a sound-pressure level of 93 dB at a distance of 1 meter when driven by 1 watt of pink noise), enables the concerto to play very loudly when required. Price: \$250.

● **Laboratory Measurements.** We measured the integrated output of the Frazier Concerto in a "live" room with the high-frequency level control at maximum. The bass output was measured separately, with the microphone placed near the woofer cone and the port in turn. After appropriate corrections the two curves were combined to obtain the total bass response, which was then joined to the higher-frequency curve to derive a composite frequency response.

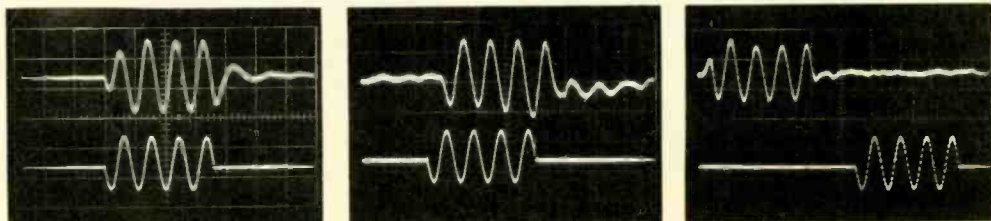
The overall response was  $\pm 5$  dB from 37 to 16,000 Hz. Depending on one's point of reference, the speaker could be considered to have a depressed mid-range response (between 500 and 2,000 Hz) or a broadly peaked output at low and high frequencies, with the peaks centered at 90 and 6,000 Hz. Our experience, confirmed by listening tests, shows that such a response shape is heard as a bass and treble emphasis, since the ear accepts the mid-range level as the reference norm.

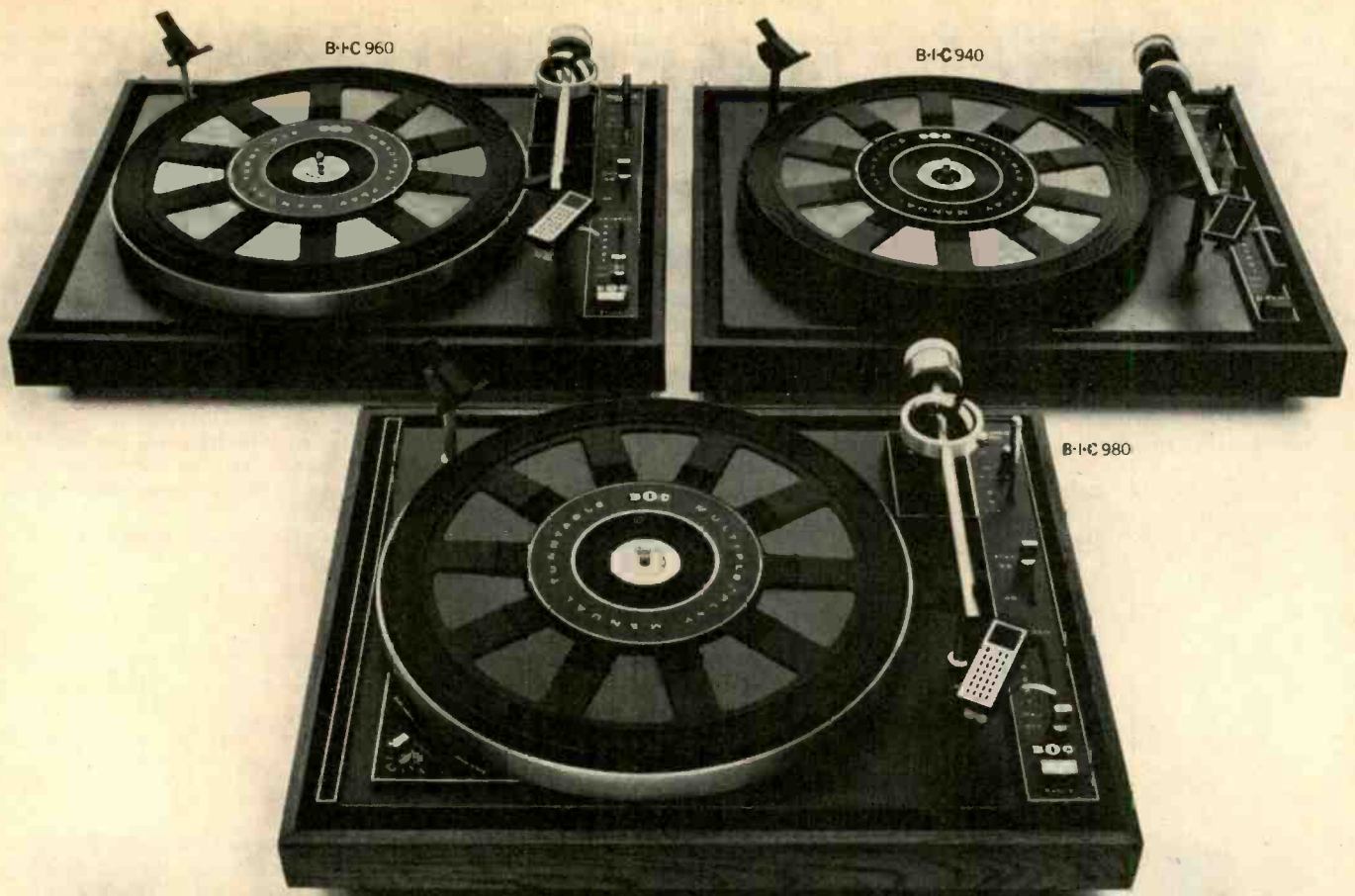
Below 60 Hz, the bass radiation from the port was dominant, and it accounted for essentially all the output at frequencies below 40 Hz. The low-bass output of the speaker was maintained all the way down to our 20-Hz lower measurement limit, where it was only 3 dB below the mid-range level (but some 12 dB below the output maximum that occurred at 90 Hz). Since low-frequency output is strongly influenced by room dimensions and speaker placement, this measured response would not necessarily agree with the speaker's performance in any specific room.

The bass distortion could not be measured unambiguously, since the cone and port have separate and different characteristics. However, at 40 Hz, where the port contributes virtually all the output, distortion was only 3 per cent at 1 watt, 5 per cent at a 10-watt input. At 30 Hz, respective distortion percentages were 5 and 10.

(Continued on page 46)

The Concerto's tone-burst performance was excellent, as illustrated by these oscilloscope photos taken at (left to right) 100, 1,000, and 5,000 Hz.





# “A dream come true.”

In just 18 months, B-I-C Multiple Play Manual Turntables have become the sensation of the high-fidelity industry.

Today, they're fast becoming the best-selling **B·I·C**<sup>™</sup> turntables in America.

Recently, we received a letter from Peabody, Mass. which explains the B-I-C phenomenon better than we ourselves ever could.

“As an audio salesman (our correspondent writes) I have the opportunity to compare very closely many different makes of equipment.

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It is B-I-C's total excellence in both these areas that has prompted this letter of congratulations on a fine product and your ability to achieve such quality inexpensively, compared to other manufacturers.

Your turntable is like a dream come true; all the superior characteristics of a fine manual, but which, if the occasion arises, a party for instance, can also be used as an automatic. It is in my opinion and the opinion of most of my colleagues, the best all-around turntable available today.”\*

Need we say more?

\*THIS LETTER IS IN OUR FILES. IN THE INTEREST OF PRIVACY THE WRITER'S NAME HAS BEEN OMITTED. B-I-C 960, ABOUT \$160—  
B-I-C 980, ABOUT \$200—B-I-C 940, ABOUT \$110. FOR LITERATURE, WRITE: BRITISH INDUSTRIES CO., WESTBURY, L.: 11590—A DIVISION OF AVNET INC. © 1975.

CIRCLE NO. 8 ON READER SERVICE CARD

The high-frequency level control was able to turn off the tweeters completely, affecting frequencies above 1,000 Hz. The system impedance reached its minimum of 7 ohms at 150 Hz and averaged about 8 ohms below the bass resonance of 80 Hz, where it was 25 ohms. At higher frequencies, the impedance rose smoothly to 50 ohms at 1,800 Hz and then decreased to 7 ohms between 10,000 and 20,000 Hz. The tone-burst response was excellent, with the burst shapes from the three drivers (at 100, 1,000, and 5,000 Hz) being as good as we have ever seen from a dynamic speaker. Our efficiency measurements, made with an octave of random noise centered at 1,000 Hz, closely confirmed Frazier's ratings. An input of 1 watt produced a 93.5-dB sound-pressure level at a 1-meter distance.

● **Comment.** In the simulated live-vs.-recorded test the extreme high-end response of the Frazier Concerto was slightly down.

We sensed a slightly constricted quality (or a lack of "openness") in the upper mid-range, where the speaker had an elevated response, as well as some "boxiness" in the upper bass, corresponding to the output rise in the 90- to 100-Hz region. The best overall audible balance in our test room was obtained with the high-frequency level-control setting reduced about 25 per cent from its maximum. Other rooms, of course, require different settings.

When we listened to FM and disc recorded programs of various types, the same general colorations were heard, but usually to a lesser degree. For example, a deep male voice acquired a "boomy" quality, but higher-pitched male and female voices were reproduced with a satisfactorily natural quality. With most recorded and broadcast material, we never sensed any lack of highs, since this effect, as we heard it in the live-vs.-recorded comparison, was limited to frequencies above about 12,000 Hz. Piano music, in particular, was re-

produced with a sense of realism that was unmistakable. Obviously it's best to keep in mind that *all* speakers have response aberrations of some kind and that the ultimate reaction of the listener is heavily influenced by the listening environment and program material in addition to whatever innate properties a loud-speaker may possess.

The high efficiency of the Frazier Concerto is indisputable. Switching from almost any other speaker to the Concerto caused such a volume increase that it was difficult to credit the difference to an efficiency advantage of only 4 or 5 dB. We suspect that the pop and rock listener will find this speaker much to his liking. Its styling, also, contrasts markedly with that of the many long, thin speakers that have appeared in recent years. The squat, almost cubical Concerto can provide substantial sound in a room without necessarily dominating the decor.

Circle 107 on reader service card

## Realistic STA-90 AM/Stereo FM Receiver



● **THE** Realistic STA-90, distributed through Radio Shack stores, is a full-featured AM/stereo FM receiver with a power rating of 44 watts per channel from 20 to 20,000 Hz into 8-ohm loads, with less than 0.5 per cent harmonic distortion. In its other specifications, the STA-90 is also comparable to most receivers selling for somewhat higher prices.

The front-panel styling of the STA-90 is conventional, with a "black-out" dial area containing the FM and AM tuning scales and two tuning meters (channel-center tuning for FM and relative signal strength for both FM and AM). The FM dial calibrations are linearly spaced at intervals of 0.5 MHz. The plastic dial pointer is lit in yellow when receiving AM or mono FM signals, and it changes to red during stereo FM reception.

At the lower left of the satin-gold panel, below the dial area, are the pushbutton power switch and the SPEAKERS selector. This latter can activate two pairs of speakers, individually or in combination, or shut them off for headphone listening via the front-panel jack. It also has a "Quatravox" position in which the second pair of speakers (which should be located in the rear of the room for this purpose) are driven with an L - R (difference) signal to synthesize a four-channel effect from conventional stereo program material.

The input-selector switch has positions for AUX, PHONO, AM, FM, and FM MUTE (interstation-noise muting). Two TAPE MONITOR buttons can control a pair of tape recorders,

monitoring the output from either one when its button is pressed. There is also a front-panel DUB OUT jack for recording onto a third tape machine which must be connected to the AUX inputs for playback.

Pushbuttons control the LO and HI audio filters, MONO mode selection, and LOUDNESS compensation. The BASS and TREBLE tone controls and the BALANCE control are lightly detented at their center settings. A VOLUME knob completes the front-panel controls.

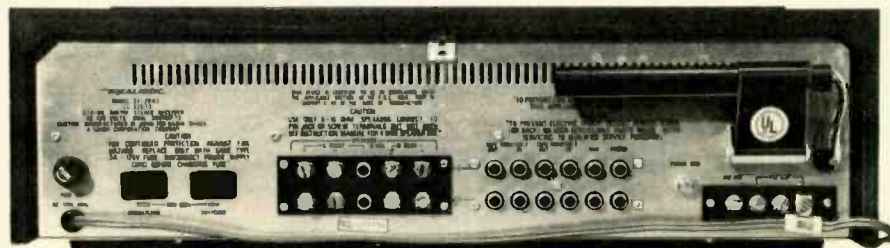
On the rear apron of the receiver, in addition to the normal inputs and outputs, there is a second pair of speaker "A" outputs using phono jacks. The regular speaker-output terminals are binding posts. The antenna terminals provide for 75- or 300-ohm FM antennas, and a wire AM antenna can be connected in

addition to the hinged ferrite-rod AM antenna. On the line cord there is a capacitive coupler that can be connected to the FM antenna terminal, which provides for reception of local stations without a separate antenna. One of the two a.c. outlets is switched. The Realistic STA-90 is supplied in an oiled walnut wooden cabinet; it measures 19¼ inches wide, 13¼ inches deep, and 5¾ inches high. The receiver weighs approximately 26 pounds. Price: \$359.95.

● **Laboratory Measurements.** When we drove the audio amplifiers of the Realistic STA-90 at 1,000 Hz, the power output at clipping was 51.5 watts per channel into 8 ohms, 52.6 watts into 4 ohms, and 36.3 watts into 16 ohms. The total harmonic distortion (THD) was less than 0.025 per cent from under 1 watt to 50 watts output, reaching 0.46 per cent at 55 watts. The intermodulation distortion (IM) was about the same—0.02 per cent or less up to 50 watts and 0.065 per cent at 55 watts. It did not increase significantly at very low power levels (less than 0.2 per cent at 1.4 milliwatts), indicating the relative absence of crossover distortion. The manufacturer's IM rating is 1 per cent (typically 0.2 per cent).

At the rated 44 watts output, the THD was (Continued on page 48)

*The rear panel of the STA-90 displays four sets of tape-monitoring jacks in addition to the conventional source inputs. One set of screw-type speaker terminals is paralleled by jacks that take a phono plug; a second set of speakers may be connected to provide a synthesized rear channel.*



It's all here! The power, the precision, the purity. One look at that heat sink will convince you that no one puts your money where it counts, like Dynaco, into the guts of the Stereo 400. And what comes out is perfection.

Every wanted feature, plus these optional accessories:

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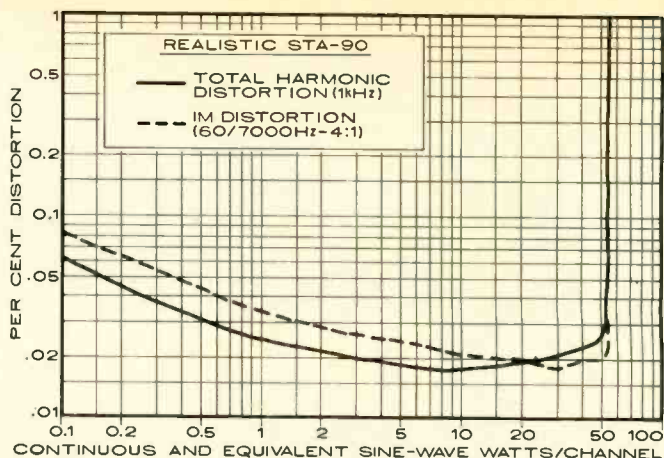
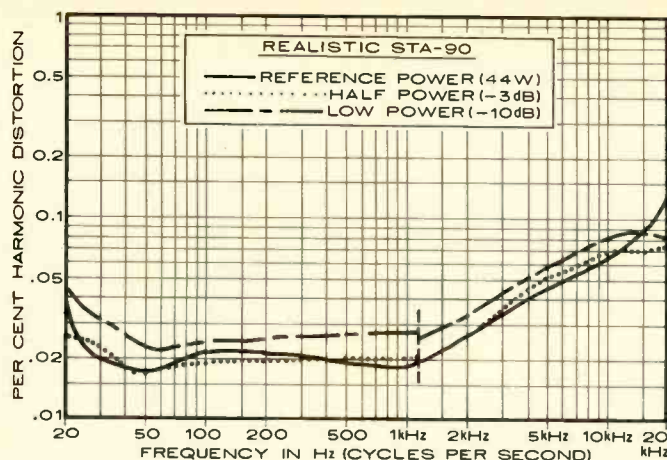
To see how easy it really is, send \$2.50 for detailed manual and performance data. It's a small investment in Dynakit—the leader in the world of sound value.

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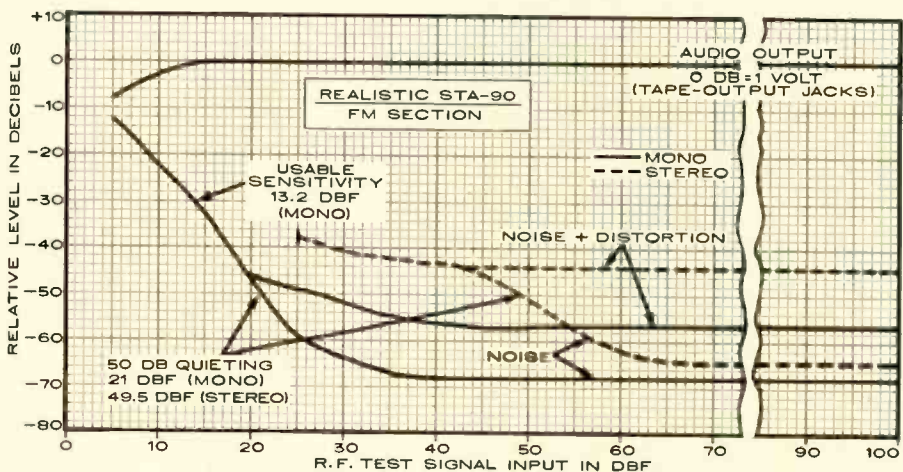
The dashed vertical line on the left-hand graph indicates where, for measurement purposes, a filter was introduced to eliminate inaudible hum.

about 0.02 per cent from 20 to 1,000 Hz, increasing gradually to 0.065 per cent at 10,000 Hz and 0.13 per cent at 20,000 Hz. At lower power levels, the distortion was very nearly the same as at full power.

The amplifier could be driven to a reference power output of 10 watts by 88 millivolts (mV) at the AUX inputs or 1.3 mV at the PHONO inputs. The respective noise levels were -80 and -69 dB, referred to 10 watts (significantly better than the rated figures of -69 and -54 dB, respectively). The phono inputs overloaded at 160 mV—a very high level considering the amplifier's high sensitivity.

The tone controls had conventional characteristics, with a sliding bass turnover frequency and a treble response hinged at about 2,000 Hz. The loudness compensation boosted both low and high frequencies, and the filters had 6-dB-per-octave slopes and -3-dB points of 110 and 5,000 Hz. The RIAA equalization was accurate within  $\pm 1$  dB from 42 to 20,000 Hz, falling off at lower frequencies to -6 dB at 20 Hz (as measured at the tape-recording outputs). The equalization accuracy was not significantly affected by cartridge inductance.

The FM tuner section had a usable sensitivity (mono) of 13.2 dBf or 2.5 microvolts ( $\mu V$ ); 50-dB quieting was reached at 21 dBf (6.2  $\mu V$ ) with 0.45 per cent THD. In stereo, the automatic switching threshold was 26 dBf (11  $\mu V$ ), and 50-dB quieting occurred at 49.5 dBf (164  $\mu V$ ) with 0.62 per cent THD. The ultimate quieting and distortion levels at 65 dBf (1,000  $\mu V$ ) were 68 dB and 0.15 per cent in mono (rated 65 dB and 0.6 per cent). In stereo, they



were 64.5 dB and 0.62 per cent, respectively.

The stereo FM frequency response was +1.5 dB from 80 to 15,000 Hz, falling to -7 dB at 30 Hz. The channel separation was 30 to 32.5 dB between 200 and 15,000 Hz (rated 35 dB at 1,000 Hz), and 24.5 dB at 30 Hz. The capture ratio was 2.7 dB at 45 dBf (100  $\mu V$ ) and 1.5 dB at 65 dBf; AM rejection was a good 60 dB. The image rejection of 60 dB and the alternate-channel selectivity of 65 dB both surpassed the ratings of 50 and 60 dB. The FM muting threshold, like the stereo threshold, was at 26 dBf (11  $\mu V$ ). The 19-kHz pilot carrier leakage into the audio outputs was

52.5 dB below the 100 per cent modulation level. The AM tuner frequency response was down 6 dB at 130 and 5,500 Hz.

● **Comment.** The Realistic STA-90, as our laboratory tests show, is well suited to almost any home music system, and the audio section is rated with commendable conservatism. Overall, its audio performance is on a par with that of any under-\$500 receiver we have seen, and it has enough power to drive low-efficiency speakers to more than adequate volume in any room of reasonable size.

Similarly, the FM tuner section, if not quite "state of the art" in its design, will certainly provide performance good enough for most requirements. With strong signals (especially those of 65 dBf or higher strength) it is excellent, but at lower input levels some background hiss may become audible. The STA-90 would seem to be very well suited to urban and suburban listening areas (its overall interference-rejection performance is above average), but perhaps not so nearly ideal for fringe areas or rural listeners.

In respect to overall smoothness of operation and quality of construction, the STA-90 leaves nothing to be desired. The FM dial calibration is as accurate as the 0.5-MHz intervals and pointer width will allow. All controls have a positive "feel," tuning is non-critical, and the muting circuit is first rate, with just enough softness to avoid any transient thumps and without any perceptible time lag in its operation.

Circle 108 on reader service card





# For a winning deck, pick a Sansui.

SC 636

With the development of the Sansui cassette decks, the cassette can truly be called a high fidelity medium. Only with the technical accuracy and near perfection of these Sansui models can the musical recording and reproduction do full justice to the capabilities of the cassette being used.

The new Sansui vertical front-load series has achieved extremely low wow and flutter by isolating the capstan drive from the reel drive.

This is accomplished by a slip-free drive belt coupled to a mirror finish, extra large flywheel. Our new decks incorporate the newest Dolby\* IC chip technology to give you a full 10 dB improvement in signal-to-noise ratio. All mechanical controls are inter-locked so you can go directly from any mode to any other without going through stop, to prevent damaging valuable tape.

The SC-3000 and SC-3003, top-of-the-line models with 0.09% (WRMS) wow and flutter are stacked with attractive features: front-access tape compartment positioned right-side up, fully automatic stop-shut/off, a reliable and easy-to-read 3-digit tape index counter with a very useful Memory Rewind Section, highly accurate VU meters, peak level indicator, extremely hard Permalloy record/playback head for long life and outstanding performance.

All four models in this Sansui series, from under \$290.00\*\* to under \$370.00,\*\* share many of the same outstanding features for true high fidelity performance at attractive prices.

The Sansui SC-636<sup>1</sup> at under \$280.00,\*\* a leading all-around deck, delivers fine quality sound without costly frills. As with the higher priced models, the SC-636 offers fully automatic shut/off, illuminated VU meters, built-in Dolby\* Type B Noise Reduction System, low wow and flutter and an excellent signal-to-noise ratio.

Sansui has stacked its decks. Stop in at your nearest franchised Sansui dealer today and buy one of these outstanding new Sansui series to stack yours.

\* Dolby is a trademark of Dolby Laboratories Inc.  
\*\* The value shown is for informational purposes only. The actual resale price will be set by the individual Sansui dealer at his option.  
<sup>1</sup> Simulated walnut grain



**Sansui**

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# THE OPERA FILE

By WILLIAM LIVINGSTONE



## MAGIC NIGHTS

A COMPLETELY satisfying operatic performance is rare because such a complex art form provides so many opportunities for something to go wrong. Once in a great while, however, a particular combination of singers, conductor, orchestra, audience, barometric pressure, astrological aspects, and I don't know what all results in a performance so thrilling that any flaws are negligible. Everything falls into place, the singers strike sparks from each other, and the waves of communication between the musicians and the audience are almost palpable.

Such a performance took place at the Metropolitan Opera House on January 30, 1974, when Erich Leinsdorf conducted *Tristan and Isolde* with Birgit Nilsson and Jon Vickers. That night I heard things in the score I'd never heard before, and when the lovers died, I felt a tremendous sense of loss. The audience went wild, and part of the exhilaration of one of these extraordinary performances comes from being surrounded by people who are getting the same thrill from it that you are.

*Tristan* is a long opera—four hours, five discs—but that night it didn't seem so. A friend commented to me at midnight that if the singers would start over, he'd go right back into the theater and sit through it again. He said, "I haven't heard such a magical performance since Inge Borkh did those *Elektras* in San Francisco twenty years ago."

Fortunately, in between these epoch-making evenings, we get smaller doses of magic and even different kinds of magic at other performances. Something to keep us going. It is possible to derive considerable pleasure from a thoroughly routine performance, and sometimes one or two especially effective scenes or a particularly striking interpretation by only one member of the cast can make an otherwise ordinary evening memorable.

Singers who turn in exciting performances with any frequency attract fans who will travel long distances to see and hear them do it. When Renata Scotto sang Leonora in *Il Trovatore* in San Francisco last November, fans came from all over the country. I talked with one man who had flown from London for the occasion, and I'm told that two others flew from Sydney, Australia, attended the Saturday matinee, and flew home—seventeen hours each way. And the prospect of Scotto's Leonora was what made me decide to forgo

an autumn vacation in Europe and spend the time on the West Coast.

The San Francisco season had opened with *Trovatore*, sung by Joan Sutherland, Luciano Pavarotti, Elena Obraztsova, and Ingvar Wixell, conducted by Richard Bonyngue. At the end of the season a second cast took over: Scotto, Juan Lloveras, Bianca Berini, and



Renata Scotto: a sensational Leonora

Louis Quilico. Not only were the singers different, but conductor Kurt Herbert Adler used a slightly different edition of the opera, notable principally for its longer final scene, the so-called Paris ending, which I had never heard before (I liked it).

In the second cast Bianca Berini as Azucena was in some ways more exciting than Obraztsova had been, but the principal dispenser of magic was Mme. Scotto. In these pages I have written enthusiastically about her recent Columbia recordings (her verismo album was included among our Record of the Year Awards), stressing the excitement inher-

ent in her voice and her expert use of it to convey emotion. Her live performances, of course, have the added visual dimension and an uncommon sense of immediacy.

Although Scotto's movements on stage are limited more or less to the Italian vocabulary of stock operatic postures and gestures, she uses them with total conviction to make you know at every moment what the character she portrays is feeling. This must come in part from her sensitivity to the words. Whether the audience understands them or not (her diction is excellent), she *feels* them and can convey those feelings to the audience through gesture and song, and I think this ability is the essential component of the thrills that keep her fans coming back for more. Her Leonora in *Trovatore* was sensational.

Additional excitement was provided in San Francisco by Placido Domingo and Cornell MacNeil, who were excellent in *Andrea Chenier* with the very promising Italian soprano Josella Ligi. The sets (by Wolfram Skalicki) were handsome, and the trial scene was especially well directed. I've never seen a better performance of Puccini's *Il Tabarro* than the one with tenor Robleto Merolla and baritone Guillermo Sarabia. The *Gianni Schicchi* with which it was paired was not exceptionally well sung, but the ensemble acting was high spirited and Jean-Pierre Ponnelle's beautiful set was a delight. Although Kiri Te Kanawa was a ravishing Pamina in San Francisco's *Magic Flute*, that production otherwise lacked the essential magic. Still, to get three hits out of four operas is an incredibly high average.

WHEN I returned to New York, the consensus among the regulars in the Met audience was that two things must not be missed: *Carmen* with Régine Crespin and *Elektra* with Danica Mastilovic, Astrid Varnay, and Leonie Rysanek. I concur. A second view of Crespin's *Carmen* reinforced my opinion that hers is the best I've seen, and I found in *Elektra* another of those magic nights when the whole is something more than the sum of its parts.

Danica Mastilovic, a Yugoslav soprano with a special affinity for the role of Elektra, looks and sounds like Birgit Nilsson. Mastilovic, Rysanek (Chrysothemis), and conductor Heinrich Hollreiser spurred each other to great heights in an unrestrained performance. The orchestra was loud and the two sopranos let out their big voices louder. Incredible in the way she could leap about the treacherously tilted platforms, Rysanek would take a high-flying phrase at what one thought her full volume and then for accent would sing certain words even louder. The performance was totally gripping.

Marvelous as commercial recordings are—and my life wouldn't be the same without them—it is rare that they have this kind of spontaneous excitement. We listen to them for their many other virtues. Occasionally, though, even in the recording studio, that magical something happens and there is a special rapport among the singers or between the singers and the conductor, and the excitement later pours forth from your speakers. Of the many new opera records I've heard in recent months the best from this point of view is the new Angel recording of Verdi's *Un Ballo in Maschera* conducted by Riccardo Muti. It is reviewed in the Best of the Month section of this issue; it certainly belongs there any month, and I heartily recommend it.

San Francisco Opera

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# GOING ON RECORD

By JAMES GOODFRIEND

Music Editor



## THE IMP OF THE PERVERSE

It is always an occasion when Italian pianist Arturo Benedetti Michelangeli releases a new record. To begin with, he simply doesn't make that many records. In an era in which dozens of virtuosos are represented on recordings by four times the number of pieces they actually have in their concert repertoires, most of Michelangeli's specialties, those pieces that audiences around the world have invariably been awestruck to hear him play in recital, have never been committed to disc by him. A Michelangeli record is an occasion for another reason too: there is almost no way to predict what his interpretation will be, other than to assume that it will be unpredictable and, in some unforeseen way, odd.

Michelangeli is one of the greatest pianists I have ever heard, on or off records, and I have admired him extravagantly for many years. But I have never claimed to be any more able than anyone else to predict his musical movements, nor even to understand consistently what he is doing—and why—upon hearing it. Angel has recently released a recording of him playing Schumann's *Carnaval* (S-37137). I think it is the worst Michelangeli performance I have ever heard and possibly the worst *Carnaval* ever put on records by a major pianist—and I am fascinated by it.

One always thinks of alternative explanations: maybe it isn't Michelangeli playing at all. But no, the authority, the evenness of that irritating, thumping left hand is the work of a master of the keyboard; the maintenance of that impossibly slow tempo could be done only by someone who knew precisely how to do it; the clear-cut avoidance of Schumannesque expressivity can be no accident or

misunderstanding. If it isn't one Michelangeli who put together this B-19 of a performance, then it is another; for, to paraphrase a remark by Leschetizky on Anton Rubinstein, you have to be a hell of a pianist to louse up the music that way.

There is a proper word for this kind of performance, for this kind of approach to music, and the word is "perverse." Perversity is a real and identifiable interpretive attitude and, if you think about it, its existence is really rather widespread. Michelangeli is basically a perverse interpreter, even at his most successful. So, to a good extent, is/was Heifetz. Loren Maazel has shown frequent signs of perversity in his conducting, as did Hermann Scherchen in some of his many recordings. Glenn Gould has evolved into a perfect champion of the attitude. But, before the feathers really begin to fly, what is musical perversity?

Well, it takes many specific forms and operates on many levels with many degrees of intensity, but basically it is a combination of the knowledge of how something *should* be done, coupled with the insistence upon doing it some other way. In specific terms it involves such things as performing works from the wrong editions. Published music, particularly nineteenth-century editions of eighteenth- or seventeenth-century music, has often been edited and modified beyond reason. There is, for example, an edition of Rameau's *Gavotte with Variations*, done by the aforementioned Leschetizky, which totally excises the majority of Rameau's ornaments. Since the whole eighteenth-century French keyboard style depends upon ornamentation, such an edition

(Continued on page 54)



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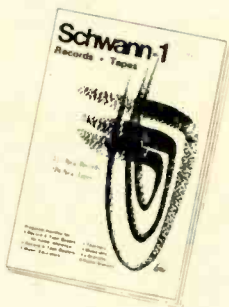
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Did you know that there are records by 6 members of the Bach family? That 111 of Bach's 215 surviving cantatas are recorded? That there are records by both Mozart and his father? There are two composers named Brown, 3 Jones, 6 Smiths? That "Haydn's Toy Symphony" actually is movements 3, 4, 7 of Leopold Mozart's "Cassatio?" That there are records of music by King Frederick II of Prussia; Wilhelmine Markgräfin von Bayreuth, Louis XIII, Benjamin Franklin? That composer/musician Pablo Casals lived to be 97, Julius Reubke died at 24?

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virtually wrecks the music. One might assume that Leschetizky did what *he* did out of ignorance, but a decision to actually play that edition today would more likely be a case of pure perversity—allowing, of course, that some pianists *still* do not know the difference.

Michelangeli, who does not, to my knowledge, play that particular piece, still seems to prefer to originate much of his repertoire from similarly discredited editions, and in at least one instance (Brahms' "Paganini" Variations) has *himself* turned the music around from the way the composer wrote it. Many conductors too, particularly of an older generation, prefer to disregard modern scholarship and perform music from old, familiar, but unreliable editions. Some may not know that anything better is available, but others are just being perverse.

Perversity is most obviously evident in such performance practices as choosing to play *legato* passages *staccato* (Gould specializes in this), taking *Allegros* as if they were *Prestos* (almost a Heifetz patent) or, conversely, rendering *Adagios* in the manner of that most famous John Cage tempo marking, "Almost stationary," playing loud passages soft and soft passages loud, bringing out the accompaniment and letting the melody go hang, eliminating rubato where it is necessary and laying it on with a trowel where it isn't, miniaturizing a big piece or puffing up a small one, and, in general, rejecting whatever tradition and the score together seem to say is proper, correct, and effective.

Once again, we must allow that a certain proportion of such goings on is owing to ignorance; mechanistic—and even musical—talent has no necessary correlation with brains, and certainly not with intellectual curiosity. But much of the practice is due to perversity, and we can probably tell the difference (given no other clues) by the very consistency with which the the perverse interpreter rides his wayward horse.

**W**HY do they do it? I think they do it largely to reaffirm, to their audiences or to themselves, just how good they are. It takes a very secure personality to be sure, at once, of his own talent and of its proper appreciation by others, to consciously avoid calling attention to himself through little (or big) quirks of performance. Such personalities are probably not all that common among performing musicians, a calling that is concerned with ego and not with serenity.

But it is an interesting point that those most enamored of musical perversity are among the most talented performers of our time. "Listen," they seem to say, "I know how everybody else has played this piece. I know what the music is supposed to be. I know which are the correct editions of it and which are not, and I know the proper performance practice. But I'm going to play it completely differently and I'm going to do it so well that you're going to go ears-over-elbows listening to it." And they do. So many, many times they accomplish just that feat. They turn the piece on its head and they *still* make it work, and it is a tightrope performance that you remember forever. What is wrong with Michelangeli's *Carnaval*, then (and with Gould's Mozart sonatas, Heifetz's Mozart concertos, Maazel's Bach and Berlioz, and others of their type), is not that it is perverse, but that this time the trick didn't come off. The imp of the perverse giveth, but the imp of the perverse also taketh away.

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# THE SIMELS REPORT

By STEVE SIMELS



## CAN WOMEN ROCK?

SOME months back I had some unkind things to say about a little Feminist Apologia for the Rolling Stones that ran in *Ms.* magazine, drawing a fair amount of reader flak—largely, I think, because the satirical nature of the piece was misunderstood. In response I promised to do a slightly more wide-ranging and serious discussion of the issues I skirted (!) initially—namely, Can Women Rock? or, more to the point, *should* they?

Part of the problem is that nobody really knows just what rock-and-roll is any more, so trying to get at women's (or anyone's) relationship to it is a bit tricky. To start with, the whole argument about whether or not rock is disgustingly male chauvinist and insulting to women—the "cock rock" school of criticism that flourished early in the Seventies, and which lately seems to have revived in certain articles I've read about Bruce Springsteen—is at best a cul-de-sac, at worst criminally dumb. Of course rock is male supremacist; that's exactly what makes it exciting, its rooster arrogance. Who would bother to listen otherwise?

Second, rock is and always has been specifically aimed at women. You don't think it was the Beatles' *musicianship* that initially had girls wetting their pants, or that fourteen-year-old boys are buying Donny Osmond records, do you? If that situation changes—as well it may, at some point—then we won't be dealing with rock any more, but something altogether different. The feminist arguments, then, strike me as totally unrealistic, since to ask rock to be other than what it is is to demand its dissolution.

Just as unrealistic, it seems to me, is the notion that any of these displays of machismo are demeaning, either to women or to men. Rock is a game, and anyone who takes these fantasies as any more than just that—amusing, juvenile fantasies—is living on another planet. So what if *Thunder Road* insults women? (I don't think it does.) It's *only a record*. I'm continually amazed that the people who promulgate this theory (or the similar theory that TV or film violence, or even war toys, inspire acts of real violence) actually seem to believe it. Does pornography turn the reader into a sex-mad rapist? Of course not. Can a rock record turn a woman into a sniveling, male-dominated housewife?

Which leads us to the question of why there are so few important female rock stars. It's quite simple, really. Women make up the bulk of the record-buying audience, and they quite

understandably want male sex objects. It's not, as we are so often and so tediously told, that women aren't encouraged to master the technology involved, it's not that our culture makes it difficult for women to be independent enough to lead the kind of lives that male rockers live; both of those facts-of-life are probably true, but they aren't germane. It is simply that rock's energy is *sexual*, and since, demographically, the bulk of the people who respond to it are female, they want to see *men* up on the stage.



Gracie: *the zotz to rock*

But could there be a great role reversal? Could we have women rockers capable of projecting images other than the ones commonly associated with "chick" singers—the honky-tonk angels, the doomed romantic losers, the Janis Joplins? I suspect so. Grace Slick comes to mind immediately. Certainly, she's never taken any guff from men (or anybody else, for that matter), and she's always gotten the male portion of her audience good and hot. The Starship's appeal clearly has as much to do with Gracie's sexual zotz as anything else. And Patti Smith, as I have already noted in these pages, strikes me as being the first woman to have the potential to be as big as Elvis or Dylan, and without compromising her femininity one whit.

And could we have the ultimate extrapolation of that sort of thing—the all-girl Rolling Stones? I hope so; it's hardly likely just yet, but it could happen. There *are* women who understand how rock operates, although they're few and far between at the moment (and they aren't in the feminist movement, that's for sure). If Patti makes it, I'm convinced we'll see lots of women who can beat men at their own game without turning into bull-dyke parodies like Suzi Quatro, pathetic would-be sex symbols like Fanny, who are simply an up-date of Ina Ray Hutton and Her All Girl Orchestra, or opportunists like Isis, who continue to blame the failure of their determinedly mediocre music on the male-dominated structure of the music business.

EVERY so often, I get letters accusing me of being a reactionary old fogey, desperately hung up on the Stones, and, as one reader put it, "heavy rock in general." Well, just to clear the air a bit, I'd like to mention that I am absolutely nuts right now over two current records I didn't get a chance to review—namely, Pink Floyd's "Wish You Were Here" and Mike Oldfield's "Ommadawn." The Floyd album is really quite remarkable, a deeply moving treatise on the responsibility they feel toward their founder and friend Syd Barrett (who is for all intents, by all reports, a martyr to the lifestyle they all once shared) as well as a wry look at the effects of their recent and surprising commercial success. Musically, it is very close to brilliant, with dazzling instrumental textures, honest-to-God melodies, and a production and sound that, for me anyway, almost rival the grandeur of "Abbey Road."

The Oldfield album is simply a masterpiece, one of the few records I've heard in years that truly deserves the appellation "progressive" in the Sixties sense of the word. It's hardly rock; in fact, it's close to unclassifiable, though my colleague Eric Salzman's coinage "Anglo-pop-Mahler" fits rather handily. But it is quite ethereally beautiful and, incidentally, a far more successful example of the collage techniques displayed on Oldfield's previous "Tubular Bells" and "Hergest Ridge"—the transitions are almost seamless. I would also note that the little children's song about horseback riding that closes the record, with its irresistible mixture of Irish pipes and space-age instrumentation, is one of the most delightful musical experiences I've had in ages. Anyone who thinks that Keith Emerson, Rick Wakeman, or even cosmic jazz cats like John McLaughlin are *composers* owes it to himself to listen to this stuff. It's the real goods.

FINALLY, I would like to add two concert notes. First, the Who, caught in Philadelphia in December, are playing even better than ever. Whatever tension exists in Townshend's mind about the hypocrisy of his elder-statesman status (not to mention reported intra-group tensions) has only served to make their playing more whiplash vicious and incisive than ever. Second, as an addendum to my Linda Ronstadt review in November, I saw the lady in question recently, and I am now prepared to state unequivocally that she and her musicians are the best bar band in the world—which is *not* a put-down. I remain unconvinced about her emotional commitment to her material, but she simply *sounded* so lovely I don't care any more. Here's hoping her knockout live version of *That'll Be the Day* is the next big single.



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# THE BASIC REPERTOIRE

By MARTIN BOOKSPAN



## DVOŘÁK'S SYMPHONY FROM THE NEW WORLD

It is now over a dozen years since I last addressed myself to Antonín Dvořák's Symphony *From the New World* in this space. Back then I wrote that the fame and popularity of this, the composer's last symphony, served effectively to blot out all but two of his other eight symphonies—the D Minor, No. 7, and the G Major, No. 8.

A funny thing has happened in the intervening time. Three conductors, no less—the late István Kertész, Rafael Kubelik, and Witold Rowicki—have now recorded all nine of the Dvořák symphonies (only the Kertész performances of all of them are presently available in this country). And, while the D Minor and G Major have retained their positions in the repertoire—even strengthened them—the *New World* seems to have slipped somewhat

there were those who found "Negro melodies" imbedded in the new symphony—a variant of *Swing Low, Sweet Chariot* as the second theme of the first movement, for example. But it soon became evident, even to those who would have wanted it otherwise, that whatever national elements there are in the music, most of them are Bohemian. Dvořák himself denied using any Negro or Indian melodies in the score.

One of the best-ever recordings of the Symphony *From the New World* is Toscanini's, still available in an electronic stereo reissue (RCA Victrola VICS 1249E; cartridge V8S 1009). It was made with a single microphone in Carnegie Hall in February 1953. The resulting mono sound was clear and brilliant, quite the best reproduction Toscanini was ever given. The electronic stereo sound, by contrast, is often muddy and indistinct, but the performance itself is a marvel of coiled tension and vitality.

A much more recent recording, Kubelik's superb performance with the Berlin Philharmonic (Deutsche Grammophon 2530415), also suffers from peculiar sound reproduction. Balances between sections of the orchestra are unnatural, and some key elements of orchestration—the triangle in the scherzo, for example—are buried in the thick texture. Kubelik has recorded the symphony no fewer than four different times during his career; perhaps his most satisfying overall account is the one he made a quarter of a century ago with the Chicago Symphony Orchestra (included in Mercury album MG 3-4501, mono), a performance aflame with temperament and in superb sound.

Of the currently available stereo recordings of the symphony, my favorites are those by Arthur Fiedler (RCA LSC 3315; cartridge R8S 1295; cassette RK 1295), Kertész (London CS 6527; reel 1-80195), Fritz Reiner (RCA LSC 2214; cartridge R8S 1061), and George Szell (included in Columbia D3S 814, a three-disc album devoted to Szell/Cleveland Orchestra performances of Dvořák's last three symphonies). All four of these recommended versions are splendidly played and recorded, and all four conductors communicate a real feeling for the music. Fiedler's reading, perhaps unexpectedly, displays such impassioned drama and momentum that one regrets that he has not had more opportunities to have his say outside the "Pops" repertoire.

"... one regrets that Fiedler has not had more opportunities outside the "Pops" repertoire."

in frequency of performance and audience affection. I cannot understand this development, for I consider the Symphony *From the New World* one of the most arresting and moving works in all the orchestral literature.

The symphony began to take shape barely three months after Dvořák arrived in New York City in October 1892 to become the director of the National Conservatory of Music on East 17th Street. By the spring of 1893 the major work on the symphony was done, and Dvořák orchestrated the music in Spillville, Iowa, during the summer. Spillville at the time was a small community of several hundred people, mostly Bohemians. There, in the farm country and among people of his own background and language, the composer could almost imagine himself back home in the rolling Bohemian countryside.

Just before the December 1893 première of the new symphony (with Anton Seidl conducting the New York Philharmonic), Dvořák provocatively proclaimed that "the future music of this country must be founded upon what are called the Negro melodies. . . . They are the folk songs of America and your composers must turn to them." Immediately

# The Garrard 990B. And the argument ends.

There are almost no limits to what you can spend for a turntable. Nor to the refinements that can be built in.

The argument has been whether you can find a turntable at a sensible price, that really performs—giving away nothing important. Now with the belt-driven 990B, the argument is over. The 990B gives nothing away in any vital area, yet is priced to make it eminently accessible.

We believe the 990B is the best value Garrard has ever offered in its quarter century of designing and manufacturing high fidelity turntables.

The 990B is a single-play/multiple-play turntable and is fully automatic in both modes. That is, its arm indexes, returns to its rest and shuts off automatically. All of which is more dependable than a hand . . . that can be shaky or careless. And the mechanism that does all of this is disengaged *during* play. You get the gentlest handling of records *plus* convenience.



But more. In the multiple-play mode, your records rest on a *two* point support. You don't have to balance them on a single center support. And pray.

And still more. A precision anti-skating device eliminates distortion and record wear caused when the stylus is forced against the inner wall of the groove by rotation of a record. Even cueing is viscous damped in *both* directions.

All well and good. But what about performance?

A glimpse at some specifications tells the story. Rumble: -64dB. Wow: 0.06%. Flutter: 0.04%. These are possible because your records are cushioned on a full size, 5 lb., die-cast, dynamically balanced platter—belt driven by a motor that *combines* an induction rotor for starting power and a synchronous section for constant speed. You can even solve the problem of off-pitch recordings with the variable speed control monitored by a strobe disc.

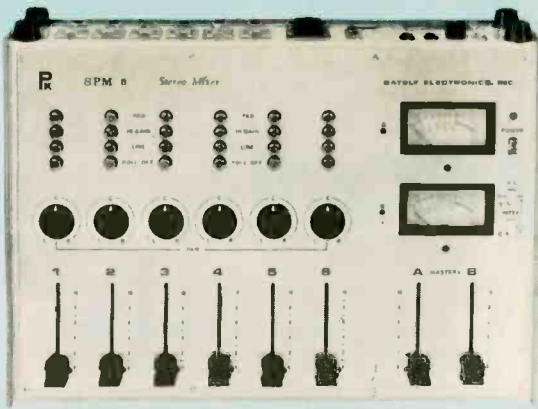
One final word. The S-shaped, lightweight, aluminum tonearm boasts low mass and low friction. But here's the thing. The 990B's tonearm can track as lightly as 1/2 gram. Protection and performance indeed.

There are other turntables in the price range of the 990B that offer *some* of these features and specifications. The 990B has them *all!* and at a price that's sensible—under \$170!

Which clinches the argument.

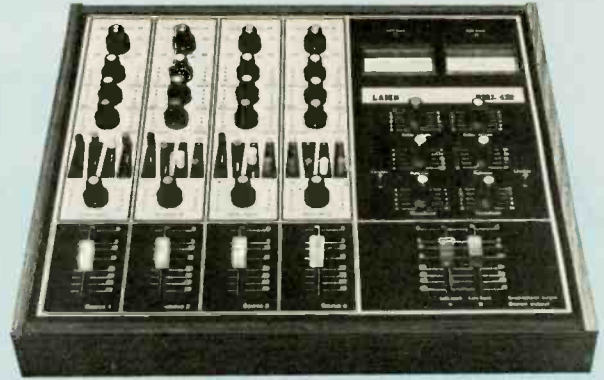
For a copy of the Garrard Guide, write: Garrard, Div. of Plessey Consumer Products, Dept. A, 100 Commercial St., Plainview, New York 11803.

**Garrard**  
The Automatic Choice



Gately's Prokit SPM 6, a two-output, six-input mixer, is available in kit form. It features balanced microphone inputs, two microphone sensitivities, meters, and pan pots.

Lamb Laboratories' PML 422 mixer has four inputs and two outputs, high-, mid-, and low-frequency equalizers, echo send and return, and limiters with variable attack and release.



# MULTITRACK:

**A**MONG the thousands of people entering audio stores each year to buy tape-recording equipment, there is a growing number that is not content to leave with a cassette deck or a conventional reel-to-reel recorder. These individualists, bent on becoming serious live-music recordists, are members of an underground, operators of a semi-pro extension of the network of professional recording studios that links this country from coast to coast.

Time was when you had to go to New York or Los Angeles to get your musical efforts committed to tape in an acceptably professional way. Now you can find big-time facilities almost anywhere in the forty-eight states from Portland, Maine to Portland, Oregon. This wide dissemination of the recording arts has operated as something of

an accidental training school, producing a growing number of musicians and music enthusiasts who are rapidly making themselves at home with the most advanced studio recording techniques. Over the years an enterprising few have learned how to put inexpensive "audiophile" equipment to work performing some studio-level recording services, and now, within the past several years, manufacturers have become aware of their special requirements and of the appreciable market they represent. The result is a significant body of audio products occupying a territory that lies between the areas of fully professional and advanced amateur recording activities. This equipment is presently being used to set up many a small-scale "multitrack" recording studio in American homes, basements, and garages.

## Multitracking and Mixing

Most modern pop recordings are created and even conceived in what insiders call a *multitrack* studio, meaning one that is equipped with a tape machine that has more than two tape tracks available for simultaneous recording and playback. Most consumer tape machines are four-track devices and we also have a cartridge-tape format called "eight-track," but in both these cases only two (or at most four, if we are talking about quadraphonic playback) of the tracks can be utilized at any one time. The control room of a true multitrack studio is likely to house a sixteen, twenty-four, or even a thirty-two (!) track open-reel recorder. All these tracks will typically be used individually and together for the creation of each song on a popular record. The



Akai's Model GX-630DSS four-channel tape deck has a "Quadra-Sync" recording function plus a pitch control and tape speeds of 3¾ and 7½ ips. \$995.

Dokorder's Model 1140 four-channel deck has "Multi-Sync" facilities, front-panel access to the bias adjustments, and a memory rewind. \$1,200.





Sony's MX-20 mixer is an eight-in, four-out device with equalization and pan pots on selected channels. There is also a headphone jack with its own level control.

Also in the Gately line are an equalization unit (top), a reverberation device (center), and another six-input, two-output mixer, all available as kits.



## a whole new world of tape equipment

By John Woram and Ralph Hodges

operative word here is "creation": the multiple tracks are used to magnetically store the sonic "ingredients" from which a final two- or four-channel recording will ultimately be "mixed down."

Let's look at a hypothetical pop-recording session in a sixteen-track studio. Each musician sits in a semi-cubicle that somewhat isolates him acoustically from his comrades. Each has a close-proximity microphone that is devoted to him alone (some instruments, such as a drum set, may be covered by two or more microphones). Out in the control room the engineer assigns each mike to its own tape track: perhaps track 1 for the electric bass, tracks 2, 3, and 4 for the drums, track 5 for the lead guitar, track 6 for the Hammond organ, and another track or so for the vocals. The balances are adjusted, the tape be-

gins to roll, and the four musicians get their instrumental and vocal virtuosity laid down on seven or more individual tape tracks.

What, then, happens to the left-over tracks up through 16? In the normal course of events, plenty! With this bare-bones miking of a song, the creation of the finished recording has only just begun. Now everyone—producer, musicians, and engineer—sits around listening to what has already been recorded and thinking about what might be added to fill out the cut. A piano or string quartet might eventually go on track 9, a flugelhorn on track 10, or the strategically timed sound of a train wreck on track 13. Certain of the tracks may be used for special effects. For example, if the already recorded guitar on track 5 is transferred to a new track with a bit of electronically created

(there's that word again) time delay properly introduced, it will sound like two guitars playing the same thing—a fast and economical way of doubling your number of musicians. If you transfer the contents of track 5 to the new track along with the delayed signal, you can then reuse track 5 for something else, or, if you like, retain it for some other purpose in the ultimate mixdown.

By the time this creative process is over it's likely that all sixteen tracks will be full, and the producer may even be clamoring for more. However, assuming that all the ingredients of the final cut are present, the sixteen-track machine is thrown into its playback mode, the output of each track is adjusted in level and seasoned with equalization and the appropriate amount of artificial reverberation, and the whole



Sony's Model TC-788-4 four-channel unit has a dual-capstan drive system, "Syncro-Trak," and a pan-pot arrangement between channels. \$1,400.



Teac's Tascam Series Model 80-8 is the first of a new breed of eight-channel, 1/2-inch tape, semi-pro recorders. It is used in conjunction with an eight-channel-out mixer. Less than \$3,000.

names by various manufacturers) appeared in a number of the more elaborate four-channel designs . . . and the home multitrack recorder was born.

business is "mixed down" into (usually) two channels and fed to a two-track tape machine as the basic *stereo* recording the consumer will ultimately hear. (The sixteen channels of basic ingredients will have to be mixed down differently for a quadraphonic disc, of course.)

## The Home Multitrack

Assuming that this kind of creative recording interests you, what keeps you from achieving it with the equipment you've already got? Obstacle 1 is the lack of a tape deck that has more tracks than the number of channels you'll be using for the final recording. Obstacle 2 is the lack of a high-quality three-head tape deck that will permit you to add new tracks that are properly synchronized *in time* with previously recorded tracks. On three-head machines (using separate recording and playback heads) the recording head precedes the playback head in the tape path by at least an inch. Therefore, should you wish to mix in a piano with an already recorded guitar later, you could have the pianist listen (via headphones) to the playback of the guitar track and add his contribution in perfect rhythm, but when you play the result back, the piano will lag an inch behind the guitar on the tape and thus be off synchronization by at least 1/7 of a second at 7½ ips.

Professionals solve this problem with the flick of a switch that enables the recording-head gaps to function in the playback mode when desired. If the record-head gaps for tracks 1 through 7 are switched to playback, the pianist can then make his recording on track 12 (which has, of course, been set up to record) and be perfectly synchronized with the material already on the tape. The recording head may not make an ideal playback head, but it is certainly good enough for the pianist to hear, with reasonable fidelity, what is on the tape.

Consumers were not really able to avail themselves of such facilities until the first four-channel audiophile tape machines began appearing on the market. Although originally conceived as quadraphonic machines, the four channels did provide a limited multitrack capability for those recordists intending to mix down to two tracks. Synchronization facilities (called Syncro-Trak, Simul-Sync, Multi-Sync, and other

## The Mixing Console

A multitrack tape machine by itself can handle a limited number of special tasks, but for real flexibility a mixer of some kind is needed. The basic mixer is a relatively compact device into which several microphones or other signal sources can be plugged to have their outputs combined in controllable proportions. When it grows elaborate enough to have six or more inputs, two or four outputs, plus equalization, "pan pots," and connections for auxiliary signal-processing devices on each input, it becomes a mixing *console*.

If the multitrack tape machine is the heart of a recording studio, the mixing console is its mind. It is designed to take over all control functions from the tape deck except for the starting and stopping of the tape. (In practice, the professional tape machine usually resides in a corner of the control room, remote controlled, while all the activity takes place around the mixing console.) The console often has meters that duplicate all the recording-level meters of the tape deck, and it has slide controls to supersede the deck's calibrated and set recording-level adjustments. It often has a full complement of tone controls (equalizers) for each input, switches to assign each input to the desired output track, pan pots (which send an input to two or more tracks at a time in the proportions desired), and the means to route signals to external signal processors and back again.

One input/output channel of a basic amateur mixer is illustrated and described in the box (opposite). It includes control facilities that are beginning to approach professional versatility. Along with six of these basic control sections, there is a master fader control that adjusts the overall levels of the output signals going to the monitor amplifier and/or the tape machine that is receiving the two- or four-channel mix-down.

Most professional mixing consoles are desk-like pieces of furniture big enough to sleep on—indeed, one hears of their being used for just that purpose in some late-night operations. But the recent revolution in miniaturized electronics has made some of them—some good ones, too—small enough to be carried around under one arm and set up on a card table or even a typewriter stand. There is little point in discussing the specific functions the various commercial models offer. Each buyer must make his choice, on the basis of hard-won experience, as to which particular

features are indispensable to him and which can go, so to speak, by the board. Some recordists will consider all but the most basic mixing controls superfluous; others will insist on a full bank of four-channel pan pots.

## The Signal Processors

Within the mixing console there are various switches, level adjustments, and the means to do some basic equalization. The more complex signal processing, although still under the control of the mixing console, is performed by devices that are physically outside it. Every recording studio has an artificial reverberation generator, since most of the sound comes out rather "dry" (with a minimum of natural reverberation) because of close miking and acoustically "dead" studios. The injection—or restoration—of the appropriate amount of acoustic reverberant "space" is therefore done during mixdown. Some studios enjoy the luxury of a genuine reverberation "chamber"—in effect, a tiled-bathroom type of space in which a loudspeaker plays to a microphone and the microphone picks up lots of reverb along with the direct speaker sound. (One major record company used to use a back stairway for this purpose.) More often today the studio offers a mechanical or digital-electronic device that provides a train of multiple, closely spaced echoes of the original sound which, in small amounts, add body and fullness, and, in large amounts, make it seem as if the track were recorded in a huge stone cathedral with a distant microphone. Given the present-day philosophy of multitrack recording, a few channels of artificial reverberation are indispensable. The home recordist can actually use his bathroom or some other small, highly *reflective* room (a clothes closet won't do) if it works and is convenient.

Closely miked instruments exhibit a wide dynamic range; very loud and very soft sounds can alternate in rapid succession. To save yourself from unexpected overloads (and to enhance the sound of certain instruments) you may want to consider a *compressor*, a device that can be adjusted to reduce dynamic range or even eliminate it, so that all sounds emerge at virtually the same level. Compressors can also be used creatively. Perhaps the musical gyrations performed by the bass player during the original recording session didn't quite come off. With a compressor you can turn his efforts into a steady thumping drone that leaves him no room to demonstrate his ineptitude.

The multiband equalizer you may be using in your present hi-fi system can also be plugged into the mixing console

## THE MULTITRACK MIXER



**T**HE illustration at right shows one input section of a six-input/four-output mixer (the Teac Model 2 shown above) intended for multitrack work. Six such "modules" arranged as part of a mixer will accept up to six microphones or other signal sources simultaneously, mix them down to four channels with whatever signal processing the operator elects, and route them in any combination or arrangement to the recording inputs of a four-channel tape deck. In a second step, the playback outputs of the deck can be returned to the mixer and further reduced to two channels for the creation of a stereo master tape.

① This switch selects either the microphone or line-input jacks on the back of the mixer. A third position of the switch reduces the sensitivity of the mike input by 20 dB to prevent the microphone output from overloading the microphone preamplifier under loud-signal conditions.

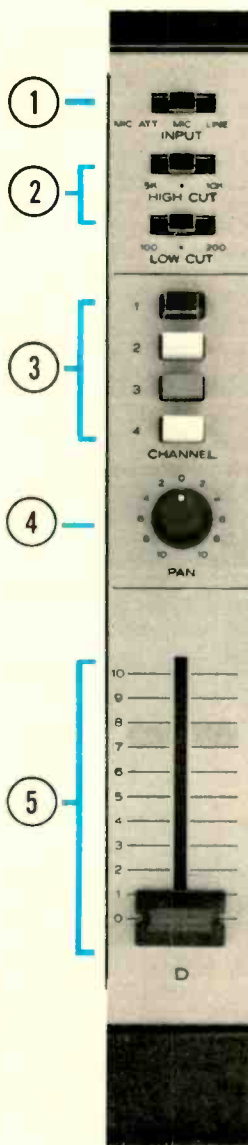
② The rather basic equalization facilities of this mixer consist of high- and low-frequency 12-dB-per-octave filters, each with a choice of two turnover frequencies (center position is flat).

③ These are the channel-assignment pushbuttons. With them, the signal passing through the input module can be sent to any or all of the four output channels.

④ If more than one of the channel-assignment buttons are pressed, this pan pot is automatically activated. It distributes the signal between the output channels selected in much the same way a balance control on a stereo amplifier distributes a mono signal between its speaker channels.

⑤ The slide control, called a "fader," is the level control for this input module. Together with the faders on the other five modules, it determines the level balances between all the input signals going into the mix. (A master fader elsewhere adjusts the output levels of all four channels simultaneously.)

These are the basic functions of a multi-track mixer. In more elaborate versions the modules of such a device might offer expanded equalization controls, additional level adjustments for signals sent out to external processors and back again, meters, and of course more input and output channels. Usually, a professional mixing console is built up of optional modules, so that the buyer can select only those control functions he needs.



to give you a bit more flexibility in adjusting tonal balances—at least on two tracks. Other possible signal processors are so numerous as to defy listing, for recording engineers are always devising (and subsequently marketing) some little black box intended to inject the proper spirit into this or that track. Often additional, gimmicked tape machines are used to provide a host of strange effects. And, lest we forget, *noise-reduction systems*—Dolby or dbx—are universally used on every track in professional studios. For multitrack work especially, they amply repay every cent invested in them.

### The Whole Thing

A minimally equipped professional multitrack studio would have a selection of suitable microphones, a multitrack tape machine, a mixing console, noise reduction on all recorder inputs, a channel or two of artificial reverberation, (perhaps) a delay line, and a second tape machine to receive the final mixdown. A well-equipped home studio would boast most of the same components, except that the main tape deck would probably be a four-tracker, the console would be a table-top model, and the signal processors whatever came readily and inexpensively to hand.

Having observed beginners during their first attempts to manage a sixteen-track studio, I would say that the neophyte is better off refining his skills on a simpler setup at first, working to master the basics before he tackles the more complex equipment. Keep in mind that practically anyone can learn, and quickly, what the knobs and switches *do*, but few can as quickly (some never) evaluate the *musical* worth of those first laid-down tracks and work creatively to improve rather than to confuse them.

It is only good sense to face up to the fact that you don't *need* all this gear to make a tape recording; you don't even need it to make a very *good* tape recording. But if you want to do a fast, efficient job on a production that requires a great deal of after-the-fact tinkering (and which may not have been too professional to begin with), the multitrack approach is without peer. For the real expert at multitrack—and you might become one—can usually find ways to make a good recording sound even better, and that's what it's all about, isn't it? □

**John Woram** heads Woram Audio Associates, which offers recording services and consultation on all aspects of studio design. He is writing a book on studio techniques.

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CR0, Tape Position	40Hz - 13kHz (+2/-4dB) (+2/-3dB)	50Hz - 12kHz ±3dB
S/N Ratio (Weighted, Signal level 250 pWb/mm): Without Dolby†	50dB or better	49dB or better
With Dolby (Above 5 kHz)	58dB or better	57dB or better
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**O**NE doesn't have to be a very close observer of the cassette scene to be aware of the fantastically rapid technical progress that has taken place, both in the tapes and the machines that play them. For several years every new-model deck seemed to outperform the previous year's production substantially. And cassette tape technology has been keeping pace, the laboratories regularly turning out oxide marvels that put to shame all previous efforts.

Finally, however, the rate of progress seems to have slowed enough for us to pause for a moment, take a breath, and look around. There hasn't been a single technical breakthrough in the last fifteen minutes, and so it seems a good time to assess where we are in tape

technology, to try to evaluate just one of the controversies precipitated by rapidly advancing developments. We didn't have to seek very far for contestants: Andy Petite of Advent and Tor Sivertsen of Tandberg had for some time been arguing privately over the virtues—or lack of them—of chromium-dioxide tape (also known as Crolyn,  $\text{CrO}_2$ , and Chrome) and were pleased to be given the opportunity to air their differences publicly. Since neither party to the dispute has a vested interest in chromium-dioxide tape and its future, it appears that we have one of those rare situations where honest men can, in good conscience, disagree. And so, may the best oxide win!

—Larry Klein, *Technical Editor*

# CHROMIUM DIOXIDE

## PRO

Andrew G. Petite  
Product Manager  
Advent Corporation



## CON

Tor Sivertsen  
Technical Manager  
Tandberg of America



**T**HE introduction of chromium-dioxide ( $\text{CrO}_2$ ) tape in 1970 resulted in a quantum jump in tape performance unprecedented in the history of magnetic recording. Before  $\text{CrO}_2$ , improvements in tape had consisted of refinements that gained a decibel or so here and there—in other words, small evolutionary steps rather than a single revolutionary leap.

Chromium-dioxide tape was so dramatically *different* that a new playback equalization standard was established resulting (in a properly designed recorder, at least) in a 4- to 6-dB improvement in signal-to-noise ratio. That improvement, coupled with the additional 10 dB provided by the Dolby-B noise-reduction system, reduced noise to 1/40th of what had been previously possible and brought about the era of truly high-performance cassette recording.

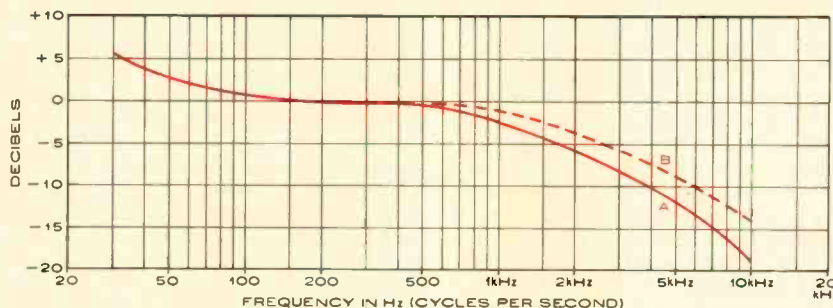
(Continued on next page)

**W**HEN chromium-dioxide ( $\text{CrO}_2$ ) material appeared in cassette tapes in 1970, it improved both the high-frequency response and the signal-to-noise (hiss) ratio compared with the then-available low-noise ferric-oxide tapes. This was achieved by changing the established standard playback-equalization curve from 120 to 70 microseconds, which amounted to trading a bit of  $\text{CrO}_2$ 's ample high-frequency response for a reduction in high-frequency noise. Also, because  $\text{CrO}_2$  requires approximately 3 dB (50 per cent) more bias, the internal recording-calibration adjustment of the cassette machine had to be changed also.

The required change of playback equalization was actually a rather drastic step, considering how determined most organizations (and particularly Philips, the originator of the cassette format) are to protect stan-

(Continued on next page)

The graph at right illustrates the difference in the playback equalization applied to (A) chromium-dioxide tape and to (B) "normal" tape. The additional 5 dB or so of high-end attenuation applied to the  $\text{CrO}_2$  tape during playback restores a flat response and reduces—by the same 5 dB—the high-frequency noise (hiss) that was added to the audio signal by the taping process.



# CrO<sub>2</sub>/CON

"... we expect that in three to four years' time there will be very few CrO<sub>2</sub> tapes sold ..."

dards that directly affect the compatibility of their products. The alteration of recording *bias* also caused some problems, for it was discovered that, for technical reasons, several cassette decks existing at the time could not provide the higher bias level required. Finally, the responsibility of matching the machine to the tape—knowing which buttons to press for the different kinds of cassette—now lay with the consumer, who is not always well informed in this area.

Of course, all this could be justified if the overall sound quality of CrO<sub>2</sub> were audibly superior. But in our opinion, this is not true today. In fact, we believe that the performance of the best ferric-oxide tapes is much superior to that of CrO<sub>2</sub>.

Everyone agrees that head wear is a serious consideration in *any* recorder, and especially on cassette machines because of the pressure pad used in the cassette shell itself. Therefore, a new head material called *ferrite* was developed that had a much better wear resistance than the usual Permalloy head. But ferrite has one serious drawback. In the record mode, it tends to saturate at too low a flux density for CrO<sub>2</sub> tape because of CrO<sub>2</sub>'s higher bias requirement. This can cause audible distortion at even low recording levels, because the head, if not carefully checked out and selected prior to installation, will go

into "overload" even before the oxide material on the tape. As a result, several manufacturers stopped using ferrite in the record/playback head. In other words, the better head material in respect to wear resistance was discontinued because of CrO<sub>2</sub> tape problems. A possible result is that the consumer will be paying for head replacements over the next five to ten years, which he might not have had to do.

The CrO<sub>2</sub> tape can, of course, be justified if the overall sound quality is better. But in our opinion this is no longer true in any comparison between CrO<sub>2</sub> and the best ferric oxide tapes.

The high-frequency response of the best of today's ferric oxide is at least as good as that of CrO<sub>2</sub> tape. And the 3 to 4 dB better signal-to-hiss ratio, because of the 70-microsecond playback equalization with CrO<sub>2</sub> tape, is more than equalled by ferric oxide's 3 to 4 dB better maximum output level (MOL) and higher overall sensitivity. Do not be fooled by a 3 to 4 dB reduction in electronic noise from the recorder when switching between the CrO<sub>2</sub> and ferric-oxide position. In open-reel, when you switch from 7½ to 15 ips, the high frequencies are also improved, but the playback equalization curve is unchanged. The reason is that the professional people want to have a good *overall* signal-to-noise ratio, not just a good signal-to-hiss ratio in a limited area of the audible range.

After several years of adjusting cassette recorders for CrO<sub>2</sub> tapes, we have found that their consistency of output at high frequencies is not as good as the best ferric-oxide tapes. Several manufacturers of both types of tapes have explained this by saying that it is difficult to obtain uniform distribution of CrO<sub>2</sub> in the coating. Uneven dispersion of magnetic material will increase the

d.c. or the modulation noise from the tape.

Data on IM distortion is seldom given among the regular tape specifications. It is generally believed that IM distortion is affected by (among other factors) the type and dispersion of the magnetic material in the coating and the overall properties of the coating. Tests done by several manufacturers on both CrO<sub>2</sub> and ferric-oxide tape show that the best ferric-oxide tape has lower IM distortion than CrO<sub>2</sub>, and this can't help but affect overall sound quality.

Another important matter is the abrasive qualities of the chrome, which cause increased head wear compared to ferric oxide. Tests available from tape manufacturers of both types of tape show more head wear with chrome even on rotating VTR ferrite heads.

It is known that the low- and middle-frequency response of chrome is lower than that of ferric oxide. That is why *ferrichrome* tapes have been introduced to combine the various virtues of ferric oxide and chrome. One manufacturer has a new non-CrO<sub>2</sub> tape—Avilyn—that uses CrO<sub>2</sub> bias (less 7 to 10 per cent) and which outperforms CrO<sub>2</sub>. Therefore, we see no future in chrome. The only reason for anyone's buying it today has to be because it is somewhat less expensive.

As a final point, I would like to mention one of the cassette system's largest advantages: *compatibility*. How can this be kept with two different standards? What should manufacturers of recording equipment do? Today we would need a four-position bias switch, a three-position record-equalization switch, and a two-position playback switch to properly cover ferric oxide, chromium dioxide, ferrichrome, and Avilyn tape. If it were not for this last new tape, we at Tandberg would be tempted to drop the CrO<sub>2</sub> po-

# CrO<sub>2</sub>/PRO

"The same properties that produce increased high-frequency sensitivity also result in less print-through and reduce the possibility of high-frequency losses with repeated plays."

Let's consider for a moment how CrO<sub>2</sub> achieved this. There are two ways in which signal-to-noise ratio can be improved. One is to increase the maximum-output level (MOL) of the tape so that a higher signal level can be recorded before distortion sets in. This approach has accounted for the kind of minor incremental improvements that have been hard-earned throughout the history of recording tape. And in fact, despite what you read in advertisements, the best ferric-oxide cassette tapes of today yield an MOL only about 2 or 3 dB higher at mid frequencies and perhaps 4 to 5 dB at 10,000 Hz than what was possible before. Furthermore, to benefit from these improvements in

MOL requires special effort on the part of the recordist. First, he must have his recorder readjusted for tapes with higher MOL. (This can entail rebiasing and possibly altering the recording equalization.) Second, if a tape has 2 dB more MOL than what he was previously using, the recordist must record 2 dB higher (on his meters) in order to benefit from the improvement. To make such a delicate adjustment with the recording-level controls consistently, and then to hear a significant difference as a result, is a goal difficult if not impossible to achieve, particularly on a day-to-day basis.

The other way to increase signal-to-noise ratio is to lower the noise "floor." This is the approach taken by both the Dolby system and chromium-dioxide tape. Chromium dioxide provides a substantial increase in high-frequency sensitivity, permitting the use of an altered playback equalization (70 microseconds) for greater rolloff at high frequencies. This results in less high-frequency playback noise than the iron-oxide equalization (120 microseconds). Therefore, the improvement afforded by chromium-dioxide tape (4 to 6 dB) is not only the largest ever provided by a single tape development, it is also repeatable in day-to-day use. A simple set of switches on most high-fidelity cassette decks converts the machines to CrO<sub>2</sub> equali-

zation and also alters the recording bias appropriately.

In addition to the improved signal-to-noise ratio, there are several other benefits provided by CrO<sub>2</sub> tape. The same electromagnetic properties that produce the increased high-frequency sensitivity also result in less print-through and reduce the possibility of high-frequency losses with repeated plays. The consistency of the chromium-dioxide particle provides unusual uniformity in the tape coating, and thus greater consistency in performance from cassette to cassette. Also, the very high degree of surface polish and a new binder have set new standards for intimate tape-to-head contact, low modulation noise, and minimal oxide shedding. Chromium dioxide has become the standard to which virtually any new iron-oxide formulation is compared. Ignoring advertising claims, objective tests have led us to the conclusion that there are now a few ferric oxide tapes that come close to chromium dioxide, and one (Avilyn) that is roughly equivalent. However, these premium tapes cost considerably more than CrO<sub>2</sub>.

Finally, it is important to remember that virtually *every* high-performance cassette recorder available today comes factory-adjusted to provide optimum performance with chromium-dioxide tape at the push of

sition in future cassette recorders and have only a 70-microsecond playback switch for old, previously recorded chrome tapes.

Does the consumer get what he believes he is getting with all these different bias and equalization settings? One thing is for sure: such switches make the unit more expensive. Several years ago thousands of inexpensive reel-to-reel machines were sold with switch settings for normal and low-noise tape. When the customer switched to the low-noise position, recording bias did not change—only the high-frequency record equalization was decreased. The result was that the more expensive low-noise tape (which requires higher bias) was recorded in an underbiased condition, causing increased distortion and decreased signal-to-noise ratio. The presence of the tape-type switch left the consumer with the impression that the machine could handle both types of tape optimally.

Given all the above, we expect that in three to four years time there will be very few CrO<sub>2</sub> tapes sold simply because ferric-oxide tapes are better. —Tor Sivertsen

## Mr. Petite replies:

**I**n response to Tandberg's reference to "increased" head wear with chromium dioxide cassette tape: balderdash! We have run two sets of tests on cassette-head wear with the same results: chromium dioxide is no more abrasive than most and is slightly *less* abrasive than some premium iron-oxide tapes! Furthermore, the nature of the wear on the heads is noticeably different. The heads run with chromium dioxide wear evenly, which extends head life. Iron-oxide wear produces an undulating surface. One of the tests was run on the head used in the

Advent Model 201. Since Tandberg uses the same head in their TCD-310, they may find the results of special interest.

If Tandberg or any other deck manufacturer has come up with different results showing substantial head wear from CrO<sub>2</sub>, we think that it would be their responsibility to the consumer to say so, to remove CrO<sub>2</sub> capability from their recorders, and to do whatever else is necessary to protect the consumer. We have not run tests on video tape recorder heads, so we cannot attest to that particular use. However, it is interesting to note that the vast majority of video cassettes in use and sold today are chromium dioxide!

This is the first time we've seen the switch from ferrite record heads made by several manufacturers (including Tandberg) blamed on CrO<sub>2</sub>. Our ferrite-head tests were first made on iron-oxide tapes. Since the saturation problem showed up clearly, we didn't find it necessary to continue the tests with chromium dioxide. Furthermore, it's an oversimplification to say that saturation is the *only* problem with ferrite record heads. Gap stability and temperature sensitivity are two others I can name offhand.

Our decision from the outset not to use a ferrite record head, even though it seems to have a magical advertising appeal, has undoubtedly cost us lots of sales. But the poorer performance on *all* types of tape was too great a compromise for potentially longer life. That's a point on which we all ultimately may agree. So as not to confuse the issue, it should be noted that virtually every manufacturer uses ferrite *erase* heads, which do combine extremely long life and good performance. (Incidentally, I'm not surprised at Tandberg's concern over the cost of replacement heads. Theirs is \$56; Advent's is \$12 for the same head.)

We find the statements about high-frequency output consistency and uniform particle distribution in the coating astonishing. Output consistency is dependent on particle distribution and CrO<sub>2</sub> is virtually unequalled in its ease of distribution. This is true because CrO<sub>2</sub> particles are almost ideally shaped and entirely free of dendrites (small, irregular "branches" found on almost all iron-oxide particles). With CrO<sub>2</sub> it is therefore relatively easy to disperse the particles uniformly and densely, leading to coatings of exceptional surface smoothness. In addition, a much higher degree of particle orientation can be obtained. It is not surprising, therefore, that magazine reviews of chromium dioxide cassettes show the high-frequency output to be outstandingly consistent.

As to modulation noise, that is also a function of surface smoothness. Although a few other tapes may now have similarly good physical properties, we know of no other tape that is meaningfully *better*.

The discussion of compatibility is specious. The older, 120-microsecond playback equalization came about because of the limitations of tape performance of ten or so years ago. The 70-microsecond equalization standard came about as a direct result of the later development of a dramatically improved tape (CrO<sub>2</sub>). The difference between the two tape-equalization combinations results in a 4 to 6 dB improvement in signal-to-noise ratio. With a state-of-the-art, Dolby-equipped cassette machine that is the difference between making recordings that are about as quiet as non-Dolby open-reel 7½-inch tapes and cassette recordings that are actually *quieter*. Furthermore, such newer oxide formulations as ferri-chrome and Avilyn *require* the 70-microsecond equalization. Should the baby be thrown out with the bath water? —Andrew G. Petite

its CrO<sub>2</sub> switch. Thus the user can automatically and repeatably get state-of-the-art tape performance, and at a moderate cost per cassette. —Andrew G. Petite

## Mr. Sivertsen replies:

**W**E both agree that the CrO<sub>2</sub> tape, when it was introduced in 1970, resulted in a substantial improvement in tape performance for cassette recording, even at the costs we have mentioned relating to distortion, noise, and consistency. However, it should not matter how long it takes to make improvements in the non-CrO<sub>2</sub> formulations; the only relevant point is what the improvements yield. And with the improvements that have been made in ferric oxide, they presently give better, more consistent and uniform results.

I will mention, however, that the difference between the 70-microsecond de-emphasis used for CrO<sub>2</sub> and the 120 microsecond used for ferric-oxide tape is closer to 4 dB than to 6 dB in the critical hiss area.

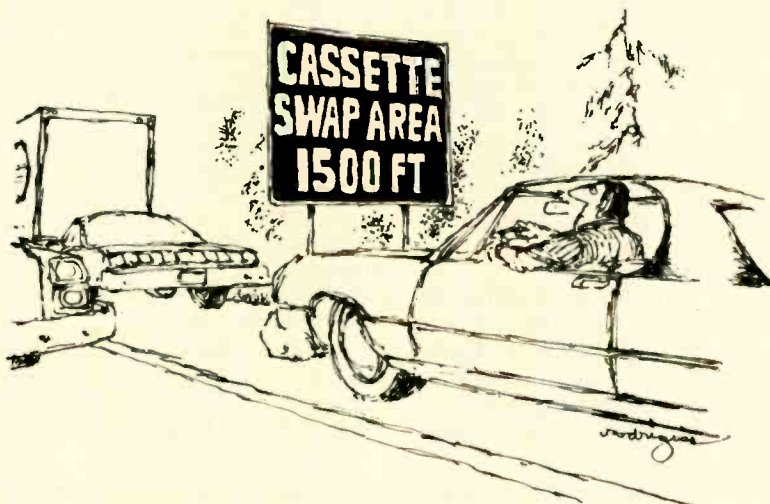
One very important issue raised by Advent is that it is hard for the user to adjust for improved MOL in a tape. This, of course, has little if anything to do with the

tape itself, and is more a matter of recording-equipment design and the acquired skill of the user in operating his machine. This is where we believe a properly designed peak-meter system that also reads recording equalization becomes significant. Tandberg's approach is to incorporate a correctly

designed metering system that will permit excellent results to be obtained with *any* tape by *any* user.

And finally, we disagree that the consistency and the uniformity of CrO<sub>2</sub> tape are better than those of ferric oxide.

—Tor Sivertsen



# Optimizing Cassette Performance

## The Problem of Azimuth

By Joseph Kempler

**T**HE most popular tape format today is undoubtedly the cassette. This is understandable in view of its convenience, low cost, and generally high quality of performance. A great deal of effort has been expended by cassette manufacturers to bring the cassette tape to its present level of performance; the progress made in extending the high-frequency response in particular has been nothing short of amazing. Yet, the outstanding recording potential of a truly fine cassette tape is not always realized under actual home-use conditions. The reasons for this range from such problems as bias incompatibility and worn heads to insufficient cleaning of the recorder, for all of these faults and omissions have an effect on the cassette's performance, particularly at high frequencies.

These problems, and their solutions too, are fairly well known, but there is another cause of high-frequency output loss that has received very little public attention: *azimuth misalignment*, or the failure to maintain the tape in proper relationship to the head gap. How even a microscopic azimuth misalignment between tape and head can produce severe high-frequency losses is explained in the accompanying box "Understanding Azimuth." But where does this misalignment come from in the first place? Output losses resulting from azimuth misalignment have only one cause: the recorded track is not exactly parallel to the playback head gap. Perhaps surprisingly, this departure from true parallel can occur even if the machine has a single record/playback head with the same gap(s) serving both purposes. Assuming that the cassette recorder is all right, then any azimuth losses present can be traced primarily to the cassette housing or its parts. A superior tape formulation cannot deliver its peak performance when it is used in an inferior housing.

The best way of determining the effect of the cassette housing on performance is first to establish the tape's ultimate capability outside the cassette. This is done by testing the tape on a laboratory open-reel recorder designed

to handle 0.15-inch cassette tape. Such recorders, specially built for cassette tape manufacturers, are constructed with sufficient precision and include enough adjustment possibilities to eliminate nearly all the performance degradation that can occur under less-than-ideal conditions. The pretested tape is then loaded into different cassettes and the same properties are re-measured in several cassette machines designed for consumer use. A careful analysis of such test data can establish the separate effects that the cassette, its internal components, and the recorder have on the azimuth, and can also determine the nature and the extent of any losses.

Figure 1 (see page 70) shows the 10,000-Hz output of a cassette tape under different conditions. Shown at (a) is the output of the tape when tested on a lab recorder; (b) is the output of the same tape in a good cassette housing tested on a cassette machine; and (c) is the output of the tape in a poor cassette housing on the same machine. Note that the three different tape "environments" strongly influence both overall output and uniformity of output.

At Capitol Magnetics' laboratories, we have drawn several conclusions about azimuth problems from such studies:

(1) Loading the tape into a cassette housing never improves its performance; at best, it matches the open-reel test results, but in some cases quality suffers noticeably.

(2) Performance degradation can be caused by any part of the cassette.

(3) Most cassette housings cause some adverse effects due to azimuth misalignment, but they are usually so small that they are not readily audible.

(4) Some inferior cassette housings are bad enough to produce an easily audible degradation.

(5) Generally, a well-designed cassette will perform well on any machine in good adjustment.

(6) Bad cassettes occasionally work adequately on some recorders.

As broad—and as apparently contradictory—as some of these conclusions may seem, they describe a real state of affairs. And they help to explain, at

least in part, why some users find that a particular premium cassette has no highs, yet another sample of the same brand and type is fine; or why the same cassette may sound great on one recorder and mediocre on another. Some mysterious test inconsistencies and lack of repeatability with cassette tapes (sometimes commented on in the hi-fi magazines) can be in large measure explained by azimuth variations.

At present the majority of cassette recorders use two magnetic heads; one provides the erase function (which does not figure in the present discussion), and the other is the record/playback head. Although the single record/play head gap design is something of a compromise in terms of overall performance and cannot provide the convenience of tape monitoring, it is superior from the azimuth-alignment point of view. Since the recording and playback are accomplished by the same head, no azimuth loss occurs even if the head is tilted with respect to the tape—provided the tape moves along precisely the same path during playback as it did during the original record pass. This is because the recorded track will remain perfectly parallel to the head gap that laid it down even if it is tilted with respect to the tape edge. As long as the same machine is used for both recording and playback, the head tilt will be harmless. But a cassette recorded with a properly set head—a commercially prerecorded one, for instance—will suffer severe high-frequency loss if played back by a tilted head. And tapes made with a tilted head will suffer similar losses when played on a correctly aligned head.

**A**s of the moment, three-head cassette recorders are very much in the minority. Aside from off-the-tape monitoring, their special virtues derive from the fact that separate head gaps are used for recording and for playback, and each head can therefore be designed for optimum performance of its individual function. However, to maintain the high-frequency response in such a recorder, not only must the

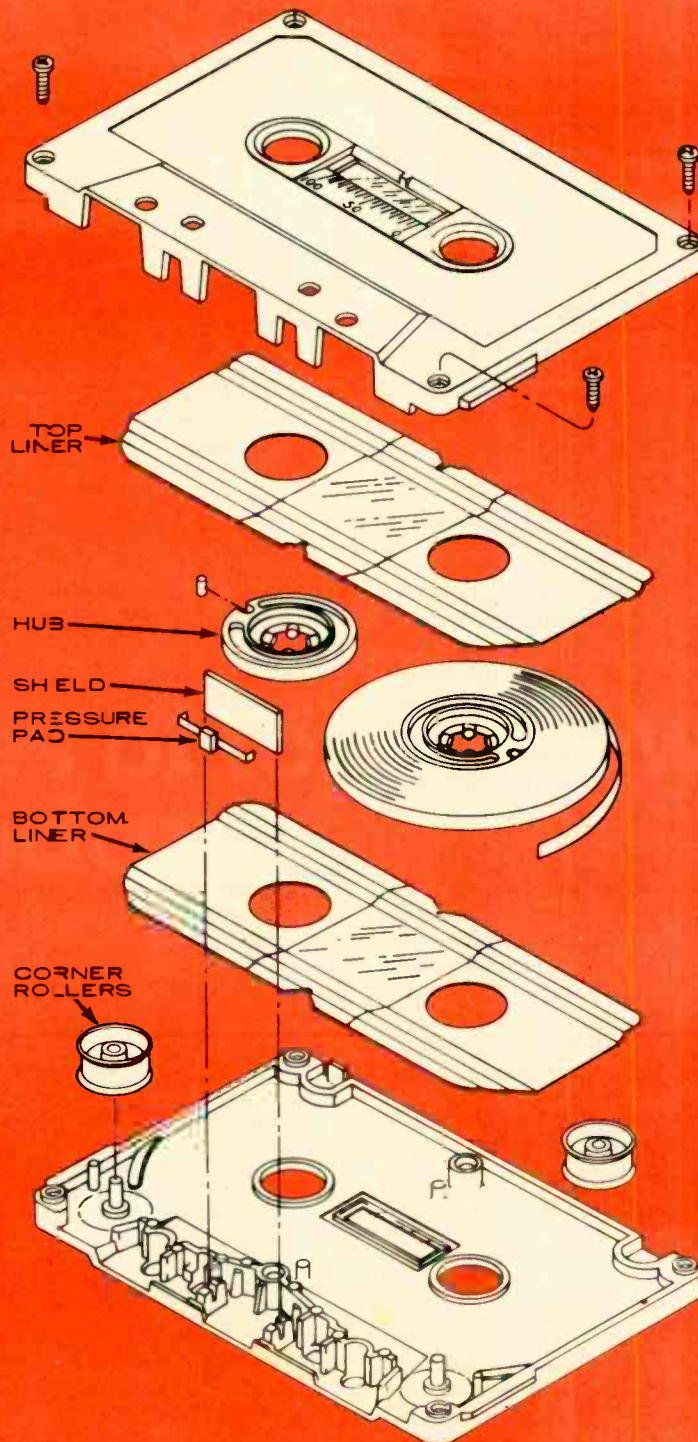
record-head and the playback-head gaps be in perfect alignment with each other, but the tape must be aligned with both heads—and stay that way.

The three-head configuration is, of course, very common in open-reel recorders, where it normally causes very few azimuth problems even at the cassette speed of 1 7/8 ips. However, open-reel machines do not have to contend with the cassette "package," and this makes all the difference. A few three-head cassette machines resolve this difficulty by including user-adjustable azimuth controls for the record head. When these controls are set for proper high-frequency output from the playback head, both of the heads and the tape will be correctly aligned with one another. For best results with these machines, this azimuth adjustment (or at least a check of it) should be made not just for each cassette but for *each side* of the cassette. If the adjustment is not performed, or if a machine with three *separate* heads has no provisions for azimuth adjustment, the high-frequency response of some cassettes can take a real nose dive. This will be true even of some well-known premium cassettes. In Figure 2, the top trace shows the frequency response on side one of a cassette tested on a three-head recorder with user-adjustable azimuth. The lower trace shows the frequency response on side two of the same cassette, on the same recorder, tested under identical conditions except that azimuth has *not* been readjusted. The high-frequency loss caused by azimuth misalignment amounts to 12 dB at 9,000 Hz. If the adjustment had been made, the frequency response would have been the same in both directions. On the other hand, a well-made cassette (from the azimuth point of view) should perform equally well on both sides with no need of adjustment. This is of great importance on machines with three separate heads and no means of adjusting the record-head azimuth. Furthermore, the 12-dB loss in this case is not at all extreme: losses from 3 to 20 dB have been measured on many different cassettes. (Those new machines that have separate record and playback gaps within a single head shell should be relatively immune to the difficulties encountered by the machines with three separate nonadjustable heads. However, there isn't enough data available at the moment to come to any firm conclusions.)

The side one versus side two disparity is caused by nonsymmetry between the two "reference surfaces" (*i.e.*, the

## Anatomy of a Cassette

*This exploded view of one manufacturer's high-quality cassette shows both the special features of his particular design and the elements common to all cassettes. In general, the tape is sandwiched between the liners, runs over the rollers, and is pressed against the head gap by the pressure pad. Most dimensions are critical.*



# Azimuth...

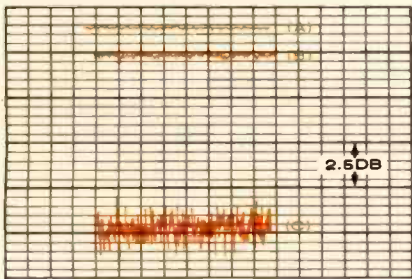


Fig. 1. The irregularities in the playback of a steady 10,000-Hz tone under three different conditions (see text for technical details).

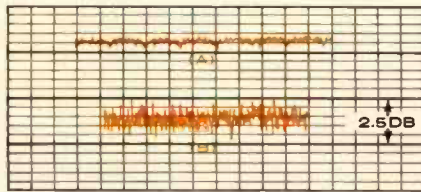


Fig. 3. A very small warp in the cassette housing can result in irregularities in response. (A) the record-playback response of a 10-kHz tone; (B) irregularities caused by removing and reinstalling cassette.

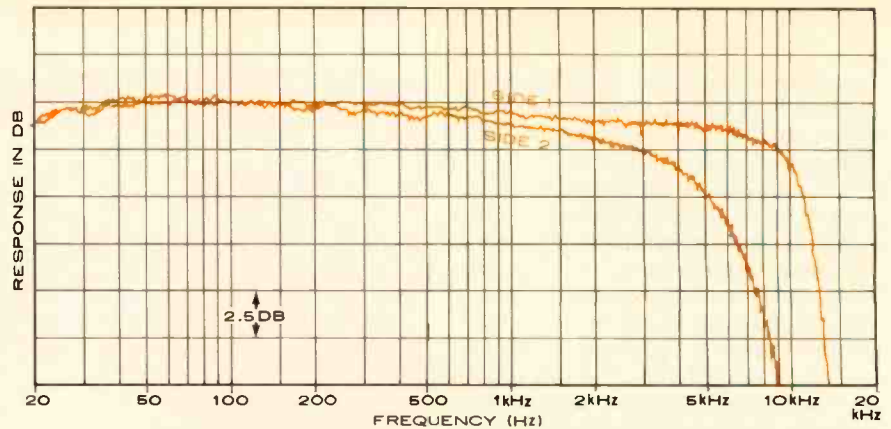


Fig. 2. The difference in record-playback response between the two sides of the same cassette is shown graphically. The major effect takes place in the higher frequencies (above 4,000 Hz).

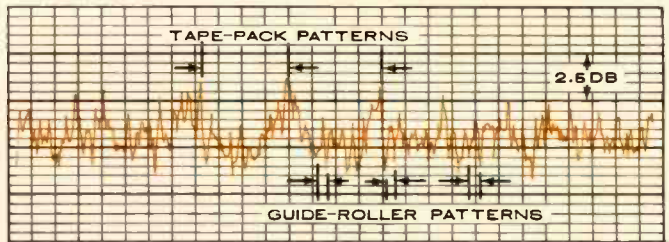


Fig. 4. An analysis of the individual characteristics of irregularities in a cassette's response can often yield information about their causes.

two halves of the cassette shell) of a "poor" cassette. Ideally, both halves of the shell should be parallel, they should lie perfectly flat in the interior of the machine, and the tape path should also be perfectly parallel to this plane at all times. Mass producing a cassette that can conform to all this is far easier said than done.

The serious differences between sides on the nonadjustable three-head machines apparently occur because of the distance between record and playback heads. It is a no-man's land over which tape guidance (which is basically provided by the cassette housing) is difficult to control.

In the open-reel format, the entire tape-guidance system—tape guides, pressure pads, etc.—is part of the machine itself, and good azimuth is relatively independent of the tape or the reel on which the tape is stored. By contrast, while all cassette recorders do have some sort of tape-guide system, the greater burden of maintaining alignment falls on the cassette housing into which most of the format's guiding elements are built. All of these influence the azimuth alignment and therefore the high-frequency response and output stability.

The basic alignment between the tape and the head depends on the external dimensions and tolerances of the cassette shell or housing. When the

cassette is inserted into the recorder, certain parts of the housing are held firmly against the surfaces of the loading slot or cassette well, forming a reference plane for the tape movement. Since the head gap is preset to be precisely perpendicular to this plane, if the cassette surface and housing are not "square" and true, a tape-to-head misalignment will result.

**W**ARPING and other housing distortions are among the major reasons for poor alignment, and this warp has several causes:

(1) *Temperature-related instability*, resulting from the use of low-grade plastic material in manufacturing or from accidental exposure to high storage temperatures. Warp can also be caused by incorrect molding conditions that induce internal stresses in the plastic which are subsequently released. (Records warp for the same reasons.)

(2) *Incorrect settings* on the sonic welding equipment frequently used to join the two cassette halves together.

(3) *Uneven torque* used in fastening the two halves of a screw-assembled cassette together; this distorts the housing.

(4) *Uneven mating* of the two cassette halves, which distort when joined together.

(5) *Abuse by the user*, such as twisting or bending.

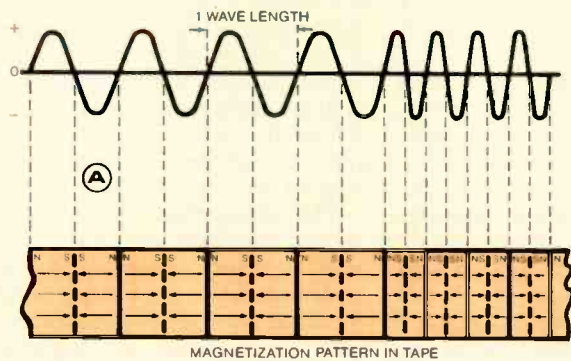
Figure 3 charts an example of misalignment caused by a small, quite invisible housing warp. Shown at (a) is the level of a 10,000-Hz tone recorded and

immediately played back without removing the cassette from the recorder. At (b) is the result when the cassette was removed, reinserted, and again played back. Obviously, the warp prevented the cassette from lining up with the reference plane properly on reinsertion, resulting in a loss of 4 dB and poorer uniformity of output as well. Repeated reinsertion and playback may result in somewhat different outputs each time. Similar effects may be produced by applying finger pressure at various points along the cassette edge while playing back a recorded high-frequency signal.

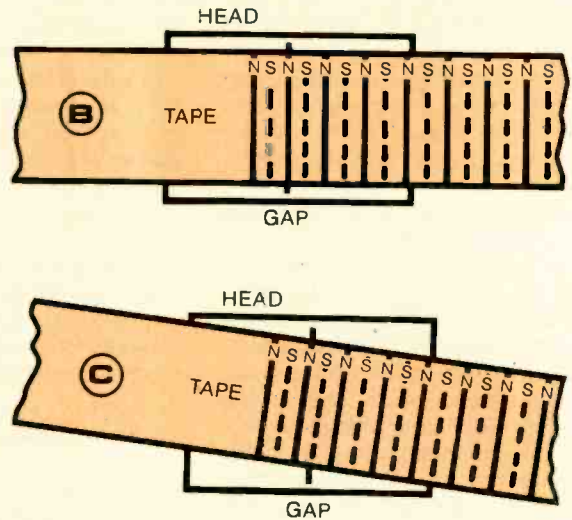
The guides and rollers within the cassette housing may also bear a share of the blame for misalignment. A large number of cassettes use front-corner plastic rollers that rotate on steel pins inserted into the cassette housing. Until recently this method was considered to be the most reliable—very quiet and contributing very little friction. However, studies made in connection with azimuth reliability reveal that in a surprisingly large number of cassettes the rollers wobble very slightly. This microscopic irregularity is sufficient to cause misalignment and output-level variations. Figure 4 shows an expanded uniformity chart of a 10,000-Hz signal run on such a cassette. The pattern on the chart indicates that two disturbances are present at the same time. The di-

(Continued on page 72)

## Understanding Azimuth



(A) The electrical audio signal fed to the record head produces an analogous magnetic pattern on the recording tape, the wavelength varying with frequency. (B) A properly aligned head lays down a magnetic track at right angles to the tape edge; if the tape is skewed during playback (C), high frequencies suffer because of cancellation at the gap.



**F**IGURE A (top) shows a low-frequency audio signal followed by one of higher frequency. Directly below are the corresponding magnetic patterns that would be recorded on a tape. The recording signal is plotted against time, with the low frequency logically occupying more time per cycle than the higher frequency. Put another way, low frequencies result in long wavelengths and high frequencies result in short wavelengths.

Tape is magnetized by the record head in one of two directions (polarities) in accordance with the polarity (as indicated by the arrows) of the recording current. This produces magnetized regions, each with its own north and south magnetic poles. How long is each wavelength? That depends on the frequency and the tape speed. In cassette recording, the speed is  $1\frac{7}{8}$  ips, with a frequency range of, say, 50 to 15,000 Hz, or a frequency ratio of 300 to 1. The corresponding ratio of longest to shortest wavelengths is likewise 300 to 1. By simple calculation we find that at  $1\frac{7}{8}$  ips the wavelength of a 100-Hz signal is 0.01875 inch. The wavelength of a 10,000-Hz signal is one one-hundredth of that: 0.0001875 inch, or  $187\frac{1}{2}$  millionths of an inch. The half wavelength (one magnetized region) of a 10,000-Hz signal is therefore only about 93 millionths of an inch long, or about thirty times smaller than the thickness of an average human hair.

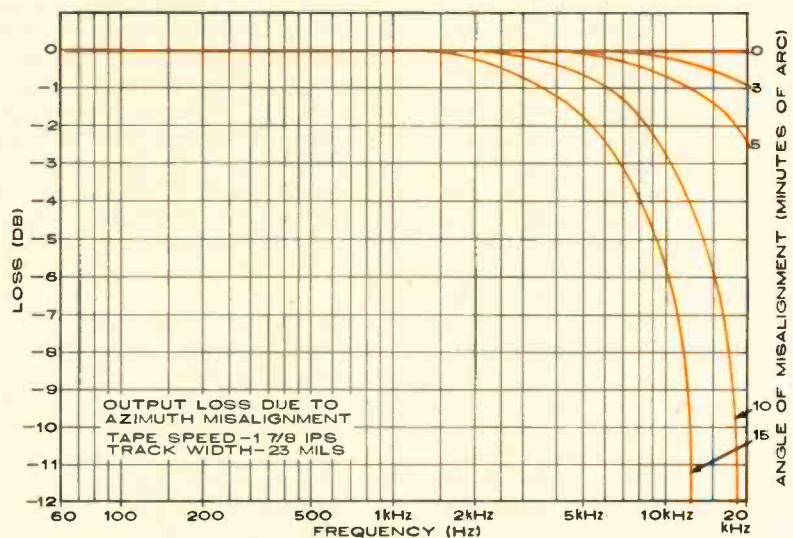
**W**ITH this as a background, we can now deal with azimuth. As used in tape recording, the term "azimuth" refers to the physical alignment be-

tween the head gap and the tape. Proper reproduction of short-wavelength signals requires an exactly parallel alignment between the playback-head gap and the magnetic poles recorded on the tape (Figure B). If the two are misaligned, as shown in exaggerated fashion in Figure C, losses of high-frequency output will result. The reason, in the case shown, is that the misalignment causes the north pole on the upper edge of the tape to cross the gap at the same instant as the south pole at the lower edge. This means that the flux lines induced in the head from the upper edge of the tape are oppo-

site in direction to those induced from the lower edge, and the two cancel each other completely. The resultant output is zero—not 0 dB, just plain 0.

If the angle of misalignment is smaller, so that the gap does not contact both poles simultaneously, the output loss will be smaller. How big does the angle have to be to produce measurable losses? Surprisingly small. A misalignment of only 15 minutes of arc ( $\frac{1}{4}$  of a degree) will produce a 6-dB loss at 10,000-Hz. That is a loss of 50 per cent. Losses from other degrees of misalignment are shown in Figure D.

(D) The high-frequency loss resulting from azimuth misalignment is shown below for four misalignments of increasing severity (15 minutes of arc =  $\frac{1}{4}$  degree).



# Azimuth...

mensions of the short-wavelength pattern conform exactly to the circumference of the roller, confirming the origin of the output variation. The longer wavelength dimensions indicate a motional disturbance in the supply pack. The total output variations of nearly 5 dB are of course unacceptable for quality recording.

A dissection of these cassettes showed that the steel pins were not positioned exactly perpendicular to the cassette base, resulting in a once-per-revolution roller wobble. During assembly the steel pins are inserted in the bottom half of the cassette housing, usually by a pin-setting machine, and the top half is then fitted over the protruding pins. Our tests indicate that it is extremely difficult to assemble cassettes with the assurance that the steel pins will always be aligned with the necessary precision.

**T**HE pressure pad of a cassette is not designed for tape guiding, and should play no part in guidance if it functions correctly. But, like any other component in a cassette, the pressure pad will occasionally get into the act and misguide the tape. Being in direct contact with the head, the pad is located in a very sensitive area and even minor inadequacies will cause major trouble. Tape misguiding can occur (1) if the pressure pad is not glued in position squarely or is loose, (2) if the spring to which the pad is glued is not properly inserted in the slot, (3) if the spring or pad is bent or twisted, or (4) if foam pressure pads (used instead of a spring) lean in the direction of tape motion because of high tape-to-pad friction.

The liners or "slip sheets" inserted between the inner surfaces of the housing and the wound tape (referred to as the "pack") provide a low-friction surface for pack rotation. In addition to this, slip sheets can also contribute much in obtaining smooth, evenly wound tape packs, especially during fast-forward and rewind. Many liners, however, are not designed to perform this function, and they permit rough "winds" to occur in many cassettes. Winding irregularities ("steps," protruding edges, or "cinching") can produce azimuth variations as well as occasional jamming. Alignment suffers because the vertically scattered tape layers on the feed pack unwind at different angles, and these may be too extreme for the roller guide to correct quickly enough to avoid a momentary tape-to-head misalignment. Also, tape layers

protruding above and below the pack make it wider, frequently causing the pack to be squeezed in the limited space inside the cassette. This interferes with smooth tape motion, which in turn affects the alignment. (Typical characteristics under these conditions are shown in the tape-pack pattern irregularity of Figure 4.)

Finally, if the tape is allowed to wind and rewind poorly over a period of time, the exposed edges rub continually against the liners and eventually become stretched and wrinkled to the point where the machine's tape-edge guides become ineffective. In severe cases both the alignment and the head contact are affected, leading to very bad dropouts in the damaged areas. Figure 5 shows how the output of a 10,000-Hz recorded signal can be degraded by a

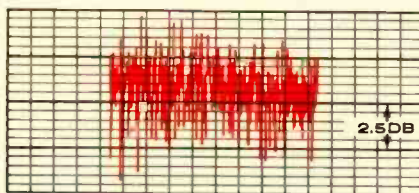


Fig. 5. Severe fluctuations in one track's response from a damaged (stretched) edge.

stretched edge. With truly inferior cassettes, not only the housing but the tape itself can compound the alignment problem. Tapes that are not slit perfectly straight exhibit skew or "snakiness." A skewed tape moves past the head with a constantly changing angle with respect to the gap, with the inevitable result of distortion.

Shedding of the tape's oxide coating can also upset proper alignment. If the shed material is allowed to build up on the capstan or pressure roller, it can result in the tape's riding up and down between them. In extreme cases there will be a complete loss of signal. A similar problem will occur if the capstan and pressure roller are not properly aligned with each other or if the roller is unevenly worn.

**T**HERE are still more causes of azimuth misadjustment, some of them quite difficult to analyze because of the constantly changing dynamic interface between the machine and the cassette. However, the cassette designer has not been standing still. Performance has been improved in every respect, so that the modern premium cassette, though superficially unchanged in appearance, is a far cry from its predecessors of the

late 1960's. In areas specifically affecting alignment, some manufacturers have adopted fixed guide posts (which don't wobble) or moving arms within the cassette to guide the tape (which improves the winding of the tape packs). A few others (Capitol among them) have replaced steel pins with large-diameter plastic pins molded right into the cassette housing. Such pins are permanently aligned and cannot be knocked askew during the assembly process. Capitol has also enlarged the rollers by 50 per cent for more precise tape guidance.

The overall housing has been improved with new high-precision molds and superior warp-resistant plastic materials, while the winding properties of some types of cassette tapes have been enhanced by the application of special back coatings on the rear surface of the base film. One result of our investigations has been a newly designed housing that fastens together with a combination of four screws and two pairs of press-fit "sockets" molded into the shell halves (this greatly improves accuracy and stability of alignment), and *ribbed* liner sheets that exert a centering force on the tape packs to promote smooth winding. These steps and others seem virtually to have eliminated azimuth misalignment on two-head cassette machines. Although some problems still remain with those three-head machines that lack head-azimuth adjustments, the situation there has also been vastly improved.

**F**INALLY, the purchaser of cassettes can do his part to obtain and maintain the best alignment possible:

- (1) Treat cassettes gently and store them in suitable containers.
- (2) Ignore advice recommending that you twist cassettes before using, "just to loosen them up a bit."
- (3) If you open a screw-down cassette for any good reason, reassemble and retighten it with care.
- (4) Keep your recorder clean and well-maintained.

During the ten years or so that the cassette has been around, it has achieved a remarkable record of performance and almost universal acceptance. Nevertheless, there are still advances taking place in cassette technology. By keeping himself informed, the cassette user can understand the nature of the still-unsolved problems, learn how to avoid them, and appreciate what is being done by the various manufacturers to correct them. □

Joseph Kempler, manager of technical marketing services for Capitol Magnetics, developed many of the company's products, including the tape in the Music Tape cassette.



# Drop in a Fuji



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**THE TAPE THAT'S HEARD AROUND THE WORLD**

**S**o you think you're a record collector? You went out and bought all of David Bowie's albums and now you've got the complete set? Not a chance. You may *think* you have it all, but you're a long way from having the *complete* David Bowie. If you want all of Bowie—or of anyone else, for that matter—you have to search literally all over the world. Since you can't do that personally (at least most of us can't), you have to check all the trade papers and the fan mags regularly to find out what's going on (and what has already gone on), make yourself a pest at record shops specializing in imports, correspond with record suppliers abroad, and plug yourself into the network of like-minded collectors. Sound tough? It is. Take David Bowie, for example, and see what you might already have missed.

A long time ago—I mean a *really* long time ago, like 1966—David Bowie signed a contract with Pye Records in England. Out of that union an EP (for “extended play,” which is not quite as extended as “*long* play,” of course) of four songs resulted. In America two of those songs were released on a Warner Bros. single. In 1976, the “A” side of that single is still in print on a Warner Bros. sampler album (you have to order it direct) called “Days of Wine and Vinyl.” In between tracks by John Hartford, Sparks, and Jethro Tull you'll find Bowie's song *Can't Help Thinking About Me*. Until recently, when it appeared on Sire's “History of British Rock, Volume III,” it was not available anywhere else except on bootleg discs.

**L**ATER on that same year, Bowie recorded more than an album's worth of songs for Decca Records of England, which resulted in an album for their American subsidiary label Deram. The album was called “David Bowie,” and it remained in print for only a few years. Once our hero had made his big success, however, London Records (another American subsidiary of Decca) rereleased most of the songs from those 1966 sessions on a double album called “Images 1966-1967.” That makes *four* sides of Bowie doing his Anthony Newley imitation (well, he was only nineteen and still a blonde). One of the songs he recorded then, *The Gospel According to Tony Day*, is available only on a London Records *single*, so to complete your collection you have to search for that little 45.

In 1969 Bowie signed with Mercury Record Productions. He had a new band (featuring Mick Ronson on lead guitar), new producers, new songs, and a new style. Surely, you might think, cataloguing things gets easier when an

## TAKE DAVID BOWIE, FOR INSTANCE

A collector's tale  
by Mark Giangrande



artist matures—but no: as always, confusion reigns. The first Mercury album was called “Man of Words/Man of Music” and it yielded the much praised *Space Oddity* single. This was followed by a second album called “The Man Who Sold the World”—which yielded no single release at all as far as I know. In fact, one of the end results of this album was Bowie’s singular release from his record contract.

So now it’s 1971 and we have little David loaded up with all those songs and nowhere to go. Well, maybe not exactly nowhere. In early 1971, before RCA snatched him from oblivion, one strange single emerged in England on the Mooncrest label. A singer named Arnold Corns released two Bowie songs from sessions produced by David himself, and Arnold Corns (A. Corns—get it?) sounded an awful lot like you know who. Which gives us two more songs, *Man in the Middle* and *Hang On to Yourself*, available only in their original-release form. There is, of course, another version of *Hang On to Yourself* on the “Ziggy Stardust” album, with new lyrics and a new arrangement, but a real collector would have to have both.

Now, at last, real success is David’s: RCA signs him and the “Hunky Dory” album is released. It racks up moderate sales and some critical praise. A year later, in 1972, “Ziggy Stardust and the Spiders from Mars” comes out and catapults D.B. into the number one spot on the unisex chart. To follow up this smash he put out *The Jean Genie* as a single, but it sold only a handful of copies (RCA didn’t publicize it very well). Collectors are somewhat protected, though, for the song appears again on the “Alladin Sane” album.

Continuing in the tradition (or stereotype, if you prefer) of newly arrived rock stars, Bowie then put out an album designed to pay homage to his roots. “Pin-Ups” contains nothing but David’s old favorites, the songs he used to listen to as a kid. The “A” single from this album was *Sorrow*. The “B” side was a rendition of Jacques Brel’s *Amsterdam*—and it’s not, of course, on the album.

Slipping in between all this were two RCA singles released only in England. The first, *John, I’m Only Dancing*, topped the BBC charts for weeks. One of Bowie’s best tunes, it is a mystery why RCA hasn’t put it out here (perhaps the chorus “All alone here/All alone here/You know what I mean” gave them pause). The second is *Drive-In Saturday*, which appeared in “Alladin Sane.” It is worth mentioning that the “B” side is Bowie’s version of Chuck Berry’s *Around and Around*.

This track is not on any album anywhere. It came out before “Pin-Ups” and just may have been the source of the inspiration for doing a whole album of oldies. It is, of course, a must for the Bowie File.

By 1973 Bowie’s reputation as a major rock star was well established, and RCA bought up the masters of the two Mercury albums to rerelease them with new covers and new titles. All the world (well, maybe only 90 per cent) waited to hear what was to come next. There were rumors of movies in the offing, of stage shows planned, even of retirement. There was an end (temporary) to touring, and a new album was released. The single from “Diamond Dogs” was *Rebel, Rebel*, but the take from the album is not the one on the single (collectors please note: the English 45 differs slightly from the American). Also, in Canada, in England, even in Germany—though not in the United States—another single was released: *Diamond Dogs* on the “A” side and *Holy, Holy*, a song recorded during the “Ziggy Stardust” sessions but never before released, on the “B.”

The year 1974 was marked by a U.S. tour and a live double album recorded in Philadelphia. The “A” single from the latter effort was *Rock and Roll with Me* and the “B” was *Panic in Detroit*—from the same concert, but not on the album. In fact, RCA kindly put a little note on the label to tell us collectors so, knowing perfectly well we would therefore have to buy both the album and the single. (In England, the “A” side was *Knock on Wood*, the “B” side the same *Panic*.)

Come February of 1975, the “Young Americans” album was released and Bowie gave his collectors a little rest: all the British and American singles from this point on have been on albums—well, not precisely all, for the two latest Bowie releases are still or-

tonbury Fayre, it was held on the traditional site of King Arthur’s court, the spot where the Holy Grail is said still to be interred. The affair was an artistic success and a financial failure. To help bail out the promoters, such big names as Pete Townshend, Marc Bolan, Hawkwind, the Grateful Dead, and others donated enough unreleased material to make up an album of three discs called “Glastonbury Fayre.” Bowie’s contribution was a live-in-the-studio performance of *Supermen*. The song first appeared in the album “The Man Who Sold the World,” but the later performance is clearly the definitive one and just as clearly another must for collectors.

Bowie’s musical associations also expand the field for his collectors. He wrote three songs for Mick Ronson’s first solo album “Slaughter on 10th Avenue” and is an uncredited performer on it as well. There is also “All the Young Dudes,” the album he produced and performed on for Mott the Hoople. A similar case is the 1974 Polydor single made by Lulu in England. She sang two Bowie songs, *The Man Who Sold the World* and *Watch That Man*, David producing and singing beside her. David (and Mick Ronson) also appears on Dana Gillespie’s first RCA LP. Can any collector resist any of them?

There may possibly be even more. Certainly there are all those bootlegs at least, among them a very good concert recorded at Santa Monica (1972—the first North American Tour), the concert at which Bowie announced his retirement (1973), and the Marquee Club concert broadcast over American television (1974). These items are impossible to document fully, of course, and their availability is very chancy.

So much, then, for the Bowie example. The best advice I can give to collectors of this or any other artist is (1) take nothing for granted and (2) keep

**If the single of *The Prettiest Star* exists, it would be a rarity any Bowie collector would give his baby teeth for**

phans. In England, as part of an EP (they now call them “maxi-singles” for some hucksterish reason) of old songs, a previously unreleased track called *Velvet Goldmine* has appeared. It’s another of those nuggets from the vaults and dates from around the time of “Hunky Dory.” In the U.S. a new single called *Golden Years* is out and slated to appear on the forthcoming “Station to Station.”

Are we finished? Not by any means. In 1971 a wonderful (much unpublicized) rock festival took place at Glastonbury in England. Called the Glas-

looking. Get all the listings in record catalogs, announcement sheets, or whatever, and track them all down. You learn tricks and shortcuts as you go, and it does become easier with time. And there will always be those heart-lifting moments of success to spur you on, when you finally lay hands on a mint copy of an English pressing of a long out-of-print mini-single whose “B” side is the unique version of a song the artist himself doubts he ever sang. It is then you know that *Eureka!* is more than the name of a vacuum cleaner. □

# The Last Will and Testament of a Classical Record Collector

By Leo Haber



*The* decedent, being of sound and disposing mind and memory, and considering the uncertainty of this life and the transitory nature of classical recording contracts, does make, publish, and declare this to be his Last Will and Testament, as follows, hereby revoking all other Wills by him at any time made.

¶ First, after the decedent's lawful debts are paid to all but record clubs that have consistently sent incorrect orders, he gives the bulk of his classical record collection to his sons, Howard and Edward, to be divided equally between them.

Since the decedent is anxious to advance sweet concord and brotherly love in this villainous world, and since the decedent is fully cognizant of the acquisitive instincts rampant in all human beings, he has seen fit to set down with an unwavering baton the specific procedures whereby his collection is to be divided.

The decedent early recognized the difficulties in effecting an equitable division of his classical records. At first he contemplated asking his sons to divide the collection by alternately taking one record each, beginning with Adolphe Adam and ending with Jan Zelenka. This did not prove to be feasible since one son would own sides one and twelve of *Götterdämmerung*, the other son sides two and eleven, and so on. With Wagner, at least, this could be a boon, but it did not seem to augur well for other composers. Break up a boxed set of Beethoven symphonies and each

son could very well end up owning half of the second movement of the *Eroica*.

¶ The next thought was to split the collection down the middle of the alphabet—thirteen letters apiece. Elder son would get A to M and younger N to Z. This idea, too, was discarded in the sacred name of sibling rivalry. The owner of Bach, Beethoven, and Brahms would have it all over the owner of such as Schubert, Schumann, Sibelius, Strauss, Stockhausen, and Stravinsky. In fact, the owner of Mozart might easily have it all over the owner of everything else.

Here are some other proposals that were rejected by the decedent for a variety of reasons:

1. Give number one son all the music performed by Fischer-Dieskau, Barenboim, Bernstein, and Ormandy; the rest to number two son. The division ought to be fairly equal in number of records, if not in quality.

2. Give all the Vox Boxes of "The Complete Music of . . ." to the elder, every other performance to the younger. Again, we might have a fairly equal division of discs with similar reservations about the levels of quality.

3. Give all the music performed by artists eighty years of age and above to one son and all performances by the younger striplings to the other. The former would include late Toscanini, Stokowski, Rubinstein, Klemperer, Walter, Monteux, Casals, etc., and would certainly give no quarter in quality. But would a son under thirty value such a collection?

4. Divide the collection ethnically. Give all the German and Italian composers to one son and everyone else to the other. This might also turn out to be an equal division of recordings, but we are again beset by the problem of equalizing aesthetic values. An alternative ethnic procedure would be to give all the performances by Jewish artists to one son and everything else to the other. This proposal almost carried the day until it was realized that one son would be getting all the violin and piano concertos, the other all the trumpet and flute concertos.

5. The decedent's wife came up with the ultimate suggestion. Equality in discs per son should not be the important criterion. More crucial is equality in *time*, since music is an aural, and therefore temporal, experience. Give, therefore, all the performances conducted by Knappertsbusch, Klemperer, and Furtwängler to the first son, and all the other performances to the second son, and each would be getting *equal playing time!* But the decedent rejected this outrageous suggestion summarily. Where would he put Hermann Scherchen, who drags one movement and races through the next? Too many insoluble problems.

But the decedent finally solved the puzzlement. He did so by acquiring at least two performances of almost every piece of music he owns—in some cases four, six, eight, and ten performances. He therefore instructs his beloved sons to divide performances equally. In the rare event that the collection contains an odd number of performances—



three, five, seven, nine, etc.—the odd performance, or the oddest one, is to be donated to a charitable institution.

¶ *Even this inspired procedure is not without its pitfalls. The decedent is consequently obliged to append the following codicils, which are to be carried out in strictest detail:*

(a) In the interests of fairness, the son who receives Bach on the harpsichord should also receive orchestral transcriptions of the organ works. The other is to receive the organ performances and the *piano* versions of the harpsichord works.

(b) Beethoven piano sonatas pose a problem. The son who gets the full Schnabel set must be willing to surrender both Barenboim and Brendel in exchange. And throw in the Arrau for good measure.

(c) The complete Berg in a neat box might pardonably be traded off for the complete Schoenberg in several boxes. Since the latter is somewhat thicker in number of records, the owner of the complete Berg should also get the complete Webern.

(d) Bruckner symphonies—a simple division. Original versions to one and Novak and other versions to the other. The decedent does not envy either son in this instance.

(e) Mozart piano sonatas: Gieseking complete to elder, Lili Kraus to younger, Glenn Gould to charity.

(f) Moussorgsky's *Pictures at an Exhibition*: piano version to elder, orchestral transcription by Ravel to younger, Stokowski transcription to

charity, and Emerson, Lake, and Palmer to Saudi Arabia.

(g) Prokofiev's Piano Concertos Nos. 1, 2, 3, and 5 are to be divided equally. The Fourth, for Left Hand, and Ravel's Left-Handed Concerto are to be divided. The Ravel Two-Handed Concerto goes in tandem with the lonely Grieg Concerto. Clear?

(h) Stravinsky's *Firebird Suite* is not quite so simple. The problem is to be solved thusly: Boulez's 1910 version to elder, Giulini's 1919 version to younger, Stravinsky's 1945 version to Robert Craft.

(i) All the Tchaikovsky *1812 Overtures* are to be divided rigorously, with the performances using actual cannon to be returned to the Pentagon. (From the blessed quiet of the grave, the decedent cries "peace.")

(j) Telemann and Vivaldi are just impossible. Who can count up and manage to separate all the concertos for multiple oboes and violins? So, it would do decedent's unquiet heart good if one son would settle for all of Telemann and the other for all of Vivaldi. It hardly matters.

(k) Wagner's *Ring*: Solti to one, Karajan to the other, Furtwängler to an old-age home.

(l) Finally, let it be said without equivocation that *no one* can separate C. P. E. Bach from J. C. Bach from W. F. Bach; there are simply too many recordings entitled "The Sons of Bach" that contain snippets from all three. The decedent decrees that all these discs are therefore to be owned in common! Shared ownership of records

is not an ideal thing even in socialist societies (communal thumbs will never learn to keep off communal surfaces), but the decedent has decided to overlook this possibly calamitous problem in order to expedite the following: beloved sons Howard and Edward are bidden to assemble once a year on the anniversary of the decedent's decease to play all the "Sons of Bach" records as incontrovertible evidence of that lack of talent which is God's punishment visited on sons who disparage their dear fathers.

¶ *It may be noted, and to the decedent's shame, that he has bequeathed not a single record to his dear surviving wife. This is done with love aforethought, since this patient soul has been praying all these years for the glorious day when the records would miraculously leave the gluttoned apartment. Sic transit tabularium mundi. . . . The decedent therefore appoints his wife Sylvia to be the Executor of this Last Will and Testament, the Happy Distributor of all his LP records, at no mark-up whatsoever.*

¶ *In Witness Whereof, the decedent hereunto subscribes his name and affixes his seal, a drawing of the ancient lyre, same seal to be found on all his record jackets.*

Witnesses:

Signature:

Howard Collyer  
Langley Collyer



Sylvia Haberman

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CIRCLE NO. 15 ON READER SERVICE CARD

# STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT

# BEST OF THE MONTH



CRD Records Ltd./Alan Hann

*Thomas Igloi, Howard Davis, Peter Pople, Berian Evans, Gregory Baron*

## Schubert's C Major Quintet: a Chamber-Music Performance Spectacularly Close to Perfection

**A**BOUT ten years ago the Albarni Quartet, a London ensemble founded in 1960, made its recording debut on the English budget label Saga with a pair of Haydn quartets; it was a stylish presentation, lacking only the ripeness that would have made it a memorable one. The Albarnis subsequently made a stronger case for themselves in their recording of Alan Rawsthorne's three quartets, released in this country on Argo ZRG 536, but no further records appeared until just now. After the passing of a decade and a couple of personnel changes (including the departure of the original first violinist, for whose western Canadian home town the ensemble is named), and in collaboration with the extraordinary young Hungarian-born cellist Thomas Igloi, the Albarni has turned up on CRD (one of the interesting English and European labels imported by HNH

Distributors, P.O. Box 222, Evanston, Illinois 60204) in what strikes me as the most all-round satisfying recording now available of Schubert's magnificent C Major Quintet.

In the last year at least five new versions of this work have been issued on various domestic and import labels, all of them of more than passing interest, and yet each in some way falling short of ideal. The accomplishment of the Albarnis and Igloi seems hardly less miraculous than that of Schubert himself—though this observation comes only as an afterthought, for the beauty of their performance is that they realize the music to the fullest without ever getting in its way. That is not to suggest that the interpretation lacks personality, but rather that the personality that informs it is Schubert's own.

Both as to individual playing and in the balances between instruments, the

ensemble is impeccable but never anti-septic. These musicians are not reluctant to embrace Schubert's incredible melodies with the warmest of hearts; some innate judgment (or simply feeling) keeps them from tripping into overindulgence. Counter-melodies are brought out with stunning clarity, but without being fussed over. The first movement in particular is music one hopes will never end; here it flows on serenely for more than twenty minutes—almost certainly a record, even with the repeat taken, as it is here—without appearing to dawdle. Nothing is cut, nothing is rushed, nothing is dragged, and dynamic contrasts are effective without being exaggerated. The pizzicati in the slow movement are neither dry nor overproduced, and there is no letdown in the two final movements; the melancholy trio is for once perfectly gauged in relation to the more extrovert scherzo, and the finale is allowed to make its compassionate point without swooping, scooping, or giddiness.

If much of this review seems to be in

terms of what the performance is *not*, it is because it is so difficult to find words for what it *is*. To my ear, it comes spectacularly close to perfection, and so does the realistically full-bodied sonic frame. The pressing itself is immaculate. The only nit I can pick in the whole production is the annotator's remark that there was not much of a precedent for a two-cello quintet except in the works of George Onslow. Not so; Boccherini is credited with some 125 of them. But neither Onslow nor Boccherini is at issue here: Schubert has seldom been better served.

Richard Freed

**SCHUBERT: Quintet in C Major, Op. 163 (D. 956).** Albèrni Quartet; Thomas Igloi (cello). CRD 1018 \$7.98.

of Riccardo Muti not only ranks at the top of the stereo list but offers a serious challenge to its two more venerable predecessors as well.

Muti dominates the opera's performance as no other conductor has since Toscanini (on RCA 6112, deleted), but, unlike the late Maestro, he does not overwhelm his singers (who happen also to be superior to the Toscanini cast in many respects) but enhances their efforts. At times (as in the closing ensemble of Act I, Scene 1) he too succumbs to that weakness for fast tempos that plagues his generation of conductors, but even then his brisk pacing never loses sight of vocal expression. His leadership gives the music clear shape and rhythmic vitality and, even more important, an unflagging momen-

securely and effectively. Only a certain tentativeness with textual values and a slight awkwardness in phrasing keep her performance short of unquestioned excellence. There is little to criticize in the solid and forceful Renato of Piero Cappuccilli either, even though we remember the recorded competition he is up against: the superior tonal allure of Robert Merrill and the towering dramatic presence of Tito Gobbi.

Tancredi Pasero played the part of Samuel in the old Gigli set, and I have waited—in vain—to encounter his like since. Odds are against any record company's being so extravagant as to cast Nicolai Ghiaurov and Martti Talvela as the two conspirators, so we must take what we get. The two young Covent Garden basses (Howell in particular) do reasonably well in their roles, and Giorgio Giorgetti is an adequate Silvano.

The recorded sound (in compatible SQ-encoded quadraphony) is generally excellent, but there are many noticeable pre-echoes.

George Jellinek

**VERDI: *Un Ballo in Maschera*.** Plácido Domingo (tenor), Riccardo; Piero Cappuccilli (baritone), Renato; Martina Arroyo (soprano), Amelia; Fiorenza Cossotto (mezzosoprano), Ulrica; Reri Grist (soprano), Oscar; Gwynne Howell (bass), Samuel; Richard Van Allan (bass), Tom; Giorgio Giorgetti (baritone), Silvano; Kenneth Collins (tenor), Un Giudice. Chorus of the Royal Opera House, Covent Garden; New Philharmonia Orchestra, Riccardo Muti cond. ANGEL SCLX-3762 three discs \$21.94.



Angel Records

Ballo playback: Martina Arroyo, Reri Grist, Riccardo Muti

## Riccardo Muti's New *Ballo* for Angel A Serious Challenge To Previous Entries

**V**ERDI'S *Un Ballo in Maschera* has been recorded many times, but never outstandingly well. Recent stereo versions, in fact, have all been spoiled by certain casting weaknesses or ineffective conducting, with the result that I have found it more satisfying to turn to the old Gigli version (Seraphim 6026) or to the recently reissued Callas-Di Stefano-Gobbi combination (Seraphim 6087) to find not only color and excitement but also true vocal personalities. I am all the more happy to report, therefore, that Angel's new recording of this opera under the baton

tum that drives the action forward and sustains it on a high level of excitement throughout. And there is no undue concentration on the "big numbers" either: with Muti, nothing is slighted, and the smallest orchestral nuances spring to life with surprising freshness.

Plácido Domingo and Fiorenza Cossotto are the vocal standouts in the cast. The tenor makes Riccardo a likable, noble figure, enriching the characterization with his customary blend of ardor and elegance; the mezzo's rich, well-focused tones and vivid delivery are a delight. Reri Grist repeats her expert, neatly sung Oscar, which will be familiar to opera fans from her previous portrayal on RCA 6179.

Martina Arroyo casts off her usual placidity under Muti's galvanizing leadership. If she does not soar over the ensemble in her first scene with quite the sovereign effect of Price or Milanov at their best, she delivers both her arias

## Gord's Gold: A Rich Lode Assayed And Refined by the Old Prospector Himself

**E**VERYONE who's interested must know by now that I consider Gordon Lightfoot one of the more important figures ever to take up with popular music, and much of the evidence that's going to prove I'm right has finally been collected all in one place by Reprise. Not only that, but Lightfoot went back into the studio and rerecorded one full disc of it—the songs from the top down through *Early Morning Rain* in the list below, those he'd originally done for United Artists. Lightfoot had his own reasons for doing this, which included recapturing some of the royalties these songs can still earn, but



the net effect of it is to give the "greatest hits" concept a degree of class it doesn't usually have.

He hasn't changed radically as a singer since *Early Morning Rain* and the others were new (and he still prefers his three-chord, intense way of doing *Rain* to the four-chord, pretty way that traces back to Ian and Sylvia), but his vocal sound has matured and weathered, and he sings all the older songs a shade better than he used to.

This is, of course, an ideal album for the interested party who doesn't yet have any Lightfoot albums—and it has something new in it for those who have every Lightfoot album, including an opening in which to second-guess him on song selection. I was surprised to find *Affair on 8th Avenue* in there, as I tend to overlook it, and the way he runs ("That's what you get") *For Lovin' Me* into *Did She Mention My Name* without a pause surprised and delighted me . . . he lets us hear the third story you get by putting those two stories together. That's just one of the reasons why "Gord's Gold" is more golden than other people's gold. *Noel Coppage*

**GORDON LIGHTFOOT:** *Gord's Gold*. Gordon Lightfoot (vocals, guitar); Terry Clements (guitar); Red Shea (guitar); Rick Haynes (bass); John Stockfish (bass); Jim Gordon (drums); other musicians. *I'm Not Sayin'/Ribbon of Darkness*; *Song for a Winter's Night*; *Canadian Railroad Trilogy*; *Softly*; *For Lovin' Me/Did She Mention My Name*; *Affair on 8th Avenue*; *Steel Rail Blues*; *Wherefore and Why*; *Bitter Green*; *Early Morning Rain*; *Minstrel of the Dawn*; *Sundown*; *Beautiful*; *Summer Side of Life*; *Rainy Day People*; *Cotton Jenny*; *Don Quixote*; *Circle of Steel*; *Old Dan's Records*; *If You Could Read My Mind*; *Cold on the Shoulder*; *Carefree Highway*. REPRISE 2RS 2237 two discs \$9.98, © J8 2237 \$10.97, © J5 2237 \$10.97.

## Van Dyke Parks: Rather Long Time Between Drinks, but Worth the Wait

As a friend of mine was saying the other day about the first new release in quite a while by one of the more "serious" balladeers of the early Seventies, "Well, that's been a long time between drinks." He pointed out that many of these writer-performers had found early success by pouring out their interior lives in their songs—and,

since their lives hadn't been all that long, chronologically, they were now scraping the bottom of the biographical barrel, not yet mature or professional enough to squeeze meaning out of what's happening around them, still clinging to what's happened to them.

Balladeer Van Dyke Parks, one of the most idiosyncratically brilliant recording innovators ("Song Cycle") of the late Sixties, hasn't been heard from in eons. His return just now on the new Warner Bros. release "Clang of the Yankee Reaper" is really more of a personal appearance than a creative effort: he seems only to have posed for the cover photos and sung the songs. The production (splendid) is by Trevor Lawrence and Andrew Wickham, the songs are by a variety of people, and the arrangements (superb) are by the same Trevor Lawrence. I have no idea how spent, bored, blocked, or just playin' possum Parks is creatively, but I can tell you that this is one of the most rambunctiously enjoyable albums in months, that as a performer he is pure delight.

The musical accent is a mixture of calypso filtered through Scott Joplin filtered through a Seventies sensibility. Parks sings his way through such things as the title song (the only one on which he collaborated), *Soul Train*, and *You're a Real Sweetheart* with all the audacious glee of a ham actor in a Dion Boucicault melodrama. The orchestrations are just plain ravishing—until you've heard the steel-drum workout on what is here called Pachelbel's *Cannon in D* you haven't really savored Tropic Madness. I should, however, point out (1) that Pachelbel's kind of canon is spelled with one "n," and (2) that this tune isn't Pachelbel's Canon at all, but the chorale *Ein Feste Burg* (A *Mighty Fortress Is Our God*) composed by Martin Luther. Bit of a credibility gap there. Shame!

The engineering of the disc is beautifully forward, so that you have a definite "presentation" feel, as if you were watching a proscenium production. The whole damned album is a glorious mixture of romanticism, put-on, and dynamite musicianship. Parks may or may not be sending us more heartfelt messages in the future; for the moment I'll settle for gorgeous entertainments such as this one. More, please.

*Peter Reilly*

**VAN DYKE PARKS:** *Clang of the Yankee Reaper*. Van Dyke Parks (vocals); orchestra. *Clang of the Yankee Reaper*; *City on the Hill*; *Pass That Stage*; *Another Dream*; *You're a Real Sweetheart*; *Love Is the Answer*; *Iron Man*; *Tribute to Spree*; *Soul Train*; *Cannon* (sic) in *D*. WARNER BROS. BS 2878 \$6.98, © M8 2878 \$7.98, © M5 2878 \$7.98.



Gordon Lightfoot



Van Dyke Parks



# POPULAR DISCS AND TAPES

Reviewed by CHRIS ALBERTSON • NOEL COPPAGE • PAUL KRESH • PETER REILLY • JOEL VANCE

**BACKSTREET CRAWLER: *The Band Plays On.*** Backstreet Crawler (vocals and instrumentals). *Hoo Doo Woman*; New York, New York; *Stealing My Way*; *Survivor*; *It's a Long Way Down from the Top*; and five others. ATCO SD 36-125 \$6.98, © TP 36-125 \$7.98, © CS36-125 \$7.98.

Performance: **Competent me-tooism**  
Recording: **Very good**

Here's another troop of reinforcements in the holding action rock is fighting now, another average band with a sheaf of average tunes. The economy, presumably, can support a certain number of these at a given time, even during these lulls in the activity of vital signs. Back Street Crawler lets you down by not sounding as mean as its name, but it pairs keyboards and guitar better than some. Essentially, though, it is playing the game someone else made up; it's another of the bands, not a new force that's likely to devastate the spreading ennui—more like a symptom of it.

N.C.

**RON CARTER: *Anything Goes.*** Ron Carter (bass); vocal and instrumental accompaniment. *De Samba*; *Baretta's Theme (Keep Your Eye on the Sparrow)*; *Big Fro*; and three others. KUDU KU-25SI \$6.98, © KU8-25 \$7.98, © KUC-25 \$7.98.

Performance: **Not for dancers only**  
Recording: **Excellent**

Ron Carter, whose albums have been appearing on the CTI label, has moved to Kudu, CTI's more commercially oriented subsidi-

ary. Why? Because Ron Carter, one of the finest jazz bassists around, has gone disco—at least for this round. It's not really surprising when one considers the fact that Carter also is one of the busiest studio musicians on the scene and, as such, has participated in many an awful hit. It bothers me when good jazz people become bad pop people, but that does not happen to be the case here; if jazz is your bag, you may not like what you hear on this album, but as a pop item, aimed at the finger-snapping crowd, it is very good. Most commercial are *Big Fro*, a Carter original (but not very), complete with a doo-dooee-doo vocal trio, and Cole Porter's *Anything Goes*, which, being a stone disco item, comes out sounding not unlike *Brazil*, *Baby Face*, or other hits from Tin Pan Alley's attic that have recently been dusted off for disconsumption. The rest of the album, though clearly aimed at your feet, has—thanks to Hubert Laws, Eric Gale, Randy Brecker, and others from the CTI stable—something for the head, too. So this is not an altogether worthless album from a jazz standpoint, and it is an excellent tool for reducing the ranks of the wallflowers. Still, I hope Ron Carter has not permanently strayed from the path he strode so well.

C.A.

**VASSAR CLEMENTS: *Superbow.*** Vassar Clements (violin); Jim Murphy (steel guitar, saxophone); Jim Colvard (guitar); Billy Sanford (guitar); Rick Brown (drums); Mike McBride (bass); other musicians. *Yakety Bow*; *Vassar's Boogie/One O'Clock Jump*; *Black Mountain Rag*; *Friday the 13th*; *Orange Blossom Special*; and four others. MERCURY SRM-1-1058 \$6.98, © MC8-1-1058 \$7.98.

Performance: **Dry**  
Recording: **Very Good**

Ol' Vassar's just about lost me with this one, the way some of your low-energy jazz loses me. That's fitting, since it's actually a jazz album, Clements arriving at that state by bending country swing at giddy angles. He does some fancy playing here, but it doesn't have much juice in it compared to what he's shown before. It comes down to whether you want to be dazzled by technique, and it's hard to see where Clements, coming from country music, thinks he sees an audience wanting that. Most of us, I suspect, don't have to have him prove

anything and would simply like to have our souls titilated. Instead, we're expected to sift through the technique to find some tunes we've already heard too many times.

N.C.

**DR. JOHN: *Hollywood Be Thy Name.*** Dr. John (vocals, keyboards); instrumental and vocal accompaniment. *New Island Soirée*; *Reggae Doctor*; *The Way You Do the Things You Do*; *Swanee River Boogie*; *Yesterday*; and five others. UNITED ARTISTS UA LA-552-G \$6.98, © EA-552-H \$7.98, © CA-552-H \$7.98.

Performance: **Spotty**  
Recording: **Good**

This album contains about equal amounts of kernels and chaff. The "live" sections were recorded during a one-night stand at a sleazy L.A. joint called Willie Purple's. The proceedings begin well with two originals by Dr. John (né Mac Rebennac), followed by his girl trio of back-up singers doing a nice job with a joshing Smokey Robinson tune. Rebennac's piano style is treasurable Americana, and we get to hear it in *Swanee River Boogie*, a showpiece of variations on the public-domain Stephen Foster tune (Fats Domino, in his only complete piano solo, cut it as *Swanee River Rock* in 1956). The first side ends with an unfortunate version of *Yesterday*.

The first two tracks on side two are studio affairs: *Babylon* is one of Rebennac's sensual evocations of the bizarre culture of New Orleans; *Back by the River* is simply bland. We now return to the live sessions, with Rebennac introducing guest artists who tear into a bewildering medley of *It's All Right with Me/Blue Skies/Will the Circle Be Unbroken*. I would much rather have heard Rebennac do them. One more dash into studio climes: the title tune consists of echo-chambered back-up singers funking up *The Lord's Prayer* while Rebennac talks about what a freaky place "Hollywood" is. Man bites dog.

Back finally to live proceedings: *I Wanna Rock* is a slapdash tune, which, judging by the writing credits, dates from the Fifties, when several small labels recorded New Orleans talent and things had to be made up on the spot. The men responsible, Otis "Bumps" Blackwell and John Marascalco, are also credited with writing most of the classic Little

#### Explanation of symbols:

- Ⓜ = reel-to-reel stereo tape
- Ⓢ = eight-track stereo cartridge
- ⓐ = stereo cassette
- ⓑ = quadrasonic disc
- Ⓡ = reel-to-reel quadrasonic tape
- ⓑ = eight-track quadrasonic tape

Monophonic recordings are indicated by the symbol Ⓜ

The first listing is the one reviewed; other formats, if available, follow it.

Richard hits, all recorded for the Specialty label in 1955-1959. It was during these adventuresome years that Rebennac got his start as a sideman and arranger, so his inclusion of the tune is a salute to his youth and to a hurly-burly that no longer exists in the Crescent City—or anywhere else, for that matter.

Like all Dr. John albums, this one is disappointing overall but has some fine moments. Perhaps he is incapable of making a uniformly good LP; his early and determining musical experience in New Orleans was—like the great days of classic “hot jazz” in Chicago during the 1920’s—hit and run. Dr. John runs down a trifle too often. But when he hits he really hits. J.V.

**PHIL EVERLY: *Mystic Line*.** Phil Everly (vocals); instrumental accompaniment. *Patiently; Lion and the Lamb; Mystic Line; January Butterfly; You and I Are a Song*; and five others. PYE 12121 \$6.98.

Performance: **Disarming and versatile**  
Recording: **Excellent**

Once upon a time there were two brothers named Phil and Don Everly. Times got hard in the record business and their “professional partnership” dissolved in 1974. Now Phil has made another of his own records, and for those who miss the sound of the Everly Brothers he has overdubbed his own voice in some of the songs so that “you’d swear it was Don and Phil reunited.” This should come as good news to their fans. I don’t know what else to tell you about “Mystic Line” except that Phil Everly has a surprisingly gentle, easy-to-like way with a song even when it’s hard rock such as *Lion and the Lamb*, and that his range extends from a reggae treatment of *When Will I Be Loved?*, one of the brothers’ early hits, through such pretty ballads as *You and I Are a Song* all the way to period pieces such as *Back When the Bands Played in Ragtime*. The program’s pace is cleverly varied, and the orchestral backing throughout is exceptionally sonorous and spacious. I do wish he’d stop harmonizing with himself, though. One Phil Everly is quite enough. P.K.

**THE FOUR SEASONS: *Who Loves You*.** The Four Seasons (vocals and instrumentals). *Storybook Lovers; Harmony, Perfect Harmony; Emily’s (Salle de Danse); Mystic Mr. Sam*; and four others. WARNER BROS. BS 2900 \$6.98.

Performance: **Past tense**  
Recording: **Lotsa echo-chamber, kids!**

Although Frankie Valli’s voice is the best-known thing about the Four Seasons, and perhaps their *raison d’être*, the group is led by Bob Gaudio, producer and provider of their material. This attempt to modernize the Seasons’ sound, basically by not letting Mr. Valli deliver himself of his unique pinched screech, results only in their sounding like various other vocal groups from the Sixties who were not half as successful as the Seasons in their prime—the Tokens, the Happenings, the Vogues, and the Belmonts, to name four. It should also be noted that Mr. Valli has a separate, solo recording contract with another label in which he sings the same sort of glop that made him famous in days of yore. He recently had a hit with *My Eyes Adored You*, not much different in style and substance from *Can’t Take My Eyes Off of You* of 1967. *Basta, basta!* J.V.

**ARETHA FRANKLIN: *You*.** Aretha Franklin (vocals); orchestra. *Mr. D.J.; Walk Softly; You Make My Life; Without You; You Got All the Aces*; and five others. ATLANTIC SD 18151 \$6.98, TP 18151 \$7.98, CS 18151 \$7.98.

Performance: **Bloated**  
Recording: **Outsize**

Aretha’s ego trip takes on all the signs of being terminal. She’s never sounded worse: rough, jagged, and coarse. Her phrasing has become a series of declamations almost unrelated to each other, and only her innate musicianship saves this album from being totally outlandish. There are moments—only moments, alas—in *You Got All the Aces* where vestiges of what she once was shine through, where the poignant vitality, the innocent sexuality, and the melting sincerity that were so uniquely hers surface briefly. The rest of the album is only another depressing example of a thoroughbred who is apparently much more content as some sort of circus horse. *Sic transit Aretha.* . . . P.R.

**TERRY GARTHWAITE: *Terry*.** Terry Garthwaite (vocals and guitar); orchestra. *Slender Thread; You Send Me; Pass On By; What More; Robin’s Nest*; and five others. ARISTA AL 4055 \$6.98, 8301-4055 H \$7.98.

Performance: **You tell me.** . . .  
Recording: **Fast-paced**

It’s extremely hard to tell precisely how good or how bad Terry Garthwaite is as a singer, although I’m sure she could make a living as a

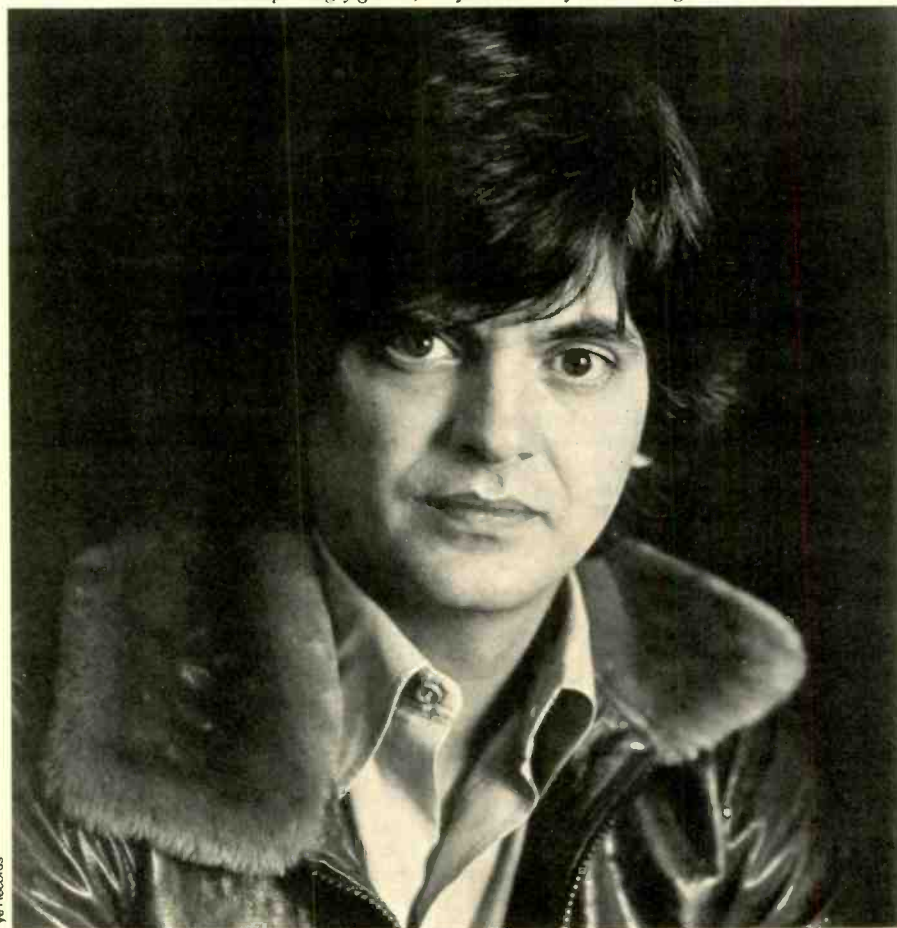
ventriloquist any time she chose to. In *Changing Colors*, for instance, she puts on a vocal display that would do credit to a female Rich Little: accurate impersonations of Streisand, Sarah Vaughan, Billie Holiday, and even, so help me, Blossom Dearie jostle each other through that one performance. By the end of the album, when it seems as though you’ve heard an intonation or a phrase that reminds you of just about everyone else performing publicly today with the possible exception of Nicolai Ghiaurov, it has become a come-out-come-out-wherever-you-are situation. This uncanny ability (talent?) to sound like twenty other people within the space of a few minutes runs rampant and unselfconsciously throughout Terry Garthwaite’s work. The only things to be said for sure are that she plays excellent guitar, writes rather mopey songs, and, when in performance-doubt, opts for a hard, driving beat. Otherwise, your guess is as good as mine as to the worth of what’s going on here. P.R.

**ANDREW GOLD.** Andrew Gold (vocals, guitar, bass, piano, percussion); Mike Botts (drums); Kenny Edwards (bass); other musicians. *That’s Why I Love You; Heartaches in Heartaches; Love Hurts; A Note from You; Resting in Your Arms; I’m a Gambler*; and four others. ASYLUM 7E-1047 \$6.98.

Performance: **Dry**  
Recording: **Very good**

There’s a difference, as *Writer’s Digest* likes to tell beginning writers, between having something to say and having to say some-

PHIL EVERLY  
A surprisingly gentle, easy-to-like way with a song



Pye Records



JIMI HENDRIX:  
a ghostly evocation  
of a brief and  
brilliant career

thing. Andrew Gold, who can sing pretty well and play several instruments, calls attention to that difference with this recording, since his writing in this case amounts to the most mundane handling of routine, time-honored song themes. If there's any passion to communicate any personal truth, I can't find it—his writing reminds me of another *Digest*, namely *Reader's*. He hasn't made it seem at all important that a singular, unique individual may have experienced anything beyond a dull, grinding study of how people write songs. His singing has a similar kind of neutrality about it, but it is straightforward and unassuming, and I think it would sound considerably less mechanical on a song with some natural juices in it. N.C.

**EDDIE HARRIS:** *Bad Luck Is All I Have*. Eddie Harris (trumpet, saxophones, keyboards, string synthesizer, vocals); other musicians. *Get On Up and Dance; Why Must We Part; It Feels So Good*; and three others. ATLANTIC SD 1675 \$6.98, ⑧ TP-1675 \$7.97, ③ CS-1675 \$7.97.

Performance: **Better luck next time**  
Recording: **Excellent**

This is another ridiculous Eddie Harris album full of sound effects that overshadow the few moments of worthwhile music. Harris is out for money, of course, but he is not without talent, and I'm quite sure he could make a comfortable living without resorting to cheap imitations of Sly Stone and Rose Murphy. As did his previous album, this one presents many faces of Eddie Harris—all of them lifeless masks. C.A.

**JIMI HENDRIX:** *Midnight Lightning*. Jimi Hendrix (guitar, vocals); instrumental and vo-

cal accompaniment (overdubbed). *Trash Man; Midnight Lightning; Hear My Train; Gypsy Boy*; and four others. REPRIS MS 2229 \$6.98, ⑧ M8 2229 \$7.98, ③ M5 2229 \$7.98.

Performance: **Ghoulish**  
Recording: **Good**

This is the second in a series of albums devised from doctored tapes concocted from various hit-or-miss Jimi Hendrix sessions done during his brief and brilliant career. It was announced a year ago that a wealth of Hendrix material had been discovered, that it would be lovingly culled and edited, that it would present him with due respect for his talent and memory, and that it would negate the shabby, substandard dregs previously released to cash in on his name.

I was not impressed with the artistic merits of the first album in this series (STEREO REVIEW, July 1975), and the second is not any better. The tracks here are "ghost" sessions—Hendrix's voice and guitar, on a separate tape, were played over and over until posthumous hired-help musicians got up suitable backing. Even though the hired help is skillful and the "ghost" session idea is not new (Buddy Holly's living-room performances on a cheapo tape recorder were padded with backing from the Fireballs, a New Mexico group), it is still false and far from honorable. It calls to mind the grisly story of the undertaker who devised a mechanism so that the corpse could sit up in the coffin and wave to his/her family on the way to the cold, cold ground.

There is nothing in this album to prove or disprove that Hendrix was, with the single exception of Eric Clapton, the primary guitarist of his generation. It proves only that the com-

Reprise Records

mercial necrophilia about Hendrix is of the most relentless and nauseating type, and that the producers of this jerk-puppet series are perhaps of the family Frankenstein. The public should boycott such body-snatching. Hendrix has the right to rest in peace. J.V.

**HOT TUNA:** *Yellow Fever*. Jorma Kaukonen (vocals, guitar); Jack Casady (bass); Bob Steeler (drums). *Baby What You Want Me to Do; Hot Jelly Roll Blues; Sunrise Dance with the Devil; Bar Room Crystal Ball; Surphase Tension*; and three others. GRUNT BFL1-1238 \$6.98, ⑧ BFS1-1238 \$7.98, ③ BFK1-1238 \$7.98, ⑧ BFT1-1238 \$8.98.

Performance: **Treading water**  
Recording: **Fairly good**

Hot Tuna does everything well enough here except for one thing: make this seem like a new album. It sounds like one we've heard several times before; it's the electric Hot Tuna album again. It seems fairly obvious that Jorma Kaukonen has explored just about everything he is capable of exploring in the amplified blues-rock format, wah-wah pedal optional, and hearing him plow the same ground again is starting to pall. He's a capable enough electric guitar player, but the wall-to-wall sound he gets here isn't nearly versatile enough to allow development of his vocals to their full potential. He probably needs to keep in touch with the blues, but he also needs to widen his horizons, break up his act a little bit. A little more attention to his singing—starting with a realization of how good it could be—and a little less emphasis on wailing on through the night might do it. There does still seem to be some enthusiasm captured in the album, but it doesn't do much to nurture the little bit left in me. N.C.

**B. B. KING:** *Lucille Talks Back*. B. B. King (guitar and vocals); orchestra. *Reconsider Baby; Have Faith; Breaking Up Somebody's Home; I Know the Price*; and four others. ABC ABCD-898 \$6.98, ⑧ 8022-898H \$7.98, ③ 5022-898H \$7.98.

Performance: **You've heard better King**  
Recording: **Very good**

The opening track here, *Lucille Talks Back*, is subtitled "Copulation," and that's rather apt, for, by charging \$7 for an album with a total running time of only twenty-seven minutes, ABC is, so to speak, copulating the record buyer. As for the music, well, it's King playing and singing very well against a background of insipid arrangements. *When I'm Wrong*, with some funky, down-home piano played by Ron Levy, comes off best, but, frankly, I'd skip this one. C.A.

**KRIS KRISTOFFERSON:** *Who's to Bless . . . and Who's to Blame*. Kris Kristofferson (vocals); instrumental and vocal accompaniment. *The Year 2000 Minus 25; If It's All the Same to You; Easy. Come On; Stallion; Rocket to Stardom*; and four others. MONUMENT PZ 33379 \$6.98, ⑧ PZA 33379 \$7.98, ③ PZT 33379 \$7.98.

Performance: **Irritating**  
Recording: **Good**

The one you love says your love is returned; a messenger delivers a million tax-free dollars (no, make that Swiss francs); a phone call informs you that your name and entry will be made in huge bold-face type in *Who's Who*. A  
(Continued on page 86)

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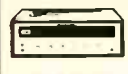


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perfect day? Surely. What can spoil it? A Kristofferson record.

This morose, monotone-voiced, former Rhodes scholar is one of the pop stars most often cited as a "poet." His lyrics are sometimes literate and clever, but his works *in toto* amount to no more than two and a half songs with endless slight variations. Kristofferson is the John Denver of manic depression. I say it's spinach. J.V.

**GORDON LIGHTFOOT:** *Gord's Gold* (see Best of the Month, page 80)

**THE FRANKIE MILLER BAND:** *The Rock*. The Frankie Miller Band (vocals and instrumentals). *A Fool in Love; The Heartbreak; The Rock; I Know Why the Sun Don't Shine; Hard on the Levee; Ain't Got No Money*; and four others. CHRYSALIS CHR 1088 \$6.98.

Performance: **Poor**  
Recording: **Hazy**

The music is okay, being based on the white Memphis style of the late Sixties (the Memphis Horns lend their customary valuable aid), but Frankie Miller is another of those fellows who write trite songs about how individual they are and how The World Is Out to Get Them. The title tune should be enough to keep you away. Filled with righteous-twerp sentiment, it tells of Miller's visit to Alcatraz where "those who can't conform to society" were held. (Alcatraz has not been used as a prison for some years, but the song is dedicated to prisoners everywhere.) He shivers when he looks at the—you guessed it—"cold grey walls." and he is overwhelmed by the thought that it could be *him* in the slams. (Why? Has he stolen a car, murdered somebody, molested a child, robbed a bank?) He scornfully concludes that America is not the land of the free. Well, if anyone wants to form a committee to get bad songwriting and whiny-pup vocals on the books as misdemeanors, I will happily serve (unpaid) as general secretary. J.V.

**STEPHANIE MILLS:** *For the First Time*. Stephanie Mills (vocals); orchestra. *Living on Plastic; Please Let Go; This Empty Place; If You Can Learn How to Cry; All the Way to Paradise*; and five others. MOTOWN M6-859SI \$6.98.

Performance: **Often charming**  
Recording: **Good**

Stephanie Mills is a bright, pretty young thing—fresh voiced, sincere, and oozing with ingenuous vitality. Just why the powers that be at Motown found it necessary to package her as if she were a siren in her late thirties, with the been-around, had-and-been-had sophistication of Hal David and Burt Bacharach, who produced and wrote all the songs in this album, is something of a mystery. To hear her grapple with the sour savanities of *Loneliness Remembers What Happiness Forgets* or the chrome and glass chic of *Living on Plastic* is like watching Tatum O'Neal take a full-dress whack at the role of Mother Goddam (you know—that kid just might). When the material allows it, as in *All the Way to Paradise*, Mills is charming, wistful, sensitive, and touching. I'd be interested in hearing her once they get rid of the musical eyelashes, falsies, and sequin cape. As for *you*, Bacharach and David, tsch, tsch. P.R.

**MICHAEL MURPHY:** *Swans Against the Sun*. Michael Murphy (vocals, guitar); vocal and

instrumental accompaniment. *Swans Against the Sun; Renegade; Rhythm of the Road; Pink Lady; Mansion on the Hill; Dancing in the Meadow*; and five others. EPIC PE 33851 \$6.98, Ⓟ PEA 33851 \$7.98, Ⓞ PET 33851 \$7.98.

Performance: **Exeunt swans, enter blurble-bird**  
Recording: **Clean**

Here's yet another example of fancy sidemen and guest stars trying to prop up a front man who can't cut it. Charlie Daniels, John Denver, James Guercio, Tracy Nelson, Earl Palmer (he was the drummer on the original Little Richard sessions), and others toss their expertise on the table as though they were leaving a tip for an incompetent waiter on whom they had taken pity. The material, with the single exception of Hank Williams' *Mansion on the Hill*, is all by Murphy, and it is all consistently feeble and fey. The album was recorded at Caribou Ranch; Murphy's delivery suggests he feared waking the snoozing caribou. J.V.

**NEKTAR:** *Recycled*. Nektar (vocals and instrumentals). *Recycle; Cybernetic Consumption; Recycle Countdown; Automation Horrorscope; Sao Paolo Sunrise; Costa Del Sol*; and five others. PASSPORT PPS 98011 \$6.98.

Performance: **Printed-circuit rock**  
Recording: **Very good**

Here's just what the world needed: another sound-effects record. It sounds as if it involved a cast of thousands (an international one—it was conceived in Germany, recorded in France, mixed in England) and ran up the kind of electric bill familiar to Yes and Kraftwerk and the New Orleans Superdome. I can't catch enough of the lyrics to find out what, if anything, Nektar wants to recycle, but apparently it's some combination of cosmic observations and Rick Wakeman's keyboard technique. The album flashes on a melody now and then, but most of the time is taken up with electronic vamping and vocals straining with adolescent urgency, which seems to be a standard item with such groups. The best thing about it is the sound, on side one, of something gigantic falling and falling and finally hitting bottom with a great, prolonged, electronically simulated crunch. That's useful; you can turn the whole thing sideways in your mind and imagine a cosmic home run and the subsequent routine explosion of the modern scoreboard . . . and *that*, if you've been keeping up with the world, should get you to thinking about Astroturf. That's the kind of grass I think these boys have been smoking. N.C.

**OLIVIA NEWTON-JOHN:** *Clearly Love*. Olivia Newton-John (vocals); orchestra. *Lovers; He's My Rock; Let It Shine; Clearly Love; Just a Lot of Folk*; and six others. MCA MCA-2148 \$6.98, Ⓟ MCAT-2148 \$7.98, Ⓞ MCAC-2148 \$7.98.

Performance: **Nice**  
Recording: **Nice**

Olivia Newton-John sounds like a nice girl singing nice songs. A lot of nice people seem to enjoy her work, and certainly she makes one of the prettiest pictures ever to flash across your TV screen. As to how well she sings, I really don't think I could tell you, for she seems to come gift-wrapped in such an attractive package of winning ways that I can't



TONY ORLANDO AND DAWN  
Batting one hundred in the Top Forty

help but like her. She wends her way prettily through such things as *Clearly Love* or *He Ain't Heavy . . . He's My Brother* (although the thought *does* occur during this last song that perhaps prettiness and charm aren't exactly what the writers of it had in mind).

Anyway, Olivia is in the tradition of the Janet Gaynors, the June Allysons, and another Olivia—de Havilland—all of them ingenues who radiated a genuine niceness along with a certain blankness. As to who and what they really are—well, it wouldn't be nice to ask that, now would it? P.R.

#### RECORDING OF SPECIAL MERIT

**THE NIGHTHAWKS: *Rock 'n' Roll*.** Mark Wenner (harmonica, vocals); Jan Zukowski (bass, vocals); Pete Ragusa (drums, vocals); Jim Thackery (guitar, vocals). *Red Hot Mama; Can't Get Next to You; Keep Cool; Bring It On Home; Tell the Truth; Stop Break-in' Down; Shake and Finger Pop*; and five others. ALADDIN ALPS-101 \$6.98 (from Aladdin Records, 101 North Columbus Street, Alexandria, Va. 22314).

Performance: **Excellent**  
Recording: **Good**

The Nighthawks are a local band operating out of Washington, D.C., and playing points fairly close by—a dash to Baltimore, a weekend in the Carolinas, a two-night stand in Virginia. What makes the Nighthawks notable is their tightness, confidence, good solo work, and solid ensemble playing. They do casually what such groups as J. Geils can no longer do even when they try hard.

The material in this, their first album (recorded a year ago), is the program you might expect from a knowledgeable bar band equally devoted to the spirit of urban blues and the desire to keep the customers dancing. The performances are always cheerful and bold, as opposed to those of many other bands of the type who are frantic and brash. The selections vary from pop nonsense (even though it was Presley's nonsense) like *Little Sister* to sturdy re-creations of Elmore James in *Red Hot Mama*. In between there are such de-

lights as *Bring It On Home*, written by the prolific Willie Dixon—a performance that defines the "roll" in "rock-and-roll." The high spot of the album is a respectful version of Jimmy Reed's *Bright Lights, Big City* that captures all the bitterness and resignation of the original, with Mark Wenner playing Reed's harmonica choruses almost as well as the Master.

The Nighthawks are proof that the better bands are not always better known. But that, I hope, will change in this case. J.V.

**MIKE OLDFIELD: *Ommadawn*** (see *The Simels Report*, page 56)

**TONY ORLANDO & DAWN: *Skybird*.** Tony Orlando & Dawn (vocals); instrumental accompaniment. *Skybird; Jolie; Come Back Billie Jo; Personality; Kelly Blye; All in the Game*; and four others. ARISTA AL 4059 \$6.98, ⑧ 8301-4059 H \$7.98, ③ 5301-4059 H \$7.98.

Performance: **Excellent**  
Recording: **Very good**

The best of the Top Forty groups and the (yes) artistic production of their records reveal a craftsmanship that anyone from Richard Strauss to Leonard Bernstein might understand. Top Forty music is meant to please and entertain; it is not "great" or "significant," nor was it meant to be. But the best of it is done with consummate skill.

Tony Orlando, a twenty-year veteran of the music business in all its delights and disappointments, began his career as a wavy-haired bleater of teen love songs in the late Fifties and early Sixties. With the release of *Bless You*, he also got the nickname of "The Grey Ghost" because his records were being played on both black and white radio stations. Only he and the Righteous Brothers ever crossed that tricky bridge.

Orlando was doing all right, and he might have done better except that the English Invasion took place and he, like most American solo singers, was nudged into the shadows. So ended one career. Because of his experience

(Continued on page 90)



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*"a meeting between Apeman and Nilsson on an off day for both..."*

**M**ORE than most rock groups, the Kinks have relied for their musical identity and direction on the talents, whims, and fetishes of one individual. Were it not for Ray Davies' singular songwriting and vocals (which is not to slight brother Dave's unique guitar work), the band would sound like a dozen others, competent but unremarkable. It is no surprise, then, that the credits for their new album, "Schoolboys in Disgrace," state that it was "written, arranged and produced by Master Raymond Douglas Davies." It's fair to assume that he was responsible for the choice of subject as well, however, and that, frankly, is a matter for surprise.

Looking through my recently completed (thanks to K-Mart cut-out bins) collection of

gladly return to them "if only I could find a way." Things like that confuse me: have I totally misread the man? How disconcerting.

Of course, to judge by the packaging, which is akin to most of the Kinks' RCA album covers, "Schoolboys" seems intended as some sort of joke, and perhaps I've missed the punch line simply because I'm still more sympathetic to Chuck Berry's view of *Schooldays* as something one longs to escape, not re-experience. Like most recent Kinks material, all this probably makes a great stage vehicle for Ray and the crew, but the problem is that, just as many fine theatrical pieces make for tedious reading, so Davies' musical melodramas make emotionally flat, predictable records. The slapstick clowning and sight

Kinks imitation of Mott the Hoople imitating the Kinks, and all the way back to the Kinks' own beginnings. All this album needed were some credible lyrics, but for the most part they're not there.

In *Jack the Idiot Dunce* that doesn't matter, though. It's a dance number in the grand tradition of all such treasures, a real rocker, and it's hilarious despite its lyrical moralizing. Of course, it may only seem that good because the rest of side one is so dead, especially a seven-minute ditty called *Education* that sounds like a meeting between *Apeman* and *Harry Nilsson* on an off day for them both. Ray is so fond of it he feels compelled to bring it back for a last chorus to end the album—"even aborigines need education" indeed.

## *The Kinks: Music as Disposable as The Komix*

*Left to right, schoolboys Ray Davies,  
Dave Davies, John Gosling,  
John Dalton, and Mick Avory*



RCA Records

the group's early Reprise albums, I was struck by how very many Kinks songs deal with the wish to be somewhere, sometime, someone, or even something else (*King Kong* is a good example). Long before it became fashionable in rock, Ray Davies was a master at creating a nostalgic mood ("I'm a twentieth-century man, but I don't want to be here" and "Take me back to those Black Hills that I have never seen"—you can't get much more nostalgic than that, surely). And, now that it's once again out of vogue (for which mercy God be praised), Ray has returned to this genre, if indeed he ever left it. Even given all that, the last thing in the world I expected now was an album full of yearnings for "those happiest days of your life" as a carefree student. I've always regarded Ray as, among other things, unalterably opposed to conformity, regimentation, intellectual repression, and all such dehumanizing horrors, which are the main things I remember from my school days. Yet, here we find him (well, technically it's Mr. Flash, arch-villain of the "Preservation" saga) claiming he'd

gags the Kinks use to such good advantage in their live shows can't be transferred to vinyl, and the plots and characters seem banal and lifeless when subjected to the careful scrutiny a record demands. "Schoolboys," in particular, seems less a rock opera than a rock comic strip, which isn't altogether a bad idea when you think of it—at least we'd have to give up a few of our more ridiculous pretensions about what this music really is.

The trouble is, though, that this comic strip is not very funny (with the exception of one or two . . . er . . . "frames"), and that too is Ray Davies' responsibility, because the lyrics are unquestionably the album's greatest weakness. Everything else is just fine: the band plays as well as I've ever heard them; Dave's guitar sounds, if anything, more incredible than ever; Ray does his best singing in some time; the horn section has finally been housebroken; and even the recorded sound is less murky than in the past. In line with the nostalgia theme, the songs themselves run the gamut from Wizzard-ish "oldies" through Beach Boys harmonies and sentimentality, a

Oddly enough, the best track here has a thoroughly contemporary, even trendy, arrangement, and it is titled *No More Looking Back*. The entire piece is played and sung to perfection and demonstrates once again with what ease Ray Davies could become one of our best schlock writers, cranking out hit singles at the drop of a hat. Perhaps he should. On the one hand, this is no "Lola," and I suspect it will date very quickly, but then if Elton John is right, and music is or should be "disposable," that would be all to the good, wouldn't it? I devoutly hope not, but I'm beginning to wonder. —Linda J. Frederick

**THE KINKS:** *The Kinks Present Schoolboys in Disgrace*. The Kinks (vocals and instrumentals); J. Beacham (trombone); A. Holmes, N. Newell (saxophones). *Schooldays*; *Jack the Idiot Dunce*; *Education*; *The First Time We Fall in Love*; *I'm in Disgrace*; *Headmaster*; *The Hard Way*; *The Last Assembly*; *No More Looking Back*; *Finale*. RCA LPL1-5102 \$6.98, Ⓟ LPS1-5102 \$7.98, Ⓞ LPK1-5102 \$7.98.



# Winner . . . and still champion!



The AR turntable was introduced in 1961. It created a revolution by virtue of its unprecedented combination of professional standards of performance, simplicity of operation, and low cost. Hirsch-Houck Laboratories reported on it as follows in *Stereo Review* for August,

## 1967

The AR manual-play turntable has been, for some years, an outstanding example of professional-caliber performance at a modest price. . . .

The wow and flutter were extremely low—0.035 and 0.03 per cent, respectively, at 33½ rpm. The unweighted rumble (NAB standard) was -38 db including vertical and lateral components, and -42 db with vertical components cancelled out. **Not only is the rumble figure at the level of the best we have ever measured, but since the basic rumble frequency is about 5 Hz, it is way down in the subsonic, sub-audible region.**

As a frame of reference, these performance figures are slightly better than those we measured on one of the original AR single-speed turntables several years ago. The differences are not significant, which is not surprising in view of the outstanding performance of the AR turntable. **It is obviously difficult to make very large improvements in products that are already outstanding performers.**

The tone arm had a tracking error of less than 0.5 degree per inch for record radii between 2½ and 6 inches. Its feel was excellent, with a comfortably shaped finger lift and no tendency to "get away" from the user, even when operating at a 1-gram stylus force. AR does not include any anti-skating features, holding that the benefits of such devices are not great enough to warrant their inclusion, since a minute increase in tracking force will accomplish the same reduction of distortion as anti-skating compensation.

The speed of the AR XA turntable was exact, and was not affected by line-voltage variation over a far wider range than would ever be encountered in practice (even in countries with poor line-voltage stability).

The AR XA turntable, complete with its oiled walnut base, plastic dust cover, stylus-force and overhang gauges, and attached power and signal cables . . . **whose performance is unsurpassed and is, at best, equaled by only two or three much higher-priced record players.**



How does the present version of the AR turntable (called the XB Model) stack up against the best of current competition? The magazine *Australian Hi-Fi* recently comparison-tested 28 different models for their *Stereo Buyers' Guide*. This is how they described the AR XB turntable in

## 1975

. . . now comes the AR-XB—the only visual difference is the inclusion of a damped cueing device but there are other subtle improvements in other areas which make an already superb performance even better. . . .

First—the rumble figure. We measured an incredible 46dB down reference to 1kHz at a groove velocity of 5 cm/sec RMS (7 cm/sec peak). **This is the best figure we have measured using present test conditions** and means that under just about any listening conditions rumble from the turntable will be completely inaudible. However, there's still recorded rumble, warps and the like. But with warps, the AR is likely to produce less subsonic disturbance than most turntables. . . .

Indeed, it is significant to note that for the first time while measuring rumble, we noticed *no* trace on the meter reading of warp component effects at all.

Wow and flutter came in at 0.06% which is getting very close indeed to that difficult to measure area—close to the residual level of the test record itself. It may be a bit lower than this—but who cares?

As we pointed out, there are no speed verniers—but the AR-XB hardly needs them. At 33½ the turntable was 0.08% fast—a negligible error and much better than the claimed specification.

We found, also, that the slight bias force created by the audio leads from the arm was exactly right for the Stanton cartridge.

This is an excellent turntable. Don't be put off by its spartan appearance or the low price. **In many areas, the AR-XB stacks up as the best turntable we have measured.**

The incredible thing is that AR has achieved this level of performance and sophistication with apparently the simplest of techniques—plus the soundest possible precision engineering. It has been said about the AR-XB that it leaves you wondering if perhaps some other manufacturers have been getting too complicated. We wonder too after testing this unit. **At the price, it's got to be a bargain, yet still a bargain that can be stacked up against the best of them.**

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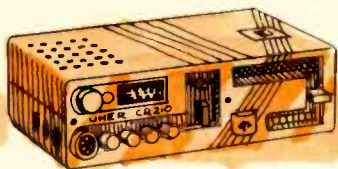
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and contacts in the music business, he became general professional manager of a music publishing company and was content to stay there until the day in 1970 when Hank Medress, formerly of the Tokens, made equally obsolete by the triumphant English, came and asked him to do the vocal on a demonstration record called *Candida*. The tune had been deliberately crafted so that it sounded like an amalgam of the Drifters, a great black Fifties group, and the white whine of the Four Seasons. Orlando, not anxious to compromise his job, said no, but Medress was persistent, and—after clearing it with his boss at the publishing concern—Orlando went in and did the vocal. He wasn't impressed with the tune, but it sold a million-plus copies.

Two other hits followed, the second of them—*Tie a Yellow Ribbon 'Round the Old Oak Tree*—so colossal that Orlando gambled and accepted the urgings of his advisors that he go on the road with two back-up lady singers. Not the least of the pressures to tour again was the existence of several pirate groups claiming to be Dawn who were pulling in dough, disappointing audiences, and killing the value of the group name.

Orlando slogged through various tours to put the pirates out of business. Whatever money left over after what was spent on lawsuits was ploughed back into the undertaking. Eventually, and much to their surprise, the group landed in Hollywood and got a shot at a TV series; they are now in clover.

May they stay there forever. Orlando is a good vocalist. Bing Crosby, whose background in blues and jazz was similar to Orlando's in soul and rock, often sang material that was beneath him, and he had no control over the arrangements framing his essays for what the producers considered to be "hit songs." This locked-in position imposes a discipline that compels a singer to fight the mediocrity to a standstill or surpass it. An unprejudiced listening to Orlando will show

that, whether he fights a battle to a draw or a victory, he graces his material with talent, taste, and—most precious—experience. J.V.

**OZARK MOUNTAIN DAREDEVILS:** *The Car over the Lake Album*. Buddy Brayfield (keyboards, oboe); Steve Cash (harmonica); Randle Chowning (guitars, mandolin, harmonica); John Dillon (guitars, mandolin, harmonica); Mike Granda (bass); Larry Lee (drums, guitar, synthesizer). *Keep on Churnin'*; *If I Only Knew*; *Leatherwood*; *Cobblestone Mountain*; *Mr. Powell*; *Gypsy Forest*; and five others. A&M SP-4549 \$6.98.

Performance: **Terrific**  
Recording: **Clean**

I love the first side of this album, for reasons both abstract and suspect. I'm sure it's blind infatuation. But I find *Keep on Churnin'* to be a funny and good-natured send-up of all those tunes ever written that urge us to be Natural (pronounced "nat'chel" or "nat'chur'l"). Its antecedents go back to vaudeville pastries like *I Wanna Count Sheep Till the Cows Come Home* or cabaret items such as (*Woof, Woof*) *It's the Animal in Me*. Best of all is the closing track on side one, *Gypsy Forest*, with a yahoo, heel-stomping beat to make the floor shake and lyrics that are the best agreement between poetry and pop we are likely to get this or any other year. The tune brings dreams—what better test can it pass?

Side two shows the Daredevils to be an accomplished urban-country-folk band without, alas, the glow that makes the first side gleam. But stars shine only at night. So welcome the night, and this remarkable, one-sided album. J.V.

**VAN DYKE PARKS:** *Clang of the Yankee Reaper* (see Best of the Month, page 81)

**ANN PEEBLES:** *Tellin' It*. Ann Peebles (vocals); orchestra. *It Was Jealousy*; *Beware*;



OZARK MOUNTAIN DAREDEVILS:  
a remarkable one-sided album

A&M Records

*Doctor Love Power; Love Played a Game; and six others. Hi SHL 32091 \$6.98.*

Performance: **Fair**  
Recording: **Good**

Ann Peebles' smoldering good looks unfortunately aren't much of a help here unless you plan to frame the gorgeous cover photo of her and then switch on Tina Turner, say, or Lena Horne. Ms. Peebles sounds forced, strained, and, at times, simply amateurish. Producer-arranger Willie Mitchell, who is responsible for several of the songs, seems to be pushing what is still an embryonic talent well beyond its limits, fraying badly whatever was there in the first place. The result is discomfort for performer and listener alike. **P.R.**

**PINK FLOYD: *Wish You Were Here* (see The Simels Report, page 56)**

**QUICKSILVER MESSENGER SERVICE: *Solid Silver*.** Gary Duncan (vocals, guitar); Dino Valenti (vocals, guitar); John Cipollina (vocals, guitar, steel guitar); David Freiberg (bass, vocals); Greg Elmore (drums); Nicky Hopkins (piano); other musicians. *Gypsy Lights; Heebie Jeebies; Cowboy on the Run; I Heard You Singing; Worryin' Shoes; The Letter;* and four others. CAPITOL ST-11462 \$6.98, 8XT-11462 \$7.98, 4XT-11462 \$7.98.

Performance: **Very good**  
Recording: **Excellent**

Just look. Just *look* at it. Pop music has reformations coming out its ears. There was Dylan getting back into the swing, then Dylan and Baez touring *together* again; the Burrito Brothers have regrouped as best they can; Crosby, Stills, Nash, and Young are keeping in touch; Sandy Denny is back with Fairport Convention; Marty Balin returned to the Jefferson Starship, *née* Airplane; and now Quicksilver has put itself together again. Clearly, the Golden Age is missed. Unfortunately, it's not the kind of thing that "getting back together" can reproduce. One of the fly-by-night operators who stepped in between The Passing and this attempted re-creation—I believe it was David Bowie, although I honestly tried not to keep track of all that—may have hit the nail on the head when he said, "Time can change me/But I can't change time." There are good enough albums coming out of this surge, especially from Fairport and the Starship, but it just isn't the *same*. An era passes because that's what eras do.

This reformation doesn't go badly in strictly technical terms—in fact, in isolated cuts such as *They Don't Know*, it shows a versatility that might be enough to vault—make that ooze—Quicksilver out of this futile era-rebuilding business and into whatever would seem to go with the immediate future, and it has a couple of pleasant cuts that hark back to the old days (in *Cowboy on the Run* and *Flames*) without going out of style. But much of it seems to be a competent rehashing of riffs and runs endemic to an old form that just isn't slick enough for the luxury-mongering that is understandably going on in these harder times. I liked 1969 better too, fellows, but we have to live in whatever time we've got, and something about this one doesn't go with these catch-as-catch-can bandsinger vocals, or the screaming through simple blues-based progressions of the electric guitar, or any of several other elements of the old way. **N.C.**

(Continued overleaf)



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**ROXY MUSIC: Siren.** Roxy Music (vocals and instrumentals). *Love Is the Drug; End of the Line; She Sells; Nightingale; Just Another High*; and four others. ATCO SD 36-127 \$6.98, TP 36-127 \$7.98, © CS 36-127 \$7.98.

Performance: **Fair**  
Recording: **Stuff and nonsense**

Bryan Ferry, the mainspring of this group, must have had a lot of control-room fun with this one. Too bad it isn't contagious. For a while it's mildly amusing, but after several bands (all Ferry compositions) of electronic shouts, murmurs, wheezes, and gasps, and only sporadic bursts of real music, the head aches, the patience wanes, and the mind begins to bend in boredom. Ferry continues to

when I hadn't asked for it or given my permission. If God knew and had time for everybody, then he had time for me, and if not, then not, but if these cards were a signal that God or the minister had plans for me—well, I had plans of my own.

I still do have plans of my own, and they do not include listening to "Another Live" again if I can help it. I am quite sure that even the vengeful Jehovah of the Old Testament would not inflict such painful boredom on mortals as this noisy, sloppy album, which includes the rape of *Something's Coming* from the score of *West Side Story*. Leonard Bernstein should seek justice in heaven for this outrage; it is my prayer that it will be granted, and he will have my congratulations when it is. J.V.

Joe South must have a commanding way about him—he's not only accompanied by his own guitar and various vocal and instrumental assistants but has even managed to ring in the Atlanta Symphony on his recording sessions. He says it takes him anywhere from fifteen minutes up to "several hours" to write one of his songs. Complete texts furnished. P.K.

**SPANKY & OUR GANG: Change.** Spanky & Our Gang (vocals and instrumentals); orchestra. *Standing Room Only; L.A. Freeway; National Stardom; Dues*; and four others. EPIC PE 33580 \$6.98.

Performance: **Astounding!**  
Recording: **Ditto!**

The above evaluation is my homage to *chutzpah*. Jim Charne, in his very good liner notes, predicts that those words will be this magazine's verdict on this new Spanky & Our Gang release. Well, if the album were as witty and as well done as Charne's notes, then—who knows?—perhaps I could squeeze out more than the "Performance: Mild/Recording: Stuffy" that I feel. Spanky McFarlane and Nigel Pickering are the only original returning members of the group that had a great deal of success in the Sixties. The new additions are Jim Moon, Marc McClure, and Bill Plummer. Yeah, it's a nice enough sound—California c-&-w, and Spanky still has that clean, high, floating Mama Cass-ish style in the lead vocals—and the songs are all pleasant enough, but (yawn) somehow I don't care very much. Two bands here, *I Wish We'd All Been Ready* and *National Stardom*, are really dreary, pompous stuff, so over-arranged and stuffily produced (with the oily profundity accented only by the addition of the San Francisco Symphony String Ensemble) that I roused myself from my torpor just long enough to be actively bored. P.R.

**SLY STONE: High on You.** Sly Stone (vocals, keyboards, arrangements); instrumental and vocal accompaniment. *I Get High on You; Crossword Puzzle; That's Lovin' You; Who Do You Love?; Green Eyed Monster Girl*; and five others. EPIC PE 33835 \$6.98.

Performance: **Heartening**  
Recording: **Very good**

After his enormous success of the late Sixties and early Seventies, Sly Stone went into an artistic decline from which he is still trying to recover. Where once his music had been zesty and assertive, it became furtive and morbid. Sly has been rebuilding himself slowly; in this album he comes the closest he has in years to being the great Sly of old.

Nearly all the material here is upbeat, and the arrangements have the same elfin quality that his great ones of the Sixties did. The band sounds happy and loose, though it lacks the pristine punch of his Sixties group. The material is lighthearted, but there are some uncomfortable moments when Sly tries to second-guess himself: *Le Lo Li*, for instance, is a pale rewrite of *Sing a Simple Song*.

Although this is an enjoyable album—and entirely free of the hammy theatrics and racial cant that unfortunately characterizes so much black music today—it is a little sad to realize that Sly is trying to pay off a mortgage on his future with a lien on his past. Still, he's in there pitching, and at this point, that's what counts. J.V.

(Continued on page 94)



SLY STONE:  
the closest yet  
to the great  
Sly of old

be totally brilliant on keyboards and moderately good on vocals, but why does he contort his talent with this kind of elaborate nonsense? A time waster for him and us. P.R.

**TODD RUNDGREN'S UTOPIA: Another Live** [sic]. Todd Rundgren (guitar, vocals); instrumental and vocal accompaniment. *Another Life; The Wheel; The Seven Rays; Intro/Mister Triscuits*; and four others. BEARVILLE BR 6961 \$6.98.

Performance: **Poor**  
Recording: **Muddy**

I have received the following communication from a reader who is distressed about my last review of a Todd Rundgren album. It is a little gem of presumption, so I reproduce it for your delight:

Todd and I are really sorry about your loss (or lack) of perception. We love you, and hope you can join us when you're feeling better.

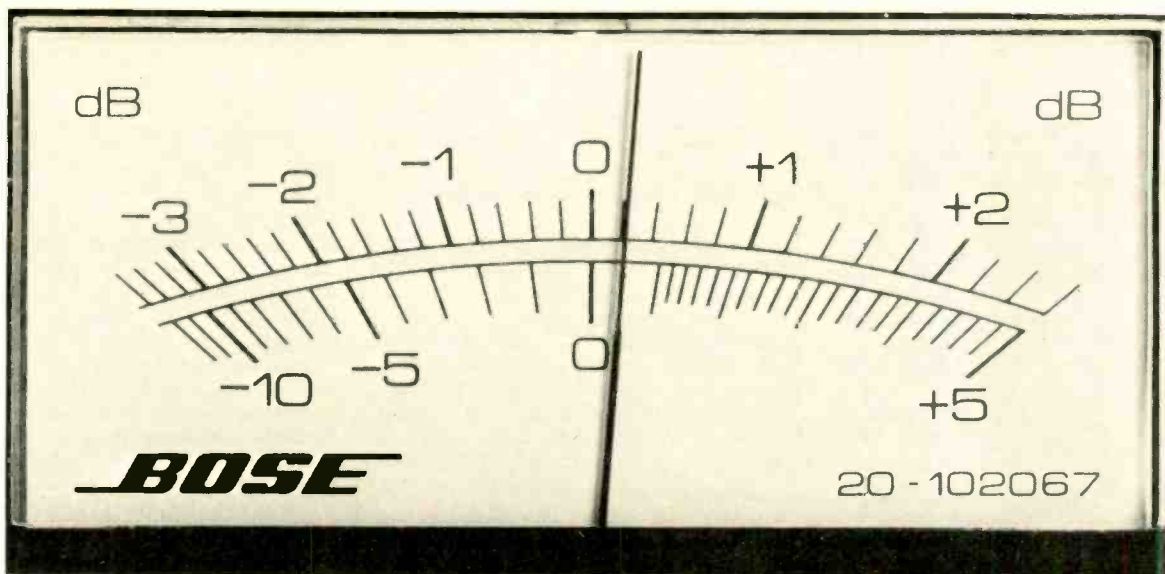
Somehow it reminds me of my boyhood and the cards I used to receive on my birthday from the church to which my parents subscribed. These cards, in raised black lettering, read: "Congratulations. Your name has been remembered in prayers today." Upon receiving these episcopal greetings, I was perplexed and suspicious. They had done me a favor

**JOE SOUTH: Midnight Rainbows.** Joe South (vocals); instrumental accompaniment. *Medley—Midnight Rainbows/It Got Away; You Can Make It If You Try; God Forgave Me; My Fondest Memories; For Your Precious Love*; and five others. ISLAND ILPS 9328 \$6.98.

Performance: **Aggressive droolery**  
Recording: **Very good**

Joe South was basking in the fame he won with his song hits (*Games People Play, I Never Promised You a Rose Garden*—he's been fond of basing his ballads on book titles) when his brother Tommy died and he went to the South Sea Islands to get away from it all. Three years later, back in Georgia with a Polynesian wife, Mr. South is open for business once more. His latest album evidently reflects the wisdom gleaned from his long holiday. In *Home and Homesick*, he comes to the conclusion that "It don't much matter where you are but it matters where you're at." In *Midnight Rainbows*, he wonders why "a good man goes/Chasin' midnight rainbows." And in *Stranger in a Strange Land* (a book title that has inspired another songwriter), the question is "Why can't we learn to love each other?" All this homely philosophy is dispensed in an overbearing voice with a heavy Georgia accent that peddles brotherly love in a style hard-sell enough to make a strong man cringe.

Epic Records



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**STREETWALKERS.** Streetwalkers (vocals and instrumentals). *Downtown Flyers; Toenail Draggin'; Raingame; Miller; Crawfish;* and four others. MERCURY SRM-1-1060 \$6.98.

Performance: **Poor**  
Recording: **Okay**

I had occasion to interview a record company president who was bringing the two biggest names on his label (a country star and a black star) to a TV talk-music show. I asked the waxery prez if he thought there were any musical similarities between his two titans.

"Indeed. They prove once again that you cannot sing away from your ruts."

Flabbergasted but deferential, I asked, "Your 'ruts'?"

"Right. Ruts."

"Ruts. . . ."

The executive became impatient. "What I said—ruts! Like from trees that grow!"

"Oh, roots!"

"Precise-est! To me, these guys are apple blossoms. They have blummed from their ruts. Maybe I confused you with the poetic license."

End of story, but with a fut-note: Streetwalkers just might play their way out of their ruts if they tried. They don't. J.V.

**TOM WAITS: *Nighthawks at the Diner.*** Tom Waits (vocals, piano, guitar); Mike Melvoin (piano); Pete Christlieb (tenor saxophone); Jim Hughart (bass); Bill Goodwin (drums). *Emotional Weather Report; On a Foggy*

*Night; Eggs and Sausage; Better Off Without a Wife; Nighthawk Postcards;* and six others. ASYLUM 7E-2008 two discs \$7.98.

Performance: **Good**  
Recording: **Good**

I seem to recall a Tom Waits album in which he actually sang some things we could agree were songs, but here he reconstructs the beat poet, growling on and on while a soft-core jazz ensemble (he, on piano and occasionally on guitar, is part of it) vamps in the background. I'm not old enough, honestly I'm not, to remember the beat poets very well, but my impression was that they took themselves much more seriously. Waits, I suspect, has been influenced by such characters as Lord Buckley; his recitations have the flavor of what in the Sixties were called stoned raps. Occasionally, just to throw you off, he'll sing a lick or two, but mostly he rambles on in a metered, somewhat stylized monologue on the absurdities of urban nightlife. This was recorded before a live audience somewhere in the Los Angeles area, and Waits does a good job of localizing the absurdities. The result on record, though, is more impressive than it is useful—a good rendering of the transient and fragmentary impressions of such stuff as neon swizzle sticks and double-knit strangers in a brand-name environment, a good feel for how gaudy and violent and lonesome the city is—and it works the way a novelty record does. You simply don't need to hear it very many times. I recommend the real thing in a real night club, where the atmosphere can be properly sleazy. Memories are better than permanent records in some cases, and this is one of those cases. N.C.

**DIONNE WARWICK: *Track of the Cat.*** Dionne Warwick (vocals); orchestra. *His House and Me; Ronnie Lee; This Is Love; World of My Dreams;* and four others. WARNER BROS. BS 2893 \$6.98, M8 2893 \$7.98, M5 2893 \$7.98.

Performance: **Nostalgic**  
Recording: **Very good**

Dionne Warwick's newest album is, by any current standard, very tepid stuff. She's still sidling assuredly through her material, relying on her vocal swagger, her distinctive, quirky phrasing, and her glittering attack to divert attention from the fact that the songs (most of them by her producer-arranger-conductor Thom Bell) are not particularly good and that her style has been deep-frozen since sometime in the late Sixties. *Once You Hit the Road* is the best track here—beautifully, if somewhat coldly, produced, as are all of the cuts—and, while she can still create a sensuous, glamorous atmosphere, it is an atmosphere laden with nostalgia. I still enjoy listening to her in a reminiscent way, but lately I find myself automatically thinking of her in the past tense: "Oh yeah, wasn't she great?" Rather sad for someone as talented as she once seemed to be. P.R.

**BILL WITHERS: *Making Music.*** Bill Withers (vocals); orchestra. *She's Lonely; Family Table; I Love You Dawn; Sometimes a Song; I Wish You Well;* and five others. COLUMBIA PC 33704 \$6.98, PCA 33704 \$7.98, PCT 33704 \$7.98.

Performance: **La vie en rose**  
Recording: **Good**

Bill Withers presents a happy, unpretentious

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PETER YARROW AND WIFE MARY BETH  
An earnest, engaging album

collection of his own songs here, performed with the warmth and ease that have become Withers' trademarks. Even *She's Lonely*, a ballad in the *Eleanor Rigby* genre, is filled with an affectionate sympathy that lifts it out of soap opera. Life through the Withers viewing lens certainly has a rosy glow about it. If for nothing else but that—and that is quite a bit these days—I recommend it. P.R.

**PETER YARROW:** *Love Songs*. Peter Yarrow (vocals and guitar); orchestra. *Such Is Love*; *Love Among People*; *Blue Sky Promise*; *Ms. Rheingold*; and five others. WARNER BROS. BS 2891 \$6.98, Ⓜ M8 2891 \$7.98, Ⓢ M5 2891 \$7.98.

Performance: **Good**  
Recording: **Excellent**

Here's another earnest, mild-mannered, and most of the time, very engaging album by Peter Yarrow. This time out he's using background voices, the most pleasing of which belongs to Mary McGregor, and the effect, while not as mesmerizing as the olden, golden days with Paul and Mary, is a vast improvement over his last few solo albums. He's at his easy best drifting along gently with songs such as *How Can You Mend a Broken Heart* and *Blue Sky Promise*, where his naive lyric style and unaffected voice create a comfortable, lulling mood. Humor, it becomes obvious, is definitely not one of his strong points. *Ms. Rheingold*, a supposedly snappy little number in the manner of *The Most Beautiful Girl in the World* ("Isn't Garbo/Isn't Dietrich . . .") falls flatter than dinner-party conversation at Ms. Haversham's. The production work, by Barry Beckett and Yarrow, is silken and unobtrusive. It's not an exciting album, but it's easily the best Yarrow has done since the split and an awfully pleasant one most of the time. P.R.

#### RECORDING OF SPECIAL MERIT

**NEIL YOUNG:** *Zuma*. Neil Young (vocals, guitar); Crazy Horse (instrumentals, backing vocals); Steve Stills (bass); other musicians. *Don't Cry No Tears*; *Danger Bird*; *Pardon My Heart*; *Lookin' for a Love*; *Barstool Blues*;  
(Continued on page 98)

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“...one would have thought she had already scaled all the peaks...”



A&M Records

## Peggy Lee: Ready to Begin Again

WHEN my teeth are at rest in a glass by my bed/And my hair lies somewhere in a drawer/Then the world doesn't seem like a very nice place/Not a very nice place anymore." It's Peggy Lee singing those singularly unbeguiling words, in her 3 a.m. pitch-dark-side-of-the-morning voice, from *Ready to Begin Again*, the opening song on her new album "Mirrors." By the song's end, newly bathed, hair and teeth retrieved and in place ("I'm ready to begin again/Looking fresh and bright I trust/Ready to begin again/As everybody—must"), one of the great survivors has given you a lesson in the fine art of survival. It's strong, mordant stuff, and, needless to say, it is superbly interpreted by Lee.

The consistent level of quality this finest of all our popular singers has maintained over two and a half decades in the entertainment firmament is unique, I think, in the annals of American music, for Peggy Lee does not merely survive—she triumphs. "Mirrors" (how does that title grab you, by the way, all you counters of grey hairs and smoothers of wrinkles?), it must be confessed, is not—for me, at least—the ideal Peggy Lee album. It is at times pretentious, gimmicky, and rather overdecorated even for her, but she nonetheless finds room in between the furbelows to demonstrate, incredibly, that she continues to grow as an interpretive artist—one would have thought she had already scaled all the peaks, that there was nothing left to conquer.

"Mirrors" is a rather special album. Its ten songs were written by Jerry Lieber and Mike Stoller (they did her classic *Is That All There Is?*, as you may recall), lavishly and idiosyn-

cratically arranged and conducted by Johnny Mandel, and engineered (mostly by Hank Cicalo) to give Lee the kind of precision that is the audio equivalent of the justly famed lighting cues that so ably conjure up a whole spectrum of moods in her live performances. This is the same Lieber and Stoller, by the way, who gave us *Jailhouse Rock*, *Poison Ivy*, and other random goodies of early and middle-period rock. The difference between those little efforts and what they have done here for Lee is the difference between button mushrooms and truffles. For instance, there is a little six-line gem titled *I Remember* ("I remember/When you loved me/I lie on my bed/Hands under my head/And remember when you loved me"), pensively and coolly performed by Lee, that simply leaves no doubt that they are all grown up now.

*Ready to Begin Again*, admirable as it is, is perhaps a bit too rough on the sensibilities of those who might best identify with it ever to gain wide popularity. *The Case of M. J.* ("How old were you when your father went away?"), another strong idea that ticks remorselessly away like a small jeweled timebomb, may be a better candidate. The ambience throughout is determinedly theatrical and not of our own—or, indeed, of any real-time. It is of the theater and the film image of the Weimar Republic, a glittering depravity set to the seductive undercurrent of a Teutonic jazz waltz. Even when the songs lapse into gaudy, overblown Weill-Brecht pastiche (as in *Professor Hauptmann's Performing Dogs*, *A Little White Ship*, or, most spectacularly, *Tango*), the effect, heightened by Mandel's

Peter Kreuder-like arrangements, is one of dreamy exoticism. Their very unreality paradoxically justifies Lee's only performing fault: a habit of perfection that sometimes threatens to seal us all—singer, song, and audience—in a drop of polyvinyl amber.

Three other songs, the sinuous and sexy *Some Cats Know*, the Cole Porterish *Say It* ("You are not my Galahad/Nor I your Guinevere/I am not in love with you/Nor you with me, my dear"), and the ragtimey *I've Got Them Feelin' Too Good Today Blues* are, on the other hand, superbly crafted, just-right pieces of special material, ravishingly performed by Lee in that inimitably drawly, mush-mouthed, pelvis-swinging style that reminds us she's still one of the best jazz singers around.

LOVE letters tend to be more effective when kept brief, so I'll only add that it is a matter of great personal comfort to me to know that Peggy Lee is always *Ready to Begin Again*, as experimental albums such as this one so happily prove. She is a national treasure, an occasion for Bicentennial pride and unceasing celebration. —Peter Reilly

PEGGY LEE: *Mirrors*. Peggy Lee (vocals); orchestra, Johnny Mandel arr. and cond. *Ready to Begin Again*; *Some Cats Know*; *I've Got Them Feelin' Too Good Today Blues*; *A Little White Ship*; *Tango*; *Professor Hauptmann's Performing Dogs*; *The Case of M. J.*; *I Remember*; *Say It*; *Longings for a Simpler Time*. A&M SP-4547 \$6.98. Ⓢ 4547 \$7.98, Ⓞ 4547 \$7.98.



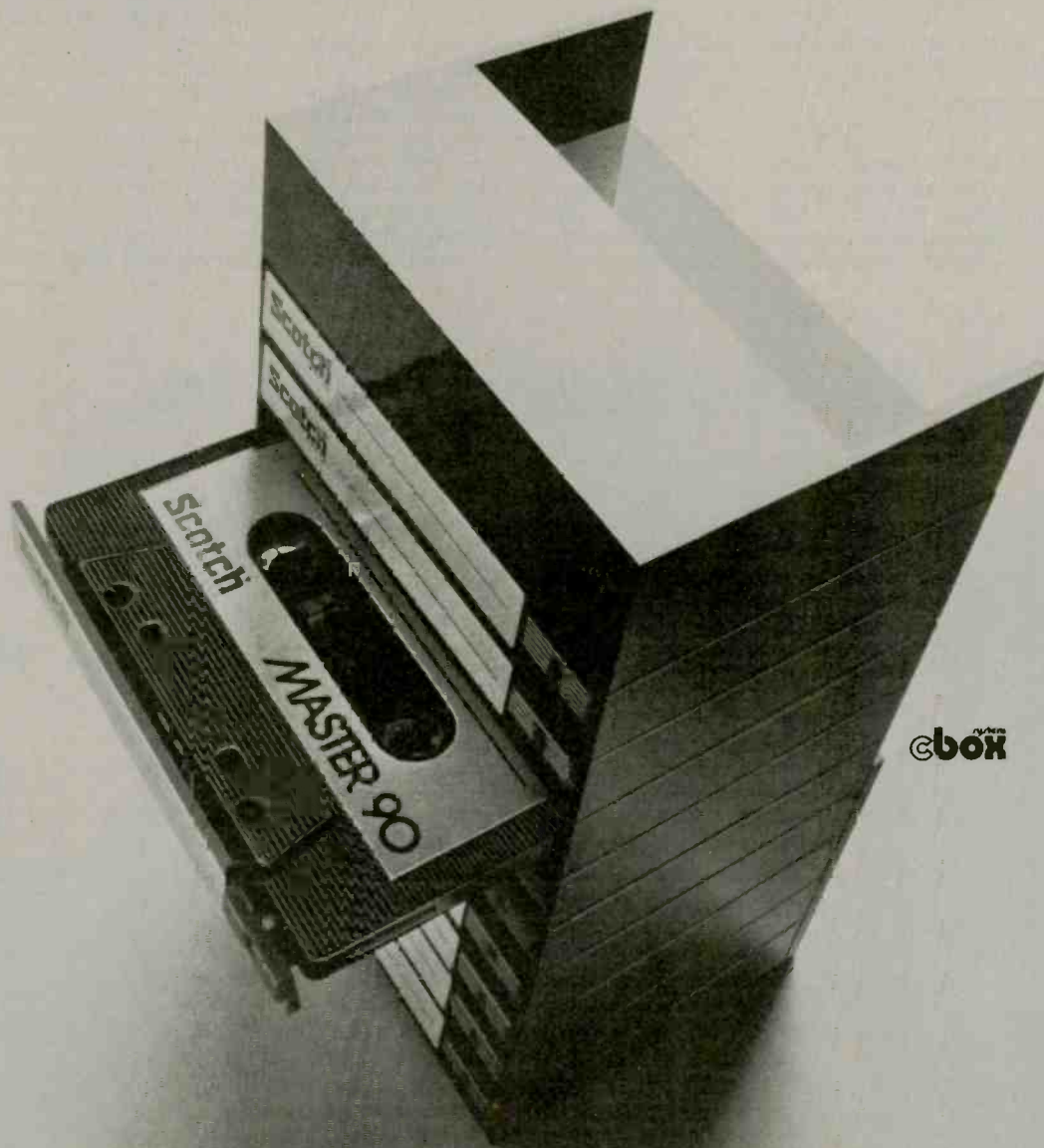
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NEIL YOUNG AND CRAZY HORSE  
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Reprise Records

best production of any since "Harvest," and it is more typical of Young's self-image and viewpoint than the easygoing "Harvest" was. I still like the other Crazy Horse album better, but this does have something that has been missing lately. It has flaws, too, but they are pretty well confined to *Stupid Girl*, which says, less elegantly, what kicking the coffee table would say, and *Cortez the Killer*, where the social moralizing is hackneyed, the personal connection is confusing, and the instrumental parts are long and tedious. The rest of it is rock, technically, basic and unadorned rock—but it has Young seeming off to the side of rock, or of any technical category, where there's just you and him and his fear and anxiety and hope and vulnerability. *Don't Cry No Tears* is about as positive as he ever becomes. Crosby, Stills, and Nash make a brief and gentle appearance in *Through My Sails*, which is a bonus but seems tacked on. Generally, Young makes a good, honest effort to connect with his listener one-to-one, and that's the impression that lasts. N.C.

and four others. REPRIS MS 2242 \$6.98, © M8 2242 \$7.98, © M5 2242 \$7.98.

Performance: **Straightforward**  
Recording: **Very good**

Neil Young's most devoted fans are young women. I have asked several (well, two or three) young women about this, and they say they don't want to sound unliberated, but Neil is so vulnerable, so helpless. He seems to

make each one feel he needs her, and perhaps he does; something is always happening to him. One of the later things was the removal of "an object" from his vocal cords, after he'd been reduced to answering the telephone by whistling. He is not a good singer or a very fantastic guitarist but a stylist, and this new album seems to represent more accurately the kind of style he has—in addition to being just plain better—than his last several. It has the

#### RECORDING OF SPECIAL MERIT

**ZAPPA-BEEFHEART-MOTHERS:** *Bongo Fury*. Frank Zappa (guitar, vocals); Captain Beefheart (vocals, harmonica); George Duke (keyboards, vocals); Napoleon Murphy Brock (saxophone, vocals); Bruce Fowler (trombone); Tom Fowler (bass); Denny Waller (slide guitar, vocals); Terry Bozzio (drums); Chester Thompson (drums). *Debra Kadabra; Carolina Hard-Core Ecstasy; Sam with the Showing Scalp Flat Top; Pooster's Froth Wyoming Plans Ahead; 200 Years Old;*

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Cucamonga; Advance Romance; Man with the Woman Head; Muffin Man. DISCREET DS 2234 \$6.98.

Performance: **Outstanding**  
Recording: **Excellent**

Frank Zappa's career is based on the old rule of successful preachers and comedians: expose the idiocies and corruptions of society without ever telling the audience, who agrees with you, that you are talking about *them*. Zappa appears to be convinced, with some justification, that the human race is a bunch of damnfools, the proof being that he has been suckering them all these years by letting them think that he is referring to some other race.

Musically, Zappa is an accomplished concocter of well-planned chaos, of which this album is a perfect example—perhaps the zenith of his anti-talents. The arrangements are carefully disruptive and meticulously confusing. It may even be art. If it is, then great credit must be given to Zappa's old friend and sometime enemy, Captain Beefheart. The wondrous Captain, of whom I am a devoted fan, has seldom been more overpowering. His vocals and recitations of his wayward poems propel the album through a display of anarchistic fireworks. The Captain's definition (if he has one) of anarchy is, I suspect, quite different from Zappa's. The Captain would probably see it as the ultimate color interplay of oils on the waters of freedom; Zappa would have it as a tidal wave that drowns all those damnfools. The difference between Zappa and Beefheart is clearly heard in the album. "Bongo Fury" is some kind of musical event.

J. V.

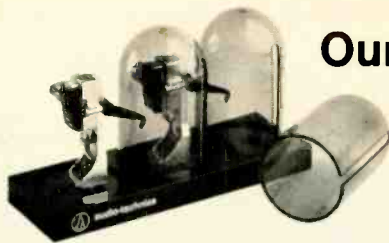
#### COLLECTIONS

**THE COMPLETE GLENN MILLER, VOLUME 1 (1938-1939).** Marion Hutton, Ray Eberle, and others (vocals); Glenn Miller and His Orchestra. *My Reverie; By the Waters of Minnetonka; King Porter Stomp; Shuteye; How I'd Like to Be with You in Bermuda; Cuckoo in the Clock; Romance Runs in the Family;* and twenty-four others. RCA BLUEBIRD AXM2-5512 two discs \$7.98.

Performance: **Suave and slick**  
Recording: **Clean and clear**

I am getting a little confused about what they mean by the "complete" Glenn Miller, and I am afraid to ask. The thing is, some time ago RCA released, complete with reproductions of old black-seal Victor orthophonic labels, a two-record set of "all previously unreleased performances" by Glenn Miller and His Orchestra, dating from May 1939 to September 1942, when the bandleader went off to join the U.S. Army in the midst of World War II, a war in which he died. Now the company offers us the first of a series of two-record sets, complete with reproductions of old Bluebird labels, covering 1938 and 1939, with almost no duplications except for *Moonlight Serenade* and *Sunrise Serenade*, Miller's most celebrated theme songs. I guess it doesn't matter much, and every number will turn up one way or another by the time the whole Bluebird series comes out.

In Bluebird's Volume One, Mort Goode's notes are jam-packed with backstage lore as they meticulously trace the bandleader's rise to fame and riches. Meanwhile, the product is, of course, essentially the same. Glenn Miller took a sound of jazz and beveled it to an unheard-of smoothness; when his drummer



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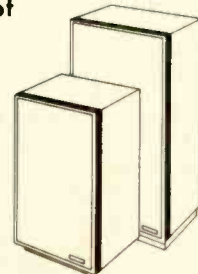
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*"She casts a midnight magic over everything"*



## *Cabaret: Greta Keller*

**T**HERE's a little of Dietrich in her, a little of Hildegard, a lot of Lotte Lenya. Yet Greta Keller stands all alone, her smoky voice transforming ordinary love songs into exalting experiences. Though she has been compared to caviar, she is really incomparable. She casts a midnight magic over everything she undertakes. She is ageless, and her appeal seems to be universal, captivating audiences in every country, on every continent. At the end of her recital, she speaks of herself as being "blessed with lovely friends all over the world." Coming from another singer, that might sound like boasting; from Greta, it is only a simple statement of truth. If there were no such thing as a night club, it probably would be necessary to construct one in order to house her remarkable personality. A cabaret is her natural habitat. But she has also sung in concert halls, and in her latest album, Stanyan's "Greta Keller in Concert," she makes the New York concert hall sound as intimate as a bistro. For once, the applause of admirers does not seem excessive; it is part of the rite of hearing her.

A song is fortunate to have itself chosen for a Greta Keller program. She is introduced by Rod McKuen (it's his record company, after all), and then immediately makes his woolly-worded *I'll Catch the Sun* sound like more than it is. Listen to what she does with them when she dusts off such ballads as *Easy Come, Easy Go*, *These Foolish Things*, and

*Thanks for the Memory*. The tired old lyrics and tunes suddenly sound remarkable, fresh, touching in ways they never were before. She takes a medley of Cole Porter songs, or songs from *Cabaret* (she was in the movie, and it seemed so natural for her to appear in that Berlin setting you almost took it for granted that she was there), or a forgotten Noël Coward song like *Never Again* and moves you to tears with the way she treats it. Even a Stephen Sondheim song sounds like real music when she undertakes it; *Delancey Street* glitters like Fifth Avenue at Christmas when she sings *Manhattan*. And then there are the little surprises—the sleepy charm of *Lazy Afternoon* from *The Golden Apple*, ballads in German by Walter Jurmann, a song called *The Other Woman* with its wry, bitter little ending. But enough. The record itself is there waiting to be savored, and it is one of her best. Which means it is a very good record indeed.

—Paul Kresh

**GRETA KELLER: *In Concert***. Greta Keller (vocals); Walter Grimm (piano). Spoken introduction by Rod McKuen. *I'll Catch the Sun*; *Manhattan*; *Easy Come, Easy Go*; *I Think of You*; *Lazy Afternoon*; *Losing My Mind*; *These Foolish Things*; *Never Again*; *Married*; *Maybe This Time*; *The Other Woman*; *Walter Jurmann Medley*; *Cole Porter Medley*; *The Party's Over Now*; *Thanks for the Memory*. STANYAN 10041 \$6.98.

Cody Sandifer "wanted to swing too much," he was fired. Miller knew exactly what he wanted and got it every time around—music made by expert players; bland band music coiffed up like a mannikin; vocalists like Ray Eberle and Marion Hutton who stood up, delivered a poker-faced, unstrained run-through of a lyric, and got out of the way; trumpets that never pierced; treatments of tunes by Debussy (*My Reverie*) and Ravel (*The Lamp Is Low*) that removed all the little kinks and just let the melody drowse away like a musical tranquilizer. Miller's version of *Stairway to the Stars*, for instance, is carefully carpeted over in blue velvet. This music still conjures up young couples of the Forties dreamily dancing away the night at Glen Island Casino, everyone groomed to a fare-thee-well, nobody raising a voice or getting drunk in the ugly way of a John O'Hara character. It all sounds so irretrievably agreeable now—you'd never suspect how violent the world was growing in the days when Glenn Miller's orchestra was soothing us to sleep to the sweet sound of *Moonlight Serenade*.

P.K.



**THE CHIEFTAINS: 5**. Paddy Moloney (uilleann pipes, tin whistle); Sean Potts (tin whistle); Michael Tubridy (flute, concertina, tin whistle); Sean Keane (fiddle); Martin Fay (fiddle); Derek Bell (harps, oboe, timpani); Peadar Mercier (bodhran, bones); Ronnie McShane (bones). *The Timpán Reel*; *Tabhair dom do Lámh*; *Three Kerry Polkas*; *Ceol Bhriotánach*; *The Chieftains Knock at the Door*; and five others. ISLAND ILPS 9334 \$6.98.

Performance: **The pipes, the pipes . . .**  
Recording: **Very good**

The Chieftains play Irish traditional music, and this, I gather, is the first real international push behind one of their recordings. I'm afraid I'd rather have my Irish music watered down by the Clancy Brothers; I can't seem to get past my mistrust of the fuss such recordings (or the Irish in general) make over nationalism, and if I could I still wouldn't like the sound of bagpipes and tin whistles all that much. My ears are too foreign, perhaps; I'd like to thank the Irish for giving us fiddling, if they really did, but they can keep the jigs. So I can't tell you much about it—although I do know some of the instruments are well played—and it may be that I'm simply reactionary in finding these renditions a bit formal, stiff, academic, a textbookish way of saving the old music. I've gradually adopted the idea that the folk process is a fluid, changing thing, and adulterating the old music is more natural than "preserving" it—but you really ought to ask an Irishman about this, or someone who isn't bothered by the narcissism in the nationalistic preoccupation, wherever it is found.

N.C.

# JAZZ



**STANLEY CLARKE:** *Journey to Love*. Stanley Clarke (vocals, organ, gong, bass, piccolo bass, synthesizer, hand bells, tubular bells); instrumental accompaniment. *Silly Putty*; *Journey to Love: Hello Jeff*; *Song to John (Parts I and II)*; *Concerto for Jazz/Rock Orchestra*. NEMPEROR NE 433 \$6.98, Ⓢ TP 433 \$7.98, © CS 433 \$7.98.

Performance: **Stupefying**  
Recording: **Clean and clear**

There come to the experienced reviewer certain moments of dread when he reads the liner credits before playing an album. This is especially true of jazz records, where the most mediocre ideas are often stretched out to the most indulgent lengths. Permit me to share my apprehension about this one with you: I see something ominously titled *Concerto for Jazz/Rock Orchestra*, running nearly fifteen minutes, plus a tribute (the hundredth, surely) to the late John Coltrane that runs nearly ten. There is also a salutation that reads: "Thanks to L. Ron Hubbard for his never-ending inspiration." Mr. Hubbard is, of course, the founder of Scientology. A spark of hope is lit when I see Jeff Beck listed as a sideman, but the spark is extinguished when I also see the name of Mahavishnu John McLaughlin. Well, so much for the album cover. I've made out my will, and I am now going to play the record.

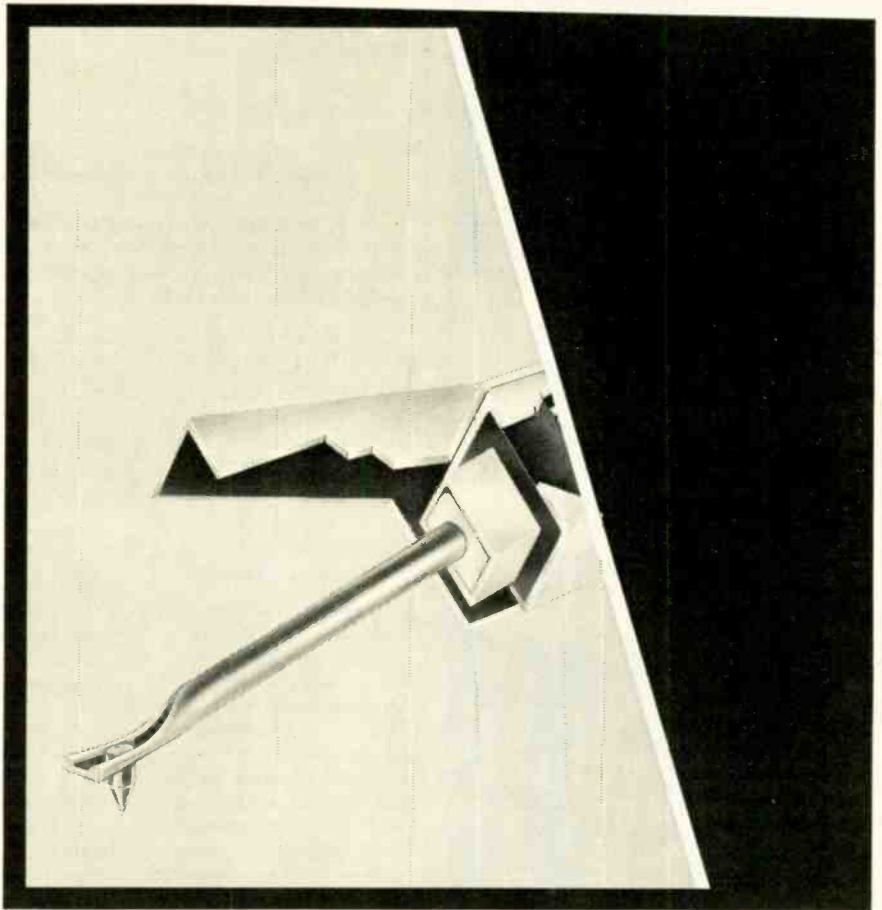
Morning! The album is over, and I am alive! (Must remember to fill out application for reviewer's veteran's benefits.) J. V.

**BILLY COBHAM:** *A Funky Thide of Sings*. Billy Cobham (drums, synthesizers); instrumental accompaniment. *Panhandler*; *Sorcery*; *A Funky Thide of Sings*; *Thinking of You*; and four others. ATLANTIC SD 18149 \$6.98, Ⓢ TP 18149 \$7.98, © CS 18149 \$7.98.

Performance: **Wayward**  
Recording: **Flashy**

Billy Cobham is a forceful and creative jazz drummer. He was a member of Dreams, a 1970 group that could have been the best jazz/rock organization ever, but the band ran into difficulties and disappeared. Some of the other personnel from Dreams are on this album, notably the Brecker brothers, Randy (trumpet) and Michael (saxophone). Although talent is present, what spoils the proceedings is the same thing that spoiled Dreams—the talent can't decide where to go and how to do it. To quote the old line: "The hero jumped on his horse and galloped off furiously in all directions." Everybody plays like mad, and all sorts of special effects are thrown in, but the end result is wasted energy. Pity. J. V.

**URSZULA DUDZIAK:** *Urszula*. Urszula Dudziak (vocals, percussion, synthesizer); instrumental accompaniment. *Papaya*; *Sno King*;



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*Mosquito; Mosquito Dream; Mosquito Bite;* and five others. ARISTA AL 4065 \$6.98, (8) 8301-4065 H \$7.98.

Performance: **A scream**  
Recording: **Very good**

Michal Urbaniak is on this album. That's only fair; Urszula Dudziak is usually howling on his. Besides, they are husband and wife, and if you have heard any of their Columbia albums, you know what this one is like. The sound was okay the first time around, but it has become a terrible bore. C.A.

#### RECORDING OF SPECIAL MERIT

**PAUL HORN: *Paul Horn + Nexus*.** Paul Horn (alto saxophone, clarinet, piccolo, flutes); Nexus (percussion). *Somba; Crystals; Friendship; African Funeral Song; Mbira;* and five others. EPIC KE 33561 \$5.98, (8) EA 33561 \$7.98.

Performance: **Eloquent**  
Recording: **Excellent**

Paul Horn, a veteran of the Sauter-Finegan Orchestra and the Chico Hamilton Quintet, revealed his penchant for the unusual when he caressed our ears with his flute solos echoing from inside the Taj Mahal a few albums back. Now he has surrounded himself with six percussionists—collectively called Nexus—and produced an album that is, again, both unusual and excellent. The ten selections run from two to six minutes each, and Horn's lyrical flute and reed improvisations complement a skillful, diversified rhythmic background provided by Nexus, which draws its inspiration from the music of Africa and India. Using a variety of instruments gathered from around the world, the Toronto-based percussion group has a great deal to do with the success of this album, but, although Horn plus Nexus equals a most palatable listening experience, I doubt that further collaborations would be fruitful. This album says it all, I think, and it says it eloquently. C.A.

**KEITH JARRETT: *Back Hand*.** Keith Jarrett (piano, wood flute, osi drum); Dewey Redman (tenor saxophone, musette, maracas); Charlie Haden (bass); Paul Motian, Guilherme Franco (percussion). *Inflight; Kuum; Vapallia; Backhand.* IMPULSE ASH-9305 \$6.98, (8) 8027-9305 H \$7.98.

Performance: **Mostly excellent**  
Recording: **Dull**

#### RECORDING OF SPECIAL MERIT

**KEITH JARRETT: *The Köln Concert*.** Keith Jarrett (piano). *Köln, January 24, 1975 (Parts I and II).* ECM 1064/65 two discs \$9.98.

Performance: **Virtuosity revisited**  
Recording: **Excellent**

These albums represent two diverse sides of Keith Jarrett, the young pianist whose solo albums on ECM have stirred some critics into affording him Messianic status. That may be a case of a bit too much too soon, but Jarrett is unquestionably an artist of formidable talent, and his recent solo performances have revealed not only an admirable technique but also a very fertile musical mind, unhampered by tradition yet ever mindful of it.

"The Köln Concert" set, featuring more of what we heard in the highly acclaimed "Solo Concerts Bremen/Lausanne" three-record album (ECM 3-1035/37), is performed with

equal intensity and brilliance and recorded with characteristic ECM crispness—what a sound Manfred Eicher (the producer) gets out of a piano! It's a great set, which is something I regret not being able to say about the Impulse "Back Hand" album, although that *does* have its laudable moments. Teaming up with his old gang, Dewey Redman, Charlie Haden, and Paul Motian, Jarrett first stomps through a funky introduction to *Inflight*, then takes off beautifully with more than a little help from his friends. By contrast, *Kuum*, which ends side one, is a tedious, eleven-and-a-half-minute excursion through a percussion-filled jungle in which Jarrett plays the wood flute in a most unimpressive manner. Side two is uniformly good, with the lyrical Jarrett piano highlighting *Valpalla* and Jarrett the cooker sparkling on *Backhand* as Redman's tenor soars and Haden's bass walks. As is Impulse's wont of late, the album is mastered for "compatible" quadrasonic play, employing the QS matrix system, but, as usual, there is no audible four-way separation, and the sound is acoustic to ECM's electric—if you know what I mean. C.A.

**CHUCK MANGIONE: *Bellavia*.** Chuck Mangione (flugelhorn, keyboards); instrumental accompaniment. *Bellavia; Dance of the Wind-up Toy; Torreano; Come Take a Ride with Me; Listen to the Wind; Carousel.* A&M SP-4557 \$6.98, (8) 4557 \$7.98, (C) 4557 \$7.98.

Performance: **Fair**  
Recording: **Excellent**

A good-natured album of mediocre jazz, "Bellavia" would make a predictable soundtrack for a public television documentary about underprivileged children learning to express themselves by painting in water-colors. I am all for jazz trying to reach an audience, but the doings here are a little too airy and cute. J.V.

**DAVID MATTHEWS: *Big Band Recorded Live at the Five Spot*.** David Matthews (piano); orchestra. *Prayer; Round Midnight; Nardis; Penny Arcade;* and three others. MUSE MR 5073 \$6.98.

Performance: **Spirited**  
Recording: **Good remote**

Dave Matthews has arranged for a variety of performers from James Brown to Idrees Mohammad, but this is his first recording as a leader. The band, consisting of twelve young New York musicians, plays with the enthusiasm that so often is lacking in the big bands nowadays, and there are some very fine, spirited solos, the sources of which are not identified on the jacket. There are rough spots in this set, recorded at New York's Five Spot on a couple of Monday nights in mid-1975, but the result is refreshingly human when measured against the rigid stuff we so often are offered in the big-band area. C.A.

**RALPH TOWNER: *Solstice*.** Ralph Towner (piano, guitars); Jan Garbarek (soprano and tenor saxophones, flute); Eberhard Weber (bass, cello); Jon Christensen (drums, percussion). *Winter Solstice; Visitation; Nimbus; Sand; Drifting Petals;* and three others. ECM ECM-1060 \$6.98.

Performance: **Impeccable**  
Recording: **Excellent**

If you have heard guitarist Ralph Towner with Weather Report (the "I Sing the Body Elec-

tric" album), the (Paul) Winter Consort, or Oregon—a group of which he is a regular member—you already know that he is a musician of impressive talent and impeccable taste. Those two qualities also apply to Jan Garbarek, Eberhard Weber, and Jon Christensen, his three cohorts on this date, and, indeed, to ECM, the label responsible for this fine album. Lately—with some justification—criticism has been leveled at ECM for not having more black artists on its roster. But let us consider the changing times: for years, Europe could boast but one truly original jazz musician (Django Reinhardt), whereas today some of the new music's finest exponents come from the Continent (England has not done too well), and we are aware of their artistry largely through the efforts of ECM, which also has opened its doors to many neglected American musicians. Some of the best work by such black artists as Bennie Maupin and Herbie Hancock, not to mention Keith Jarrett, has been on ECM, and we can only hope that men like McCoy Tyner and Ornette Coleman will one day find a place there too.

Towner is an American, but his classically oriented style on the twelve-string acoustic guitar is eminently compatible with the music of his European colleagues, an often fragile, introverted sort of music that makes the John McLaughlin/Herbie Hancock kind of electrified output seem rather like an aural by-the-numbers painting. Ralph Towner also plays the piano here, but he does so sparingly, and that is, I think, wise. This is Towner's first American release as a leader, and it should go far to establish him as an important artist. I hope it will also encourage American ECM to bring out his solo album, "Diary." C.A.

#### RECORDING OF SPECIAL MERIT

**RANDY WESTON:** *Blues to Africa*. Randy Weston (piano). *African Village Bedford Stuyvesant*; *Uhuru Kwanza*; *Tangier Bay*; *Kucheza Blues*; and four others. ARISTA AL 1014 \$6.98.

Performance: **Superb**  
Recording: **Good**

Randy Weston was one of the "new faces" at the 1958 Newport Jazz Festival, and he is probably still unknown to many Americans because much of his time in recent years has been spent in Tangier—where he operated his own club—and because he simply never received the wide recognition that should have been his. Weston is a technically facile pianist whose playing reflects the past as well as the present. An expert creator of moods, he will stroke your ears with tender lyricism, gently splashing Monkish ripples against rock-steady bass figures, or shake you to the marrow with fiercely pounding waves of sound. But whether the influence is Monk or Morocco, the music is distinctly Weston.

Weston spent the better part of the Sixties in Africa, an experience that has clearly influenced his work, particularly his compositions. Once the writer of such jazz hits as *Hi-Fly* and *Little Niles*, Weston's writing has in recent years been less commercially oriented and more on the serious side—impressionistic pieces evoked by his face-to-face meeting with a rich African ancestry and a resulting deep social consciousness. The recording quality of this album, which is Weston's first solo effort, leaves something to be desired, but the music—all Weston originals—makes it a \$6.98 well spent. C.A.

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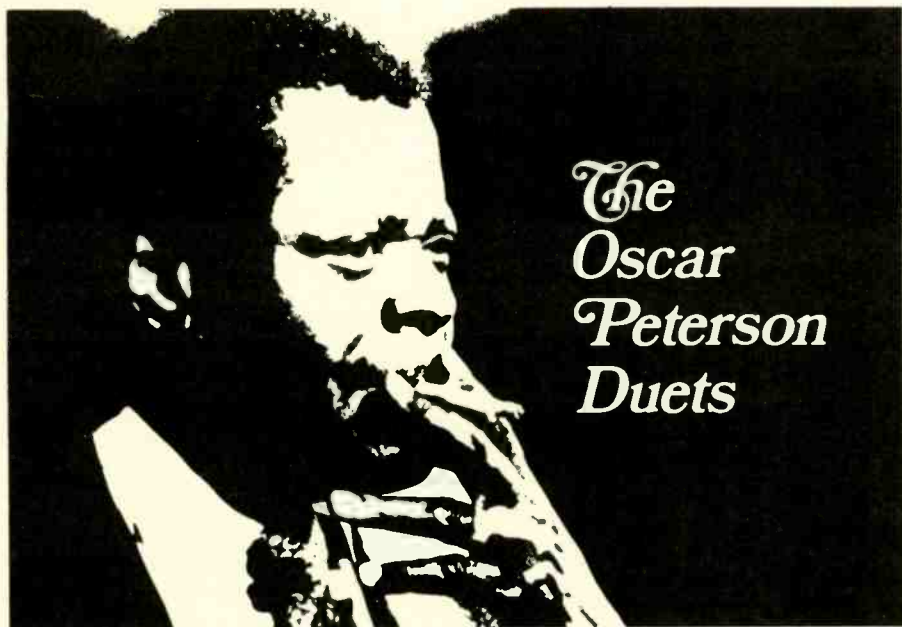
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## The Oscar Peterson Duets

Pablo Records

I HAVE derived enormous pleasure from listening to Oscar Peterson since the late Forties when His Master's Voice in Denmark issued his now thirty-year-old Canadian Victors. Then—and later as “Tank Butterball” on the Norgran label—he was playing boogie-woogie versions of such numbers as *The Sheik of Araby*, giving few hints of what was to come. Excellent though he was, he never quite elevated himself into the class of Teddy Wilson, the ultimate swing pianist, or Art Tatum, for whom he obviously still has a great deal of admiration. Nor has he ever achieved the individuality of, say, Bud Powell or Keith Jarrett. However, Peterson made enormous forward strides (no pun intended) after 1950, when Norman Granz took his career in tow, and to list all the records he has since made for various Granz labels—most notably Clef and Verve—would be to fill several pages of this magazine.

Granz has already issued several albums with Peterson—both as leader and sideman—on his new Pablo label, and now we can add to this a series of trumpet/piano duets teaming Peterson with five excellent musicians, one album with each. I'm not sure that Granz isn't doing Peterson a disservice by such saturation: his albums are competing with each other at a time when the economy forces record buyers to be more selective, and one must also question whether Oscar Peterson's talent really merits all this attention.

The idea of recording a trumpet and piano duet is not new; it goes back at least as far as 1928, when Louis Armstrong and Earl Hines—both in their prime—cut *Weatherbird* and turned it into the ultimate study in improvisational rapport. None of these Peterson duets approaches the brilliance of that classic collaboration, but, judging by current standards—as, in all fairness, we must—there are

some unarguably fine tracks in these albums.

There was a time, in the late Thirties, when a young Dizzy Gillespie emulated Roy Eldridge's style to the point where it was hard to tell the two players apart. Gillespie, of course, went on to develop his own, highly individual style, help pioneer a jazz idiom called bebop, and inspire new generations of trumpet players. That he is still a source of inspiration is nowhere more evident than in the playing of twenty-one-year-old Jon Faddis. Interestingly enough, Faddis first caught the attention of Thad Jones and Mel Lewis—who subsequently hired him to lead the trumpet section of their big band—when they heard him on a Lionel Hampton session playing in a Gillespie style; some thirty-three years earlier, Gillespie had recorded with Hampton playing in the Eldridge style.

There is no clear Faddis style as yet—his playing is for the most part pure Gillespiana—but there are also times, as on *Things Ain't What They Used to Be*, when he sounds remarkably like the current Eldridge. He is unusually traditional for a performer of his age, but the talent is unmistakable, and, bearing in mind his progenitors, we can look for history to repeat itself when Faddis eventually finds himself. There are times when this album sounds like an initial run-through with Faddis holding back to see what Peterson will do, but time will undoubtedly remedy any diffidence.

There is no holding back on Gillespie's part in his album, though. He can still race through *Dizzy Atmosphere* with the greatest of ease, and he runs neck-and-neck with Peterson on *Caravan*. But my favorite moments on the disc occur in the slow *Blues for Bird*, a piece that reflects the two musicians' affinity with what came before them. The Dizzy Gillespie collaboration is clearly the most successful of the five.

While I have long been (and continue to be) a staunch Roy Eldridge fan, I must confess to some disappointment in his performance in this series. Roy's health has been failing in the last couple of years, and, though there are moments when he is his magnificent old self, there are other times when he sounds so tired that he would have been best served had his performance been left unissued. Surely Granz could have come up with a flawless album had he spent more than one day on it, but as it is—even with the good stuff that is there—I wish I hadn't heard this album.

Harry Edison and Clark Terry, two big-band veterans who spend a lot of time in the often anonymous world of the studio musician these days, perform well on their respective albums, but neither generates any real excitement. Edison's days of glory were spent with the Basie band from 1937 to 1950, when he often sparkled à la Eldridge; he never achieved much recognition as a leader. Terry, on the other hand, has been quite successful as a leader both of small groups and, more recently, of a big band. They are both excellent, but the Peterson duets are not the contexts in which to hear them at their best.

FINALLY, there's Oscar Peterson himself: technically facile, Tatumesque, able to boogie, stride, or get down home with the blues, a man who can swing in a variety of idioms and usually does. I still enjoy his playing, but there is something missing, and that something is called originality. —Chris Albertson

**OSCAR PETERSON/ROY ELDRIDGE:** *Oscar Peterson and Roy Eldridge*. Roy Eldridge (trumpet); Oscar Peterson (piano and organ). *Sunday*; *Bad Hat Blues*; *Blues for Chu*; *She's Funny That Way*; and three others. PABLO 2310-739 \$7.98, Ⓢ S 10739 \$7.98.

**OSCAR PETERSON/DIZZY GILLESPIE:** *Oscar Peterson and Dizzy Gillespie*. Dizzy Gillespie (trumpet); Oscar Peterson (piano). *Mozambique*; *Alone Together*; *Autumn Leaves*; *Con Alma*; and four others. PABLO 2310-740 \$7.98, Ⓢ S 10740 \$7.98.

**OSCAR PETERSON/HARRY EDISON:** *Oscar Peterson and Harry Edison*. Harry Edison (trumpet); Oscar Peterson (piano). *Mean to Me*; *Easy Living*; *Basie*; *Willow Weep for Me*; *Signify*; and four others. PABLO 2310-741 \$7.98, Ⓢ S 10741 \$7.98.

**OSCAR PETERSON/CLARK TERRY:** *Oscar Peterson and Clark Terry*. Clark Terry (trumpet); Oscar Peterson (piano). *But Beautiful*; *On a Slow Boat to China*; *Mack the Knife*; *Satin Doll*; and four others. PABLO 2310-742 \$7.98, Ⓢ S 10742 \$7.98.

**OSCAR PETERSON/JON FADDIS:** *Oscar Peterson and Jon Faddis*. Jon Faddis (trumpet); Oscar Peterson (piano). *Things Ain't What They Used to Be*; *Blues for Birks*; *Lester Leaps In*; and three others. PABLO 2310-743 \$7.98, Ⓢ S 10743 \$7.98.



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# CHOOSING SIDES

By IRVING KOLODIN



## COPLAND (AND OTHERS) ON COPLAND

**A**ARON COPLAND'S seventy-fifth birthday this past year produced in America an expectable quantity of tributes, but it also produced two unexpected expressions of esteem from overseas which probably pleased him even more. These are a pair of recordings of his music, made and manufactured in England, which give Copland the distinction of joining William Walton and Benjamin Britten as living composers whose works have crossed the Atlantic and gotten into the commercial recorded currents of each other's countries. The circle of happy circumstances is closed by the fact that the British performances of the two works in question are well rounded and finely phrased.

Copland's Piano Fantasy (1957) finds a responsive, lyrically minded interpreter in Antony Peebles (Unicorn RHS 323), whose record also contains Bartók's Three Studies, Op. 18, and Dallapiccola's *Musical Exercises for Annalibera*. Peebles would appear, like Roger Woodward of Australia, to be one of those new pianists who take a world view of the keyboard literature, and Copland has entered his repertoire, one would guess, not because he is an American composer but because he is an interesting composer.

As for the second disc, it records the fact that Copland's Clarinet Concerto has finally come into the hands of Gervase de Peyer, who brings to it qualities of artistry and musicianship not possessed by any of its prior interpreters. With Bernard Jacob as conductor of the London Mozart Players (Unicorn RHS 314), the outcome has been to maximize the merits of the score and make one regret only that the performance did not last longer—always the sign of a good piece. The work's record partner is a Grand Concerto by Bernhard Henrik Crusell, a Finnish clarinetist-composer of the early nineteenth century, and it is a work that provides pleasure for the listener as well as the performer.

Among the *American* tributes (a "celebration," as the cover copy has it) is a three-disc set from Columbia (D3M 33720) that brings together, in order of their appearance on the records, the *Fanfare for the Common Man*, *A Lincoln Portrait*, the suites from *Appalachian*

*Spring* and *Billy the Kid*, the Four Dance Episodes from *Rodeo*, *Our Town* (the concert sequence), *El Salón México*, and *Dance Panels*. Though all of these have been available before on various single discs, it is good to have them collected in one package. But Columbia offers an additional single disc (M 33586) of newly recorded material, made up of such addenda as *The Red Pony Suite*, *John Henry*, *Letter from Home*, *Music for Movies*, and *Down a Country Lane*. All of these works—the three-record set and the single disc—are



Columbia Records

conducted by Copland, who is well on his way to equaling the late Igor Stravinsky's achievement of himself recording virtually all his major, as well as many of his minor, works. (Columbia will now take a double bow, please.)

As did Stravinsky, Copland disagrees in many subtle details with the conceptions of his best-known interpreters. But, unlike the case of Stravinsky, for whom marginal differences were often productive of improvement, the results here are not always to the advantage of Copland's creations. As an instance, *El Salón México*, as directed by Copland, strikes me as slower in tempo, the first clarinet-trumpet interchange less raucous and not so suggestive of a crowded dance hall, the folk tune that follows less earthy and more genteel than in many other versions.

"Well," the reader may ask, "if that is the

way Copland wants it, isn't that the way it should be heard?" Not necessarily. It is possible that the conductor-composer adds something mentally to what he hears in a playback, fulfilling and fleshing out for himself the sound that is actually there. That sound alone may still leave the listener bereft of an element that an objective and non-composer conductor may provide: a feeling of *performance*, of interpretive fire that brings the essence to a boil rather than a mere reheating. The difference may amount, paradoxically, to that between a restatement (by the composer) and a re-creation (by a conductor).

But any outside assistance may help. As an instance, the *Lincoln Portrait* here becomes the kind of performance that *El Salón México* is not because of the participation of Henry Fonda as narrator. Fortunately, Fonda has put aside both his Clarence Darrow drawl and his G!A!F! huckstering manner to do a straightforward job of elocution, one with just enough theatrical emphasis to give the words the sense of "occasion" they require. In a long line of narrators, the best on records have been actors rather than politicians, men (such as Melvyn Douglas, Gregory Peck, and Fonda, but *not* Charlton Heston) who have learned to use their voices as another instrument in the ensemble. The one exception I would cite is Carl Sandburg, who evoked, out of his poetic talents and a deep knowledge of the subject, the illusion that this is the way Lincoln himself might have sounded.

In his recapitulation of the singular sequence of achievements that brought about, within a dozen years, a new attitude of response and hospitality among American con-

certgoers to their native music, Copland invests *Billy the Kid* with just a little more grandeur than it merits, he clearly rejoices in the spirit and snicker of *Rodeo*, and he infuses the suite from *Appalachian Spring* with something that the other works do not quite draw from him—a deep, abiding love and pride of authorship. This is a remarkable performance, on the same interpretive level, if not with quite the intimacy, of his own direction of the only recording of the complete ballet score in its first form for an ensemble of thirteen instruments (Columbia M 32736).

Included in this cross-section of the total Copland is much of the music I admire most, relish best, and can hear with the greatest frequency. To the ballets, *El Salón México*, and *Lincoln Portrait* mentioned above I would add the small-scale but warmly believable op-

"...work directed toward maintaining a place in the avant-garde..."

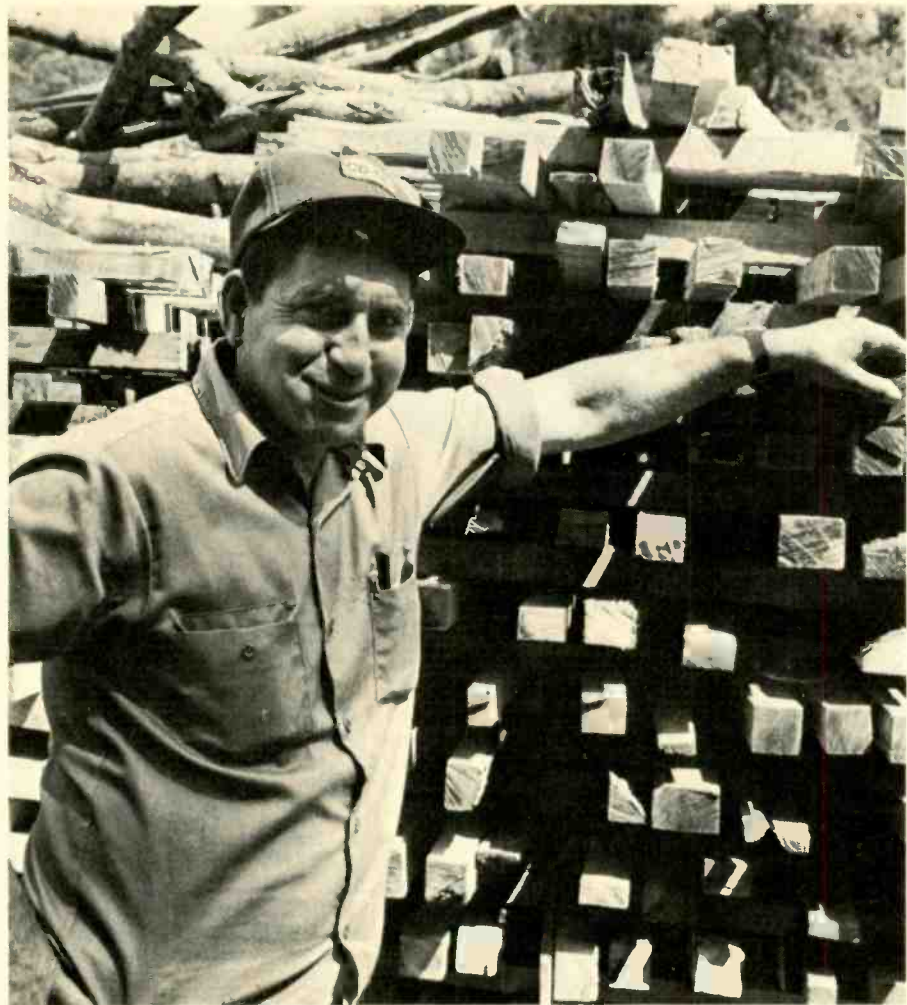
era *The Second Hurricane* (in contrast to the more extensive, but less credible, *The Tender Land*), the *Piano Variations*—especially in the composer's own recording—and the *Twelve Poems of Emily Dickinson*, as sung by Adele Addison with Copland at the piano (Columbia M-30375).

These are, for the most part, musical expressions in what the composer refers to as his "easy" style (he avoids the word "popular," perhaps on the premise that popularity is a by-product of response rather than a product of intent). That being the case, I suppose that the works I admire less, relish least, and have mixed anticipations about rehearsing—those with such titles as *Statements*, *Fanfare*, *Connotations*, *Solemn Prelude*, *Inscape*, and *Symphony* (Short, Dance, and No. 3)—are all products of his "uneasy" style. They are, for the most part, also products of a drive to be impressive rather than expressive—the later works directed toward maintaining a vested place in the avant-garde that has been his, through the force of the early works, since the Twenties and Thirties—to be intellectual as well as down to earth.

Some associate this dichotomy of purpose with events of the late Thirties and early Forties, when the series of works for which Copland became generally famous struck some of his erstwhile devotees as a deviation from "principle," as hedging his musical bets, and so on. But the fact is that many of the elements of both later Coplands are contained in such works as *Music for the Theater*, the *Piano Concerto*, and the *Symphony for Organ and Orchestra of the Twenties*. Rather than going forward in the search for a single, integrated style, he found it possible to channel one series of inclinations in one direction (film scores, ballet music, songs, etc.) and the other in a different direction (the orchestral works, including the orchestrally reworked *Piano Variations*).

THERE are some arts that accommodate a segmentation of impulse, a conscious control of style to achieve a predetermined end with no loss in productivity: writing easiest of all, graphic arts perhaps next. Among the arts are four or five about which I am not sufficiently versed to have a firm conviction. But about music I most certainly do have one. "Reading," wrote Bacon, "maketh a Full man." My adaptation of this would be: "It is the Full man who maketh music." I have two further convictions derived from a certain amount of attentive listening: "The man who liveth by the big drum shall perish by the big drum"; and, finally, "There is little music in the snare drum." Too much of both percussion instruments corrupts for me what had initially been a favorable impression of the *Symphony No. 3*. On the other hand, the absence of such compositional rhetoric from the *Twelve Poems of Emily Dickinson*, and the presence of the real Copland's guiding taste and secure aesthetic have clarified for me what was originally a dim view of them (derived from a performance not by Miss Addison).

Well, even Sibelius didn't win them all, despite the contentions during his lifetime that attached importance to mannerism rather than meaning. Fortunately, the Copland repertoire is sizable enough for one to have his preferences and his prejudices too. If I like his creative statement of *I Bought Me a Cat* (a three-minute song) better than the whole of *Dance Panels*, can the composer of both hate me for that?



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# CLASSICAL DISCS AND TAPES

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**ARRIAGA: *Three Quartets. No. 1, in D Minor; No. 2, in A Major; No. 3, in E-flat Major.*** Chilingirian Quartet. CRD RECORDS LTD. CRD 1012/3 two discs \$15.96 (from HNH Distributors, P.O. Box 222, Evanston, Ill. 60204).

Performance: **Gutless**  
Recording: **Excellent**

Juan Cristostomo Arriaga y Balzola was born in Bilbao, Spain in 1806. Fearfully productive during his short life span (he wrote two operas before he was thirteen), he is called, and not without reason, the Spanish Mozart. All evidence suggests that, had he lived, he would not have needed such a comparative in his maturity. As it was, he died at twenty in Paris, victim, as Grove's so quaintly has it, "of decline" (probably tuberculosis).

Very little recorded Arriaga is available in this country (there may be more in Spain, the mother of prodigies)—a nonet, a symphony, and the overture to the opera *Los Esclavos Felices* on MHS 578, the quartets in recordings by the Phoenix Quartet (Golden Crest CR 4061) and by the Classical Quartet of the Spanish National Radio (MHS 717). The Guilet Quartet recorded the first two quartets some years ago for a limited-edition label called Rarities Collection (CHS-1068); it is now unavailable, of course, but *somebody* must have the masters.

Arriaga's music is of the immediately compelling sort that can inspire a comparison to Mozart, and it is patently the music of a young man—not juvenile, but young. The three

fluent quartets are easy proof, though not, I fear, in these performances by the Chilingirian Quartet. The players may be young, but they play old—stiffly, tentatively, short of breath and *brio*. The Guilet's performances take this music's measure perfectly, their remarkably synchronized downstroke establishing an allegro authority with the very first note of Quartet No. 1. But try the Chilingirian anyway; they are not the Guilet, but they are well ahead of the rather coarse Phoenix, and you need to know Arriaga. *William Anderson*

**J. S. BACH: *Sonata No. 6 in G Major*** (see BU-SONI)

**J. S. BACH: *Violin Concerto in D Minor (BWV 1052); Violin Concerto in A Minor (BWV 1041); Violin Concerto in E Major (BWV 1042).*** Ruggiero Ricci (violin); City of London Ensemble, Ruggiero Ricci cond. UNICORN UNS 202 \$6.98.

**J. S. BACH: *Violin Concerto in D Minor (BWV 1052); Violin Concerto in A Minor (BWV 1041); Violin and Oboe Concerto in D Minor (BWV 1060).*** Itzhak Perlman (violin); Neil Black (oboe); English Chamber Orchestra, Daniel Barenboim cond. ANGEL S-37076 \$6.98.

Performances: **Excellent**  
Recordings: **Excellent**

Both Messrs. Ricci and Perlman are superb violinists whose meat and drink are drawn from the passionate outpourings of the nineteenth century. In these two records they have addressed themselves to the powerful Baroque architecture of J. S. Bach. When two first-rate artists perform indestructible music, the results are bound to be excellent, but there are significant stylistic differences that reveal varying approaches to the problem of authentic performance practice.

In recent years musicologists have made tremendous strides in uncovering the performance conventions of the Baroque era. Although most well-known performers have probably not consciously studied these findings, the results have rubbed off onto some of them and passed others by. Ricci has

returned to the Baroque convention of conducting his own ensemble, but his approach is heavily Romantic. He is always the virtuoso soloist with accompanying strings. His tone is rich and vibrant, and the long-line legato is always present. The City of London Ensemble plays in a similar fashion, thus creating a unified partnership, but the result lacks clarity of articulation, and any rhythmic thrust is Bach's doing.

Perlman, in contrast, plays under the direction of the extremely talented and versatile Daniel Barenboim. The fiddling is, as we have come to expect, flawless, but the solo passages grow from the tuttis and there is no flaunting of virtuoso technique over the accompanying group. Also, Mr. Perlman's tone is so focused that it is heard because of its cut-through, not its pressured volume. The essential long line is there, but also present is a clear articulation that lets us hear the space between Bach's tightly wrought motives. Now, space between notes and groupings of notes is, in eighteenth-century music, as important as the notes themselves. Spacing, or articulation, breathes life and vigor into a performance of this music. As a result of its clear articulation, then, the Perlman-Barenboim reading not only retains Bach's rhythmic drive but adds to it.

One specific passage that demonstrates Perlman's and Barenboim's affinity for the Baroque is in the use of the harpsichord toward the end of the final movement of the D Minor Concerto. Both artists play the cadenza for violin beautifully according to their own lights, but how much more effective it is when the harpsichord joins Perlman to support his final cadence, an event lacking in the Ricci version. A choice between these two albums, then, boils down to a question of preference in performance practice. Each approach is consistent and perfectly executed.

S.L.

**BEETHOVEN: *Sonata for Violin and Piano No. 5, in F Major, Op. 24*** (see BRAHMS)

**BEETHOVEN: *Symphony No. 7, in A Major, Op. 92; Overture to "Egmont," Op. 84.*** Los Angeles Philharmonic Orchestra, Zubin Meh-

## Explanation of symbols:

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The first listing is the one reviewed; other formats, if available, follow it.

ta cond. LONDON CS 6870 \$6.98, Ⓢ O 86870 \$7.98, Ⓢ O 56870 \$7.98.

Performance: **Quick-step**  
Recording: **Excellent**

**BEETHOVEN: *Symphony No. 7, in A Major, Op. 92.*** Marlboro Festival Orchestra, Pablo Casals cond. COLUMBIA M 33788 \$6.98.

Performance: **Laid-back**  
Recording: **Live**

There is a predictable contrast between Zubin Mehta's finely honed, hard-edged L.A. Free-way Beethoven and Pablo Casals' New England summer horse-and-buggy ride. Racing the metronome with Mehta is a thrilling experience, although it tends to be exhausting after several nonstop movements; in short, it has diminishing returns. Casals and the Marlboro forces—recorded in live performance—start slow and never achieve a comparable level of polish, but at least they have some place to go. In effect, through some process of building, each moment is a culmination of what came before, and we get more and more, not less and less, involved. E.S.

**BORODIN: *Prince Igor, Overture*** (see MOUS-SORGSKY)

#### RECORDINGS OF SPECIAL MERIT

**BRAHMS: *Sonatas for Violin and Piano: No. 1, in G Major, Op. 78; No. 2, in A Major, Op. 100; No. 3, in D Minor, Op. 108.*** **BEETHOVEN: *Sonata for Violin and Piano No. 5, in F Major, Op. 24 ("Spring").*** Wanda Wilkomirska (violin); Antonio Barbosa (piano). CONNOISSEUR SOCIETY CS 2079 and CS 2080 two discs \$6.98 each.

Performance: **High-quality**  
Recording: **Excellent**

This is a very satisfactory trio of Brahms violin-and-piano sonatas with the Beethoven *Spring* Sonata as an attractive pairing with the Brahms Third. Wanda Wilkomirska and Antonio Barbosa make a perfectly matched

team, and the levels of musicality and expressivity put forth here are consistently high. The give and take between the violin and piano—an essential but often difficult element of this equal-rights music—is particularly well carried off. I also like the recorded sound (reviewed from advance pressings), with its combination of resonance and clarity. There is an odd little repeated buzz on the Beethoven side that is faint but puzzling—seemingly on the recording itself. Beyond that, though, no reservations. E.S.

**BRAHMS: *Symphony No. 4, in E Minor, Op. 98; Academic Festival Overture, Op. 80.*** New Philharmonia Orchestra, Leopold Stokowski cond. RCA ARL1-0719 \$6.98; □ ARD1-0719 \$7.98; Ⓢ ARS1-0719 \$7.95, Ⓢ ARK1-0719 \$7.95, Ⓢ ART1-0719 \$8.98.

Performance: **Intriguing**  
Recording: **Pretty good**

My recollection of Stokowski's two earlier recordings of the Fourth are too hazy to be reliable, but my impression is that they were less characterized by sheer drive than this one (taped, by the way, in June 1974, two months after Stokowski turned ninety-two). As in many of Stokowski's recent recordings, the pacing is on the brisk side. The finale is one of the fastest on records, and so is the scherzo, but neither movement sounds headlong or breathless, and details are brought out beautifully everywhere; many will find this controlled exuberance refreshing. And the *Academic Festival*, no mere make-weight, is absolutely and incontrovertibly glorious.

The sound is a little tubby—certainly not on the level of RCA's recent Philadelphia productions—but quadruphonics will be happy to have a disc of Brahms' orchestral music at last. I cannot recommend the cassette; the flimsy cardboard box (some of whose three blank edges might have been used for labeling) contains not a word of annotation, the hiss level is high, and there is an unacceptable break in the scherzo in order to make the two sides come out even. R.F.

#### RECORDING OF SPECIAL MERIT

**BUSONI: *Sonata No. 2, Op. 36a.*** **BACH: *Sonata No. 6, in G Major (BWV 1019).*** Sergiu Luca (violin); David Golub (piano in Busoni); Albert Fuller (harpsichord in Bach). DELOS DEL-25404 \$6.98.

Performance: **Expressive**  
Recording: **Good**

This recording is rather charmingly entitled "Bach Busoni (unhyphenated)," although "Busoni Bach" would be a little more precise. Side one has a terrific, true-grit performance of a fine violin-and-piano sonata by Ferruccio Busoni—one of those late-Romantic, neo-Classic, I-embrace-it-all works that is well deserving of its revival and excellently served by Sergiu Luca and David Golub.

For his Bach side, Luca has not only made the obvious move from piano accompanist to harpsichord (with the excellent Albert Fuller as his partner) but also slightly altered his Bergonzi violin (gut strings, lower tuning, soundpost moved away from the bridge), and he plays on it with a Baroque bow. The whole effect is rich and resonant in tone and exquisite in feeling. Both Luca and Fuller capture that wonderful, expressive Baroque swing that is the essence of great Bach performance. Beyond the traditional association of Busoni and Bach, the pairing makes a certain kind of sense, and the music as well as the sensitively recorded performances are eminently worthy of your attention. E.S.

**CANTELOUBE (arr.): *Songs of the Auvergne, Album 2.*** *La Pastoura als camps; L'Antouèno; La Pastrouletta è lou chibaliè; Lo Calhè; Lou boussu; Malurous qu'o uno fenno; Oi ayai; Pour l'enfant; Pastorale; Lou coucut;* and five others. Victoria de los Angeles (soprano); Lamoureux Concert Orchestra, Jean-Pierre Jacquillat cond. ANGEL S-36898 \$6.98.

Performance: **Very charming**  
Recording: **Reverberant**

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va's first group of these enchanting Canteloube settings, which appeared in 1973. While the first disc contained the most irresistible Auvergne songs (*Bailero*, *L'Ao de rosso*, *La Fiolaire*), the fifteen entries on the current disc offer the same beguiling mixture of pastoral charm and earthy humor, and the inspired orchestrations provide the perfect framework for the glowing vocal lines.

The singing calls for a comfortable tessitura most of the time, and here Victoria de los Angeles offers a lovely tone quality. There is a certain strain in the area of the register break (around E), which results in a whiter (unvibrated) tone and unclear enunciation, but on the whole she delivers the music with verve and humor. She is still about the most naturally charming interpreter imaginable. The orchestral accompaniments are radiant, and the engineers surround the soprano with the kind of protective halo they seem to bestow on singers who have become "institutions" (Tebaldi and Callas come to mind). The intentions are noble, but not really beneficial to music that calls for spontaneity and natural impact. *G.J.*

**COPLAND:** *Piano Fantasy; Clarinet Concerto; Twelve Poems of Emily Dickinson; Orchestral Music* (see Choosing Sides, page 106)

**DVORÁK:** *Symphony From the New World* (see The Basic Repertoire, page 58)

**GLINKA:** *Ruslan and Ludmilla, Overture* (see MOUSSORGSKY)

**GRIEG:** *Holberg Suite, Op. 40.*  
**TCHAIKOVSKY:** *Serenade in C Major, Op. 48.* Netherlands Chamber Orchestra. David Zinman cond. PHILIPS 6580 102 \$7.98.

Performance: **Dull**  
Recording: **Good**

#### RECORDING OF SPECIAL MERIT

**GRIEG:** *Holberg Suite, Op. 40; Two Elegiac Melodies, Op. 34.* **NIELSEN:** *Little Suite, Op. 1.* **SIBELIUS:** *Rakastava, Op. 14.* Little Orchestra of London, Leslie Jones cond. UNICORN UNS 201 \$6.98.

Performance: **Ingratating**  
Recording: **Good**

Perhaps no one would think of putting Leslie Jones' name on a short list of the world's great conductors, but his recordings are invariably satisfying and not infrequently, as in the present case, distinguished. The explanation, I think, is simply enthusiasm on an exceptional level. Jones apparently never bothers with music that doesn't draw a deep response from him, and the understanding that accompanies that response is anything but casual. This collection, labeled "Scandinavian String Music," is a long way from the Haydn most of us associate with this conductor, but his grasp is no less idiomatic, the sense of joyous involvement no less evident, in this repertoire than in that. Jones' way with the *Holberg Suite* strikes me as the most persuasive on records since Boyd Neel's old London ten-incher, and the *Elegiac Melodies* are set off in a frame of greater intimacy, if less grandeur, than usual. Nielsen's *Little Suite*, not otherwise available at present, could hardly sound more ingratiating, and the Sibelius rarity is beautifully realized, with no attempt to expand its exquisite proportions. The sound is not especially rich, *(Continued on page 112)*

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but it is crisp, clear, and honest in delineation of the fine performances.

Zinman's readings, I'm afraid, are just plain dull. His unimaginative handling of the Tchaikovsky never lets the music get off the ground, and the Grieg, too, though he fusses over it more, fails to come to life till the last of its five movements. The string playing is excellent and the sound is good, but the disc is just not in the running. R.F.

**HANDEL (arr. Bream): Concerto in B-flat Major for Two Lutes and Strings, Op. 4, No. 6 (see VIVALDI)**

**HONEGGER: Symphony No. 1; Symphony No. 4 ("Deliciae Basilienses").** Czech Philharmonic Orchestra, Serge Baudo cond. SUPRAPHON 1 10 1536 \$6.98.

Performance: **Excellent**  
Recording: **Good**

It was not until 1973, when the record under review here was released in Czechoslovakia, that Serge Baudo completed the Honegger symphony cycle and in so doing gave us a first recording of the Symphony No. 1, a work commissioned by Serge Koussevitzky for the fiftieth-anniversary season of the Boston Symphony Orchestra.

The First Symphony's musical language partakes of both the fashionable *style mécanique* of some of Honegger's works of the mid-Twenties and the linear lyricism/dissonnance of his later works. There are also touches of jazz coloration.

The most readily likable of all the Honegger symphonies is No. 4, *The Delights of Basel*. The composer's characteristic nervousity is very much present in the end movements, but it is tempered by touches of his early post-impressionist manner (as in the *Pastorale d'Été*). He also brings a striking bit of local color into the finale by having piccolos and percussion parade through with the ancient *Basler Morgenstreich* carnival tune. As does the First Symphony, the Fourth ends on a note of idyllic serenity.

The performances here are fully up to the intense and brilliant quality of Baudo's earlier recordings, though I would have liked somewhat more orchestral presence in the Fourth Symphony (Ernest Ansermet's 1969 London recording is better in this department). Honegger is still best known as the composer of such specialized works as the oratorio *Jeanne d'Arc au Bucher* and the programmatic *Pacific 2-3-1*. But the availability on discs of the five symphonies in M. Baudo's integral and expertly fashioned readings offers a welcome opportunity for a real reassessment of the man and his music. D.H.

## RECORDING OF SPECIAL MERIT

**JANÁČEK: In the Mist; Sonata, 1 October 1905 ("Street Scene"); On an Overgrown Path, Series I; Concertino for Piano, Two Violins, Viola, Clarinet, Horn, and Bassoon; Capriccio for Piano Left Hand, Flute, Two Trumpets, Three Trombones, and Tuba.** Josef Páleníček (piano); Czech Philharmonic Wind Instruments Ensemble. SUPRAPHON 1 11 1481/2 two discs \$13.96.

Performance: **Strong**  
Recording: **Close-up**

This release is especially timely, since Rudolf Firkusny's similar package (Deutsche Gram-  
*(Continued on page 115)*

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mophon 2707 055) has just been withdrawn. Like Firkusny, Páleníček has lived with this music for a half-century or so, has recorded most of it more than once, and performs with deep commitment and understanding; his approach, though, is quite different, particularly in the two concerted works and the two-movement sonata. Firkusny is subtle and seeks out the lyricism in the scores, but Páleníček stresses their starkness and is insistently blunt, almost primitive-sounding, in his phrasing. The sonic focus is similarly contrasted: Firkusny is more forward in his collaborations with members of Rafael Kubelik's Bavarian Radio Orchestra on DG, while the other instruments are more in the picture in Supraphon's close-up treatment. R.F.

**KOHAUT: Concerto in F Major for Lute and Strings (see VIVALDI)**

**KORNGOLD: Die Tote Stadt.** René Kollo (tenor), Paul; Carol Neblett (soprano), Marietta/Marie; Benjamin Luxon (baritone), Frank; Rose Wagemann (mezzo-soprano), Brigitta; Hermann Prey (baritone), Fritz; Gabriele Fuchs (soprano), Juliette; Patricia Clark (soprano), Lucienne; Anton de Ridder (tenor), Gaston/Victorin; Willi Brokmeier (tenor), Count Albert. Bavarian Radio Chorus; Tölzer Boys' Choir; Munich Radio Orchestra, Erich Leinsdorf cond. RCA ARL3-1199 three discs \$20.94.

Performance: **Good**  
Recording: **Good, with reservations**

Erich Wolfgang Korngold's *Die Tote Stadt* is an opera about an obsession: Paul lives an imitation of life unable to come to terms with the death of his wife, Marie. He meets an alluring dancer, Marietta, in whom he sees Marie reincarnated. Torn between past and present, he experiences a traumatic nightmare. In the end, he loses the living Marietta, but, released from the stranglehold of the dead Marie, appears to find motivation for starting a new life. With the beautiful and exciting Maria Jeritz in the dual role of Marietta/Marie, the opera was a phenomenal success in the Vienna of 1921. In the decades that followed, it became something of a legend, eagerly sustained by Viennese of long memories and a new generation raised on the elders' recollections. It is not surprising that Viennaborn Julius Rudel of the New York City Opera was responsible for the opera's American revival. The work was rather well received by the public, and quite patronizingly by the New York critics, who seem unable to forgive Korngold for his many years of Hollywood success.

Freed of the effective but controversial stage techniques that tended to deflect attention from the music, the opera we discover through this first complete recording is an atmospheric, eminently listenable, well-constructed, admirably professional creation. It is highly eclectic—Korngold knew his Richard Strauss, his Debussy, and his Puccini—but not without a certain individual profile. The vocal writing is effective, but it is so taxing for the two leads that it virtually asks for trouble. The orchestration, on the other hand, is sumptuous and brilliant: a Straussian orchestra is employed with a mastery not at all unworthy of such an association. There are inconsistencies, but altogether this is still one of the few operas written after *Der Rosenkavalier* worthy of frequent revivals.

RCA's release, a joint production with the

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MARIA JERITZA:  
A legendary  
Marietta/Marie

Munich Radio, offers a sound picture in which the orchestra is the dominant element. Since atmosphere is very important in this opera; and since the nightmarish quality of Act II calls for a great deal of orchestral presence, the perspective seems valid, though I find the results puzzling when more vocal emphasis seems desirable. Fortunately, the orchestra has been captured in opulent sound, with many captivating details of instrumentation (organ, celesta, all sorts of bells and other percussion instruments) clearly spotlighted and beautifully blended under Erich Leinsdorf's direction. This is the strongest element in the performance.

Both principals are gifted singers, but neither can fully cope with the score's uncommon demands. Carol Neblett is distinctly more effective in the higher reaches than in the lower range, where she sounds unsupported. Her voice has an attractive quality and a built-in sensuality that would be ideal, but some of that is dissipated by indistinct enunciation and the absence of the seductive image she creates on stage. Rene Kollo's agreeable tone is compromised by a faulty vocal technique that is cruelly exposed in the high tessitura and in the passages written for the crucial area of the register break (around E and F).

Hermann Prey sings the show-stopping Pierrot Lied in a melting operetta style that is quite appropriate for it. Rose Wagemann and Willi Brokmeier excel in minor parts, but the other supporting singers are dwarfed by the orchestra. RCA has given the opera an elegant packaging that contains the bilingual libretto, excellent and valuable notes by Christopher Palmer, and prima-donna-style reminiscences by Maria Jeritza. G.J.

#### RECORDING OF SPECIAL MERIT

LISZT: *Piano Concerto No. 1, in E-flat Major; Piano Concerto No. 2, in A Major.* Garrick Ohlsson (piano); New Philharmonia Orchestra, Moshe Atzmon cond. ANGEL □ SQ-37145 \$6.98.

Performance: **Superb** in all departments  
Recording: **First-rate**

LISZT: *Mephisto Waltz No. 1; Bénédiction de Dieu dans la Solitude; Funérailles; Liebes-*

*träume, Nos. 1-3.* Garrick Ohlsson (piano). ANGEL S-37125 \$6.98.

Performance: **The best is superb**  
Recording: **Good**

A good many months ago I reviewed a Garrick Ohlsson Chopin recording and found myself not altogether convinced by his realizations. But I must say that his Liszt performances are something else again. Ohlsson has the knack of getting to the lyrical essence of Liszt's musical utterances without in any way diluting the rhetoric. As a matter of fact, his careful nurturing of the music's lyrical values and meticulous attention to details of passage-work and *fioriture* serve to make the overall rhetoric all the more convincing. It's pretty hard to miss with the flashy and sure-fire E-flat Concerto, but he brings off the A Major even more convincingly, and obviously there are no terrors for him anywhere in the Lisztian virtuosic challenge. He has the further advantage of unusually sympathetic orchestral backing from Moshe Atzmon and the New Philharmonia, who make the transitions from fire-and-brimstone to melting sentiment with flawless musicality and expertise. In four-channel playback, the sound has a splendid semi-surround ambiance in the orchestral department; the piano is well front-and-center, but there is no loss of orchestral detail.

The solo disc has unusual points of interest in terms of repertoire. Whether one finds the lengthy *Bénédiction de Dieu dans la Solitude* akin to late Beethoven or merely a superbly crafted pianistic essay in saccharine religiosity is a matter of aesthetic judgment. The music has not exactly been over-recorded, and Ohlsson's excellent performance makes for fascinating comparison with that of Claudio Arrau on Philips. Of even greater rarity on records are the first two *Liebesträume*, which, like the famous No. 3, stem from vocal originals. The Tristanesque chromatics of No. 2, in E Major, are of the greatest interest, and all three works stand high among Liszt's purely lyrical essays. The familiar *Mephisto* Waltz gets a rousing reading, but I like an even more sulphuric atmosphere than is achieved here. On the other hand, Ohlsson does wonders with developmental details that are all too often passed over by virtuosos mainly intent on wowing the audience.

The real prize of this disc is Ohlsson's reading of the heroic elegy *Funérailles*. Unlike most of the other recorded performances I have heard, this one is set forth on the broadest possible rhetorical framework, and it comes off magnificently—not only because Ohlsson has the requisite power, virtuosity, and sense of drama, but also because he knows how to use the pedal in the interest of clarifying line and dynamic impact rather than of creating amorphous thunder. Except for some splattering of overtones in the tolling pedal C's that open *Funérailles*, the piano sound throughout is excellent. D.H.

MAHLER: *Symphony No. 5, in C-sharp Minor; Kindertotenlieder.* Christa Ludwig (mezzo-soprano); Berlin Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON 2707 081 two discs \$15.96.

Performance: **Supercharged**  
Recording: **Superb**

The release of Mahler's Fifth, the first excursion into the Mahler repertoire by Herbert von Karajan, was planned well over a year ago, but release was postponed in order to include the freshly recorded and piercingly eloquent *Kindertotenlieder* with Christa Ludwig. And, in my opinion, this "filler" is the real prize in the package: the interpretation is fully equal in poignant eloquence to the justly prized older versions by Janet Baker, Dietrich Fischer-Dieskau, and Kathleen Ferrier.

For his first Mahler symphony recording, Karajan has taken on what is to my mind the most difficult of all to project effectively on both the technical and expressive levels. For the first three movements, this is the most exciting performance of the Fifth I have heard thus far, either on or off records, and it is the most highly charged reading of anything I have heard from Karajan since his early post-war recordings of Tchaikovsky, Beethoven, and the Brahms German Requiem. Here, as in those earlier recordings, there is no inhibition in order to achieve mere niceties of control—simply an almost overpowering urgency of communication.

The spirit of Karajan's reading seems to me much akin to Leonard Bernstein's, and, like Bernstein, Karajan does make rather too much of the famous Adagietto, turning an essentially intimate lyrical utterance into a huge sentimental sigh. Unlike Bernstein, however, Karajan has not captured the humor that threads its way through the super-complex finale. Instead, Karajan's finale becomes an immensely brilliant "transcendental étude" for orchestra, more like Solti's reading for London.

The playing of the Berlin Philharmonic here calls to my mind the blinding virtuosity and tonal intensity of the Boston Symphony of the Koussevitzky era when this work was very much in its active repertoire. It is a pleasure, too, to hear a Berlin Philharmonic recording without the "churchy" acoustic that has tended, in previous recordings, to dilute the string tone. There is plenty of presence in the strings here, as there is all through the orchestral spectrum, from the highest upper partials to the lowest reaches of the bass drum. D.H.

#### RECORDING OF SPECIAL MERIT

MONTEVERDI: *Vesperae Mariae Virginis; Magnificat I/II; Missa, In illo tempore.* Paul Esswood, Kevin Smith (falsetti); Ian Par-  
(Continued on page 118)

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tridge, John Elwes (tenors); David Thomas, Christopher Keyte (basses); Regensburger Domspatzen; instrumental ensemble, Hanns-Martin Schneidt cond. DEUTSCHE GRAMMOPHON ARCHIV 2710 017 three discs \$23.94.

Performance: **Stunning**  
Recording: **Stupendous**

What we have here is probably better known as "The Vespers of 1610," Monteverdi's monumental offering to church music. The original publication, containing five psalm settings for chorus, orchestra, and soloists, three vocal concertos, the hymn *Ave maris stella*, the *Sonata sopra "Sancta Maria, ora pro nobis,"* two complete settings of the Magnificat, and a Mass based on Gombert's motet *In illo tempore*, has been something of a puzzle to

scholars. Some believe that the entire contents of the collection make up a mammoth cycle. Others believe that only certain sections belong to the actual Vespers and the rest should be performed separately. A third group believes that only one of the Magnificats should be performed. And so on down the line, so that there are as many versions as there are pieces and musicologists involved. Archiv has simply recorded the entire lot, and a handsome lot it is. We hear Monteverdi handling everything from massive double choirs to intimate solo chamber music, and we also get the striking difference between the virtuosic "second" practice, which set off the Baroque era, and the sober, contrapuntally conceived "first" practice, which sums up the Renaissance ideal.

The performances are as splendid as the music. The choral sound is unusual in that each part has a distinct timbre of its own that enables us to hear the inner parts, but at the same time the blend and overall sound is rich and lush. It would be difficult to single out one soloist in particular: each is a fine singer in his own right and can toss off Monteverdi's stylistically difficult coloratura with ease and not be embarrassed by the notorious "goat bleat." But, more important, their ensemble is superb. The many instrumentalists, playing a variety of ancient instruments, are also a fine lot of musicians, and for the most part one is put at ease concerning intonation. There is, in fact, a minimum of cringing to be done in the difficult *Sonata sopra "Sancta Maria."*

In short, this is a superb recording of a religious masterpiece that will always be a great favorite. If you do not own the work, the recording is a must. If you do, it may still be a must because of the unabridged contents and brilliant performance. S.L.

**MOUSSORGSKY:** *Night on Bald Mountain, Khovantschina, Prelude and Persian Dance.* **BORODIN:** *Prince Igor, Overture.* **GLINKA:** *Ruslan and Ludmilla, Overture.* Berlin Philharmonic. Sir Georg Solti cond. LONDON CS 6944 \$6.98.

Performance: **Russian music**  
**German-style**  
Recording: **Sensational**

What the record world needs now is an album of Russian music played by a German orchestra under a Hungarian conductor on an English label. Right? The shortage of available recordings of *Night on Bald Mountain* and those heady overtures to *Prince Igor* and *Ruslan and Ludmilla*, not to mention the incidental music from *Khovantschina*, has caused alarm throughout the industry. What if London should suddenly lose its entire inventory of Stokowski discs? Where would we all be? Famished for Russians! Fortunately, London has taken measures to forestall such a disaster. Here is the entire program one more time. And it must be admitted that Solti is the right chef to cook up such a Slavic musical meal. His *Night on Bald Mountain* is as harrowing as any in the catalog, if not more so. The flamboyant overtures to the Russian operas resound with verve to spare under the Hungarian's energetic ministrations. The "Dawn" and *Persian Dance* from *Khovantschina*, as colored in by Rimsky-Korsakov, emerge with all tints intact. The Berlin Philharmonic remains unrivaled, and the recorded sound is the last word in amplitude. If somehow you never got around to adding this basic Russian program to your collection, the album can certainly be recommended. P.K.

**MOZART:** *Fantasy in C Minor (K. 475); Sonata No. 14, in C Minor (K. 457); Sonata No. 16, in B-Flat Major (K. 570); Sonata No. 17, in D Major (K. 576).* Glenn Gould (piano). COLUMBIA M 33515 \$6.98.

Performance: **Perverse**  
Recording: **Somewhat tubby**

When Mozart committed his music to paper, not only could he indicate the pitches and rhythms he wanted but he also had at his disposal a system of markings that precisely reflected his thoughts concerning dynamics, accentuation, articulation, and phrasing, and some less exact markings for tempo. When



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Mozart composed, he employed ALL of these materials (not just notes and bar lines) to express his thoughts and to bring logic to his forms and structures.

Glenn Gould, for reasons known only to himself, has observed Mozart's wishes about pitch and rhythm but completely ignored everything else on the page. The carefully placed accents that bring harmonic direction to the smoldering opening of the C Minor Fantasy are lacking, melodies marked *legato* are played *staccato*, and Alberti basses that should be held in order to sound like animated harmony are also played *staccato*. Moreover, Gould's tempos are erratic and frequently distort the music. The Adagio of the C Minor Sonata is so painfully slow that boredom sets in after the refrain. On the other hand, the Adagio of the B-flat Sonata is taken so quickly that the music becomes trivial. The pianist also has a way of breaking a chord, sometimes even turning it into a perceptible figuration that detracts from the music. Add to this a persistent, unmusical humming, and one can readily understand why this record, as far as Mozart's incredibly sensitive piano writing is concerned, must be chalked up as a disaster.

Despite Mr. Gould's many mannerisms, he has always had the ability to bring clarity and sparkle to contrapuntal writing. This is apparent in the outer movements of the D Major Sonata, which, with certain reservations about the articulation, I enjoy listening to. But the ability to bring off a canonic passage, a rarity in Mozart anyway, is certainly not enough to bring off an entire sonata, let alone an album of them, again let alone a projected "Complete Mozart Piano Sonatas," of which this is Volume Five. S.L.

**MOZART: Piano Sonata in A Minor (K. 310); Piano Sonata in C Minor (K. 457); Piano Sonata in C Major (K. 545).** Christoph Eschenbach (piano). DEUTSCHE GRAMMOPHON 2530 234 \$7.98.

Performance: **Crisp**  
Recording: **Hard**

Christoph Eschenbach brings a clean technique, a crisp touch, and rhythmic vigor to these three wonderful sonatas. This approach is excellent for the fast movements and brings out the drive and austerity of Mozart's only two sonatas written in a minor key. The slow movements, however, suffer from a lack of warmth here because the essential vocal quality of the writing is lost through the pianist's neither breathing between phrases nor allowing time for melodic subtleties and cadences.

Still, Eschenbach deserves credit for his courageousness in taking all of the repeats. Repeats for Mozart are not the result of a printer's convention but are carefully placed, and hearing them enables one to comprehend the full scope of the music and Mozart's sense of proportion. And Eschenbach's tempos are well chosen. The slow one taken for the rondo of the C Major Sonata may surprise you, but the movement is, after all, marked *allegretto* (slower than *allegro*), and it is a pleasure to hear an easy bounce rather than a frantic rush. S.L.

**NIELSEN: Little Suite, Op. 1 (see GRIEG)**

**OCKEGHEM: The Maria Motets. Salve Regina I and II; Intemerata Dei Mater; Gaude Maria Virgo; Alma Redemptoris Mater; Ave Maria; Ut heremita solus.** Prager Madrigalis-

ten, Miroslav Venhoda cond. TELEFUNKEN 6.41878 AW \$6.98.

Performance: **Lush**  
Recording: **Sumptuous**

Johannes Ockeghem, the most renowned composer of the last half of the fifteenth century, was not only revered as a creator during his life (as attested by the many laments written on the occasion of his death), but was also the teacher of such composers as Loyset Compere, Pierre de la Rue, and Josquin Des Prez. Because of his preference for almost endlessly long lines that defy any perceptible musical organization and thick textures that rarely cadence, his music is extremely difficult for the average listener to penetrate. The Prager Madrigalisten, supported by a host of

ancient instruments, has courageously tackled seven of the spacious and grandly conceived motets written in honor of the Virgin Mary.

Although the jacket notes state that Renaissance paintings prove the music was originally performed by a "small but very efficient choir of soloists" supported by instruments, recent iconological research is coming around to the conclusion that most fifteenth-century religious music was sung by solo singers with no instrumental support. The Prager Madrigalisten have not only taken the first concept as their ideal but have blown it up to a choir of some thirty singers supported by about ten instrumentalists each of whom plays a mind-boggling variety of ancient instruments. It must be admitted, however, that the result is



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ravishing in its sonority and clarity of line. Frankly, this is the first time I have ever listened to a disc of Ockeghem's music and been thrilled by its sheer beauty and breadth rather than saying to myself, "He is historically important but it just doesn't grab me." If it were not for the Mendelssohn, Busoni, and Stokowski arrangements of Bach we might never have built up an enthusiasm for that composer's works and then made the transition to the point where today we can appreciate them in their original versions. Perhaps the Prager Madrigalisten's version of Ockeghem's music will perform a similar service. S.L.

#### RECORDING OF SPECIAL MERIT

**PROKOFIEV: Alexander Nevsky.** Betty Allen (mezzo-soprano); Mendelssohn Club of Philadelphia; Philadelphia Orchestra, Eugene Or-

mandy cond. RCA ARL1-1151 \$6.98, © ARS1-1151 \$7.95, © ARK1-1151 \$7.95.

Performance: **Good**  
Recording: **Could stand more body**

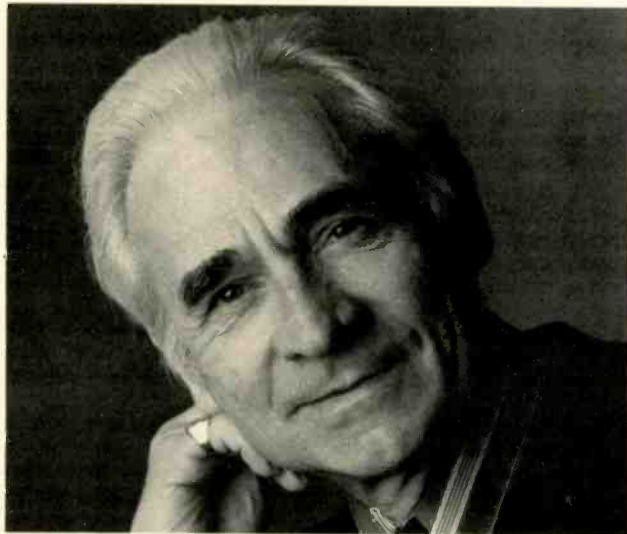
I would give André Previn's new disc of the Rachmaninoff First a slight edge over Ormandy's nearly decade-old Columbia disc (my preferred version) in terms of sonic richness in the lower register and revelation of inner detail in the middle movements, especially in quadrasonic playback. But, over all, the dramatic urgency of the Ormandy reading makes for the more compelling final result, and it is backed up by one of Columbia's finest recording jobs with the Philadelphians.

I had hoped for a similar outcome from Ormandy's new version of the Second Symphony in its uncut form, inasmuch as I found Pre-

tors of our time. I am delighted that Angel is following up on his recent Debussy series with a similar survey of the works of Ravel (under whom he performed as an orchestral violinist more than four decades ago), and I am especially pleased to find the previously unrecorded *Shéhérazade* Overture on the first of his Ravel discs. This was Ravel's first work for orchestra, introduced unsuccessfully in 1899 and then written off except as a source of some of the material in the song cycle of the same title. No one would guess this music was Ravel's: it might be taken for Balakirev, or even now and then for Scriabin. (Pierre Lalo likened it to Balakirev, Rimsky, and Grieg in his devastating review of the première.) It is a worthwhile discovery, though, and a not unattractive piece of Orientalism *à la russe*; if the 1899 performance had been half as brilliant as Martinon's, perhaps both Ravel and the audience would have thought better of it.

There have been several fine recordings of *La Valse* recently; the one I have enjoyed most is Skrowaczewski's, which may be the finest single performance in his splendid Ravel set (Vox □ QSVBX-5133, also on Turnabout □ QTV-S 34595). Martinon's is from a similar mold, perhaps a bit more sumptuous overall and not quite as cleanly recorded in the climaxes. The new *Rapsodie Espagnole* is more expansively voluptuous than Martinon's Chicago Symphony version, and it is surely one of the two or three finest current recordings of this work. The *Boléro*, too, is noticeably less hurried than the one Martinon did in Chicago, but still a little breathless; this work seems to appeal to him less than the others—there is more conviction in Ormandy's finely detailed RCA remake (ARL1-0451) and several other versions. But the *Boléro* is a piece one is resigned to duplicating, anyway; with the first-rate performances of the other three items—one of them an "exclusive"—this is really a stunning package, despite sloppy annotation and labeling. R.F.

JEAN MARTINON:  
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his stride



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mandy cond. RCA ARL1-1151 \$6.98, © ARS1-1151 \$7.95, © ARK1-1151 \$7.95, □ ART1-1151 \$8.95.

Performance: **Brilliant**  
Recording: **Striking**

Is *Alexander Nevsky* the only major feature film ever to be cut to its musical score? We all know with what outstanding filmic and musical results it was tailored. The cantata that Prokofiev drew from this epic score has long been associated with Eugene Ormandy and the Philadelphia Orchestra, and they have recorded the work several times. This is an outstandingly brilliant recording and a performance full of character and spirit. I could not vouch for the Philadelphia Mendelssohn Club's Russian (English and Latin texts only are provided), but they do sing in the original language and capture at least some of its sound qualities. The requisite musical qualities—vocal and instrumental—are there in abundance. E.S.

**PUCCINI: Operatic Duets** (see Collections—Leontyne Price/Plácido Domingo)

**RACHMANINOFF: Symphony No. 1, in D Minor, Op. 13.** London Symphony Orchestra, André Previn cond. ANGEL □ SQ-37120 \$6.98.

Performance: **Good**  
Recording: **Very good**

**RACHMANINOFF: Symphony No. 2, in E Mi-**

vin and the London Symphony a bit tame in their treatment of the original version. Unfortunately, though this performance is a good one judged by ordinary standards, the task of communicating this music is no ordinary one, and I feel that Previn has a very slight edge in the architectural department. What I miss in the Ormandy reading is the dramatic urgency he brought to the First Symphony, as well as the rich and well-focussed sound of that Columbia disc. In short, I can't escape the feeling that the comparatively scrawny string sound that comes from both the RCA disc and cassette is partly to blame for the final result. Ormandy is somewhat freer in his use of *rubato*, as one should be in the uncut version of the score; but I sense precious little urgency in the dynamics. Perhaps it will take a Bernstein or a Mravinsky, recorded under ideal conditions, to achieve something approaching a definitive reading of this problematic score. D.H.

#### RECORDING OF SPECIAL MERIT

**RAVEL: Boléro; Shéhérazade—Overture de Féerie; Rapsodie Espagnole; La Valse.** Orchestre de Paris, Jean Martinon cond. ANGEL □ S-37147 \$6.98, © 8XS-37147 \$7.98, © 4XS-37147 \$7.98.

Performance: **Brilliant**  
Recording: **Very good**

At sixty-five, Jean Martinon is just hitting his stride as one of the really important conduc-

Performance: **Galic**  
Recording: **Excellent**

The music of Saint-Saëns is frequently patronized nowadays as slick, superficial stuff, yet I wonder how many of us turn (with a certain sheepish guilt, perhaps) to pieces like the C Minor Symphony when we seek a few musical thrills at the close of a tiring day. Whether Saint-Saëns' Third is truly a symphony or more in the nature of a rhapsody for orchestra, as some disparaging critics have called it, it is never, throughout its two long movements, pedestrian or dull. The transformations on its beguiling themes are breathtaking, and when the deep throb of the organ combines with the full brilliance of the orchestra in the final pages, the spirit of the piece is irresistibly exalting.

There are several good recordings of this music available (this new one brings the total in the catalog to ten); its sonic scope is ever a challenge to recording engineers. But Martinon's is one of the best. Not only is it well recorded, it is also distinguished by the headlong vigor this conductor has been bringing to everything he has gone near of late. The per-

formance has all the requisite excitement, to which Bernard Gavoty, presiding over the great organ at the Église Saint-Louis des Invalides in Paris, contributes in no small measure, especially toward the end.

**SCHOENBERG:** *Piano Music. Three Piano Pieces, Op. 11; Six Small Piano Pieces, Op. 19; Five Piano Pieces, Op. 23; Suite for Piano, Op. 25; Piano Pieces, Op. 33a and 33b.* Maurizio Pollini (piano). DEUTSCHE GRAMMOPHON 2530 531 \$7.98.

Performance: **Glittery, hard**  
Recording: **Good**

Who would have believed that sets of Schoenberg's complete piano music would become a glut on the market? Hard on the heels of Paul Jacobs' set on Nonesuch comes a more surprising combination: Maurizio Pollini on Deutsche Grammophon. Pollini is really brilliant in this music; I doubt that it has ever rung out with such hard luster and clarity. Everything sounds, and pianistically everything works. But there is, so to speak, no redeeming social value at all. All the Expressionist *Angst* is gone, all the traces of Brahms and Wagner and early Kandinsky and World War I and the fall of the Austro-Hungarian Empire and personal anguish and mystery. With the emotional guts removed, we are faced with a monumentally ugly outer shell. We are long past the stage where purely historical or architectural considerations are going to hold us! Technically speaking, I cannot praise these performances too highly, but I cannot recommend them very enthusiastically either.

E.S.

**SCHUBERT:** *Quintet in C Major, Op. 163* (see Best of the Month, page 79)

**SCHUMANN:** *Liederkreis, Op. 24; Eighteen Songs from "Myrthen," Op. 25.* Dietrich Fischer-Dieskau (baritone); Christoph Eschenbach (piano). DEUTSCHE GRAMMOPHON 2530 543 \$7.98.

Performance: **Mostly excellent**  
Recording: **Very good**

This is Fischer-Dieskau's second recording of Schumann's Opus 24—the first version, issued on Deutsche Grammophon some eight years ago, is still in the catalog. There are no radical differences between the two, for these relatively subdued songs find an ideal interpreter here in top form. In fact, Fischer-Dieskau gauges the dynamics in these songs with a sensitive mastery that has not been quite so consistent in his other recent recordings. His singing tone here has a mellow and warm ring matched with an expressiveness that often borders on the magical (*Schöne Wiege meiner Leiden* is a good example).

*Myrthen* (a collection of thirty-six songs) is something of a grab bag among Schumann's song cycles, for its poets range from Goethe to Ruckert, from Burns to Byron, and its moods run the gamut from playfulness to despair. The singer's work, too, is more varied here. Some of the songs are superbly realized: *Was will die einsame Träne* and *Die Lotusblume* (both Heine songs) are exquisite. So is *Du bist wie eine Blume*, through the simpler approach in Fischer-Dieskau's earlier version (DG 139115) is even more beguiling. Elsewhere he occasionally surrenders to overinterpretation: in *Freisinn* the intended carefree bravado becomes an exaggerated military swagger, while in the poignant *Widmung*

fussiness of detail and sudden shifts of emphasis intrude on the serene smoothness of the vocal line.

By all standards, however, these are masterly interpretations captured with clarity and sharp detail. In his first collaboration with Fischer-Dieskau, Christoph Eschenbach combines poetry and virtuosity: his rendering of the challenging piano part of *Warte, warte, wilder Schiffmann* is but one of the many keyboard delights.

G.J.

**SIBELIUS:** *Rakastava, Op. 14* (see GRIEG)

**SIBELIUS:** *Symphony No. 5, in E-flat Major, Op. 82; Symphony No. 7, in C Major, Op. 105.* Boston Symphony Orchestra, Colin Davis cond. PHILIPS 6500 959 \$7.98.

Performance: **Tidy**  
Recording: **Very good**

It was a fine idea to get the Boston Symphony Orchestra, with its outstanding Sibelius tradition, for Colin Davis' first recording of that composer's music, and Philips has done a very good job, if not quite its best, in its first Symphony Hall sessions. But the spirit of Serge Koussevitzky is not evoked here, and neither, to my ear, is that of Sibelius. There is nothing radical or outlandish in Davis' approach; his tempos in both works are almost ideal, and the orchestra seems to be giving him everything he wants. What I miss is the mystique, the aura, the lift—whatever an individual devotee might choose to call that special quality one listens for in Sibelius. Lorin Maazel's similar coupling with the Vienna Philharmonic demonstrates readily enough what is missing here. For No. 5 my preference is Bernstein, with a marvelous *Pohjola's Daughter* (Columbia MS-6749). For No. 7 I would take either Maazel (London CS-6488) or Beecham (Angel S-35458); the latter disc shows its age, but it is generously filled out with the *Pelléas et Mélisande* music and a magical *Oceanides*.

R.F.

#### RECORDING OF SPECIAL MERIT

**SZYMANOWSKI:** *Piano Sonata No. 1, in C Minor, Op. 8; Piano Sonata No. 3, Op. 36.* Daniel Graham (piano). MUSICAL HERITAGE SOCIETY MHS 3136 \$2.95 (plus 95¢ handling charge from the Musical Heritage Society, Inc., 1991 Broadway, New York, N.Y. 10023).

Performance: **Fluent**  
Recording: **Realistic**

There has been something like a very slow-developing ground swell of interest in Szymanowski's music during the last few years, and some of us hoped it would lead to recordings of many of his major works. Since two American recording orchestras are now in the hands of Polish conductors, we might continue to hope, but in the meantime so pivotal a work as the First Violin Concerto has disappeared from our catalogs. The one area in which activity seems to be continuing is the piano music, which has caught the imagination of some highly capable—if not internationally celebrated—young performers with no ethnic link to the composer; this very welcome release from MHS, taken together with Vladimir Pleshakov's recording of the Second Sonata (Orion ORS 73111), gives us a complete survey of Szymanowski's three keyboard sonatas. The First and Third Sonatas, composed in 1904 and 1917, respectively, rep-

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resent extreme contrasts in style: the First is a four-movement Romantic virtuoso work more or less in the language of Chopin and with an abundance of both drama and charm, while the Third, in a single movement, comes from a different world, the one we think of as having been created by Scriabin. Daniel Graham seems to be a committed advocate; he is certainly a powerful one. He projects the expressive character of the music with convincing intensity and deals with the technical challenges as if he enjoyed them. The piano sound has admirable presence, and the pressing itself is up to MHS' highest standard. R.F.

**TCHIAKOVSKY:** *Serenade in C Major, Op. 48* (see GRIEG)

**VERDI:** *Un Ballo in Maschera* (see Best of the Month, page 80)

**VERDI:** *Operatic Duets* (see Collections—Leontyne Price/Plácido Domingo)

**VIVALDI** (arr. Bream): *Concerto in D Major for Lute and Strings; Concerto in G Major for Two Lutes and Strings (P. 133)*. **KOHAUT:** *Concerto in F Major for Lute and Strings*. **HANDEL** (arr. Bream): *Concerto in B-flat Major for Two Lutes and Strings, Op. 4, No. 6*. Julian Bream (lute); Monteverdi Orchestra, John Eliot Gardiner cond. RCA ARL1-1180 \$6.98. Ⓢ ARS1-1180 \$7.95, Ⓢ ARK1-1180 \$7.95.

Performance: **Vital**  
Recording: **Excellent**

Here is an album of first-rate concertos in an exciting performance by Julian Bream. Of special interest is Bream's role as arranger. Taking a clue from Thurston Dart, who claims that the Handel Harp Concerto originally had a lute part as well, Mr. Bream has made a stunning arrangement of the work for two lutes as soloists. He has also arranged the two mandolin parts of the Vivaldi G Major Concerto for two lutes. And, thanks to modern technology, he has recorded both lute parts himself. The Vivaldi solo lute concerto is an expansion of a chamber work.

The Monteverdi Orchestra, under the direction of John Eliot Gardiner, supplies a vigorous accompaniment and produces wonderful sonorities by the bold use of the chitarrone as continuo, recorders, harpsichord, and organ. S.L.

### COLLECTIONS

**E. POWER BIGGS:** *Recital*. **Handel:** *Samson: Awake the Trumpet's Lofty Sound. Water Music: Pomposo. Aylesford Pieces: Fugue in G Major; Sarabande; Impertinence*. **Mozart:** *Adagio (K. 356)*. **Buxtehude:** *Tocatta and Fugue in F Major*. **Purcell:** *The Indian Queen: Trumpet Tune. Bonduca: Trumpet Tune. Air in G Major*. **Abdelazar: Rondeau**. **Purcell** (attr.): *Voluntary in C Major*. **Krebs:** *Fugue on B-A-C-H*. **Banchieri:** *Dialogo per Organo*. **Soler:** *Concerto No. 6 for Two Organs: The Emperor's Fanfare*. **Campra: Rigaudon**. E. Power Biggs (the four organs of Freiburg Cathedral). COLUMBIA □ MQ 33514 \$7.98, M 33514 \$6.98.

Performance: **Fun and games**  
Recording: **Quadraphonic special**

One can well understand how E. Power Biggs' successful quadraphonic Bach record—  
(Continued on page 124)



# If you're surprised to learn that tubes solve some amplifier problems best, you have something to learn about amplifiers.

## And about LUX.

It may seem courageously retrogressive for a company to introduce a *tube* amplifier—even a highly advanced type—to the semiconductor audio world of 1976. Especially for a company only recently established in the U.S. market with a comprehensive line of solid-state amplifiers and tuners. But for LUX, it is simply consistent with our philosophy: whatever path may lead to improvement in the accuracy of music reproduction will be explored by our audiophile/engineers. Whether it leads to transistors or tubes.

Certainly, transistors are not about to be obsoleted by tubes. However, there are some amplifier problems that tubes still handle better than transistors. Overloading is one such problem.

When a solid-state amplifier is driven beyond its rated power, it clips abruptly. Engineers call it "hard" clipping. The term is apt, as the sound from the spurious high-order odd harmonics is raspy and irritating. Further, if the overall circuitry is not stable, and the protective circuits not very well-designed, the distortion is extended in time beyond the moment of overload. Drive a tube amplifier beyond its rated power and it too clips the waveform, but gently and smoothly. This "soft" clipping introduces much smaller amounts of odd harmonics. The distortion is far less irritating, hence less noticeable.

Notch (or crossover) distortion, present in many transistor amplifiers, is another source of spurious high-order odd harmonics. It occurs when the transistor output circuits are not able to follow the musical waveform accurately at the points where it changes from positive to negative and back again. Since notch distortion, unlike clipping, is at a constant level regardless of the power the amplifier is delivering, the ratio of this distortion to signal is worse at lower power. The gritty quality heard from many transistor amplifiers, particularly when they are playing at low levels, is usually due to crossover distortion.

Of course, tubes also have *their* limitations. Especially

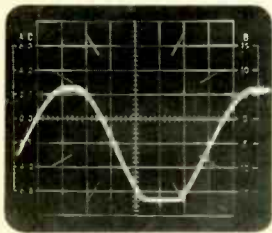
conventional tubes. The only tube previously capable of high-power amplification—the pentode—has inherently higher levels of distortion than the triode. Existing lower-distortion triode tubes cannot deliver sufficiently high power as a simple push-pull pair. But LUX, together with NEC engineers, has developed the first of a new breed of triode tube, the 8045G, which with other related technological advances, makes possible a high-power, low-distortion triode amplifier—the Luxman MB-3045. Among the differences in this new triode: the plate-electrode uses a special bonded metal with high heat-radiation characteristics. Also, the fin structure further aids heat dissipation.

LUX also developed a low-distortion high-voltage driver tube, the 6240G, capable of delivering over 200 volts of audio signal to the output triodes. Also, a new output transformer (LUX's long-time special area of expertise) has been designed to take optimal advantage of the triode configuration feeding it. The quadrifilar winding and core technology of this transformer represents another breakthrough. Overall, from input to output, the use of advanced design direct-coupled and self-balancing differential amplifier stages ensures stability and minimum phase shift.

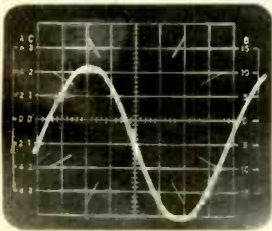
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When a typical transistorized amplifier tries to deliver more power than it can, the top and bottom edges of the waveform "clip" sharply and abruptly, and not always symmetrically. Result: high-order harmonic distortion, raspy and irritating.



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LEONTYNE PRICE, PLACIDO DOMINGO: *sensuousness and persuasive ardor*

ing, involving the four organs of the Freiburg Cathedral played from one console, would provoke a sequel. In this instance it takes the form of a chiefly "fun" collection with Buxtehude and Krebs works thrown in to add a bit of serious ballast. I'm not enamoured of the Handel arrangements taken from *Samson* and the *Water Music*, but the little "Aylesford" keyboard pieces are something else again, especially the two-voice *Fugue* in G and the delectable little tidbit titled *Impertinence*. The Purcell pieces are mostly familiar favorites of Biggs buffs. But the real gem on side two is the *Banchieri Dialogo per Organo*, with its hugely effective (in quadraphonic) back-front interplay. Though the grandiose perorations of Krebs and Buxtehude are magnificent room-shakers, the really effective quadraphonics happen in the small pieces that rely heavily on the reed and mixture registrations that bring with them a strong sense of directionality, Handel's "Aylesford" pieces and *Banchieri's Dialogo* being the most striking instances in point.

Needless to say, the Biggs performances are zestful, and the recording, in both two- and four-channel formats, is by turns fearfully impressive and delightfully entertaining.

D. H.

#### RECORDING OF SPECIAL MERIT

**MADY MESPLÉ: Coloratura Arias.** Donizetti: *Lucia di Lammermoor: Mad Scene*. Verdi: *Rigoletto: Caro nome*. Rossini: *La Gazza Ladra: Di piacer mi balza il cor*. *The Barber of Seville: Una voce poca fa*. Bellini: *I Capuletti ed I Montecchi: O! quante volte*. *La Sonnambula: Ah! non credea mirarti* . . . Ah, non giunge. Mady Mesplé (soprano); Paris Opera Orchestra, Gianfranco Masini cond. ANGEL S-37095 \$6.98.

Performance: **Expert and charming**  
Recording: **Excellent**

Mady Mesplé, France's reigning coloratura soprano, has not been heard at the Metropolitan since her brief appearance as Gilda during the 1973-1974 season. Her absence cannot be ascribed to artistic shortcomings, for her exceptional skills are notably displayed on records, particularly on her recital of French arias on Seraphim 60215.

In the present program of Italian arias

Mme. Mesplé reveals equally winning ways. Her phrasing is very musical, her command of the high tessitura is spectacular, and her technique is very fluent, though trills are not her forte and, in fact, she even omits some of them. The voice is light and even fragile at times; she is not a lyric soprano with a good florid technique like Montserrat Caballé, nor one with exceptional dramatic insights like Beverly Sills. She is a coloratura soprano in the tradition of Lily Pons and Mado Robin—and at least their equal in natural musicality and all-around technical skill.

Mme. Mesplé's girlish, fluttery timbre is ideal for Gilda and Amina (*La Sonnambula*). Her "Caro nome" is very sensitively done, which makes me regret that she recorded only the aria, without the "Gualtier Maldé" passages which provide such a touching frame for it. The scene from *La Sonnambula*, on the other hand, is complete, and the tender aria is effectively contrasted with the dazzling cabaletta "Ah, non giunge" in which the second chorus, at a slowed tempo (!), is delivered with just the right amount of ornamentation.

The record liner credits Mady Mesplé for the cadenza in the *Lucia* Mad Scene. I fail to hear anything really original in it, but the singing is fine. The rarely heard aria from *La Gazza Ladra* (quite similar to Rosina's "Una voce poco fa") provides the only real novelty. It is spectacularly sung, with an interpolated high F-sharp. The program could have been put together with more imagination, but this is a major artist, she sings her heart out, and she receives good orchestral support and very effective sound as well.

G. J.

#### RECORDING OF SPECIAL MERIT

**LEONTYNE PRICE/PLACIDO DOMINGO: Verdi and Puccini Duets.** Verdi: *Otello: Già nella notte*. *Un Ballo in Maschera: Teco io sto!* Puccini: *Manon Lescaut: Oh, sarò la più bella*. *Madama Butterfly: Bimba, bimba, non piangere*. Leontyne Price (soprano); Placido Domingo (tenor); New Philharmonia Orchestra, Nello Santi cond. RCA ARL1-0840 \$6.98.

Performance: **First-rate**  
Recording: **Excellent**

"The Operatic Duo of the Century!" is the brazen proclamation on the jacket of this album—this from the same company that once

boasted the teams of Caruso and Farrar. Ponselle and Martinelli, Galli-Curci and Schipa, and Milanov and Bjoerling. The album billing is an exaggeration, but Leontyne Price and Placido Domingo are two of the bright luminaries on a not particularly starry horizon. In tandem, they are, without a doubt, one of the great operatic duos of the decade.

And they live up to their stellar reputation in this, their first joint recital disc. The repertoire is familiar, but these two artists bravely stand up to comparison with all illustrious predecessors without quite setting new standards. The Puccini side, in fact, is very nearly faultless. Sensuousness is the principal quality in both the Manon Lescaut and the Butterfly of Leontyne Price. Character differentiation is barely noticeable, but the singing is surpassingly beautiful. The tenor's performance is characteristic in its persuasive ardor controlled by an ever-alert musicality.

The *Ballo* duet sizzles as it should. Some of Verdi's dynamic markings fall by the wayside, but we too are swept along by the tidal wave of the emotion-charged singing. There are glowing moments in the *Otello* scene as well, but here Miss Price sounds not so much like the tender, yielding Desdemona as a star soprano determined not to be outdone by the star tenor. The results caress the ear, but the effect would have been more memorable had the artists paid more attention to Verdi's expressive markings.

More assertive direction would have helped matters, but Nello Santi was apparently content with sometimes prosaic efficiency. The orchestral sound is lustrous, however, and the technical presentation is all we can ask for. Richard Mohr, the recording producer, is also the author of the expert annotations. G.J.

#### RECORDING OF SPECIAL MERIT

**ROGER WAGNER: Festival of Early Latin American Music.** Belsayaga: *Magnificat* a 8. Zipoli: *Gloria*. Lopez Capillas: *Gloria laus et honor* a 4; *Two Alleluias*. Fernandes: *Eso Rigor e repente*. Anon.: *Sa qui turo zente pleta*. Nunes Garcia: *Lauda Sion Salvatorem*. Blasco: *Versos con duo para chirimias*. Duran de la Mota: *Laudate pueri*. Fernandez Hidalgo/Victoria: *Salve Regina* a 5. Roger Wagner Chorale and Sinfonia Chamber Orchestra, Roger Wagner cond. **ELDORADO S-1 \$7.95** (plus shipping, total billed on receipt of order by UCLA Latin American Center, University of California, Los Angeles, Calif. 90024).

Performance: **Very good**  
Recording: **Very good**

The music on this handsomely produced disc, imaginatively selected from materials researched by UCLA's renowned Robert Stevenson, is of more than historical interest; most if not all of it is downright fascinating. None of it is what anyone might regard as primitive, though some of the pieces are based on folk styles; it is all extremely well crafted, the work of polished professionals, some of them—such as the Italian-born Domenico Zipoli (1688-1726)—of European origin and all of them apparently conversant with European musical developments in their time.

All the performances reflect enthusiasm as well as fastidiousness, and the sound is very good indeed. This is the sort of release that would enhance any catalog, and surely beyond what most of us would expect from a university press operation. R.F.

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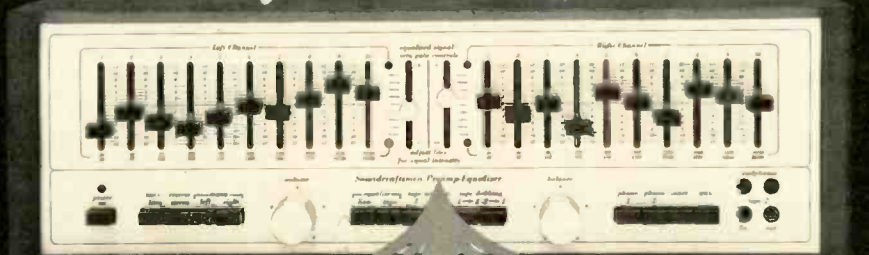
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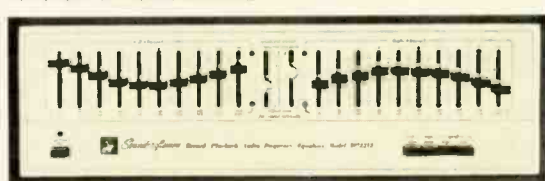
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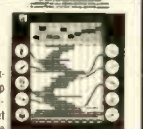
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# Changing instruments meant changing technique and music as well.

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so that he can know the original dynamics, articulations, and pedalings appropriate to the music and the instrument. This, of course, involves not only visiting museums and private collections that have properly restored instruments and that allow musicians to play them, but also spending much time in libraries studying the provenance of the instrument and ferreting out its repertoire in original editions. Until recently this has been all but impossible, but during the last decade most museums and collectors have been restoring their instruments and allowing qualified performers to work on them. Also, thanks to musicologists and the wonder of Xerox, these performers are now generally able to obtain proper editions of the music they need.

## Learning from Old Instruments

ONE of the most fascinating facets of today's musical life is the continuing exploration of old instruments and the lessons they have to teach us. The modern musician is pretty much spoiled by the comparative uniformity of instruments. Grand pianos, for example, are similar enough throughout the world that a pianist is able to move from one instrument to another and play the same program without too much difficulty. If, however, he were taken back to the first years of the nineteenth century, he would find the situation wildly different. In Vienna he would be confronted with a frail instrument that had a treacherously light action, a beautiful singing treble, and knee levers instead of pedals. In London, on the other hand, he would find a much larger instrument with a heavy action, a weak treble but a strong tenor register, and foot pedals. In shifting from the Viennese instrument to the English instrument, not only would he have to make extreme changes in his

technique, but he would also have to play an entirely different repertoire. The lesson to be learned from this is that what is effective on one old instrument may be disastrous on another; even today, a harpsichordist travels at his peril without his own instrument.

From this basic fact of nineteenth-century life we have learned that composers, most of whom were also performers, wrote for specific instruments and that their music *sounds* best when played on that specific instrument. Organists learned this lesson some time ago, harpsichordists have just learned it, and pianists are just beginning to learn it.

In order for a performer to grasp this message, two major obstacles must be surmounted: first, he must locate the instruments concerned and spend a great deal of time learning their various peculiarities; second, he must know what music was written for which instrument and he must have access to first editions (or autograph manuscripts) of the music,

MANY of the results of exploration of old keyboard instruments have been made available to the record-buying public by the Peerless Record Company, an English outfit that produces its discs under the Oryx label. Although the records were at first available only in England, the Musical Heritage Society has released many of them here through their mail-order operation. Now the Oryx series is being made generally available to the American public in stores under the auspices of the American CMS Record Company.

In the current batch of nine Oryx records, we are taken on fascinating tours of three major European keyboard collections and presented with a far-flung assortment of various organs. The first volume of the two discs devoted to instruments in the Victoria and Albert Museum in London is given over to early English, Italian, and German harpsichords. Especially good is Margaret Hodgson's performance, on a hexagonal spinet known as "Queen Elizabeth's Virginals," of a fine sampling of Elizabethan virginal pieces. Even though Valda Aveling does not sound quite at home on the Italian instruments, the flavor and sound of Frescobaldi do come across. Here, more homework should have been done: the "Frescobaldi Fugue in G Minor" is really a fake by Clementi, and one cannot justify the decision to play Haydn on instruments built in 1600 and 1660.

The second volume presents us with four pianos which range from 1767 to 1875 in date of construction. Starting with a plunky Zumpe, moving to the sweeter sound of a Longman & Broderip square, lingering on an exotic "Giraffe," and finally arriving at a modern-sounding Wornum grand, the recording dramatically shows the remarkable development of the piano from the very beginning. The music is well chosen and nicely played, but the novel sounds of the bassoon, triangle, and *una corda* effects (unique to the Giraffe) are inaudible even though they are boasted of on the jacket.

PERHAPS the most important private collection of early pianos is that of C. F. Colt in Kent. All of the instruments are in beautiful condition, and Mr. Colt is extremely generous in making them available. Volume IV of this series presents Malcolm Frager playing C. P. E. Bach, Haydn, and Beethoven on appropri-

Keyboard of a 1738 harpsichord by Mahoon, one of the earliest surviving two-manual English instruments.



The Colt Clavier Collection

ate instruments. It is rare that the modern concert artist can adjust to old instruments, but Mr. Frager is rare. His performance of the *Appassionata* on an 1806 Broadwood sheds new light on this popular work.

The Beethoven repertoire is further explored by Barbara Holmquest on two more Colt instruments. Conrad Graf was one of the finest piano builders of all time, and the silky sheen of the Graf treble is well captured in the last movement of the *Waldstein* Sonata. Although the sound of the Broadwood is ravishing for the *Moonlight* Sonata, Miss Holmquest unfortunately does not take Beethoven's pedal markings for the first movement seriously. Also, her performances are marred by some odd tempos and wrong notes.

Volume VI of the Colt collection demonstrates how well old instruments sound in chamber music, both instrumental and vocal. The modern piano tends to override other instruments, while the older pianos really blend, which puts quite a different emphasis on the balance.

Turning to the German National Museum at Nürnberg, Ernst Groschel gives us a side of Chopin done on an Érard of 1840 and a side of Schubert done on another magnificent Graf. Mr. Groschel is a sensitive musician, and the instruments are almost modern in sound. The virtue of both instruments is the clarity and delicacy of tone that allow one to hear the inner workings of the music, all too often forgotten by exponents of modern pianos.

The recording of harpsichord and organ duets, also done at Nürnberg, must be counted a disaster. The Guissani Sonata is a dreadful bore, and the Giordani was originally conceived as a harpsichord duet. The recorded balance is so heavily weighted on the harpsi-

chord side that one is unaware that there is a melody in the last movement. But with Diabelli and Kuffner for guitar and piano we enter the finest world of the nineteenth-century salons. Although lightweight, the music breathes an elegance that is enhanced by the silvery sheen of these old instruments.

**T**HE last two records take us into the world of historic organs. Here we are given a fine sampler which includes such great builders as Compenius, Stein, Schnitger, and Silbermann. If one has never heard French reeds, the 1782 Cliquot will come as a hair-raising experience. Of special organological interest is Michael Thomas' recording on the Claviorganum, a bizarre combination of harpsichord and organ. Unfortunately, the only piece that comes off musically is the Bach Fantasia and Fugue in A Minor. The rest of the music is hindered by the cumbersomeness of the instrument and by Mr. Thomas' rather lumpy performance.

The Oryx engineers are to be congratulated for capturing (for the most part) these sounds so faithfully. And certainly the main thrust of this series lies in the unusual sonorities presented. As for rewarding musical experiences, the discs are uneven, depending on the repertoire and performer. Nonetheless, musicians—especially keyboard players—owe it to themselves to familiarize themselves with this extremely important pioneer series that boldly presents a musical tradition we are just beginning to understand. And even nonmusicians will find in these records an opportunity to broaden their musical experience in an unusual and valuable way with a whole new variety of sounds emerging from their speakers.

—Stoddard Lincoln

**HISTORIC INSTRUMENTS AT THE VICTORIA AND ALBERT MUSEUM, VOLUME I: *Early Keyboard Instruments.*** Works by Byrd, Morley, Frescobaldi, Scarlatti, and Haydn. Margaret Hodgson and Valda Aveling ("Queen Elizabeth's Virginals," Rossi pentagonal spinet, harpsichord by Baffo, triangular spinet, and writing-case spinet). ORYX EXP 76 \$6.98.

**HISTORIC INSTRUMENTS AT THE VICTORIA AND ALBERT MUSEUM, VOLUME II: *Early Piano.*** Works by Bach, Arne, Arnold, Steibelt, and Smith. Esther Fisher, Valda Aveling, and Malcolm Binns (square pianos by Zumpe and Longman & Broderip, grand pianos by Van der Hoef and Wornum). ORYX 1811 \$6.98.

**THE COLT CLAVIER COLLECTION, VOLUME IV.** Works by C. P. E. Bach, Haydn, and Beethoven. Malcolm Frager (grand pianos by Schiedmeyer and Broadwood). ORYX 1804 \$6.98.

**BEETHOVEN: *Sonata in C Major, Op. 53 ("Waldstein"); Sonata in C-sharp Minor, Op. 27, No. 2 ("Moonlight"); Für Elise; Four Bagatelles from Op. 33.*** Barbara Holmquest (grand pianos by Broadwood and Graf). ORYX EXP 18 \$6.98.

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**UME VI.** Works by Haydn, J. C. Bach, C. P. E. Bach, and Schobert. Celia Bizony (harpsichord) by Kirckman, grand piano by Broadwood; Duncan Robertson (tenor); Peter Vel (viola da gamba); string quartet. ORYX 1706 \$6.98.

**MUSIC FOR ORGAN AND HARPSICHORD/MUSIC FOR FORTEPIANO AND GUITAR.** Works by Guissani, C. P. E. Bach, Giordani, Diabelli, and Kuffner played on historic instruments in the German National Museum, Nürnberg. Franz Haselböck (chamber organ); John Henry van der Meer (harpsichord); Rita Maria Fleres (fortepiano); Mario Sicca (guitar). ORYX EXP 58 \$6.98.

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## Introducing the Staff . . .

Since readers from time to time understandably display a natural human curiosity about the backgrounds of the writers and editors who bend their ears each month, we are offering a series of capsule biographies and autobiographies designed to satisfy that expressed need and at the same time to circumvent some of the hazards of mere speculation. —Ed.



Editorial Coordinator

# Louise Boundas

**T**HERE has been a revolution in printing in the last ten years," says Louise Boundas, "and I am having to learn along with our typesetters and printers just what can be expected from the new techniques and processes." As STEREO REVIEW's Editorial Coordinator, she is the magazine's resident expert on these processes, and she supervises the complex procedure of turning authors' manuscripts into articles on printed pages. All copy, both technical and musical, passes through her hands several times and thus comes under her scrupulous scrutiny.

Ms. Boundas was born Louise Gooch in Yazoo City, Mississippi, and grew up in a variety of small Southern towns. She graduated with honors from the Woman's College of the University of North Carolina at Greensboro. "I majored in English and took some advanced math and physics and worked on the college literary magazine, but I didn't intend to teach. And the prospect of a career in publishing was not what lured me to New York. Like a lot of young Southerners who are interested in the arts, I just could hardly wait to get here.

"I was only twenty when I arrived (I could have graduated at nineteen, but

Mama wouldn't let me), so I had to live at the YWCA for a short time because I was too young to sign a lease on an apartment. I came armed with a job offer from the New York Public Library, but since I didn't really want to be a librarian, I looked around for a while. I was told that a girl could never expect to get a job in publishing until she could type sixty words a minute and take shorthand."

Even without these skills, Louise got a job on the staff of a group of engineering journals editing highly technical copy and performing some production functions. "Although the office was in a beautiful mansion on Fifth Avenue, it was an editorial sweatshop. They hired only women because that was all they could afford. The pay was less than subsistence, but the training was excellent."

With that experience Louise soon got a better job at Conover-Mast, the publishers of a number of trade magazines. When William Anderson left the company to join STEREO REVIEW, Louise succeeded him as managing editor of *Electro-Technology*, a position she held until the magazine moved to the Midwest.

After taking a master's degree in English at Yeshiva University, she taught in a junior high school in South Yonkers. Attempting to teach something so structured as traditional language skills in the unstructured situation of "heterogeneous classrooms" was depressing and made her pessimistic about the literacy of at least one generation and probably two. After two years she was happy to return to publishing as an editor for the Public Affairs Committee, and in 1972 she joined the staff of STEREO REVIEW.

In addition to her solid literary and technical printing background, Louise brings to the magazine a strong interest in music. She particularly enjoys instrumental music of the Baroque and Classical periods and some popular songs, such as those of Gershwin and Porter. And she hears a lot of jazz because her husband is an avid jazz fan.

Louise is married to George Boundas, a magazine art director whom she met at Conover-Mast. They have recently moved to a house in Westchester County where Louise is enjoying gardening ("I planted a hundred narcissus bulbs and a hundred tulips this fall") and expanding her picture collection, a pleasure afforded by the increased wall space of the new house.

**W**ith reasonable good humor Louise puts up with a certain amount of teasing about being the office feminist because when new on the staff she was asked for an opinion on the use of the term "Ms." She answered, "Well, I am Ms." Like many women, however, she does not regard herself as a militant, although she has strong views on equality of opportunity and remuneration. "Publishing has exploited women and continues to do so, but opportunities are finally becoming more nearly equal in this field, as in others. We just have to learn to take advantage of those opportunities."

—William Livingstone

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(Stereo Review, February, 1975)

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