

ELVIS HAS LEFT THE BUILDING

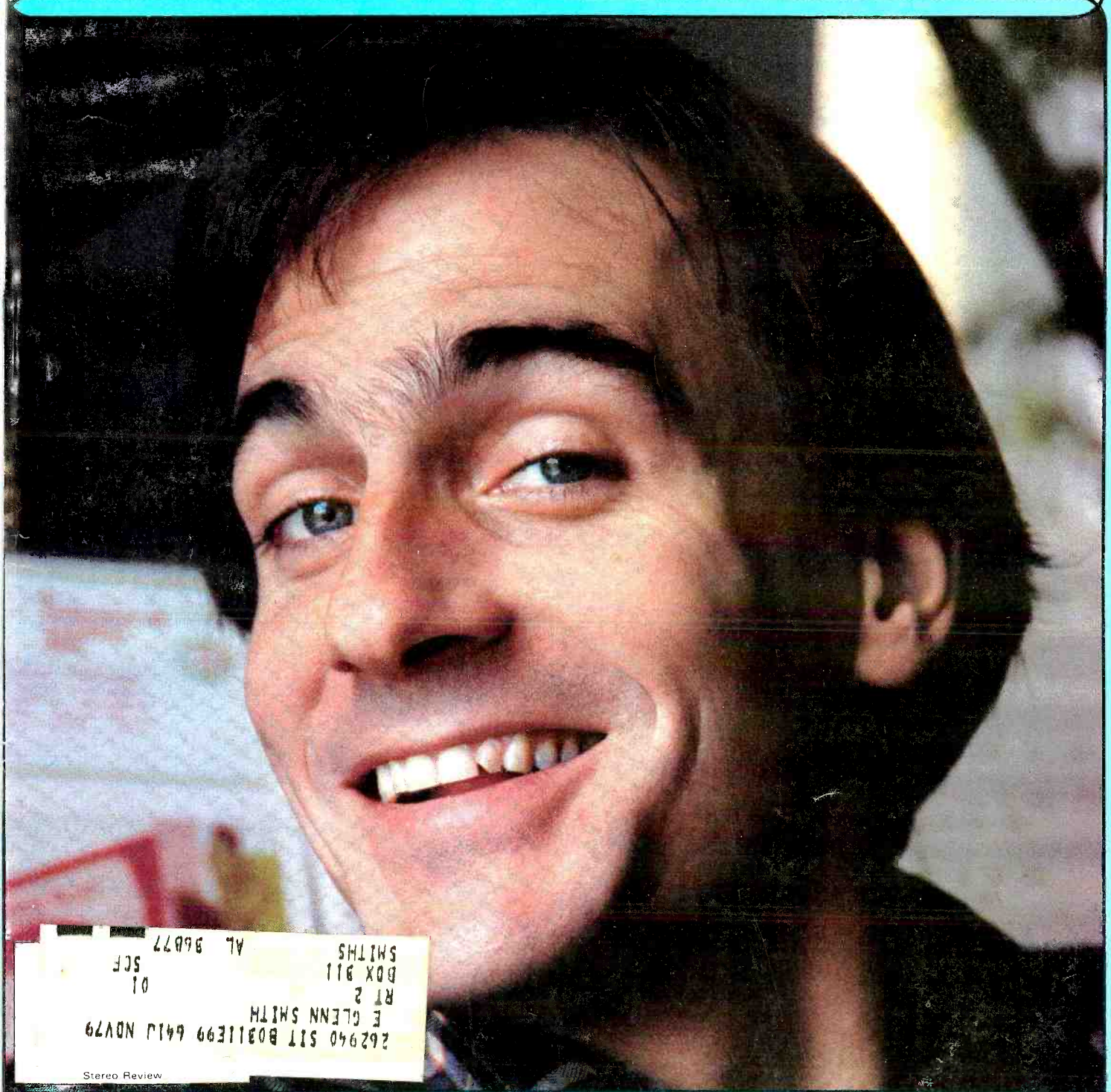
JANUARY 1978 • \$1.25

Stereo Review

AUDIO "BREAKTHROUGHS": WHAT'S IN IT FOR BUYERS?

Equipment Test Reports: ADS 810 Speaker System • Sherwood Micro/CPU 100 FM Tuner
dbx 128 Dynamic-range Enhancer/Noise-reduction System • Sankyo STD-2000 Cassette Deck
Yamaha CR-620 AM/FM Stereo Receiver

A TALK WITH CAB-DRIVER JAMES TAYLOR



**WHEN SOMETHING
WORKS THIS SUCCESSFULLY
MOST PEOPLE WOULDN'T
MESS AROUND WITH IT.**

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The most obvious improvement over the old 2121 is the new front end of the CT-F4242.

What isn't quite as obvious is the thinking behind it. The new push-button oil damped door, for instance, doesn't tilt like the CT-F2121's, or out like others. Instead, it slides neatly up over the lighted tape transport. So it's easier to get your cassette in and out of the deck.

This same kind of thinking went into repositioning the hard Permalloy Solid tape heads. Vertically. Right at your fingertips where you want them. So it's no hassle to keep them free of dust and in good working order.

Pioneer's engineers also put a great deal of thought into features our competitors seem to have given very little thought to. Features like a three-position bias and equalization switch, instead of the more typical two. And a six fin tape drive shaft, instead of the common three, to hold your cassettes more securely.

The point is, you'll see a lot on the new CT-F4242 that you won't see on other modestly priced cassette decks.

But there's more to this deck than meets the eye.

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Inside, for example, where many cassette decks use small flywheels that can cause wow

and flutter, the flywheel in the new CT-F4242 is massive. (In fact, it's 30% bigger than the 2121's.) Our bigger flywheel reduces wow and flutter even further. So you get cleaner and crisper recordings.

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Practically every decent cassette deck today has some sort of Dolby system that adds clarity to the music by reducing tape hiss. But the Dolby in the CT-F4242 cuts tape hiss enough to produce an incredible signal-to-noise ratio of 62 decibels. A figure comparable to far more expensive equipment.

And although you'll find a multiplex filter switch on many cassette decks, you won't find one on the CT-F4242. It's built-in. Which literally means that you can't make a bad FM recording.

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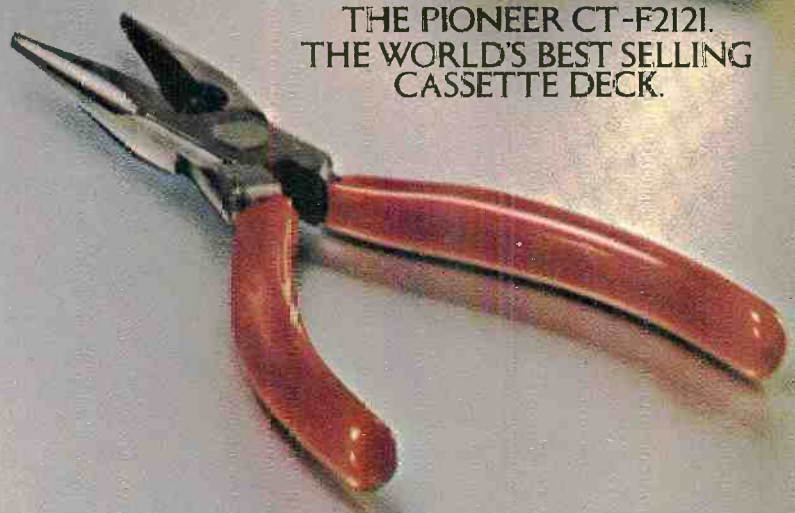
	CT-F2121	CT-F4242
HEADS:	"Permalloy Solid" recording/playback head sl. Ferrite erasing head sl.	"Hard Permalloy Solid" recording/playback head sl. Ferrite erasing head sl.
WOW AND FLUTTER:	No more than 0.17% (WRMS)	No more than 0.00% (WRMS) No more than ±.2% (DIN)
FREQUENCY RESPONSE:	Standard LH tape: 30 to 13,000 Hz (40 to 11,000 Hz ± 3 dB). Chromium type tape: 30 to 16,000 Hz (40 to 12,000 Hz ± 3 dB)	Standard LH tape: 30 to 14,000 Hz (40 to 13,000 Hz ± 3 dB). Ferrichromium type tape: 30 to 16,000 Hz (40 to 15,000 Hz ± 3 dB). Chromium type tape: 30 to 16,000 Hz (40 to 15,000 Hz ± 3 dB)
SIGNAL-TO-NOISE RATIO:	Dolby OFF: 48 dB (Standard and LH tapes) Dolby ON: 58 dB (over 5 kHz, standard and LH tapes). When chromium type tape is used, signal-to-noise ratio is further improved by 4.5 dB over 5 kHz.	Dolby OFF: more than 52 dB Dolby ON: more than 62 dB (over 5 kHz standard and LH tape). When chromium type tape is used, signal-to-noise ratio is further improved by 4.5 dB over 5 kHz.

*Without vendor wood cabinet optional at extra cost.

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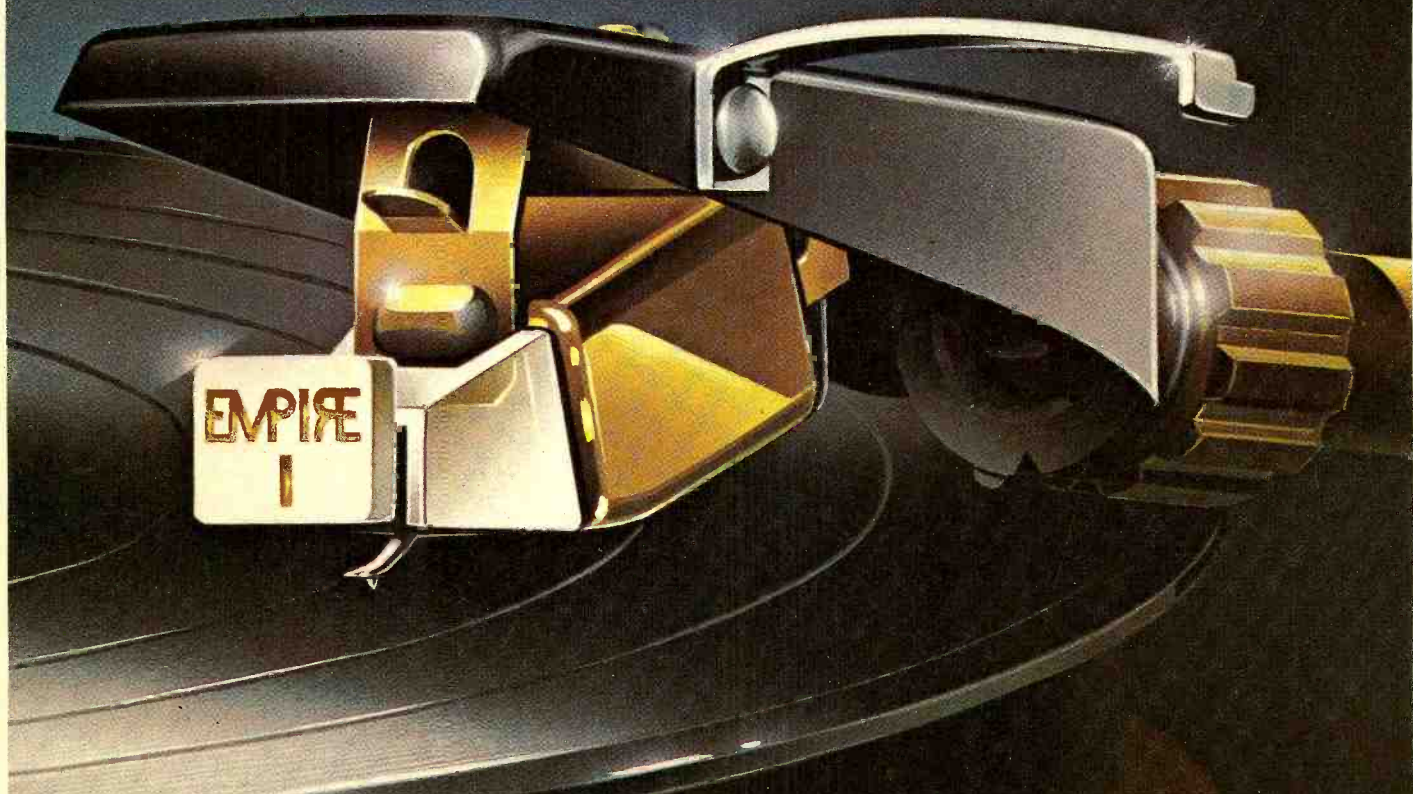


THE PIONEER CT-F4242.
THE LOGICAL SUCCESSOR
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CASSETTE DECK.



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THE WORLD'S BEST SELLING
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FORMERLY HI FI/STEREO REVIEW

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JANUARY 1978 • VOLUME 40 • NUMBER 1

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Editorially Speaking

By William Anderson



THREE CHORDS AND SIX CHANGES

ASKED by an interviewer whether the blues is folk music, Big Bill Broonzy was predictably only half serious when he replied, "It's all folk music, 'cause horses don't sing." But troubadour James Taylor, interviewed in this issue, was quite serious when he made very much the same observation: "... it's actually *all* folk music, what we listen to today. It has a self-made tradition, people who go out and shop for their own education rather than having one delivered to them. Sure, I'm a folk musician."

But even that formulation, qualified as it is by the limiting "what we listen to today," is not general enough for me: isn't all popular music, today *and* yesterday, the result, as Taylor puts it, of whatever "happenstantial kind of random musical environment" its composers grew up in? (There is, of course, very little that is "random" about a classical musical education.) No one, after all, grows

up in a musical environment that is identical, either in quantity or in quality, to anyone else's. What we folk hear—and the order in which we hear it—goes irrevocably into the mix, and when we get around (like the Beatles, Joni Mitchell, or James Taylor) to producing music of our own, that mix is the one we must work with. And work it must, for we haven't run out of music yet.

Which is why it is a little difficult to take cultural vigilantes seriously when they prophesy that the degenerate cacophony of rock, or disco, or whatever, means at the very least the destruction of a whole generation's musical sensibilities, and perhaps the end of music itself. Of course we all know what "good" music is—it is that uniquely communicative, serious, soulful, wholesome, intelligently crafted, toe-tingling, mind-filling, and simply wonderful combination of sonic materials that has earned our personal endorsement, the

kind of entertainment anyone in his right mind will agree deserves all the prizes and the right to ravish the world's ear. So why doesn't it work out that way? Why is there all this unmusical crud around?

There are at least a couple of reasons, one of them being every generation's psychological imperative: discover your identity and establish your autonomy. One of the ways this is done is by inventing a music that will define your uniqueness while maximally insulting the musical prejudices of your parents. Another reason is that "mix." It is one of the sad facts of American culture that the arts—particularly music—are given scandalously short shrift in our schools. The average young person in this country knows nothing about music—what it is made of and how it is put together—after eight years in elementary school, eight more in high school and college. Little wonder that they often settle, in their "folk" music, for three chords and six clumsy changes. Why, instead of denouncing these perfectly valid though technically simple expressions, don't parents insist that a little music be taught in schools? (Reading music is, after all, no big deal; *five-year-olds can do it*.)

If the parents and the schools have been lax in fulfilling this obligation, perhaps it will be picked up by a different educational medium. Washington, D. C. station WETA-TV last fall ran a series of programs "guaranteed to make youngsters love music while they're learning about it." Each program covered a different aspect of music—"Music Is . . . Rhythm" (and Melody, Harmony, Tone Color, Form, Style, Composed, Conducted, Improvised)—with examples drawn from Baroque to rock and everything in between. The series was also made available for rebroadcast by other public-TV stations. If you missed it, hold your breath—the producers are already at work on a sequel, and Congress is at work on a bill for further funding. If the good senators have been listening to the new wave of "folk" music lately, it's bound to pass.

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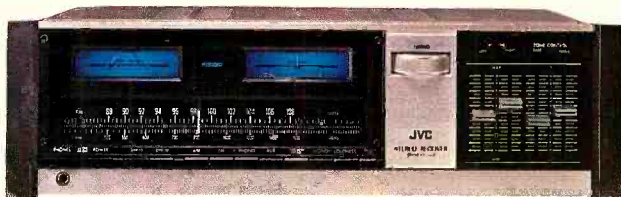
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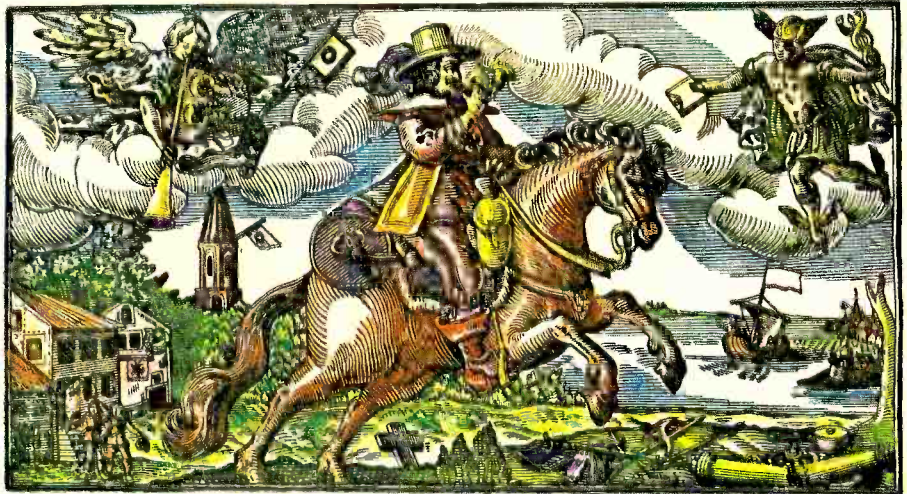
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LETTERS TO THE EDITOR

Comparing Loudspeakers

● The "Safe Speaker Reviews" item in the October "Audio Q. and A." and the November review of the ESS amt 1b speaker system make some good points about speaker comparisons that I would like to add to. My experience is that the human mind has almost no memory for the quality or details of sounds. Differences between speakers do show up clearly if you are listening to one and then switch suddenly to the other—but after a few seconds you lose track of what the first speaker sounded like. Therein lies a danger for the unaware speaker shopper. Any speaker he listens to for a period of time will come to be the norm, since the memory of how other speakers sounded is as shortlived as a dream upon awakening. And without a live source to compare them to, quite different speakers may seem to be equally good. Finally, to confuse the matter further, a given speaker may sound different depending upon one's position relative to it. One study I have heard about even suggests that the differing shapes of people's outer ears and even ear canals account for some of the differences in our perceptions of sounds!

FRANK CICCONE
Naugatuck, Conn.

Technical Director Larry Klein replies: I find that the trick when evaluating speakers by ear is to focus on what sounds wrong, rather than on what's right. If you are able to mentally characterize a given speaker system as boomy, shrill, or nasal (or, more scientifically, as having response peaks at 100, 8,000, or 2,000 Hz, respectively), you are then in a position to remember—and compare—its special sound "signature." Of course, this will work only with speaker systems that have specific characteristics that can be clearly labeled—which is why it is difficult to differentiate between accurate speakers.

The physical idiosyncrasies of people's outer (or inner) ears are not really relevant to how they perceive loudspeakers, since both live and reproduced music will be affected the same way. However, this factor may influence the relative performance of headphones, since the ear itself is the "acoustic environment" into

which headphones radiate and differently shaped ears may relate differently to the same headphones. It is possible to change the subjective frequency response of some headphones (particularly the stethoscope type) by moving them about on, over, or in one's ears, since this may affect how well the high-frequency radiating part of the phones is focused on the tympanic membrane (the eardrum).

Government Support

● Although I don't always agree with William Anderson's editorials, I find them consistently well thought out and effectively argued. "Culture Snobs" in the November issue is certainly no exception. For the most part I agree with it. The tax dollars of opera and symphony goers in New York City help pay my salary at NASA; why then should I get upset if a much smaller fraction of mine goes to support culture in New York (and, of course, elsewhere as well)? My only reservation is that whatever the federal government supports it eventually seeks to control, and whatever it controls it screws up—and I love good music enough to be awfully scared at that prospect. I hope that in the arts we will see federal support without federal interference, but my hope is mixed with trepidation.

DAVID R. SCHRYER
Hampton, Va.

The Editor replies: Mr. Schryer has a point. What makes me nervous is the possibility of bureaucratic elephantiasis, with all the grant money being swallowed up in administrative paperwork—reports, position papers, studies, and surveys—before it reaches the performing level. There has already been a move by Sen. Abraham Ribicoff (D-Conn.) to put the National Endowment under the control of HEW or the new Department of Education. Now I wonder why he'd want to do a thing like that?

JT and JB

● Applause to Peter Reilly for his superb review of Barbra Streisand, "The Indomitable" (Continued on page 10)

Total Energy Response:

The reason why Jensen Lifestyle speakers sound better than any comparable speaker.

Just what is Total Energy Response?

Total Energy Response is the uniform radiation of sound throughout the whole listening area—at all frequencies. And it makes an unquestionable difference in the stereo sounds you hear.

Most speakers are to one degree or another directional. That is, part of the room in front of the speaker gets the full sound. Bass, treble and midrange. While parts of the room to the sides of the speaker get just a fragment of the sound. (See Fig. A)

It's precisely this fault we set out to correct. Because others may tell only part of the story. Often with just one response curve measured from just one position—their optimum position.

However their results don't look so favorable when the test microphone is

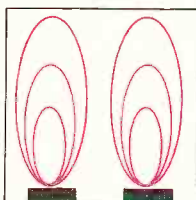


Figure A Ordinary Speaker Dispersion

moved "off-axis," that is, to the side instead of directly in front of these speakers.

Figure B illustrates this. It is a Total Energy Response curve, taken with test micro-

phones in all positions. When comparing the Jensen (blue line) with a comparably priced "flat" speaker (red line), you can see how deficient the other speaker is in total radiated energy in the mid and mid-high frequencies. This midrange deficiency is unfortunately very common amongst speakers, and gives many so-called "flat"

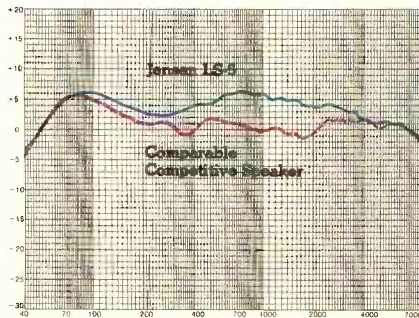


Figure B Total Energy Response Curve

response speakers a very "thin" sound

The Jensen Lifestyle speaker, on the other hand, demonstrates true Total Energy Response. Uniform radiated



part of the room. Not just the bass if you're to the side of the speakers. And not just the treble if you're in front of them.

2. Excellent stereo imaging. You hear everything that *both* speakers are putting out. Almost anywhere in the room. Unlike listeners of other speakers, who can fall victim to gaps in the response characteristics, or "hole-in-the-middle" stereo.

3. Excellent balance. Many other speakers are hot on treble, or bass, or both. But all that really means is that the midrange is often neglected. Jensen sends the all-important midrange throughout a room every bit as much as the highs and lows.

4. Total Energy Response is achieved in Jensen speakers without any loss of efficiency. Which means a moderate output amp or receiver is still all you need for great performance. Not a big super-amp.

power—at all frequencies—throughout the whole room.

These speakers were conceived, designed and tested for this. Tested from every spot in anechoic "dead" rooms, reverberation "live" rooms, and simulated living rooms.

Our finished products: remarkable dispersion for the hard-to-disperse high frequencies... 160° or 170° wide, depending on the model. Also expanded dispersion of the critical midrange response. And full, rich bass that still perfectly matches the other frequencies for accurate sound reproduction. The way it's *supposed* to be heard.

You can see how the sound from a Jensen is distributed much more evenly throughout a room. And when you're in your own listening room... you can *hear* it.

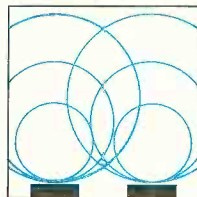


Figure C Jensen Lifestyle LS-5 Dispersion

What gives Jensen Total Energy Response?

A number of features. First, the extremely wide dispersion of the Lifestyle Tuned Isolation Chamber™ midranges.

Especially important are Jensen's two tweeters: a 160° dispersion cone direct radiator, and the 170° dispersion Mylar® Sonodome® tweeter. The sound input to each of these drivers is precisely monitored by Jensen's exclusive Comtrac® crossover network, which insures uniform energy transfer between the woofer, midrange, and tweeter.

For final command of the Jensen Lifestyle's sound, behind-the-grille controls are featured. These controls let you adjust the treble, and in some cases, the midrange, to the characteristics of your individual room.

And with Total Energy Response... there's more music to control.

Hear the difference yourself...

Stop by your local Jensen dealer and hear for yourself the difference Total Energy Response makes. It's the reason why Jensen Lifestyle speakers sound better than any comparable speaker.

JENSEN

LIFESTYLE SPEAKER SYSTEMS

For the name and location of your nearest Jensen dealer, write:

Jensen Sound Laboratories, Division of Pemcor, Inc., 4136 N. United Parkway, Schiller Park, IL 60176.

One Is Back," in the October issue. I have one question, however, with respect to his otherwise excellent review of James Taylor's "JT," in which he states that "Taylor remains the single artist in pop who can tell it like it is without sending you off either to the hills with a hatchet, a flint, and a hunting dog or straight to the nearest Disney movie." Has Mr. Reilly never heard of Jackson Browne?

DONNA L. BOTT
Davis, Calif.

More Beatlefacts

Some time ago I came across the August 1977 issue of STEREO REVIEW. The article en-

titled "Rediscovered Historical Beatlefacts" by Steve Simels especially caught my attention, but when I got one of the records discussed in it—"Live! at the Star-Club in Hamburg," issued by Lingasong—I had a surprise. I think that was the record Mr. Simels held in his hands, but there are discrepancies between the list of songs on it given in the article and those actually on the record. *I Saw Her Standing There, Twist and Shout, Reminiscing, and Ask Me Why* were on the list but not on the record, and *I'm Gonna Sit Right Down and Cry, Where Have You Been All My Life, Till There Was You, and Sheila* were on the record but not on the list.

JERZY BOJANOWICZ
Pruszkow, Poland

IOCTM

The different distortion indicator

The Input-Output Comparator (IOC) now available on Crown D-150A and DC-300A amplifiers is a significant departure from traditional clipping indicators. The IOC reports all types of overload distortion by telling the user that the output waveform no longer matches the input waveform. The IOC is so sensitive that distortion is reported before it is audible.

In the feedback system used in Crown amplifiers, the input IC is continually comparing input and output waveforms. If there is a difference, indicating a non-linearity in the amplifier, the input IC generates a correction signal.

If the output is distorted from some cause other than overload (for example, crossover distortion) the correction signal will bring the output waveform into compliance with the input.

Overload distortion, however, results from some circuit component operating beyond its linear range. The correction signal cannot change the characteristics of the component, so the input IC continues to generate a large correction signal. This will happen regardless of the kind of

overload—clipping, TIM or protection circuit activation.

The IOC was designed by Crown engineers to take advantage of this behavior, and to use it to report significant information about distortion to the user of the amp. The Crown IOC analyzes the correction signal and reports the existence of nonlinearities in the output waveform through a front-panel LED.

The IOC is highly sensitive and detects distortion that is a great deal less than the .05% THD and IMD ratings of the D-150A and DC-300A. The user is thus notified about distortion before it is audible. The user also knows that the Crown IOC is reporting distortion of a music waveform, not just a laboratory test signal. Maximum useable gain for the D-150A or DC-300A can be determined by adjusting gain so the front panel LED's stay off, or come on briefly during the highest music peaks.

The IOC is available on all Crown DC-300A and D-150A amps manufactured after October, 1977. Because of its value to any serious music listener, a factory retrofit is available for earlier units.

See your dealer soon for complete information about detecting distortion differently... with Crown.



CROWN

1718 W. Mishawaka Rd., Elkhart, IN 46514

CIRCLE NO. 15 ON READER SERVICE CARD

Mr. Simels "held in his hands" the version that was released in the United Kingdom and Germany (note that he said it was an imported record). The version later released in the United States (and Poland, apparently!) had the four replacements Mr. Bojanowicz mentions—but it wasn't available here until after the magazine had gone to print.

TV Sound

In his answer to a reader's letter about the possibility of adding a TV-audio function to FM receivers (October 1977 "Audio Q. and A."), Larry Klein says that it would cost "perhaps \$50" extra and concludes that "if any manufacturer was convinced that there was a large enough TV-audio hi-fi market out there, he would do his best to stake out his share of it."

I, for one, would be willing to pay as much as \$100 more for such an addition. I'm a movie buff and, as a hobby, tape the soundtracks of films shown on TV. Every so often Channel 6 in my area broadcasts a musical and I am able to play it through my receiver; the sound is rich and full, far better than that heard from current TV sets. Can you check whether any manufacturers are working on this?

JOHN G. WINDSOR
Langley, British Columbia

Larry Klein replies: So far as I can tell, everyone is watchfully waiting to see what the next guy does—and how successful TV sound is in the hi-fi marketplace. Several Japanese manufacturers have expressed interest, and there are even a few TV-audio tuners (some with a three-inch picture tube!) on the domestic Japanese market. But for some reason they seem shy about bringing their TV-sound products into the U.S. If I see any prototype AM/FM/TV tuners at the IHF Trade Show in Atlanta this spring, I'll let y'all know.

Joan Baez

A few years ago, music critics were attacking the political nature of Joan Baez's recordings. Now Paul Kresh attacks her personal songwriting on "Blowin' Away" (November) as full of "self-pity" and "self-absorption." He completely ignores the compassion in such songs as *Luba the Baroness* and *The Altar Boy and the Thief*, and he totally misses the leavening humor of *Time Rag* (which, judging by his inaccurate summary, he hasn't really listened to). Mr. Kresh says he would gladly trade in the "new" Baez for the old one, but they are the same. How about trading in his review for one by Peter Reilly?

TERRY HARPER
Loma Linda, Calif.

Paul Kresh replies: I love to hear Joan Baez sing. I just don't like her much as a songwriter. On the other hand, she has made such a profession out of sounding hurt that I would be the last to want to wound her further. If I didn't understand *Time Rag*, which I followed faithfully with the text, it wasn't for lack of trying. Anyhow, if ballads are going to be written about magazine interviews, where will it all end? The next thing will be rhymed attacks on record reviewers. Who could bear it?

(Continued on page 14)

STEREO REVIEW

No other speaker has ever looked like this, no other speaker has ever been built like this. And we believe no other speaker, regardless of size or price, can recreate the impact and feel of live music like the Bose 901 Series III.

It is a speaker unlike any other.



BOSE[®]
Better sound through research.

In one page we cannot begin to describe the 901 Series III and the technology behind it. So we've put together a comprehensive literature package that includes a detailed 16-page color brochure, a 20-page owner's manual, and a copy of Dr. Amar Bose's paper on "Sound Recording and Reproduction," reprinted from Technology Review. To receive this literature, send \$1.00 to Bose, Dept. SR11, The Mountain, Framingham, Mass. 01701. Patents issued and pending. Cabinets are walnut veneer.

True four-point gibal centers and pivots tonearm mass where vertical and horizontal axes intersect. The four needle-point pivots are tempered and honed to produce microscopically smooth surfaces. Each pivot is matched to a ball-bearing race only 0.157 inches in diameter.

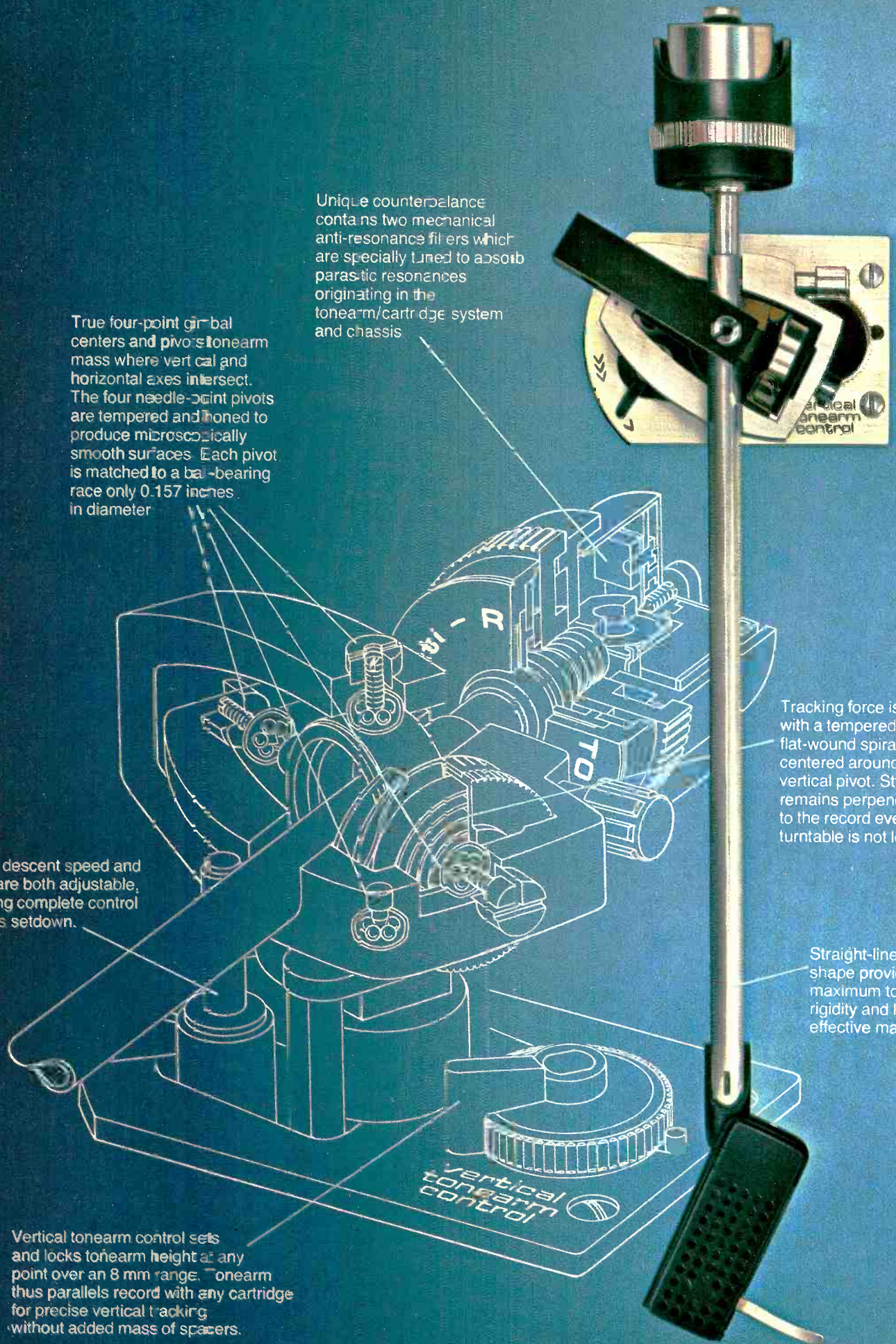
Unique counterbalance contains two mechanical anti-resonance filters which are specially tuned to absorb parasitic resonances originating in the tonearm/cartridge system and chassis.

Cueing descent speed and height are both adjustable, providing complete control of stylus setdown.

Vertical tonearm control sets and locks tonearm height at any point over an 8 mm range. Tonearm thus parallels record with any cartridge for precise vertical tracking without added mass of spacers.

Tracking force is applied with a tempered, flat-wound spiral spring, centered around the vertical pivot. Stylus force remains perpendicular to the record even if the turntable is not level.

Straight-line tubular shape provides maximum torsional rigidity and lowest effective mass.



How to identify the world's finest tonearm.

When one tonearm—among all those available—is described as "the world's finest," some controversy may be anticipated. Fine, we welcome that possibility. There is far too little discussion about tonearms—considering the critical difference they make in how records sound and how long they last.

Simply stated, the tonearm's function is to provide the correct cartridge-to-groove geometry and to allow the stylus to trace the groove contours freely, precisely, and with the lowest practical tracking force.

Dual's engineering approach to tonearm performance makes us feel confident of the outcome of any comparisons.

The basic geometry.

The shape of the Dual tonearm is a straight line from pivot area to tonearm head, the shortest distance between those two important points. Curved tonearms may look sexier, but contribute extra mass, less rigidity and a tendency to lateral imbalance. That's hardly consistent with good engineering.

Every Dual tonearm is mounted in a true, four-point gimbal. The tonearm mass is centered, balanced and pivots precisely where the vertical and horizontal axes intersect.

Identical pairs of low-friction needle-point pivots and miniature ball bearings are used in both axes. The precision and quality control standards applied to their manufacture and assembly are usually found only in aerospace and allied technologies.

Settings for your cartridge.

The vernier-adjustable counterbalance lets you set zero-balance with micrometer-like precision so that tracking force can then be set accurately. A tempered, flat-wound spring applies tracking force directly at the vertical pivot, and this force remains perpendicular to the record even if the turntable

chassis is not level. Anti-skating is applied around the horizontal pivot, directly counter to the skating force, and it adjusts automatically to the varying skating force encountered by the tonearm as it moves across the record.

Another Dual refinement, not available on any other integrated tonearm, is the Vertical Tonearm Control. A vernier height adjustment over an 8mm range allows paralleling the tonearm to the record without cartridge spacers. Tonearm mass remains as low as possible, and mounting and changing cartridges are simplified.

Another Dual exclusive: tuned anti-resonance filters.

The counterbalance contains two specially tuned mechanical filters that absorb parasitic resonances originating in the tonearm/cartridge system and chassis. The result: flawless tracking stability maintained even in the presence of external shock and vibration whether caused by acoustic feedback, record warps or dancing feet.

About all Dual tonearms.

The tonearm shown and described here is part of our higher-priced turntables. But many of its features are found in our lowest-priced model: the four-point gimbal, the straight-line design, and the precise mechanisms for balance, tracking force and anti-skating adjustment.

In fact, we'd be willing to match the performance of our lowest-priced tonearm against anyone else's highest-priced tonearm. But one argument at a time is enough.

Now that you've been "armed" with the facts, we invite you to visit your audio dealer to examine the tonearms you find there—separate and built in—and decide for yourself which one is indeed the finest.

No one can argue with that suggestion.

Dual[®]



United Audio, 120 So. Columbus Ave., Mt. Vernon, NY 10553

CIRCLE NO. 50 ON READER SERVICE CARD

Direct-to-Disc

● In the October editorial, "Cottage Industry: Direct-to-Disc," William Anderson presents some strong arguments against the d-to-d idea. The prices (\$12 to \$16) are, admittedly, impractical, and the technique does not allow for large-quantity pressings. But having recently cut my first d-to-d recording ("Grant Johannesen in Recital, Direct-to-Disc versus Tape-to-Disc"—Golden Crest CRDS-1, two discs), I cannot agree with Mr. Anderson's impression that the outcome is "not free, spontaneous music-making, but pussy-footing carefulness."

I had previously made recordings only via the tape method, and when I was asked to

consider putting what amounts to a concert performance onto discs I naturally hesitated. We have been spoiled by the recording studio, where with rare exceptions artists opt for a "collage" performance—which is hardly "spontaneous music making"! I emerged from the d-to-d session strangely exhilarated. The clinical aspect of recording was absent. True, there are some performance flaws in the result, but something else, something spontaneous, also surfaced in these readings.

The "nagging imperfections" Mr. Anderson points out that we risk by direct cutting are more than compensated for by the superior sound ("absolutely fantastic sound" in his words). For a performer, the possibility of gaining a true mirror of his immediate expres-

sion seems to me reason enough to choose this method. It may be that d-to-d records are necessarily limited editions. The mass industry needs a reminder from time to time of the ordinariness built into it! Recently I have observed that young listeners are seeking out old 78-rpm recordings for performing inspiration. Might it not be possible that they recognize there a purer musical thought process than the stitchwork they have grown up with?

GRANT JOHANNESSEN
President, Cleveland Institute of Music
Cleveland, Ohio

● There have been several essays recently in STEREO REVIEW criticizing the general lack of consistent high quality in the mass production of phonograph records and touching upon "new" recording techniques. For the past fifteen years I have spent part of almost every day debating the relative merits of technical improvements in record manufacturing as they affect the music on the discs. I believe that a record buyer hopes to get a performance that will, in the current idiom, "turn him on." The producers of rock recordings go to great lengths in the recording process to achieve that result, and producers of classical recordings have no less a responsibility.

The record buyer must assume that the producers have engaged performers who have the ability to produce inspired performances. But no reasonable or conscientious producer can expect even the most brilliantly gifted performers to be technically perfect and inspired *all the time*. To ask an artist to give a note-perfect, musically inspired performance over a period of fifteen to twenty minutes, as in direct-to-disc recording, is clearly inhibiting. In a tape session, we do everything we can to help the artist forget he is playing into a microphone. He is asked to take every risk that he might consider justified in a live performance, and to understand that if there is any error or miscalculation, *the passage can be corrected*. Inserting one or two corrected notes seldom has any effect on the curve of a beautiful phrase, whereas leaving obviously wrong notes in can be irritating to the listener who buys the finished product. Therefore, Editor Anderson is absolutely right (in October's "Editorially Speaking") about the aesthetic limitations of direct-to-disc recording.

Moreover, with advances in tape formulations and the recording and reproducing electronics, a taped performance has virtually the same *potential* for high-quality sound as a direct-to-disc recording. The greatest technical problem in records today is not the quality of the original master but that of the pressing the consumer purchases. It is both theoretically and practically possible to produce a disc that is as quiet as the source material it reproduces, without the clicks, pops, tearing sounds, etc. that plague so many records today and anger consumers.

E. ALAN SILVER
President, Connoisseur Society
New York, N.Y.

Correction

● An uncaught printer's error in the caption on page 24 of the December 1977 issue changed "uninsulated" to "insulated." The sentence should, of course, have read "... make sure not to touch the insulated parts of the prods."

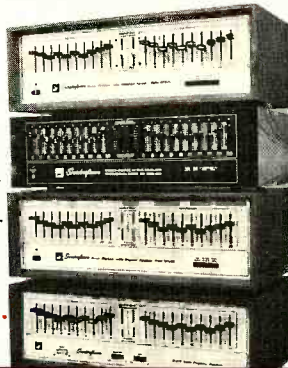
Soundcraftsmen invents...

the Great Equalizers...

WITH THE ONLY TOTAL-SYSTEM APPROACH FOR COMPLETE CLOSED-LOOP EQUALIZATION OF ENVIRONMENT, SOURCE MATERIAL, AND FINISHED PRODUCT—(TAPES, PROGRAMS, ETC.)...

We **INCLUDE** all the accessories and features that are a **MUST** to make equalizing easy, as well as an amazingly rewarding new experience... An Environmental Do-It-Yourself **TEST RECORD** edited and announced by Soundcraftsmen especially for use with the Soundcraftsmen equalizer... **COMPUTONE CHARTS** for making a record of, and resetting in seconds, any desired **EQ** curve... a Full-Channel Frequency **SPECTRUM LEVEL CONTROL** on each channel for instant "no distortion" in/out balancing... **LIGHT-EMITTING DIODES** for precise visual signal level balancing... A Graphic Display of each **EQ** curve... And up to **36 dB** range of adjustment for each octave... Specifications: S/N: better than **106 dB** at full output... THD: less than **.05%** @ 1v... Filter type: Toroidal and Ferrite Core.

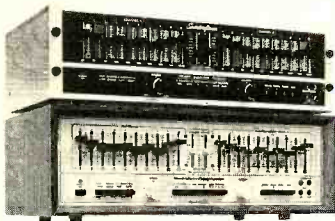
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WITH A PUSH-BUTTON PATCH-PANEL, PLUS OCTAVE-WIDE TONAL CONTROLS, FOR FANTASTIC FLEXIBILITY IN PROGRAMMING, SWITCHING, PLAYBACK...

The PE2217 offers more flexibility and control than preamps costing twice the price. The 20-band **OCTAVE EQUALIZER** uniquely coupled with a versatile combination **PUSHBUTTON PATCH PANEL** and advanced phono preamp section (**84 dB S/N**) allows you the capability of graphic "EQ" during the playback and recording process. Dual phono and triple tape control with **84** and **106 dB S/N** specs make the PE2217 an unsurpassed preamp value at **\$529.50.**



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WITH PATENT-PENDING VARI-PORTIONAL® ANALOG LOGIC CIRCUITRY, AUTOCROWBAR® PROTECTION, NON-LIMITING OUTPUT....

Fantastic performance because its revolutionary new Patent Pending **VARI-PORTIONAL®** system uses Analog Logic Circuitry to anticipate, control and supply only the exact amount of power required for most efficient performance... Conventional Class AB amplifiers with **250 watt** power ratings, operating at 1/2 power in accordance with FTC test requirements, **WILL CONSUME OVER 40% MORE ENERGY** than the Soundcraftsmen "NEW CLASS" amplifier... Here are just a few "NEW CLASS" benefits:

1. Greatly reduced average current drain resulting in **SUBSTANTIAL ELECTRICAL ENERGY SAVINGS.**
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3. And perhaps the greatest benefit of all, manufacturing cost savings meaning more power, and more features for fewer dollars... **SPECIFICATIONS: 250 watts per channel RMS 20Hz-20KHz** both channels driven into 8 ohms, less than **0.1% THD**, Noise — **105dB**, Damping factor **100**, Slew rate **50**, Frequency response **± 1/4 dB 20Hz-20KHz**. Size **7" x 19" x 15"** deep. Side panels included. Priced from **\$599.00.**

and now the New 250w. Amp-Qualizer®!

Mfg. in USA by Soundcraftsmen, Cal. 92705. For NEAREST DEALER ph. 714 - 556-6192

CIRCLE NO. 51 ON READER SERVICE CARD

Books Received

● *The Devil's Music: A History of the Blues*, by Giles Oakley. Taplinger Publishing Company, New York (1977), 287 pages, \$14.95. "Africans brought African music into white society. They took white music and changed it to African. And then they changed it back again. So we have *ragtime* (pure), *jazz* (impure, hot, mainstream, cool . . .), and of course the *spirituals* (Amen). But underneath all this . . . we have—permeating all—the *blues*, and who can blame us?" Who indeed? From the cotton fields and "piney woods" of the Mississippi Delta to Jackson and Memphis and St. Louis and Chicago and Detroit and New York, the blues traveled this country. Giles Oakley allows the musicians and their friends who were there to tell the history of the blues, to define the blues in anecdote and song lyric. It is a fascinating story. Moreover, this is a handsome book, illustrated with contemporary drawings and photographs. Originally published by the BBC in Great Britain, *The Devil's Music* includes an index, extensive references, a selected bibliography, and a short discography. Excellent. —L.G.B.

● *Musical Chairs (A Life in the Arts)*, by Schuyler Chapin. G. P. Putnam's Sons, New York (1977), 429 pages, \$12.50. In this apologia the author traces the principal events of a career in musical administration that led, with a good deal of unattractive tergiversation on the part of the management, to his appointment as general manager of the Metropolitan Opera in 1973 following the tragic death of Goeran Gentele. In 1975 he was unceremoniously dismissed, and this, for lovers of backstage intrigue, is his account, recollected in tranquility, of How It Happened. Toward the end there appears a regret-filled observation that perhaps ought to have been made the motto of the book: "I sensed once again the undercurrent of viciousness and cruelty that seems to be a historic part of the artistic life of the world, the desire to pull down anyone who reaches a certain pinnacle, the unspoken jealousy of desire and envy. This is a human condition, one that applies to any walk of life and activity, but in the arts it seems especially painful as one is essentially dealing in something that is supposed to be beautiful and bring beauty to others. . . ." But it is a compelling story, and there must now be more than a few who have cause to regret that Mr. Chapin can write. —W.A.

● *Starmaking Machinery: Inside the Business of Rock and Roll*, by Geoffrey Stokes. Vintage Books, New York (1977), 234 pages, \$3.95 softbound. *Village Voice* writer Geoffrey Stokes offers a thorough and accurate account of the producing and selling of one album by the country rock group "Commander Cody and His Lost Planet Airmen" in 1974. Through a chronicle of events and conversations that take place in studio sessions, legal offices, and backstage dressing rooms, Stokes exposes the complex maze of machinery and men that is behind the business of making records to make money. This unglam-

orous look at the industry may not thrill rock fans, but it is a must for anybody planning to enter the arena. (The original hardbound edition of *Starmaking Machinery* was published in 1976 by the Bobbs-Merrill Co., Inc., \$8.95). —R.S.

● *The Tuning of the World*, by R. Murray Schafer. Alfred A. Knopf, New York (1977), 301 pages, \$12.95. This rich, ambitious book is a discussion of two interrelated new disciplines: acoustic ecology and acoustic design. Schafer's concern is with the sonic environment—the "soundscape"—and the way it tends to be degraded from a naturally "hi-fi" state to a "lo-fi" one in which interesting and meaningful sounds are swallowed up in an ever higher level of background noise. Many of his proposals will seem utopian, but they are thought-provoking nonetheless, and his descriptions of a wide variety of natural and man-made sounds and soundscapes—including many "endangered species"—are alone worth the price of the book. Indexed, with glossary, appendices, notes, and illustrations. —D.S.

● *The World of Earl Hines*, by Stanley Dance. Charles Scribner's Sons, New York (1977), 324 pages, \$14.95 hardbound, \$7.95 softbound. Stanley Dance has been listening to Earl "Fatha" Hines since 1928. He corresponded with him for several years after World War II (Hines replied on tapes and often filled out a tape on the piano), and since the middle Sixties he has served as a kind of amateur manager for the pianist. Would that more great men had such knowledgeable and sympathetic biographers. *The World of Earl Hines* is an "oral history," much of it told in the first person by Hines himself, which is supplemented by a chronology, a bibliography, a discography, and a general index. There are reminiscences by such jazz luminaries as Teddy Wilson, Milt Hinton, Dizzy Gillespie, Trummy Young, and Charlie Carpenter, and everything is surrounded by photographs, over 120 of them. Good reading, good looking. —L.G.B.

● Recorded Sound Research (1506 W. Barker, Peoria, Ill. 61606) offers several pamphlets of interest to record and tape collectors. *Collectors' Contact Guide 1975* (58 pages, \$4) lists dealers for specialized recordings, service places for antique equipment (such as Edison cylinder machines), and special-interest societies and associations of collectors, as well as giving bibliographies of other directories, discographies, etc. *Sound Search* (35 pages, \$7) lists sources for recorded material in several specialized areas (such as radio broadcasts, railroad sounds, "Watergate"-related items, and dance music), plus an extensive bibliography of the free magazines in the audio field. *The Unauthorized Duplication of Sound Recordings* (61 pages, \$6) is a reprint of a 1957 Senate subcommittee study concerning the application of copyright law to records and tapes. —D.S.

New . . . 100D 3-Way
Curvilinear Enclosure System

THE DYNAMIC DOME

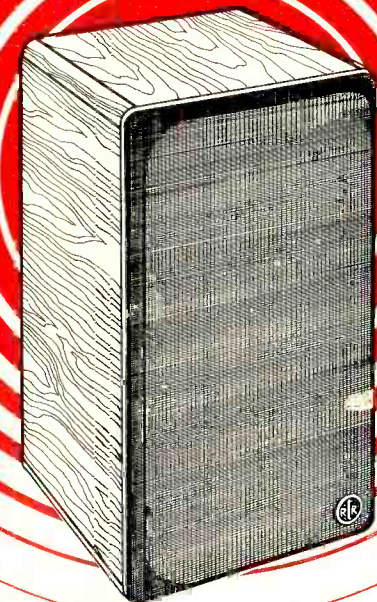
RTR interpolates a significant midrange

Within this striking, acoustically transparent enclosure, lies an exceptional 3-way speaker system. Entirely new. Totally RTR.

The 100D was conceived and executed to display the new, technologically advanced RTR midrange system. Vast midrange capabilities are yielded by a low mass 1.5" soft dome driver, single layer voice coil and 3.4 lb. magnetic assembly. This is the first dome system to successfully integrate smooth response and broad dispersion with outstanding dynamic range and transient response. The key to reproducing music convincingly!

This multi-faceted midrange crosses over at 1.25 KHz to an RTR 12" woofer which is so technically excellent that it will neither destruct nor delaminate. The deep, authoritative bass response is uncolored and precisely defined. Crossing in at 10 KHz, the solid state supertweeter imparts extended crystalline high end reproduction.

All packaged handsomely in a 15 x 26 1/2 x 14D walnut enclosure and bookshelf priced. Audition the 100D now at your RTR dealer.



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Canoga Park, CA 91304

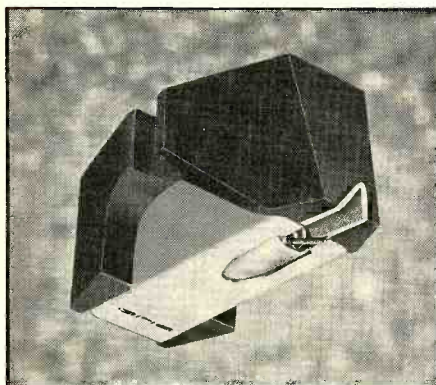
New Products latest audio equipment and accessories



Sound Guard Offers Total Record Care

□ Ball Corporation's new Sound Guard Total Record Care System brings a record cleaner together with the familiar Sound Guard "record preservative," essentially a dry lubricant suspended in a carrier fluid that is sprayed onto the record surface and worked into the grooves with a velvet pad. This leaves a thin-film residue of the lubricant. The record cleaner is also in liquid form and a pump-spray applicator is provided. A sponge-like pad is used to remove grime from the record surface, and a velvet pad is included for touch-up wiping. There is also a foam pad for cleaning the velvet. All components are assembled in a permanent storage box. In addition to the various pads and two pump sprayers, the complete kit comes with 2-ounce bottles of cleaner and preservative. Price: about \$15.

Circle 115 on reader service card



Three Moving-coil Cartridges from GAS

□ Great American Sound is offering three new moving-coil phono cartridges, all structurally similar and differing primarily in stylus geometry. They are low-mass (5½ grams) designs and have low-"Q" 6-ohm moving-coil elements which are said to be insensitive to electrical loading. For each cartridge, channel

balance is better than 1 dB, and the rated output at a 5-centimeter-per-second recorded velocity is 0.3 millivolt. Recommended tracking force is 1.8 grams for all three models.

The super elliptical model, with a 0.3 × 0.6-mil elliptical stylus tip, has a frequency response of 5 to 40,000 Hz. Compliance is 15 × 10⁻⁶ centimeters per dyne, and stereo separation is 30 dB at 1,000 Hz (20 dB at 10,000 Hz). The elliptical model has an identical stylus tip but slightly different specifications. Response is 10 to 35,000 Hz, compliance is 13 × 10⁻⁶ centimeters per dyne, and minimum separation is 27 dB. The spherical model has a 0.6-mil-diameter spherical stylus tip, a response of 10 to 30,000 Hz, a compliance of 13 × 10⁻⁶ centimeters per dyne, and a minimum separation of 25 dB. Price of the super elliptical cartridge, \$200; of the elliptical, \$180; of the spherical, \$160.

Circle 116 on reader service card



Olympus Pocket Recorder with Two Tape Speeds

□ The S-301 is a new addition to Olympus Corporation's Pearlcor line of microcassette tape recorders. The special feature of the S-301 is its provision of two recording speeds, 15/32 and 15/16 inch per second. With the slower speed, a full two hours of recording time is possible on one microcassette; one hour of recording time is possible with the faster speed with fidelity considerably increased. The S-301 has a built-in electret condenser microphone plus a miniature phone jack for a remote microphone. Recording level is automatically adjusted. Pause, cue, and review functions are provided, and there is a LED for checking battery strength and recording level.

The S-301 has a frequency response of 300 to 7,000 Hz at the 15/16-ips tape speed and 300 to 4,000 Hz at 15/32 ips. It uses two 1.5-volt penlight batteries ("AA" type) but has an adapter for use with a.c. line power. It measures only 5¾ × 2¾ × 1 inches and weighs about 11 ounces. Price: about \$200.

Circle 117 on reader service card



Empire Produces Record-static Eliminator

□ Empire is offering the Static Eliminator, an electronic device for neutralizing the static charge on record surfaces. The Static Eliminator is part of a new line of record-care products bearing the name Audio Groome. It has a piezoelectric element that develops a high electrostatic voltage at the emitting points when the trigger is squeezed. This voltage ionizes the air around the points, thereby allowing the charge on the disc to drain off. There are two emitting points ("double barrel") for wide coverage. Price: about \$40.

Circle 118 on reader service card



Super-power Amplifier From Rotel

□ Rotel's newest contribution to the ranks of mammoth power amplifiers is the Model RB-5000, rated at 500 watts per channel continuous power into 8 ohms. It includes three distinct power supplies, one for each channel and a third small one for the front-panel meters and LED's. The meters, which read average power, are calibrated from 0 to 1,000 watts and have adjustable sensitivities (0, -10, and -20 dB). Set screws are provided under each meter for calibration. The LED

(Continued on page 18)

HIGH BIAS.

These cassette deck manufacturers use SA
as their reference for the High(CrO₂) bias/EQ setting:

AIWA · AKAI · CENTREX · JVC
KENWOOD · MERITON · NAKAMICHI
OPTONICA · PIONEER · ROYAL SOUND
SANSUI · SHARP · TEAC · TOSHIBA
UHER · YAMAHA

And are joined by these
in recommending SA for use in their decks:

BANG & OLUFSEN · DUAL · FISHER
HARMAN/KARDON · LAFAYETTE
SANKYO · TANDBERG
AND MANY OTHERS.



There's been a quiet revolution going on in the cassette world. □ Leading makers of quality cassette decks have adopted TDK SA as their reference standard tape for "High" (CrO₂) bias and equalization settings. Why TDK SA? Because TDK SA's advanced tape formulation and super precision cassette mechanism let them (and you) take full advantage of today's advanced cassette deck technology. □ In addition, a growing number of other companies are recommending SA for use with their machines. □ So for the ultimate in cassette sound and performance, load your deck with SA and switch to the "High" or "CrO₂" bias/EQ settings. You'll consistently get less noise, highest saturation and output levels, lowest distortion and the widest dynamic range to let you get the best performance from any quality machine. □ But you needn't believe all this just because we say so. All you have to do is check our references.

 **TDK**[®]

The machine for your machine.

TDK Electronics Corp., 755 Eastgate Blvd., Garden City, N.Y. 11530.
In Canada: Superior Electronics Industries, Ltd.

CIRCLE NO. 57 ON READER SERVICE CARD

New Products latest audio equipment and accessories

power indicators display peak power levels, and there are additional LED's to indicate overload, activation of protection circuitry, and stand-by condition. A power-limiter switch sets maximum output at full, one-half, or one-fourth power, and there is a switchable subsonic filter. There are output jacks for three pairs of loudspeakers, with pushbutton switches for speaker selection; however, the amplifier will not drive more than two pairs of speakers at once. A protective circuit automatically rejects one pair if all three are selected. Heat dissipation is aided by a built-in fan. The separate left- and right-channel gain controls are of the step-attenuator type.

The RB-5000 has a frequency response of 0 to 100,000 Hz \pm 1 dB at 1 watt. Total harmonic and intermodulation distortion is below 0.009 per cent from 20 to 20,000 Hz. Input sensitivity is 1 volt at the standard phono-jack inputs and 0.775 volt at the Cannon-type input jacks (for sound-reinforcement applications). Signal-to-noise ratio is better than 120 dB (IHF A weighting). The RB-5000 has approximate dimensions of 9 $\frac{3}{4}$ x 19 $\frac{1}{4}$ x 17 $\frac{1}{4}$ inches and weighs 118 pounds. Price: about \$2,350.

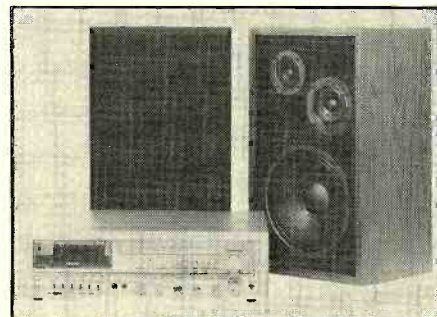
Circle 119 on reader service card

per cent. FM sensitivity is 1.9 microvolts (10.8 dBf), capture ratio is 1 dB, and selectivity is 60 dB. The stereo-FM separation is 40 dB. The tape-transport system has 0.15 per cent wow and flutter. Approximate dimensions of the receiver/cassette deck are 6 x 20 x 15 inches; the speakers measure about 22 $\frac{1}{2}$ x 13 x 10 $\frac{3}{4}$ inches. Price: about \$370.

Circle 120 on reader service card

watt-per-channel power amplifier. Dimensions are 10 $\frac{3}{4}$ x 18 $\frac{1}{2}$ x 5 inches, and the unit weighs about 14 pounds. Available as an option is the HM-200E binaural headphone/microphone combination (about \$90). Price of the RC-828: \$260. The HM-200E binaural headphone/microphone comes with an acoustic dummy head.

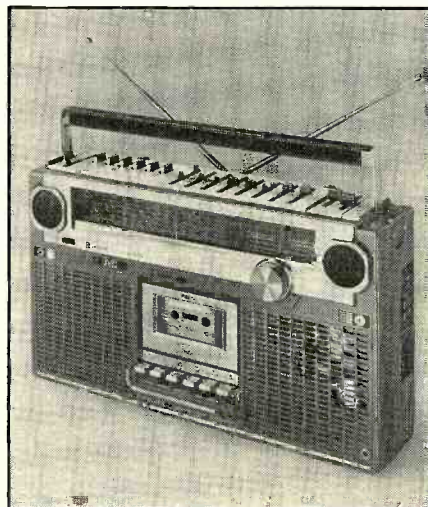
Circle 121 on reader service card



Three-way Speakers With Pioneer's Compact System

The KH-767 compact stereo system from Pioneer includes a built-in cassette recorder and an AM/FM stereo receiver. A pair of three-way loudspeaker systems, each with a 10-inch woofer, 4-inch mid-range, and 3-inch cone tweeter, are part of the package. The cassette recorder has pushbuttons for setting bias and equalization for ferric and chromium-dioxide tapes. Recording-level controls are provided for each channel, and the tape-transport mechanism has a pause function. The FM section has a channel-center tuning meter and a pushbutton that controls both muting and mono/auto selection (the tuner is in the auto mode with muting on and in mono with muting off). There are separate controls for bass, treble, balance, and speaker-system switching.

The amplifier section of the KH-767 is rated at 12 watts per channel continuous power into 8 ohms, with total harmonic distortion at 0.08



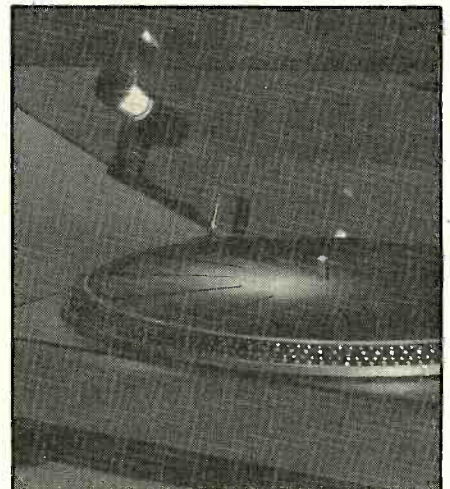
Biphonic Processor In Radio/Cassette Recorder from JVC

JVC has introduced the RC-828 portable radio/cassette recorder incorporating its unique biphonic processor, a device intended to produce an illusion of "depth" from binaural recordings without headphone listening. The two-head cassette recorder can be used (with a special optional microphone) to make binaural recordings that can be played back through the processing circuitry for the biphonic effect. Regular stereo tapes can be played back through the processor (as well as stereo FM broadcasts) and some enhancement will result. The recorder has two built-in condenser microphones for normal stereo recording as well as separate recording-level meters and controls for each channel. The level meters double as FM signal-strength and battery-strength meters. Bias and equalization are selectable for ferric or chromium-dioxide tapes. Also provided are a pause function, a three-digit tape counter, and a variable monitoring function (which allows adjustment of the monitoring level without affecting the recording level).

The radio section of the RC-828 receives FM, AM, marine, and three shortwave bands. Slide controls are used for bass, treble, and left- and right-channel volume. Pushbuttons are provided for mode selection. The RC-828 has a 6 $\frac{1}{2}$ -inch woofer and a 2-inch tweeter for each channel, driven by the system's 2 $\frac{1}{2}$

New Book Catalog From Howard Sams

Howard W. Sams and Co., Inc. has released an updated catalog of its more than 350 publications for technical workers, hobbyists, and do-it-yourselfers. Included are twenty-three titles specifically in the audio/hi-fi area, such as *ABC's of Tape Recording*, *Easy Speaker Projects*, and *Hi-fi Stereo Handbook*. The eighty-page catalog contains brief descriptions of all the books and a complete price list; it is arranged by subject area and indexed by title. The catalog is available free of charge from the publisher at 4300 W. 62nd Street, Indianapolis, Indiana 46206.



Lencolamp Mounts On Dust Cover

Lenco's new "Lencolamp" is an accessory lamp for lighting the platter of a turntable. It clips to the left side of the dust cover and has an on/off switch placed so that the lamp comes on whenever the dust cover is opened; closing the dust cover automatically shuts it off. The Lencolamp has a 7-watt bulb and plugs into the a.c. line. No tools are required to install it. Price: about \$20.

Circle 122 on reader service card

(Continued on page 20)

Separates or an integrated unit?

Don't you owe it to yourself to seriously consider the alternatives?

A complete home stereo system built around a Phase Linear power amplifier and a Phase Linear preamplifier, is now within the reach of every serious listener. The development of the new Phase Linear 200B power amplifier makes this possible. In combination with the 2000 preamplifier, the 200B provides the nucleus for an awesome, medium-powered stereo system. The increased dynamic

range, faster transient response, lower distortion and greater flexibility make the Phase Linear System 200B a serious alternative to comparably priced systems built around integrated components. For those who are serious about acquiring state-of-the-art performance from a medium-powered high fidelity system, we present the Phase Linear System 200B. The serious alternative.

Phase Linear[®]
THE POWERFUL DIFFERENCE



The Phase Linear 2000 preamplifier is one of the quietest preamps ever made. *Signal to noise ratio:* 74 dB below 10mV. *Total Harmonic Distortion:* 0.1%. *Variable ambience injection circuit* recovers music lost with most preamps.

The new Phase Linear 200B power amplifier is a handcrafted, reliable amplifier with outstanding sonic performance in the tradition of the famous 700B and 400 models. *Power output:* 105 watts per channel, minimum R.M.S. at 8 ohms from 20Hz to 20kHz with no more than .25% total harmonic distortion. *Hum and noise:* 100dB below rated power.

Distortion Indicator For Crown Amplifiers

□ Crown is introducing Input-Output Comparator (IOC) circuitry in its DC-300A and D-150A power amplifiers. The IOC circuits trigger a front-panel LED whenever the amplifiers are even momentarily driven above their rated distortion specifications. The system monitors the feedback-generated correction signal at a point that enables it to detect any difference between input and output. Its main advantage over the conventional overload/clipping LED is that it responds very rapidly and will detect such short-lived phenomena as slewing-induced distortion. By virtue of its location it will report any nonlinearities in the signal.

Inclusion of the IOC in new DC-300A's and D-150A's will add \$50 to their current suggested prices. The IOC circuitry can also be installed in older units. Factory installation costs about \$60 and includes a complete checkout.

Crown is also now offering optional rack-mount assemblies with grab handles for the DC-300A and D-150A. They are user-installed and cost \$20.

Circle 123 on reader service card

complement the locations of the staggered drivers.

The frequency response of the 3050 is 48 to 22,000 Hz ± 3 dB, and nominal impedance is 8 ohms. Amplifiers delivering between 12 and 60 watts per channel continuous power are recommended; maximum continuous input is 50 watts. The 3050 produces a sound-pressure level of 85 dB at 1 meter with a 1-watt input. The cabinet is finished in walnut veneer and measures 25¼ x 11¾ x 13¾ inches. Weight is 42 pounds. The Leak 3050 speakers are sold in matched pairs. Price: \$600 per pair.

Circle 124 on reader service card

er supplies for its driver sections and output stages. It has a direct-coupled input together with a separate input incorporating an 18-Hz subsonic filter. The M-3030 is rated at 100 watts per channel continuous power into 8 ohms. Frequency response is 0 to 100,000 Hz $\pm 0, -1$ dB. Total harmonic distortion is 0.007 per cent and intermodulation distortion is 0.05 per cent at rated output. Input sensitivity is 1 volt into 50,000 ohms. Approximate dimensions are 6½ x 16½ x 11¾ inches and weight is about 42 pounds. Price: about \$700.

Circle 125 on reader service card



New Preamp and Power Amplifier From JVC

□ JVC has introduced its new Model P-3030 preamplifier and Model M-3030 power amplifier. The P-3030 is a low-profile unit that provides a wide variety of cartridge loads as well as a pre-preamp ("head" amplifier) for low-output moving-coil cartridges. Input impedance can be selected at 100, 33,000, 47,000, or 100,000 ohms; input capacitance can be set at 100, 220, 330, or 470 picofarads. The program-source selector has settings for tuner, auxiliary, and three phono inputs (one of which is the moving-coil input). There is a tone-control defeat switch as well as a switchable 18-Hz subsonic filter with a 6-dB-per-octave slope. Switching for tape dubbing and monitoring is provided.

Input sensitivity of the P-3030 is 2 millivolts (mV) at the regular phono inputs and 0.1 mV into 30 ohms at the moving-coil input. The phono overload point is 300 mV for the regular inputs. Total harmonic distortion is 0.005 per cent at a 10-volt output for the regular phono inputs and 0.05 per cent at a 1-volt output for the moving-coil input. Signal-to-noise ratios are 76 dB for the regular phono inputs, 66 dB for the moving-coil input, and 96 dB for the high-level inputs. Approximate dimensions are 2½ x 16½ x 13¾ inches. Price: about \$400.

The M-3030 direct-coupled power amplifier—which is, in effect, two mono amplifiers on one chassis—employs three separate pow-



Innotech Speaker Uses Asymmetric Transmission Line

□ Innotech's new Model D-24 loudspeaker system utilizes a transmission line of asymmetric geometry, said to enhance woofer output while avoiding standing-wave problems. The system has two 5-inch woofers with Bextrene cones; the rear radiation from these drives the line, which is damped with lamb's wool and long-fiber polyester. A three-way system, it also employs a 1½-inch dome driver for the upper mid-range and a ¾-inch dome tweeter loaded with a shallow, flared horn. Crossover frequencies are 3,500 Hz and 11,000 Hz. The drivers are mounted on a baffle board set at an angle of 30 degrees from the vertical to improve dispersion. The transmission line radiates from the base of the floor-standing enclosure.

The D-24 has a rated frequency response of 25 to 25,000 Hz. Minimum impedance is 5 ohms. Innotech recommends amplifiers rated

(Continued on page 22)

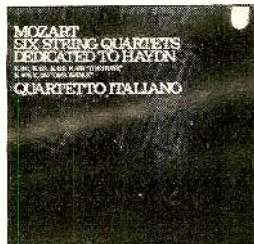


Dual-woofer Speaker System from Rank

□ The Leak 3050 loudspeaker system, a new addition to the Rank Hi Fi line, is a "time-delay compensated" system, with two 6¾-inch woofers mounted several inches forward of the ¾-inch dome tweeter in an acoustic-suspension enclosure. The drivers are crossed over at 4,000 Hz by an 18-dB-per-octave network whose electrical phase characteristics

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Nathan Milstein



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As Many As Four Records For Less Than The Price Of One.

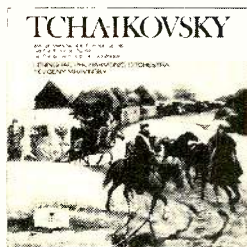
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Yevgeny Mravinsky: Leningrad Philharmonic & Swan Lake
Herbert von Karajan: Berlin Philharmonic



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Seiji Ozawa: New Philharmonia Orchestra & Chorus
Violin Concerto in D
Henryk Szeryng. Bernard Haitink: Concertgebouw Orchestra, Amsterdam



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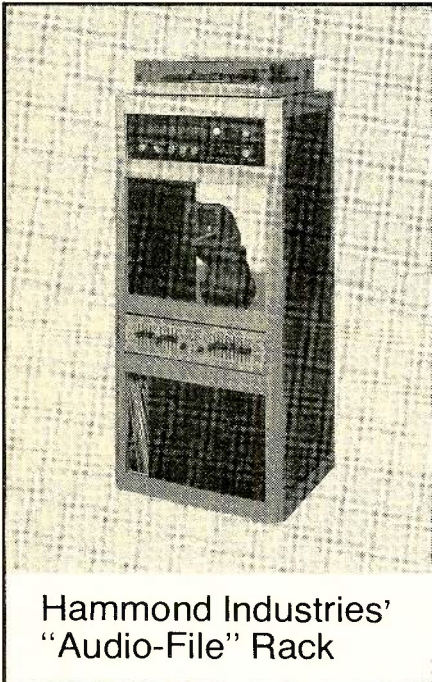
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Offer limited to the connecting 48 states. Offer expires June 30, 1978. Limit: one membership per household. Only new members eligible. NOTE: All applications are subject to review, and we reserve the right to reject any application.

New Products latest audio equipment and accessories

at a minimum of 35 watts per channel continuous power to drive the speaker. The cabinet is finished in walnut or optional rosewood veneer and has approximate dimensions of 36½ x 10½ x 15½ inches. Price: \$375.

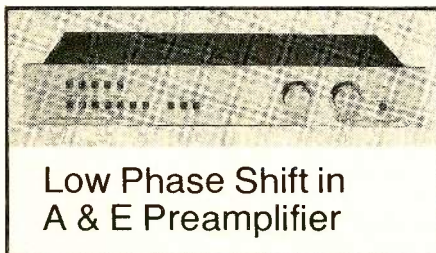
Circle 126 on reader service card



Hammond Industries' "Audio-File" Rack

□ Hammond Industries announces a new rack for owners of rack-mounting-adapted audio equipment. The Audio-File is a standard 19-inch rack constructed of brushed aluminum. It is available with black Plexiglas side panels and shelves so that it can support free-standing as well as rack-mounted equipment. Space is provided for record storage at the bottom of the rack. The Audio-File stands 48 inches tall and takes up a floor area of 22 x 19 inches. It is available without the Plexiglas panels and is sold in kit form. Price with Plexiglas panels: \$350; without: \$210.

Circle 127 on reader service card



Low Phase Shift in A & E Preamplifier

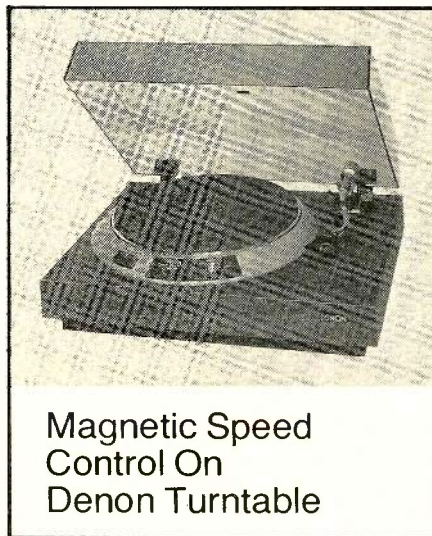
□ The SCA-2000 is A & E Technical Research's latest preamplifier. It employs direct-coupled circuitry that results in unusually low phase shift (between 0 and 3 degrees) over the 20- to 20,000-Hz frequency range. Phono-

input impedance is selectable at 100, 1,000, 33,000, 47,000, 68,000, and 100,000 ohms.

The SCA-2000 is a "bare-bones" unit, with controls for volume and balance but no tone controls; it is intended for use with a separate equalizer. There is also a low-cut filter and a low-boost function (which increases output by 6 dB below 100 Hz), as well as a 15-dB audio-muting switch. Other front-panel push-buttons select the program source (two tape decks and two phono inputs are accommodated) and handle tape-dubbing operations. The volume control is a thirty-two-step attenuator switch.

The rated frequency response of the SCA-2000 is 1 to 500,000 Hz for the phono inputs. There is a low-frequency filter in the phono-signal path that attenuates signals below 1 Hz; for the high-level inputs response extends down to 0 Hz (d.c.). Total harmonic distortion is below 0.01 per cent, and signal-to-noise ratios are 80 dB for the phono inputs and 90 dB for the high-level inputs. Phono-input sensitivity is 2 millivolts, and maximum output is 10 volts. Slew rate is 22 volts per microsecond. Approximate dimensions of the SCA-2000 are 3½ x 19 x 11 inches. Price: \$950.

Circle 128 on reader service card



Magnetic Speed Control On Denon Turntable

□ The DP-790 is a new direct-drive turntable from Denon featuring that company's magnetic speed-control system. The inner rim of the turntable platter is coated with a ring of magnetic material on which a series of close-spaced electrical pulses are recorded. A special magnetic sensor picks up the recorded signals and detects any speed fluctuations, which are then corrected by the servo system. A slide switch on the platter support selects the speed (33½ or 45 rpm) and a pitch control provides up to ±3 per cent speed variation. The "S"-shaped tone arm is mounted on viscoelastic bushings that damp out vibrations from the turntable base. It has viscous-damped cueing and adjustable antiskating.

The base has rubber feet for acoustic-feedback insulation.

The DP-790 has less than 0.019 per cent wow and flutter (wrms), and rumble is better than -75 dB (DIN B weighting). The platter comes to speed in under 1.8 seconds. The turntable base is of laminated wood, and approximate dimensions with the dust cover are 6¾ x 9 x 16 inches. Price: \$298.

Circle 129 on reader service card



JBL's New Two-way Bookshelf Speaker

□ The L40, JBL's new two-way bookshelf loudspeaker system, employs a 10-inch woofer and 1-inch dome tweeter in a vented enclosure. The woofer has an extra-large dust cap—4 inches in diameter—intended to assure adequate output at higher frequencies up to the crossover point of 1,800 Hz. A fiberglass acoustic-resistance shell is mounted over the rear of the woofer to smooth the system's low-frequency response. High-frequency output of the system is within 6 dB of on-axis output for angles as great as 75 degrees off-axis at 15,000 Hz and 45 degrees off-axis at 20,000 Hz. A level control is provided for the tweeter.

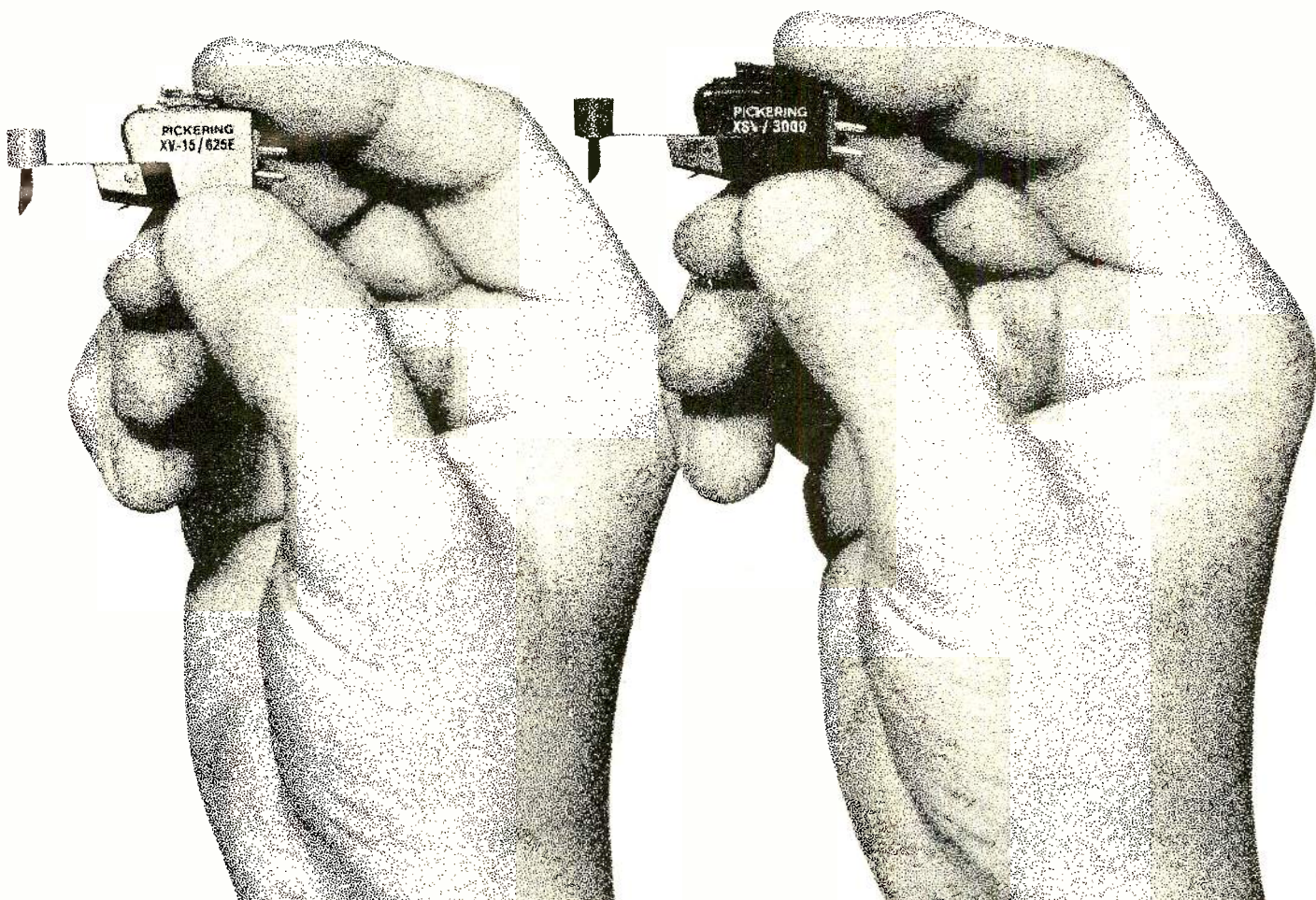
The nominal impedance of the L40 is 8 ohms, and sensitivity is 75 dB sound-pressure level at 15 feet from a 1-watt input. JBL recommends amplifiers delivering between 10 and 60 watts per channel continuous power to drive the speaker. The cabinet of the L40, which measures approximately 23 x 15 x 12 inches, has an oiled-walnut finish and is available with a stretch-fabric grille cloth in brown, rust, or tan. Price: \$207.

Circle 130 on reader service card

NOTICE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturer.

Recent fluctuations in the value of the dollar will have an effect on the price of merchandise imported into this country. Please be aware that the prices quoted in this issue may be subject to change.

Two sources of perfection in stereo sound.



Match one to your equipment

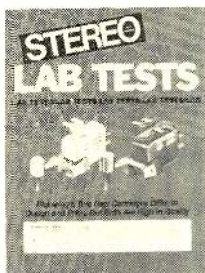
"The right Pickering Cartridge for your equipment is the best Cartridge money can buy."

We've been saying that for years; and tens of thousands of consumers have profited by applying this principle in assembling their playback systems.

If you have a fine manual turntable, the XSV/3000 is a perfect choice.

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The summary advice of **Stereo's** Lab Test, in an unusual dual product review, we think brilliantly states our position: "The XV-15/625E offers performance per dollar; the XSV/3000, the higher absolute performance level." That makes both of these cartridges **best buys!**



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Pickering's new XSV/3000 is a remarkable development. It possesses our trademarked Stereohedron Stylus Tip, designed to assure the least record wear and the longest stylus life achievable in these times with a stereo cartridge. Its frequency response is extraordinarily smooth and flat; its channel separation is exceptional; its transient response affords superb definition. It represents a whole new concept of excellence in stereo cartridges.

Read the whole evaluation report. Send for your free copy of the **Stereo** "Lab Test" reprint; write to Pickering & Co., Inc., 101 Sunnyside Blvd., Plainview, N.Y. 11803.

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CIRCLE NO. 41 ON READER SERVICE CARD

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DiscTraker is a precision damping device that improves the performance of tonearm/cartridge systems by adding a protective cushion between the record and the tracking stylus.

- reduces low frequency resonance that colors the sound of even the best tonearm/cartridge systems on all records.
- reduces record-warp resonance—as witnessed by a dramatic reduction of woofer-flutter.
- permits accurate tracking of even badly warped records.
- reduces record wear and stylus damage from warps.
- reduces distortion caused by high velocity groove overload, mistracking and intermodulation.
- adaptable to most tonearms.

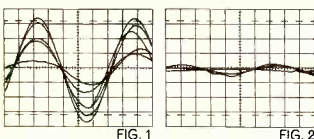


Figure 1 shows the amplitude of low frequency resonance in a typical tonearm/cartridge system using a "flat" record. Figure 2 shows the identical conditions with the DiscTraker damping system on the tonearm.

discwasher, inc.
1407 N. Providence Rd.
Columbia, MO 65201

Audio Q. and A.

By Larry Klein



Technical Director Klein posing (quietly) in front of the sound-absorbing wedges in Allison Acoustics' semi-anechoic chamber

Distortion Perspective

Q. My questions, prompted by Peter Fryer's August 1977 article on the audibility of distortion in loudspeakers, are these: if it takes at least 5 to 6 per cent intermodulation distortion to be detectable in loudspeakers under some circumstances, does the same hold true for distortion in electronics? If so, how can one reconcile IM figures of 5 to 7 per cent in some high-quality cassette machines, as reported by another magazine's test lab? On the other end of the scale, why do some preamps boast IM figures of 0.001 per cent? The whole thing doesn't seem to make sense. Can you help put these figures in perspective?

F. B. SCHMIDT
New Hamburg, Ontario

A. It's obvious that distortion is one of those controversial audio topics that suffers from an extremely poor signal-to-noise (which is to say sense-to-nonsense) ratio. Test results and tightly controlled listening experiments are frequently overwhelmed by noisy, technically invalid, and highly subjective opinions—much to the confusion of people like Mr. Schmidt. Let's try for some noise reduction. To answer the first question; yes, it was our finding in the first experiments we did in 1973 that, on certain types of complex program material, measured amplifier distortion of about 6 per cent frequently went unheard. Over the years, our test results were confirmed by many other researchers throughout the world. And although STEREO REVIEW's experiments used an amplifier-distorted test signal, it doesn't seem to make any difference (in respect to the ear's sensitivity to it) whether the audio-waveform distortion originates in an amplifier or a speaker as long as we are referring to distortion levels of under 7 or 8 per cent. Of course, a mistracking phono cartridge, an overdriven speaker or tape recorder, or a clipping amplifier is readily audible if the problem is either severe enough or lasts long enough.

In regard to your second question: the "5 to 7 per cent" intermodulation distortion measured on high-quality cassette machines by one of the other test labs (not Hirsch-Houck) is quite simply a misinterpretation of their instrument readings. Without going into details, various signal disturbances peculiar to tape

which are not particularly audible can produce very high IM distortion readings that, if they were real, certainly would be audible. This appears to be a case of a blind (deaf) faith in meter readings without adequate analysis of exactly what the test instruments are actually measuring.

As to your third question: we've been juggling this hot potato for several years now. It's obvious—to me, at least—that the human ear's threshold of sensitivity to a variety of acoustic signals under a number of circumstances has not been completely investigated or adequately described. The journals of the Acoustical Society of America and of the Audio Engineering Society regularly print articles revealing new psychoacoustic data or challenging old data, but what the human ear can and cannot hear is still very much unresolved. Therefore, the safest and most scientific approach to any question dealing with auditory perception is to preface all statements with something like: "At the moment, in the light of available evidence, it appears that. . . ." So it appears that distortions below about 0.1 per cent are not audible under virtually any circumstances, and distortions slightly above that point can usually be heard only on pure tones, listening through headphones, or, maybe, when the moon is in the proper phase. So why do manufacturers push specifications of 0.001 per cent? Why not?—if they can be achieved without paying a price elsewhere in the equipment's performance or reliability. As I've suggested previously, it may be that, in pursuit of these ever-lower distortion figures, problems get solved in passing that do have audible consequences. That's called serendipity.

Playing 78's

Q. Your recent "New Products" listings have included two record players capable of speeds of 78, 45, and 33 1/3 rpm. These are relatively fixed speeds, which are fine as far as LP's and 45's are concerned, but what good is a fixed 78-rpm speed? Columbia and other record manufacturers didn't standardize their playing speeds until the late 1920's. Before that, speeds ran as low as 74 rpm and up into the 80-rpm area. The old wind-up phonographs therefore usually had a playing-speed

control lever that would adjust for different recording speeds. Unfortunately, the modern Lenco player with continuously variable speeds hasn't been available for over a year.

RALPH MORAN
Wilmington, Del.

A. I'm pleased to report that the Lenco continuously-variable-speed turntables are once again available. For example, the four-speed Model L-55SBD can play at any speed between 30 and 86 rpm, with click stops at 16 $\frac{2}{3}$, 33 $\frac{1}{3}$, 45, and 78 rpm. The machine is priced at \$185 (including base and dust cover) and should be at local audio shops shortly. If you have trouble locating a dealer in your area, you may write directly to Mort Lesly at Neosonic Corp., 180 Miller Place, Hicksville, N.Y. 11801.

Antiskating Brush Force

Q. I own a Technics SL-1300 turntable outfitted with a Pickering XUV-4500Q cartridge, and I'm not sure where to set the calibrated antiskating-force control knob. As you know, the cartridge incorporates a brush that travels in front of the stylus. Pickering's instructions state that the stylus force must be set 1 gram above their recommended minimum of 1 gram in order to compensate for the weight of the brush. Technics says only that the antiskating force must match the stylus-tracking force. So where do I set the antiskating—for 1 gram or 2?

DONALD T. JUDD
Canyon, Texas

A. When the tone arm is in playing position the brush is resting on the record, so the extra 1-gram force you dialed in to compensate for its weight is *not* applied to the stylus or record groove. The tone arm, however, is relating to the record with a 2-gram force even though only 1 gram is applied at the stylus tip, which might indicate that the equivalent of 2 grams of antiskating are required. I tried to work out the question intuitively and got immediately bogged down. Therefore, I thought it best to ask those who should know the answer from practical test experience. I'm pleased to report that Pickering, Technics, and Julian Hirsch all agree that the antiskating dial should be set a gram higher than "normal" to compensate for the presence of the brush.

Unfulfilled Wattage

Q. Driven by obscure desires, I purchased Radio Shack's inexpensive power-level meter to connect to my amplifier. Allowing for even a grossly large margin of error in its readings, I am astonished by the results. Driving two very large ported speakers, my amplifier (if the meter is to be believed) was never called upon to deliver more than ten watts per channel at very loud (but not painful) levels.

Are ported speakers that efficient, or does my meter actually display pilot-light output? If ten watts is indeed the maximum that my ears can handle, why do I have this nagging sense of guilt and (gasp) impotence, feeling that my life is unfulfilled with only a 65-watt-per-channel amplifier? Although I cannot hear any distortion, I know something must be wrong with me. I do not want to live the rest of

my life in a 65-watt-per-channel closet, but if the meter is to be trusted, why buy more watts? Maybe a couple of aspirin would help.

DALE PIZZINI
Springfield, Va.

A. Like many other readers, Mr. Pizzini can undoubtedly trace his lurking sense of unfulfillment to unrealized power fantasies. Whether his difficulties are part of an unresolved childhood-deprivation syndrome or whether they arise from more esoteric causes is beyond the scope of this column. So I will stick to the audio aspects of the question.

I, too, have a power-indicating meter (the Heath AD-1307) hooked up to my system. When I am listening with average low-efficiency speaker systems, I find that 2 watts or less is background level, 20 watts or so on peaks is loud, and 200 watts can be reached on momentary very loud peaks. Each step represents a 10-dB increase in power delivered to the speaker(s). I've also had speakers under test at home that in A-B comparison with the previous pair required about 10 dB less power to achieve the same loudness level (only 0.2, 2, and 20 watts were required under the same listening conditions). It therefore does not seem improbable to me that Mr. Pizzini's 65 watts per channel is more than adequate for his "very large ported" speaker systems.

When dealing with conventional dynamic speaker systems, there are several rules of thumb regarding efficiency. The larger the system, the more efficient it is likely to be. And a horn or bass-reflex (ported) system is likely to be more efficient than an acoustic-suspension or infinite baffle system of equivalent size. However, given a pair of equivalent-size systems, the more efficient of the two is likely to have less very low bass response.

To Mr. Pizzini's question "Why buy more watts?" I would respond, don't—unless you really want to. Until recently I found that 350 watts per channel was adequate for my needs, but I had this dream the other night

Discwasher/Sound Guard

Q. I would like to know if Discwasher fluid will wash away the dry lubricant from a disc treated with Sound Guard. While Sound Guard does reduce the need for cleaning, it does not entirely eliminate the problem of microdust and visible debris, and obviously the economics of using such a product is questionable if a disc so treated cannot thereafter be cleaned. I hope you can clarify the matter.

RICHARD E. REX
Bountiful, Utah

A. I have been informed that elaborate tests by both the Sound Guard and Discwasher companies indicate that properly "bound" Sound Guard will not be removed by Discwasher's D3 fluid. In fact, normal cleaning with the Discwasher fluid has been found by both Ball and Discwasher to remove unneeded, excess lubricant but not the effective, "attached" compound.

Because the number of questions we receive each month is greater than we can reply to individually, only those letters selected for use in this column can be answered. Sorry!

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To that end, we manufacture all our drivers and crossover networks ourselves. (Most of our competitors do not.) We test every driver and every crossover board (not just a random sample) to a set of close-tolerance standards. Only those that meet the standards are installed in cabinets. Then every completed system must pass another long series of performance tests, before the cabinet gets its final coat of oil finish, a careful visual inspection, and is packed for shipment.

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Audio News Views and Comment

By George Tlamsa

Stereo AM

● In the not too distant future you may be finding stereo-AM, stereo-FM receivers in your local hi-fi shop—if the FCC gives its nod, that is—for stereo AM is now being seriously considered as an additional channel for commercial broadcasting. There are four proposed stereo-AM systems currently under scrutiny: those of Kahn Communications, RCA, Magnavox, and Motorola. The Kahn system has been around for a while, as has RCA's (a joint effort with Belar Electronics Laboratory, a broadcast-studio-equipment manufacturer). The National AM Stereophonic Radio Committee (NAMSRC), advisers to the FCC, completed on-the-air tests of the RCA, Magnavox, and Motorola systems on August 21; Kahn refused to participate, citing the exorbitant costs involved and the fact that its system had already undergone extensive use tests elsewhere. The FCC has been soliciting comment from broadcasters and the public on the stereo-AM issue; with this data and the report of the NAMSRC in hand, it expects to issue a ruling—or a reaction—on the matter sometime this month.

Although the notion of stereo AM goes back a long way (as far as 1925!) AM radio was not seriously promoted as a stereo medium when stereo discs were coming into their own largely because of its fidelity problems. The two major difficulties were limited audio-frequency bandwidth and poor signal-to-noise ratio, and these are still with us. AM stations are technically capable of broadcasting a frequency range of 50 to 10,000 Hz, but this still doesn't equal FM's range of 30 to 15,000 Hz. Noise problems are significant in AM too; AM receivers respond to amplitude variations in the received signal—any amplitude variations, including all sorts of natural and man-made noise. FM receivers are designed to respond to frequency—not amplitude—modulation, which eliminates most of this kind of noise.

In most of the current proposed systems, a stereo-AM signal is broadcast by using the two "edges" of the band to carry the additional information while a conventional AM radio gets a normal mono signal. All the proposed systems appear to be workable, with at least 8 to 12 dB of channel separation being available. This may not be very impressive to an audiophile accustomed to 25 to 30 dB of separation, but it may well sound very good in another rapidly growing market: mobile sound. Considering all the ambient-noise high-frequency masking that goes on in the average car, the loss of highs in AM may not be that significant to the average listener. And with car speakers mounted the way they usually are, the AM separation available would work well enough for a distinct stereo effect. Consider also that one major advantage of AM over FM is most observable in a moving vehicle—AM signals are not subject to flutter

effects and multipath distortion as FM signals are. And AM signals are also longer-range than FM. Will we soon be listening to the AM talk programs in stereo? Only the FCC knows for sure. In any case, even if it's in stereo, it certainly won't be hi-fi.

"Instant" Cassettes

● If you think that all cassettes provide "instant" recording once you press the proper button, you're right—except that they do it only when you get past the 6 seconds or so of blank nonrecordable leader section spliced to the head and tail of the tape pack. The leader is used to prevent tape stretch or breakage at the point where it is attached to the hubs—and where, of course, it is most subject to stress from sudden halts after fast wind or rewind. Now someone at 3M has had a good idea: use standard *recordable* 1.5-mil tape for the leaders and splice to it whatever thickness of "body" tape is required for the various recording capacities of 30, 60, or 90 minutes. The IRC (Instant Record Cassettes) series is economy-priced and specially designed for recording at lectures and other situations where *really* instant recording is necessary.

High Cost of Car FM

● According to Donald A. Thurston, chairman of the board of the National Association of Broadcasters, many Americans do not have FM receivers in their cars because of the high prices charged by auto manufacturers for factory-installed AM/FM radios. In testimony before the House Small Business Committee, Thurston suggested that the FTC and the Justice Department look into possible antitrust violations in the situation, since despite increases of as much as 73 per cent in the number of home radios with FM tuners in the ten-year period between 1965 and 1975, only 37 per cent of all car radios had FM tuners in 1975, an increase of 31 per cent over the 1965 figure.

In addition, he stated that the cost of an AM car radio purchased from the car's manufacturer could well run upwards of \$75, with an AM/FM set costing twice as much and an AM/FM stereo set three times that amount. These figures he compared with the typical production costs of a car radio, which in 1974 were \$13.52 for parts and labor for an AM-only set and an additional \$6.95 for an AM/FM set, according to a 1974 survey by the A. D. Little Company. In that year Congress considered legislation requiring all radio receivers to be capable of receiving all commercial stations, both AM and FM. Though the bill did not make it through the House at the time, Thurston is apparently hoping that similar legislation will be considered again in the immediate future.

It's time for everybody else to start playing catch-up. Again.

From the very beginning, experts have acclaimed the performance and feature innovations of Yamaha receivers as nothing less than spectacular.

But now, we've outdone ourselves.

Yamaha is introducing a new line of receivers with such unprecedented performance, it's already changing the course of audio history.

Real Life Rated™ While traditional laboratory measurements provide a good relative indication of receiver performance, they simply don't tell you how a receiver will sound in your living room in actual operation. So Yamaha developed a new standard for evaluating overall receiver performance under real life conditions. It's called **Noise-Distortion Clearance Range (NDCR)**. No other manufacturer specifies anything like it, because no other manufacturer can measure up to it.

We connect our test equipment to the phono input and speaker output terminals, so we can measure the performance of the entire receiver, not just individual component sections like others do. We set the volume control at -20dB, a level you're more likely to listen to than full volume. We measure noise and distortion together, the way you hear them.

On each of our new receivers, Yamaha's Noise-Distortion Clearance Range assures no more than a mere 0.1% combined noise and distortion from 20Hz to 20kHz at any power output from 1/10th watt to full-rated power.

Four receivers, one standard. On each of our four new receivers, Yamaha reduces both THD and IM distortion to new lows—a mere 0.05% from 20Hz to 20kHz into 8 ohms. This is the kind of performance that's hard to come by in even the finest separate components. But it's a single standard of quality that you'll find in each and every new Yamaha receiver. From our CR-620 and CR-820 up to our CR-1020 and CR-2020.

What's more, we challenge you to compare the performance and features of our least expensive model, the CR-620, with anybody else's most

expensive receiver. You'll discover that nobody but Yamaha gives you our incredibly low 0.05% distortion and -92dB phono S/N ratio (from moving magnet phono input to speaker output).

You'll also discover that nobody else starts out with such a variety of unique features. Independent Input and Output Selectors that let you record one source while listening to another. A Signal Quality Meter that indicates both signal strength and multipath. The extra convenience of Twin Headphone Jacks. Or the accurate tonal balance provided at all listening levels by Yamaha's special Variable Loudness Control.

More flexibility. It's consistent with Yamaha's design philosophy that you'll find the same low distortion throughout our new receiver line. Of course, as you look at Yamaha's more expensive models, it's only logical that you'll find the additional flexibility of more power, more functions, and more exclusive Yamaha features.

For example, there's a sophisticated tuner, with unique negative feedback and pilot signal cancellation circuits (patents pending), that makes FM reception up to 18kHz possible for the first time on a receiver. Plus other refinements like a Built-In Moving Coil Head Amp, Fast-Rise/Slow-Decay Power Meters, and Yamaha's own Optimum Tuning System.

Now's the time to give us a listen. Our new receiver line is another example of the technical innovation and product integrity that is uniquely Yamaha. And your Yamaha Audio Specialty Dealer is an example of uncommon dedication to faithful music reproduction and genuine customer service. It's time you heard them both.

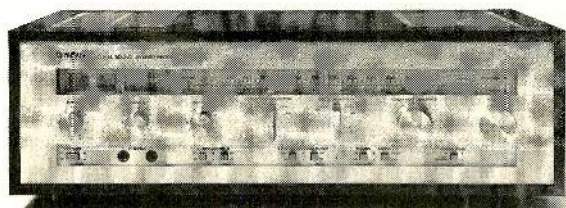
If your Yamaha Audio Specialty Dealer is not listed in the local Yellow Pages, just drop us a line.



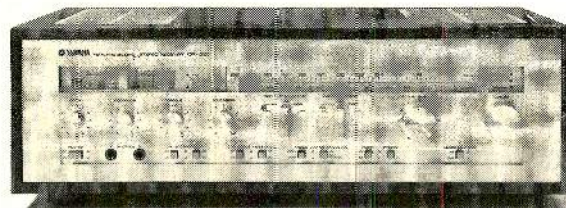
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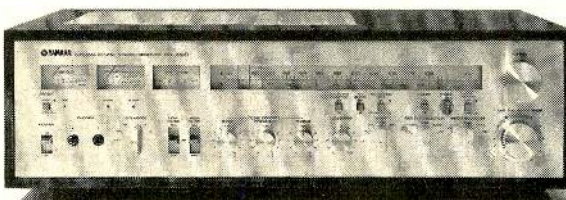
Real Life Rated



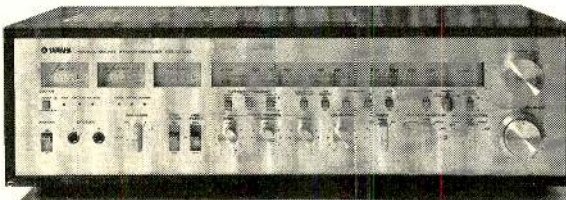
CR-620 0.05% THD 0.05% IM



CR-820 0.05% THD 0.05% IM



CR-1020 0.05% THD 0.05% IM

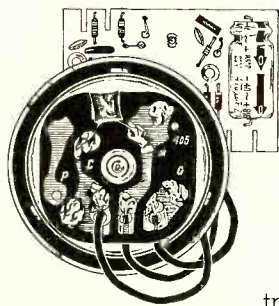


CR-2020 0.05% THD 0.05% IM

Why you should consider the new Garrard GT35 if you're thinking Dual or B.I.C.

We'll say it straight out. The new Garrard GT35 is the best all-around turntable anywhere near its price. Let's do some direct comparing.

Start with the motor. The Dual 1245 features a fine 8 pole, synchronous motor and the B.I.C. 981, a 24 pole, synchronous unit.



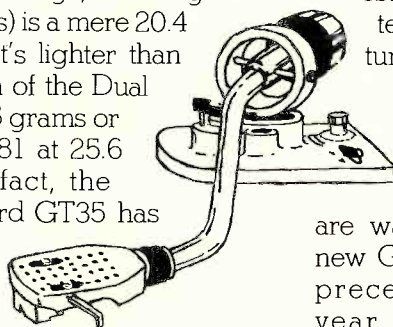
The new Garrard GT35 incorporates a servo-controlled, DC mo-

tor. Servo control provides absolutely steady speed. The motor, (and thus the rotation of the platter), is immune to fluctuations in household voltage or frequency. Len Feldman, writing in *Radio Electronics*, reviewed it as a "significant breakthrough" superior to the "synchronous motor however many poles it might have." The GT35 is the only, belt-driven, single/multiple play turntable in the world with a servo-controlled, DC motor.

Chalk one up for the new Garrard GT35.

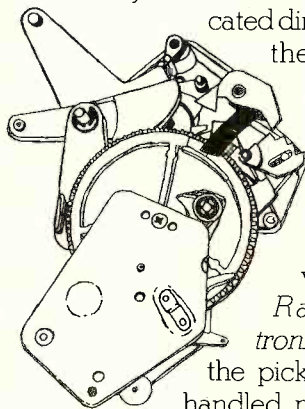
Now for the tonearm. Remember that the delicate stylus, as it traces the groove, bears the full weight of the tonearm. The heavier the tonearm, the greater the wear on the record and stylus. Light is right. The effective mass of the GT35

tonearm (measured with a Shure M95ED cartridge, tracking at 1/4 grams) is a mere 20.4 grams. That's lighter than the tonearm of the Dual 1245 at 27.5 grams or the B.I.C. 981 at 25.6 grams. In fact, the new Garrard GT35 has the lightest tonearm of any single/multiple play turntable.



Chalk up one more for the new Garrard GT35.

The Dual, B.I.C. and Garrard all protect your records as only fully automatic turntables can. And all provide the convenience of multiple play. But only the new GT35 boasts the patented Delglide® system. Unlike the Dual and B.I.C. automatic mechanisms, Delglide is driven by its own belt and is located directly under the tonearm.

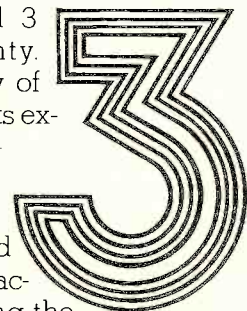


Tonearm control is by simple rotary action. It's no wonder that *Radio Electronics* said, "... the pick-up arm is handled more gently than could be done by the steadiest of hands." We make

this claim: Delglide is the smoothest and quietest automatic system ever incorporated in a turntable—of any kind.

That's still another one for the new GT35.

There's more. The Dual 1245 and the B.I.C. 981 are warranted for 2 years. The new Garrard GT35 carries an unprecedented 3 year warranty. That's our way of underscoring its exceptional reliability.



Finally. The price advertised by the manufacturer. Including the base and dust cover, the Dual 1245 is \$240 and the B.I.C. 981, \$237. The price of the new Garrard GT35: just \$200.

The GT35: a "breakthrough" motor, the lightest tonearm, the smoothest and quietest automatic system and a 3 year warranty.

Consider the GT35. If you're thinking Dual, or B.I.C. Or Technics. Or Pioneer. Or Sony. Or...

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Audio Basics

By Ralph Hodges



LEARNING TO LISTEN

I AM always a little surprised, and more than a little taken aback, when a neophyte audiophile suggests to me with something like awe that it must be wonderful to possess so rare a talent as being able to listen to audio systems and tell immediately what's right (or wrong) about them, for I am not accustomed to looking upon this skill as any big deal. I won't go so far as to say there is no such thing as a "golden-eared" listener, for plainly there is: an appreciable number of people earn their livings at least in part through their super-sensitive auditory faculties. But this, I feel, has little if anything to do with any neurological or physiological gift. Critical listening is a skill acquired through practice and concentration. (Some might also call it a curse, like perfect pitch, because once you have really learned to listen, it is difficult to tolerate anything that falls below your standards, and the simple pleasures of a transistor radio on the beach may be lost to you forever.)

To be useful to an audiophile—or to anyone else—critical listening must be both analytical and diagnostic. Stories abound of conductors who can unerringly pick out the one off-key violin in a string section of sixty members. "Argh!" such a conductor might say, which is of no help to anyone. But if he follows that expletive up with "My 'Argh!' is directed at the violins, which sound awful," that's analytical. And if he continues, "Furthermore, it is directed specifically at *that* violin, which is mistuned," that's diagnostic.

I HAVE encountered few audiophiles who could be called universal masters of analysis and diagnosis. Sometimes a diagnosis is beyond an audiophile because, though he can plainly hear the flaw in the reproduction, his technical knowledge is not sufficient to suggest to him what might be going wrong. Or he might be indifferent: "I recognize the existence of such-and-such a fault in my system, but it really doesn't bother me that much, and the system has many other things going for it that I'm really more demanding about." His attitude, if sincere, might make him a poor consultant in the choice of someone else's equipment. He may have become too much a critical specialist in his own areas of preference and too little concerned with any number

of problems that may be setting other people's teeth on edge—this is particularly true where there are striking differences in musical taste or hearing acuity.

How does one become a useful member of the critical-listening "trained-ear" fraternity? First, by listening, and in particular by listening *critically* to whatever you want to evaluate. I can't fully subscribe to the view that you should listen exclusively to live music in order to pass judgment on reproduced music, for two reasons. First, in microphone perspectives, equalization, and mixdown practices in general, the recording industry seems to be moving further away from the live-music experience and closer to something that it considers more dramatic and captivating. Hence live music can actually lead you astray



if you expect a high-fidelity system to sound exactly like it; if the record grooves don't have "live" sound in them, then no matter how good the audio system, it won't *sound* "live"—and it shouldn't. Second, if you want to learn to be analytical and diagnostic, you have to pay attention to context. I have heard, from a poor seat in an otherwise respected concert hall, a sonic effect that exactly mi-

micked the sound of a dirty phono stylus. I have also heard a recorded tenor voice that I was certain was rife with distortion until the record's producer demonstrated that the soloist in question was trying to "force" his way through a bad chest cold. Hardly a common-denominator case, but even the most acute listeners have been innocently fooled a time or two by a "distorted" original.

Therefore, if you want to learn about concert-hall acoustics, instrumental intonation, ensemble playing, and great spontaneous entertaining, by all means attend live music performances whenever possible. But if you want to learn about hi-fi equipment, concentrate on listening to that, with regular reference to live music, if only for philosophical edification. Do not, in any case, confuse the two, because the cause of genuinely bad sound in the one is almost never the cause of bad sound in the other.

WHAT does one listen *for*? This is a good question that has perhaps never been satisfactorily answered. In a way it's a personal matter. Some expert listeners I know are immediately sensitive to frequency balance and colorations. The "ocean-roar" noise often heard when the tone arm is lowered to the edge of a record will often tip them off to something right or wrong even before the music starts. Of course, they need some experience with the way this noise *should* sound on audio systems of proven "correctness" to acquire this skill, and this has often been sharpened in some cases by dabbling in speaker design. For my part, a variety of musical experiences during my school years gave me the ability to "play back" a virtually note- and noise-perfect rendition of a recorded performance in my head, so that I at least have some standard of comparison if not an *absolute* standard. Combining this with the experience of hearing those recordings reproduced on good systems has added perspective—and a sense of what could stand even more improvement.

Above all, I would say that acquiring the ability to listen analytically, being aware of the individual contributions of all the instruments and even of the acoustic space around the instruments is of paramount importance. This skill does not come easily. I keep on hand a small collection of distinctively distorted recordings so that I can demonstrate to the concerned and curious what this blight upon reproduced music really sounds like. But drawing their attention to a particular distortion "tree" will not work until they have learned to ignore the "forest," learned to separate an undifferentiated "mass" of sound into its component parts.

BUT I feel certain that the trick of analytical listening can be learned—learned, anyway, by anyone for whom music has a vital appeal. Once he has mastered it, the listener will be able to hear the chest cold or the dirty stylus instantly, even if he can't positively recognize its cause. If he wishes to get further involved with the technicalities of high fidelity, the diagnostic skills will follow. Unfortunately, learning to listen critically may well require a reasonably analytical sound system on which to sharpen your senses. That's why so many audiophiles find that their first equipment purchases in time come to be seen as merely a set of training tools by means of which they were able to make a much wiser decision the next time around.

I want low tar. But taste is a must.

I wanted less tar. But not less taste.
I found Winston Lights. I get the low tar numbers
I want, and the taste I like. If it wasn't for
Winston Lights, I wouldn't smoke.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

Winston Lights. Winston Light 100's.

Tape Talk

By Craig Stark



Microseconds Query

Q. My cassette has switch markings for 70 μsec and 120 μsec . What do these numbers mean, and what do they have to do with cassette performance?

MARIANNE SPIVEY
New York, N.Y.

A. The abbreviation " μsec " stands for "microsecond" and refers to what the engineers call the "time constant" of the high-frequency portion of your cassette's playback circuitry. The concept of a "time constant" is useful from an engineering standpoint since it is simply the product of the actual resistor-capacitor values necessary to create a particular frequency-response curve.

In order to achieve flat overall frequency response, all tape decks employ what amounts to a treble boost in their playback section. The frequency at which this effective boost begins to take place is determined by the circuit's time constant (frequency = $1 \div 2\pi TC$, or, more simply, just divide 159,155 by the stated time constant, in microseconds, to find the frequency). As can be seen from the curves in the diagram below, a 70- μsec treble boost starts (its 3-dB point) at 2,274 Hz. It is used for chromium-dioxide (and cobalt-treated ferric) tapes. Because ordinary ferric oxides require much more treble assistance on playback, a 120- μsec curve which starts at 1,326 Hz is used.

The greater treble boost required for regular ferric oxides means that their hiss level, on playback, will be amplified more (by about 4.5

dB, the difference between the two curves) than that of CrO₂ tape or its equivalents. That is why tape manufacturers today are rushing to produce more and more 70- μsec cassettes.

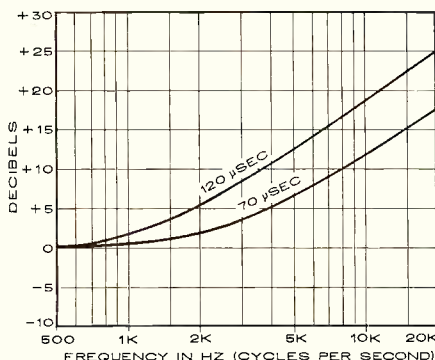
Not So Rack-mountable

Q. I recently purchased an open-reel deck, a cassette deck, a tuner, and an amplifier which were all advertised as "rack mounting." All of them have the standard 19-inch width, and if I move each individual unit up and down the front of the rack I can line up the notches for its front mounting screws with the drilled and tapped screw holes provided in the frame of the rack. But when I try to stack the units on top of each other, panel to panel with no spaces between them, the way they look in every rack installation I've ever seen, the slots don't match the mounting holes any more. Why? Is there anything I can do about it?

BOB SILVERSTEIN
Brooklyn, N.Y.

A. Having had to spend countless hours with drills, hack saws, coping saws, and files, making up custom adaptors to make so-called "rack mountable" equipment fit in my own multiple six-foot racks, I was touched in a very tender spot by your question. All the American-built "rack mountable" equipment I own fits standard EIA racks (the type sold in this country) perfectly. But, while there are a handful of exceptions (usually specifically designed for professional, not home use), the Japanese-built "rack mountable" equipment I have used won't fit my standard racks any more than it will fit yours.

The problem lies in this: EIA standard rack mounting specifies not only the 19-inch width and the spacing between the notches for screw mounting, but it also specifies very precisely, using a standard that has not been changed in the many decades since its first promulgation, the permissible panel heights. To fit standard racks, every panel must have a height that is an exact multiple of $1 \frac{3}{4}$ inches, less $1/64$ inch at top and bottom for clearance. Units measuring $1 \frac{3}{4}$, $3 \frac{1}{2}$, $5 \frac{1}{4}$, 7, $8 \frac{3}{4}$, or $10 \frac{1}{2}$ inches, given standard notching, will fit a standard rack in any combination (up to the maximum height of the rack, of course). No



other will, and no others should be advertised and sold as designed for standard rack mounting unless the manufacturers of the nonstandard, pseudo-rack-mounting units will supply the necessary nonstandard blank panel strips (top and bottom) to space the panel height out to the next standard multiple. Since increasingly large numbers of pieces of high-fidelity equipment are being designed to look as if they were "rack mountable" and are being advertised as if they were (it's very "in" these days), I believe that either voluntary or enforced compliance should be obtained, perhaps through the Federal Trade Commission.

Now that you've been stuck, however, there is an alternative open to you. I have found at least one firm (Sansui Electronics, 55-11 Queens Boulevard, Woodside, N.Y. 11377) that manufactures a kind of rack which uses a slotted channel and rear-mounted clamps to take the place of the notch-and-screw mountings. With this you can set up nonstandard panels on top of each other and have to worry only about the need for a single nonstandard blank spacing panel at the very top or bottom of the rack.

Decoding Dolby FM

Q. My new cassette deck has a Dolby FM feature that's supposed to let me decode Dolby broadcasts whether I record them or not. The instructions say to set my receiver's switch to "25 microseconds" or to connect the cassette unit to the receiver's "Dolby output" jacks. My receiver, however, doesn't have any special Dolby jacks or switch—that's what I thought the Dolby FM feature of the cassette was supposed to take care of. Can you explain what's going on and tell me if there's anything I can do besides buy a new receiver?

OLIVER J. MULDOON
Seattle, Wash.

A. To judge from my mail, you're not the only reader with this kind of question, and happily for each such situation there is an answer, although which answer will apply varies with the individual circumstance.

To understand "what's going on," you must appreciate that Dolby-FM broadcasts differ from regular FM broadcasts in two ways, not one. First, and obviously, the FM audio signals are Dolby-encoded using the same "Dolby-B" system incorporated in most hi-fi cassette recorders. Most prerecorded cassette and open-reel tapes are now also Dolby-B encoded. But second—and here's where the difference comes in—when an FM station converts to Dolbyized broadcasting (at last count about 160 had) it also changes its "pre-emphasis" from 75 to 25 microseconds (μsec).

This pre-emphasis change means that the broadcaster starts using less overall treble boost in his audio signal than formerly—a welcome change, since with many of today's music sources the old 75- μsec boost leads to high-frequency overloads that have to be controlled by limiters that detract from broadcast fidelity. At the same time, however, the Dolby-B encoding process boosts the low-level treble frequencies, so that if your receiver is not Dolby-equipped and is designed for the old 75- μsec boost, a Dolbyized signal with the 25- μsec pre-emphasis sounds close enough to a "regular" broadcast subjectively that most

listeners won't spot the differences. This "compatibility" with existing, non-Dolby receivers is an obvious inducement to the broadcaster to make two changes that have the potential both to improve the signal-to-noise ratio and to improve the fidelity with which he can transmit high-level high frequencies. People whose receivers have full Dolby facilities have both a switch that changes the receiver's operation from 75 to 25 μ sec (matching part of what the broadcaster did) and a Dolby-B decoder, and only these listeners get the full benefit of Dolby noise reduction.

Dolby-B decoders raise the cost of a receiver somewhat, of course, so if there aren't any Dolby-FM stations in your area (or if you don't like their programs), you wouldn't be willing to pay for a decoder you couldn't use. On the other hand, including a switch and a jack (plus a capacitor and a resistor or two) to change the de-emphasis alternately from the 75- μ sec normal setting to the 25- μ sec setting suitable to feed into an outboard Dolby unit costs the receiver manufacturer very little. Thus, most recent receivers in the mid and upper price range do incorporate the switch for 75-to-25- μ sec FM de-emphasis or they give you a "Dolby-output" jack that provides the 25- μ sec de-emphasis without switching. It's a nice compromise on the receiver manufacturer's part. Budget-price receivers (and older models that predate the introduction of Dolby FM) don't have this feature, however, and this now presents a problem for a cassette manufacturer.

Since cassette decks already have a built-in Dolby system, it doesn't cost the cassette manufacturer too much to provide the necessary switching and level controls so you can use your cassette's Dolby system for decoding Dolbyized broadcasts. But it becomes a little tricky, for the Dolby-FM switch in the cassette unit can be designed either with or without the capacitor and resistors necessary to convert the incoming FM signal from a 75- μ sec de-emphasis to a 25- μ sec one. Most cassette "Dolby-FM" switches do not have this conversion built in, for not only does it cost something to provide it, but if the cassette's Dolby FM provides the 75-to-25- μ sec treble change and it gets used with a receiver that already has a Dolby-FM switch or jack, the treble will be altered twice, and this will cause trouble in the decoding.

For anybody who owns a receiver that lacks the 25- μ sec Dolby-FM output and whose cassette deck's Dolby-FM feature does not provide the 75-to-25- μ sec conversion, Switchcraft offers a plug-in module, Model 621 PI (\$13.60 list from your local parts-supply store or from Switchcraft, 5555 N. Elston Avenue, Chicago, Ill. 60630), which goes between the receiver and the cassette deck. It provides either a bypass mode (for taping regular, non-Dolby FM programs) or a 75-to-25- μ sec conversion (for taping Dolby-FM broadcasts). Unfortunately, however, this device cannot be used with every receiver—specifically, the receiver output impedance must be less than 2,000 ohms (most are). If this information is not given in your receiver's instruction manual, you must write to the manufacturer. If the Switchcraft unit is not suitable for your receiver, you can get information on build-it-yourself devices that will work by writing Dolby Laboratories, Inc., 731 Sansome Street, San Francisco, Calif. 94111; ask for bulletin S77/L75/362/29.

ADS 710
AR 12
B&O PHASE-LINK S-60
INFINITY QUANTUM JR.
YAMAHA NS 500

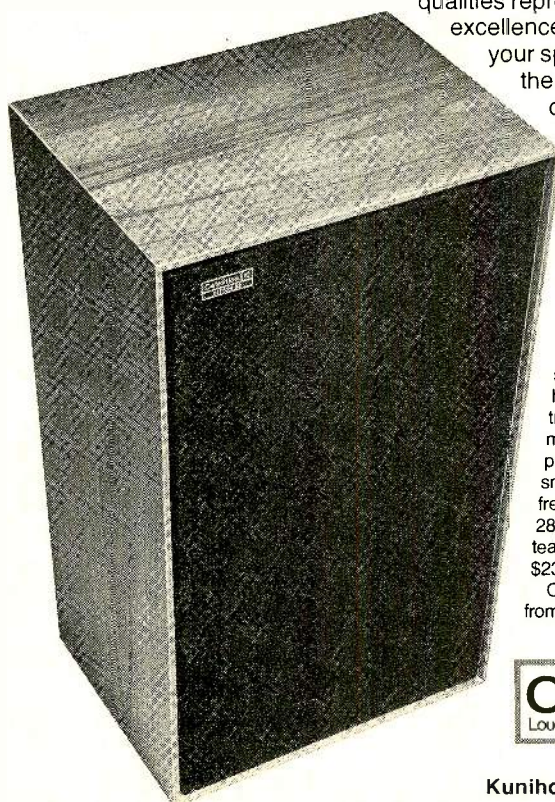
If any of these fine speaker systems sounds better to you than the Ditton 33, buy it.

Give or take a few inches and dollars, all of these systems are comparably sized and priced. And all are quality products worthy of your serious consideration.

Fine speakers like these are available usually only at true audio specialists, those who carry a limited number of component lines. The specialists we've selected to be Celestion dealers take pride in their critically designed listening rooms. They provide an acoustic environment that permits you to distinguish the speakers that are truly excellent from those that are merely very good.

When you audition the Ditton 33, keep in mind that all its drivers, the crossover network, and the cabinet have been engineered and manufactured by Celestion. Just as we've been doing for more than fifty years.

We've made the Ditton 33 as accurate, as precise, and as true to musical life as our experience, abilities, and engineering facilities permit. If these qualities represent the sort of sonic excellence you want to hear from your speakers, we urge you all the more to carefully compare the Celestion system with those listed above. It's a risk we invite with a reasonable amount of confidence.



The Ditton 33 by Celestion

A sealed-enclosure three-way system employing a 10-inch high-compliance woofer, a 5-inch transmission-line-loaded mid-range and a 1-inch pressure-dome tweeter for smooth, wide dispersion. Overall frequency response is 25 to 28,000 Hz. Available in walnut or teak finish. 14" w \times 10 1/2" d \times 24" h. \$239.50 each.

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A new Space Program by Sansui.

Designed to send every audiophile into orbit.

Sansui has conquered space — the space in your listening room. Our engineers have created a rack to hold all your high fidelity components in one place so they're easily accessible and easy to operate. And the Sansui GX-5 rack is so elegant you will be proud to display it in your home.

The **Sansui GX-5 rack** is about the only EIA 19" standard-width rack available with casters for moving your sound system easily from room to room. It is 37-1/2 inches tall and can hold every rack-mountable component. You can also adjust the height of each unit to meet your needs.

We have filled the rack with our choice of outstanding Sansui components. And there's still plenty of room for your records. Listen to them on the **Sansui SR-838 Quartz-Servo direct-drive turntable**, about the most elegant and stable precision turntable in the world. Even when set on top of so much power, the SR-838 will perform free from all noise and feedback.

When your mood changes, listen to your favorite FM station on the **Sansui TU-717 tuner**. Reception, even of the weakest stations, is outstanding, with selectivity so high there is never a problem with adjacent channel programming.

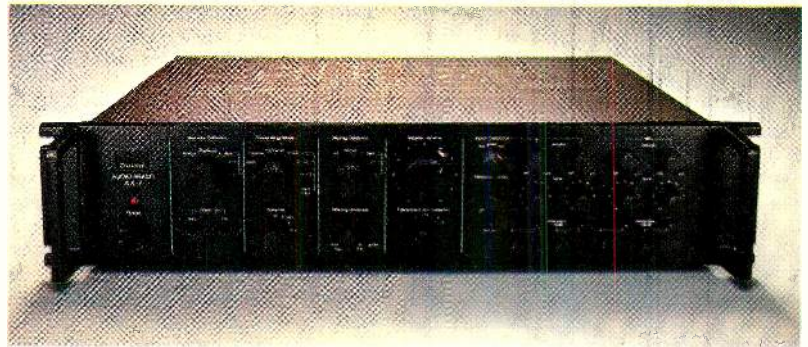
And, of course, if you want to preserve these treasured sounds for years — as clean and pure as they were the very first time you heard them — it's all possible with the **SC-3110 cassette deck**, our rack-mountable version of the SC-3100, already well-known for its superior performance and ultra convenience including Sansui exclusive Direct-O-Matic loading.

To match these outstanding components, Sansui offers you the **AU-717** amplifier with the widest frequency response (from main-in) of any available **DC integrated amplifier** at any price. With astonishingly low distortion and noise, and wide overall frequency response, the signal is an ultra-faithful replica of the original. The AU-717 delivers the brilliance and all the nuance that makes music so important in your life.

Listen through a pair of **SP-L800** (or SP-L 900 or 700) **dual-woofer speaker systems*** They have been designed to give you the full enjoyment of the clean and pure sound that our advanced technology components provide.

Of course, you can select other components to meet your own listening needs. You may want slightly less power, so we offer you the AU-517 DC integrated amplifier, created with the very same expertise as its bigger brother, the AU-717. If you wish to spend a little less on your cassette, you can choose the SC-1110.

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20dB input level attenuators on the 4 main inputs. Reverb is included, as well as circuits for 4-channel, equalization and noise reduction. Record the sounds you create on up to 3 tape decks.

We're sure you'll want to visit your local franchised Sansui dealer for a complete demonstration of Sansui's new Space Program. Just think about it. It will send you into orbit.

*Walnut veneer finish

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In Canada: Electronic Distributors



Technical Talk

By Julian D. Hirsch



● **ARE MEASUREMENTS VALID?** Many people are so accustomed to interpreting the performance of high-fidelity components solely through measurements and specifications that they tend to lose sight of the real significance of those data. I see evidence of this in letters from readers and questions from friends that often indicate a preoccupation with the test numbers and a lack of understanding of what they really *mean*.

The only meaningful way to describe most physical processes exactly is in mathematical terms, although the meanings may then be somewhat obscured. For example, a large amount of data can be presented in a limited space in the form of a curve on a graph, and this is usually more easily interpreted than the mass of raw numbers that went into its creation. An oscilloscope waveform, such as a square wave or pulse response, is another "instant" expression of a rather complex mathematical result which is (potentially, at least) easily interpreted.

Measurements themselves vary widely in the ease with which they can be made. Only rarely is the process so simple as connecting a test-signal source to the input of a device and reading the output on a meter or other instrument. Usually, a large number of special test conditions must first be specified in order for the measurement to be repeatable in another environment. (I am not talking about accuracy, which is another matter entirely, but merely repeatability.)

To ensure repeatable (and therefore comparable) measurements, various organizations have issued standards that define all relevant factors in the test conditions. These are modified or superseded periodically as technological changes dictate. The goal remains one of interchangeability of test results, so that after Manufacturer A or Reviewer B has obtained a set of performance data on a product, I have a reasonable chance of duplicating the results when I come to test the same product.

You may have noted the "catch" in the preceding statement. Only very rarely will I be testing the *same* serial-numbered unit that was used by a manufacturer or anyone else to measure the performance. The manufacturer's specifications are derived from tests on a number of units and include (we hope!) a reasonable safety factor to allow for individual

performance variations. Sometimes, competitive marketing pressures may lead a manufacturer to rate performance too close to the statistical *mean* of his quality-control distribution curve (some do this as a normal practice) instead of the more conservative approach of guaranteeing that *every* production unit will, as a *minimum*, satisfy the advertised claims.

In general, the test unit sent to a reviewer is taken from regular production (it would be prohibitively expensive for a manufacturer to design and construct a special review model of any complex electronic device). It may well be selected from the best performers from that production run or simply from those that meet their specifications by a reasonable margin. We request that manufacturers pre-test the sample submitted to be sure that it is operating properly and that they send us a copy of their test data. The reason is simply to check on our own test results, so that we are alerted if some measurement is far off the mark.

Lest the reader conclude that we are sent "ringers" that do not accurately reflect regular production performance, we can say (regretfully) that only a small percentage of the manufacturers comply with our request for pretesting. As a matter of fact, we often receive a recently introduced product before its instructional literature or printed specifications are available. And in a growing number of cases we find units that in one or more measurements fail to meet—usually by a very small margin—advertised ratings. This is not quite the same as our problem of some years ago, when a significant percentage of test samples were defective on arrival or failed

(blew up!) during testing. This rarely happens today, but sometimes the effect of a small departure from rated performance is, from our standpoint, much the same as that of a total failure. For example, if a tuner with a rated IHF sensitivity of 1.9 microvolts is measured by us at 2.5 microvolts, there is likely to be total consternation on the part of the manufacturer. From our point of view, this is by far the most trivial "defect" a tuner can have ("backlash" in the dial mechanism is far more serious to me, and it will elicit a much stronger reaction than a sensitivity discrepancy of a couple of decibels). But since 1.9 microvolts is a *published* rating, the discrepancy is viewed with great concern, not only by the manufacturer, but by many readers as well. In a later article I will deal with the real importance of various ratings (and some of the much more important unpublicized and un-rated factors).

PERHAPS you can see where all this is leading. There are basically two different aspects of measurements as they apply to high-fidelity components. First, the *accuracy and repeatability* of the actual measurement, and second, the *significance* of the measurement. Are deviations of a fraction of a microvolt in sensitivity—or a fraction of a per cent in distortion, or a watt or two in power—anything that we really should be concerned about? And, following from this, what *should* be measured in order to define the performance or quality of a product?

There are no easy answers (or any other kind, for that matter) to that last question simply because subjective values—which are quite different from objective costs—enter into the judgment. In the last analysis, we are not dealing only with electrical performance (or *should* not be, at any rate). Of course, that is a valid *part* of the story and one which cannot be ignored, but it is given far too much emphasis and tends to be misinterpreted both by audiophiles and by the general public because of their desire to find an objective number that represents quality.

Sooner or later, we come to the human listener and how he perceives the sound field created in his immediate vicinity, whether from "live" instruments or from loudspeakers. The number of variables affecting that audible end result is so large that I would hardly

Tested This Month

●
Sherwood Micro/CPU 100 Tuner
ADS 810 Speaker System
Yamaha CR-620 AM/FM Receiver
Sankyo STD-2000 Cassette Deck
dbx 128 Noise-reduction System

be exaggerating if I called it nearly infinite. Immersed in this mass of unknowns is a relative handful of measurements, such as noise and distortion, frequency response, and perhaps a few hundred more that are routinely made on the components of a music system. I can say definitely, without fear of contradiction, that some of our measurements under some conditions sometimes correlate with audible effects. But sometimes they don't.

So what do we do—ignore all measurements and depend on subjective opinions alone? Some people believe this to be the right way (or at least *at the moment* the best way) to judge audio components, and there is,

given the present state of affairs, a certain logic to their argument. However, individual tastes differ so widely that even the most perceptive, accurate, and unbiased listener (as though subjective criticism could ever be unbiased!) cannot hope to give meaningful advice to others whose taste in sound differs even slightly from his. To further complicate things, even the most open-minded people have an incredible capacity for self-delusion, hearing pretty much what they unconsciously expect to hear.

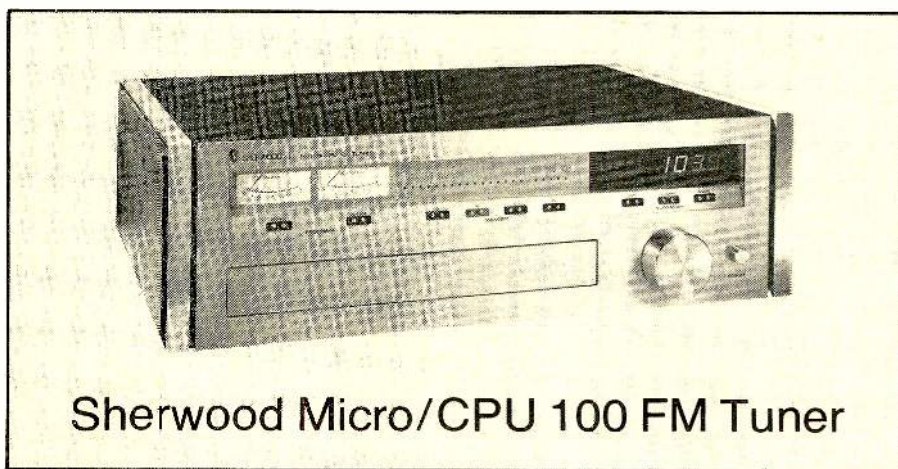
I see no likelihood that any objective test method will ever be devised that will be able to assign a figure of merit to the sound of a

music system so that no one will have to listen to a component or system before he buys it. Although all of us—manufacturers and reviewers alike—are constantly striving to arrive at measurements that minimize the vast uncertainty of objective testing, the goal continues to elude us.

In columns to come, I will be describing the individual measurement procedures used for each type of component, pointing out some of the limitations of the tests, and calling attention to some of the unspecified qualities of audio products that, to me at least, can be much more important than many of their advertised ratings.

Equipment Test Reports

By Hirsch-Houck Laboratories



Sherwood Micro/CPU 100 FM Tuner

A MICROPROCESSOR, for the benefit of those not familiar with the term, is a large-scale integrated circuit that contains the basic working elements of a digital computer. Given a moderate number of additional components, it can actually *become* a computer with rather impressive capabilities. Thousands of hobbyists now have personal computers using these devices, and a thriving industry has developed to meet their needs.

Microprocessors are found in many types of products from automobiles to microwave ovens—and in the past year or two in high-fidelity components. The first product to use one was a turntable, then a cassette deck, and now we have a remarkable FM tuner from Sherwood, the Micro/CPU 100.

From the outside, the Micro/CPU 100 is instantly recognizable as an FM tuner, with a dial scale calibrated from 88 to 108 MHz located in the usual place at the upper center of the satin-finish aluminum front panel. As on many tuners and receivers, the word **STEREO** lights up above the dial scale when a stereo broadcast is received. However, the dial has no pointer, which is the first clue that this is no ordinary tuner.

To the left of the dial are two normal-looking meters labeled **SIGNAL** and **MULTIPATH**.

At the lower right of the panel is a large knob, obviously for tuning, and a pushbutton power switch. A hinged door across most of the lower portion of the panel swings down to reveal a number of small knobs and switches whose markings also seem consistent with FM tuner operation.

The first sign of something “completely different” (other than the missing dial pointer) is a black window to the right of the dial and a row of contactors, grouped into nine closely spaced pairs, emerging from the panel below the dial. Two at the left are marked **ALPHA** and **STORE**, with the word **PROGRAM** identifying their joint function. The next four (A, B, C, D) are labeled **MEMORY**. At the right are three identified as **AUTOSCAN**, with the center one marked **STEREO** and the flanking contactors marked **LEFT** and **RIGHT**.

The rear panel of the tuner contains few surprises, with two pairs of audio outputs marked **FIXED** and **VARIABLE**, a **COMPOSITE** output (before the multiplex circuit, for use with an external decoder should the FCC approve a system of discrete quadrasonic FM broadcasting), and terminals for 75- and 300-ohm FM antennas. There is a single unswitched a.c. outlet, a fuse, and a small toggle switch marked **FREQUENCY—EVEN/ODD**.

Rather than go into further detail about what is inside the Micro/CPU 100 (most of which would not be recognizable as a tuner to most people because of the absence of such familiar components as tuning capacitors, coils, and the like), let us examine what happens when the tuner is connected to an amplifier and antenna and is switched on.

The black area to the right of the dial lights up to reveal a large digital frequency display with bright red ½-inch-high numerals. Turning the knob causes the expected change in the frequency indication, and stations are tuned in just as with other tuners having a digital frequency readout. It is interesting to note that the tuning knob is not connected to any mechanism, but merely turns a multi-bladed “fan” that interrupts a light beam to signal the tuning operation to the computer.

The frequency display is not just a frequency counter, but is the readout portion of a frequency synthesizer that accurately tunes the set to channel frequencies at 200-kHz spacings (with an accuracy of 0.0024 per cent). When the switch in the rear is set to **ODD** (the normal condition for this country), the tuner will receive only channels with odd frequencies (for example, 104.3 MHz). In some countries where channel assignments are on even-numbered frequencies, the switch can be set to **EVEN**, and the tuner will then reach only even frequencies (for example, 104.2 MHz, etc).

It is not necessary to use the knob to tune in stations. A light momentary touch of the **LEFT** or **RIGHT AUTOSCAN** contacts causes the tuner to scan electronically down or up the band, stopping when it comes to any station strong enough to overcome the muting threshold. If it reaches the end of the band before finding a station, the tuner returns instantly to the frequency from which it started and resumes scanning in the opposite direction. If it finds nothing there (hardly likely unless no antenna is connected), it returns to the starting frequency and stops. A touch on the center **STEREO** contact will permit the tuner to stop scanning only on a stereo transmission (a second touch returns it to the stereo/mono

(Continued overleaf)

mode). When any of the control contacts on the panel is touched, a light appears behind it to show the function is being executed.

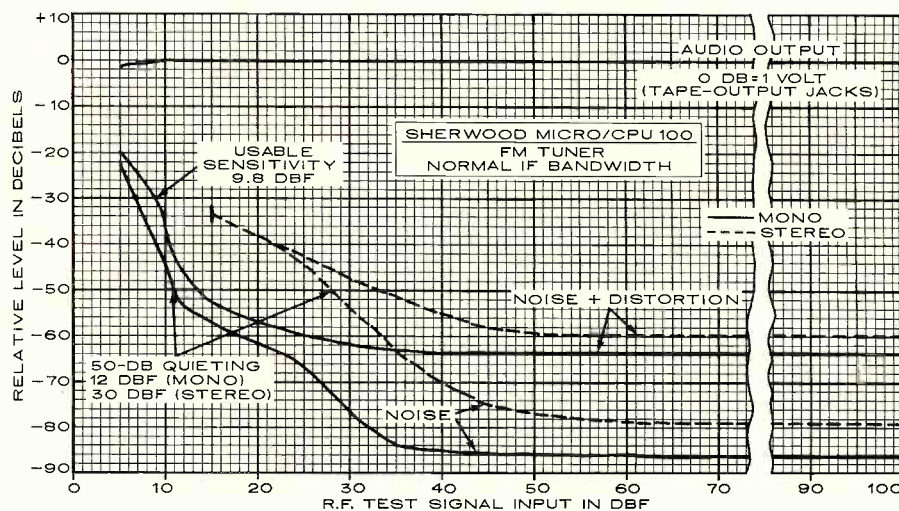
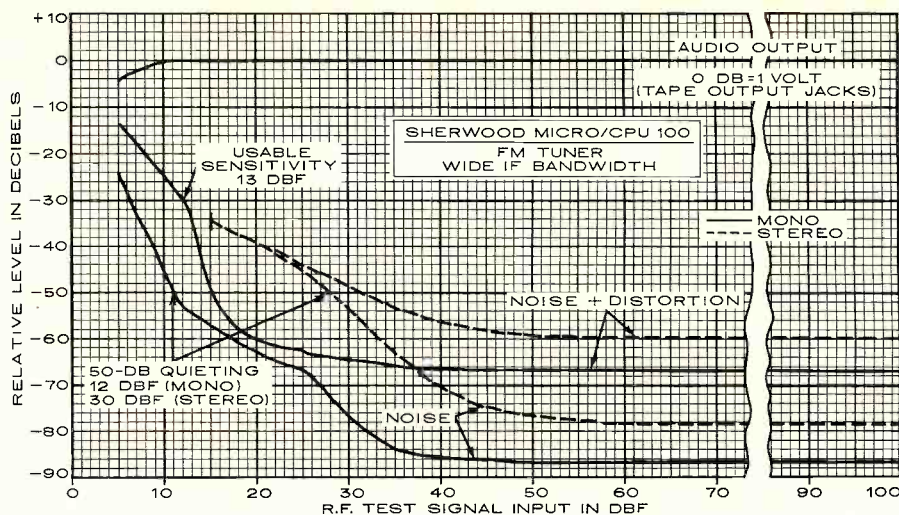
So far we have described a tuner not very different from some other synthesized tuners. The first significant difference comes when one wishes to use the four MEMORY contacts. Unlike some tuners whose memory functions depend on punched cards or other physical accessories, the computer in the Micro/CPU 100 is able to store the frequency of a station in one of four memory locations, from which it can be called up at any time by a touch of the corresponding contact, which instantly tunes the tuner to that frequency. For example, to store 93.9 MHz in memory A, tune the set to that frequency, touch the STORE contact, and touch A. The information remains in the memory indefinitely (even when power is removed from the tuner), but it can be changed at any time by tuning to some other frequency and repeating the process.

This brings us to one of the most startling (the adjective is a fair one) features of the Sherwood Micro/CPU 100—its alphanumeric memory and display, which is best illustrated by a step-by-step description of its use. In the New York area, 93.9 MHz is assigned to WNYC. When it has been tuned in, touching the ALPHA contact causes a letter "A" to appear in the portion of the display area to the left of the station-frequency numerals. Turning the tuning knob now causes that letter to change in sequence through the entire alphabet, followed by a series of punctuation marks and all the numerals comprising essentially the content of a full typewriter keyboard. The characters are formed by multiple LED's and are 3/8 inch high.

In the case of "WNYC," we stop at the "W" and touch STORE. This causes an "A" to appear to the right of the "W," and we go through the same process until we reach "N." Touching STORE now gives us a display of "WNA," and the process is repeated to form "WNYA" and finally "WNYC." The fourth operation of the store function restores the tuning knob to its normal function.

The Micro/CPU 100 has memories for up to forty-eight sets of call letters, and it is therefore possible, in almost every part of the country, to assign call letters to every receivable station. If one reaches the limit of forty-eight and attempts to load another frequency into the memory, the display flashes FULL for a couple of seconds and goes blank. Should one still wish to assign a call to that frequency, it is necessary to erase one set of call letters by tuning to its frequency and touching ALPHA and memory A in sequence.

Behind the front-panel door, from left to right, are knobs for adjusting output level (up



to 1.5 volts) and muting threshold, and switches for controlling the MUTING, SELECTIVITY (the tuner has normal and wide i.f. amplifiers), the AUTO STEREO FILTER (a high-frequency blend circuit that can either come into play automatically when the signal is weak enough to be noisy or can be disabled entirely), STEREO/MONO mode, and DE-EMPHASIS. The normal de-emphasis setting is 75 μ sec (microseconds), but it is internally adjustable to the 50 μ sec used in Europe, and the other setting is the 25 μ sec needed with an external Dolby adapter.

In case you have been wondering about that pointerless dial, it has a row of LED's, at 1-

MHz intervals, that light up to show approximately where the tuner is set, although the numerical display makes this unnecessary.

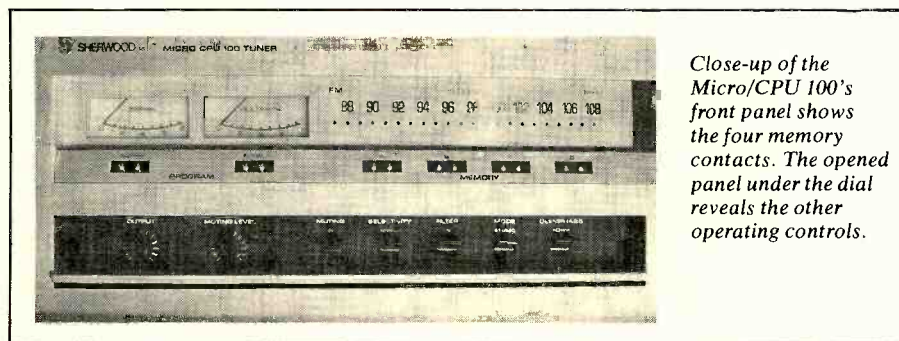
The performance specifications of the Sherwood Micro/CPU 100 are, to say the least, excellent. This is not surprising, since no one would be likely to design a tuner with costly state-of-the-art control features without giving it performance to match. Rather than detail the specifications, we will let our laboratory measurements speak for themselves.

The Sherwood Micro/CPU 100 is 20 inches wide, 6 3/8 inches high, and 15 inches deep. It is furnished in a black metal cabinet with walnut-grain wooden side plates. The tuner weighs 34 pounds. Price: \$2,000.

● **Laboratory Measurements.** Since the Sherwood Micro/CPU 100 can be tuned only in discrete steps, we located a clear channel and tuned our signal generator to the tuner frequency instead of the other way around. Almost all measurements were made twice, using both NORMAL and WIDE i.f. bandwidth, since this can affect many areas of the tuner's performance.

The sensitivity was certainly impressive. The IHF sensitivity (NORMAL) was 9.8 dBf or 1.6 microvolts (μ V) in mono. In stereo it was 15 dBf (3 μ V). The more important 50-dB quieting sensitivity was 12 dBf (2.2 μ V) in mono

(Continued on page 40)



Close-up of the Micro/CPU 100's front panel shows the four memory contacts. The opened panel under the dial reveals the other operating controls.

The sound and the theory.



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Introducing a speaker system with a sound so fantastic that it took a whole new theory of loudspeaker design to produce it . . . the Koss CM 1010 loudspeaker. It's the ultimate in 2 bandpass speakers, with an extended bandwidth response, high efficiency and incredibly low distortion that's unmatched by any other 2 bandpass speaker at any price.

To achieve such remarkable performance, Koss engineers set critical parameters for cabinet size, frequency response and efficiency. Then the computer-programmed Koss Theory furnished not only construction specifications for the woofer, tweeter, passive radiator and crossover network, but also the optimum position in the cabinet for each component to create maximum structural rigidity and optimum dispersion and phase coherency.

The result is an all-embracing quality of sound. The 10-inch passive radiator reinforces the lower 2 octaves

while the special 8-inch woofer also handles midrange to 3500 Hz. With the radiator's unique alignment mass in place, the CM 1010 reproduces a maximally flat response from an f_3 of 35 Hz on outward. However, for more acoustic energy in the 50 to 80 Hz range, the alignment mass can be removed to create an f_3 of 42 Hz and a low bass ripple of $1\frac{3}{4}$ dB centering on 60 Hz. The CM 1010's high-energy, 1-inch dome tweeter linked to an acoustic transformer increases the high bandpass headroom by an incredible 6 dB. With performance so superior, the CM 1010 is clearly the ultimate speaker in its price range.

For a free, color brochure of Koss CM loudspeakers, write to Fred Forbes, c/o the Koss Corporation. Or ask your Audio Dealer for a live demonstration of the Sound of Koss, and hear the Koss Theory in action. Once you've listened to the revolutionary CM 1010, you'll agree: hearing is believing.

KOSS® CM 1010 SPEAKER SYSTEM hearing is believing™

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CIRCLE NO. 35 ON READER SERVICE CARD

with 0.7 per cent distortion, and in stereo it was 30 dBf (17 μ V) with 0.63 per cent distortion. In the WIDE i.f. position, the sensitivity figures were essentially the same, the only change being a mono IHF sensitivity reduction to 13 dBf (2.4 μ V).

In the NORMAL mode, the distortion at 65 dBf (1,000 μ V) input was 0.1 per cent in mono and 0.13 per cent in stereo. In the WIDE mode, distortion was slightly less, reading 0.07 per cent in mono and still 0.13 per cent in stereo. Stereo distortion, with L - R modulation, was 0.4 per cent at 100 Hz, 0.067 per cent at 1,000 Hz, and 0.089 per cent at 6,000 Hz (NORMAL). In WIDE, these figures were 0.56, 0.1, and 0.056 per cent.

The signal-to-noise ratio (S/N) of the Micro/CPU 100 was phenomenal, far better than we have ever measured before and better than what we had suspected our Sound Technology signal generator was capable of: in mono it was 82.5 dB, and in stereo it was 75 dB. The readings were approximately the same with both bandwidths.

The stereo frequency response was within ± 0.3 dB from 30 to 15,000 Hz. The crosstalk (channel separation) with the NORMAL bandwidth was nearly as flat, measuring 45 ± 1.5 dB from 30 to 5,000 Hz, and with the minimum separation being 40 dB at 10,000 Hz! In the WIDE setting it was generally similar, except that the separation fell to 36.5 dB between 10,000 and 15,000 Hz.

The other tuner-performance measurements ranged from good to almost unbelievable. Capture ratio (NORMAL) was 1.06 dB at 45 dBf (100 μ V) and 1.25 dB at 65 dBf (1,000 μ V). As expected, it was better in WIDE, reading 0.72 dB at 45 dBf and 0.61 dB at 65 dBf. These are the best capture ratios we have ever measured, but it must be realized that accurate and repeatable capture-ratio measurements below 1 dB are very difficult, if not impossible, to make.

The AM rejection was very good, varying from 68 dB (65 dBf, WIDE) to 72 dB (45 dBf, WIDE). Image rejection was unmeasurably high, being greater than the 106-dB limitation of the test instruments. In NORMAL the alternate-channel selectivity was a very high 87 dB with perfect symmetry about the channel center. In WIDE, it measured 38 dB with a slight asymmetry. The respective adjacent-channel selectivity figures were 8.4 and 4.8 dB. The muting threshold was adjustable from about 15 dBf (3 μ V) to something in excess of 95 dBf (30,000 μ V) with the control at its clockwise limit. The stereo switching threshold was about 15 dBf (3 μ V). The pilot-carrier leakage in our sample was relatively high at -62 dB (it is rated at -80 dB), but this is low enough that it should not cause any problems with external Dolby units or tape recorders. Finally, the tuner hum level was the lowest we have measured to date, -80 dB referred to 100 per cent modulation.

● **Comment.** If the Sherwood Micro/CPU 100 had been just an ordinary tuner with the various computer functions added, we would have judged it noteworthy, fun to use, and probably a living-room conversation piece. But it would hardly have aroused any great enthusiasm in us.

As it is, in addition to its unique control features, this is one of the most impressive tuners—as a tuner—we have ever seen. It is so outstanding in so many ways that it is difficult to avoid the overuse of superlatives in de-

scribing it. For example, it has an absolutely flat frequency response, with none of the loss of extreme highs that we believe accounts for many of the quality differences heard between tuners. Its distortion, like that of some others, is lower than can be measured meaningfully with a Sound Technology signal generator—and there is nothing available at this time that is any better. Its channel separation of typically 45 dB across the full audio range is 10 to 20 dB better than that of any recorded program source, as well as of the FM stations themselves.

Needless to say, there is no possibility of a distortion-producing tuning error with the Micro/CPU. When a station is heard, it is heard properly. The SIGNAL meter has a logarithmic response, giving useful and proportional readings on any receivable signal. The MULTIPATH meter not only works, but it is just about the best of its kind. Unlike almost every other one we have used, this meter does as good a job as an oscilloscope, and it is a lot easier to interpret. Even a small amount of multipath distortion causes a visible meter movement, and when it reads zero, the distortion is really negligible.

The muting (which is significant only in manual or AUTOSCAN tuning) is very good, though there is a tendency for noise bursts to occur when it is set too low, and it is possible to pass by a station if it is set too high. In normal use it is absolutely silent, with enough time lag that the knob can be spun to cover the entire FM band without a sound while the tuning is under way.

Perhaps the most surprising thing about this tuner was its noise level, which was 5 to 10 dB lower than we have ever measured before, even on the finest tuners (the hum level was also 10 to 15 dB lower than on any other tuner). This may or may not be immediately apparent to the listener (it was not to us), but what it really means is that beyond any reasonable doubt the sound quality of the programs emerging from this tuner—for better or worse—is determined *entirely* at the broadcast station.

In case any readers might be concerned about potential servicing and reliability problems of the very complex Micro/CPU, the tuner can actually use its built-in computer to check the performance of its own circuits.

Specially programmed read-only memory (ROM) IC's are available to Sherwood's servicing organizations for this purpose. When one of the IC's on the internal computer board is replaced by one of these special plug-in IC's, the various computer circuits are rapidly checked in sequence, and the results are displayed as flashing letters and numbers on the readout panel. Any defective IC is immediately identified by *part number* on the display. If all is well, the test is completed in less than one minute, and the words TEST DONE flash alternately on the tuner's call-letter display.

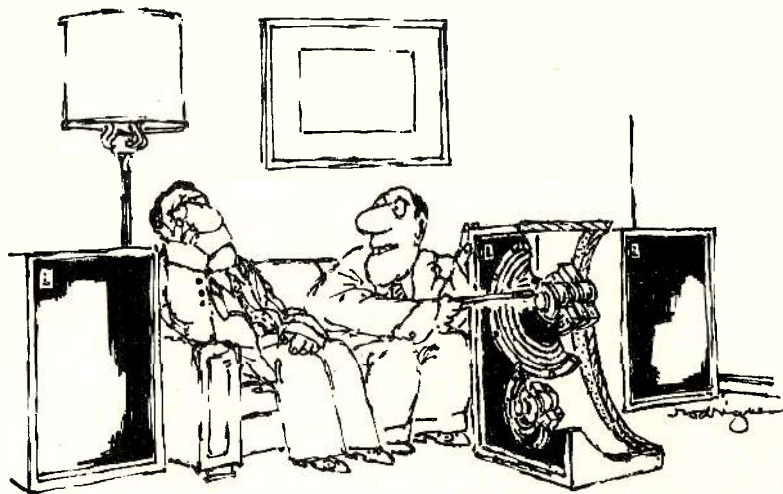
Another IC is used in a similar fashion to check the interface between the computer and tuner circuits. It causes the tuner to scan the entire FM band and activates all the touch-contact functions. The time required to perform these tests is controlled by the "tuning" knob and varies from about 5 seconds to a fraction of one second.

A final demonstration of the tuner's self-test capability is triggered by setting the ODD/EVEN switch on the rear panel to EVEN. The alphabetical display then shows a message (THE QUICK BROWN FOX JUMPED OVER THE LAZY DOGS BACK), moving from right to left, that checks the ability of each display character to reproduce the entire alphabet.

While these self-test features do not directly help the user, they certainly should help to minimize the time and cost of any repairs that might become necessary. The tuner carries a two-year limited warranty.

As we tested the Sherwood Micro/CPU 100, we were struck by another of its properties that is not likely to be detected in normal use. Most FM-tuner tests require rather careful arrangement of input and output signal cables, critical tuning of the signal generator, and a certain amount of fiddling—none of which are spelled out in the instruction manuals or in the standards. In more than twenty years of product evaluation, this is the *first* FM tuner that we have been able to test like a textbook example. There was absolutely nothing "touchy" or critical about any adjustment or measurement except possibly capture ratio, which is a function of the signal generator as much as anything else. The same setting of the signal generator that gave a zero mul-

(Continued on page 42)



RECORD

DOLBY NR

TAPE COUNTER
2 1 6



+7dB

+3dB

PEAK

COUNTER RESET

MEMORY
OFF ON

METER
VU TAPE TIME

INPUT SELECTOR
LINE MIC/DIN

DOLBY NR (MPX)
OFF ON [MPX ON]

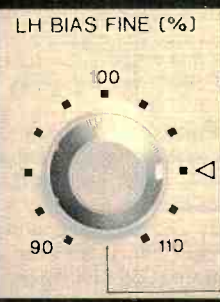
3 Minute Warning from AIWA

With the AD-6550's unique new Remaining Tape Time Meter you never have to worry about running out of tape in the middle of recording your favorite music. In the past you monitored your tape visually and hoped that the musical passage and tape would finish together. Now, this extremely easy to use indicator gives you plenty of warning. It shows you exactly how many minutes remain on the tape. So that when you record the "Minute Waltz" it won't end in 45 seconds.

Wow and Flutter: Below 0.05% (WRMS)

The AD-6550 cassette deck achieves an inaudible wow and flutter of below 0.05% (WRMS) thanks to a newly designed 38-pulse FG servomotor and AIWA's special Solid Stabilized Transport (SST) system. And because we use Dolby* we also improve the S/N ratio to 65dB (Fe-Cr). So you can listen to the music instead of tape hiss. The AIWA AD-6550. Be forewarned.

AIWA®



Bias Fine Adjustment

But there's a lot more to the AD-6550. AIWA has included a Bias Fine Adjustment knob that permits the fine tuning of frequency response to give optimum performance of any brand of LH tape on the market.



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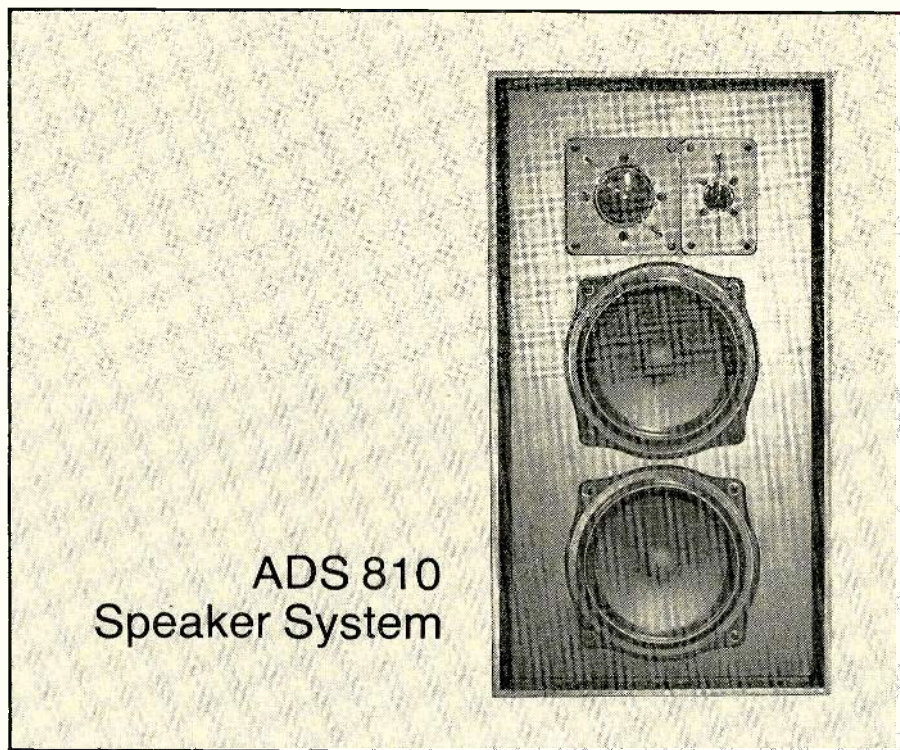
tipath-meter reading also gave lowest distortion and noise and best channel separation, and, unlike the situation with most tuners, none of these normally critical tuning points changed with signal level.

The Sherwood Micro/CPU 100 is one of the most expensive FM tuners you can buy. Sadly, things being what they are in the

broadcast and recording industries, you may not hear much—if any—difference between it and some other fine but far less sophisticated tuners. Given the rapid advances in the state of the audio art—and given the differences in importance that any individual might attach to any particular performance quality—it is risky and perhaps misleading for a reviewer to

refer to any product as “the best.” Nevertheless, our reaction to the Sherwood Micro/CPU is that, as of now, it is the best available FM tuner. And it is important to stress that we would have found this tuner just as remarkable even if it lacked its special computer functions.

Circle 105 on reader service card



THE ADS (Analog and Digital Systems) Company describes the sound of its speakers as “invisible,” meaning that the goal is to reproduce sound with as little coloration as possible. The ADS approach to design is aptly illustrated by their next-to-the-top model, the 810. This moderate-size system, though plainly intended for floor mounting, is no larger than some speakers that are offered as “bookshelf” models. It is a three-way system whose woofer section consists of two 8-inch drivers in separate, fully sealed, acoustically isolated compartments.

The 810 has a 12-dB-per-octave crossover at 550 Hz to a rather large dome mid-range driver. The 2-inch-diameter dome is described by ADS as being of “soft-tissue” construction and appears to be made of a fine-mesh fabric. It is covered with, and damped by, a sticky material. Since the dome is driven by a voice coil of the same diameter, it can handle considerable power.

The crossover to the tweeter at 4,000 Hz also has a 12-dB-per-octave slope. The tweeter is a 1-inch dome, similar in its construction and damping arrangement to the mid-range driver. The acoustic balance of the ADS 810 is set at the factory, and there are no user adjustments provided.

The ADS 810 system is exceptionally efficient, being rated to deliver a 93-dB sound-pressure level at a 1-meter distance with a 1-watt input. The speaker’s nominal power rating is 75 watts, and it can be driven by amplifiers rated at between 20 and 200 watts output. The impedance is rated at 4 ohms minimum and 6 ohms typical.

The ADS 810 is approximately 25½ inches high, 14 inches wide, and 12 inches deep. It weighs 46½ pounds. The cabinet is finished in walnut, and there is a removable grille covered in black cloth. Although it can be placed directly on the floor, better results are often obtained by raising it slightly. An optional black-metal stand for this purpose is available from ADS. The price of the ADS 810 is about \$350. The 800LF base, sold in pairs, is \$64 per pair.

● **Laboratory Measurements.** The ADS 810 was tested on the ADS 800LF base, which raised the cabinet about 12 inches from the floor and tilted it back at a very slight angle. The woofer response, though not extending very low, was exceptionally flat and smooth. It varied only ± 1.5 dB from 50 to 600 Hz and dropped at a 12-dB-per-octave rate below 60 Hz. The mid-range response measured in the

reverberant field of the room was also flat and smooth, averaging about 4 dB below the woofer level from 700 to 5,000 Hz. At higher frequencies, the output rose smoothly, giving the system a very creditable overall frequency response within ± 5 dB from 40 to 15,000 Hz.

The high-frequency dispersion of the 1-inch dome tweeter was truly exceptional. In fact, we could see no significant difference between the frequency-response curves made on axis and about 30 degrees off axis, all the way up to our measurement limit of 15,000 Hz. In this measurement most speakers show at least 5 dB of difference between the two curves at the high end.

The efficiency was exactly as claimed, so that driving the ADS 810 with an octave of random noise centered at 1,000 Hz produced a 93-dB sound-pressure level at a 1-meter distance. When we measured the bass distortion, the speaker was driven with a 2.8-volt signal (1 watt into a nominal 8-ohm load). However, given the lower-than-8-ohm impedance of the ADS 810, this yielded an effective drive level of about 2 watts. The distortion ranged from 1 to 2.5 per cent at frequencies between 100 and 45 Hz. It rose quite gradually at lower frequencies, reaching 10 per cent at 25 Hz (where the output was some 15 dB below mid-range levels).

The high efficiency of the ADS 810 enables it to generate as much sound with the 2-watt input we used for our basic distortion measurement as most acoustic-suspension speakers can deliver with 10 watts. For a given sound-pressure level, the 810 actually has less distortion than many other speakers we have tested, yet it requires a much lower driving power from the amplifier. The actual minimum impedance of the 810 was 4 ohms, reached between 100 and 150 Hz and at 10,000 Hz. The low-frequency resonance at 50 Hz measured 10 ohms; there was an impedance rise to 20 ohms in the mid-range and a rise to 8 ohms at the second crossover frequency of 4,000 Hz.

The tone-burst response of the 810 was most interesting because of what it did *not* show. With most multi-driver speakers, the tone-burst appearance changes markedly with changes in frequency and microphone position, due to interference effects between the drivers. In the case of the ADS 810, the bursts were uniformly excellent, with no signs of ringing or interference even at the crossover frequencies. Except for the minor and predictable anomalies caused by the crossover networks, and some unavoidable room ringing between bursts, the tone-burst output of the 810 over the full audio range was as nearly

(Continued on page 44)

Nikko Audio Puts It All Together for Your Professional Component System

Nikko builds more than outstanding professional components and separates. And for good reason.

Firstly, we don't think stereo gear of any sort should be spread willy-nilly over the studio.

Secondly, we've created these designer-crafted hand-rubbed walnut veneer equipment racks. And in keeping with our professional attitude, two of the hardwood cabinets are 19-inch standard width.

Thirdly, we've made it possible for you to assemble three fantastic custom packages to fit the cabinet of your choice.

End of commercial on cabinets.

We now invite you to read about a few of Nikko Audio's newest electronic products.

As with every Nikko Audio product features abound in the NT-850 (far top), an AM/FM stereo tuner.

A switchable (normal/narrow) IF band and advanced circuitry are employed to insure low distortion, signal stability, maximum stereo separation and outstanding reception.

Below the tuner is the NA-850 integrated stereo amplifier. It delivers 60 watts, continuous power output, minimum RMS per channel, driven into 8 ohms from 20 to 20kHz, with no more than 0.05% THD.

Take a hard look at the cabinet below with the Gamma I stereo FM broadcast monitoring tuner. A simply remarkable product.

It has a switchable wide and narrow IF stage for low distortion, high sensitivity ($1.8\mu\text{V}$) and the ability to pull in distant stations with clarity.

Nikko Audio's ultra-slim stereo preamp, the Beta II, has both an input equalizer and amp circuit powered by independently regulated voltage supply to help eliminate interference distortion. There is no end to its professional features.

Each dual power supply on the Alpha II power



amplifier has dual filters to eliminate channel crosstalk and improve stereo separation. Exterior heat sinks keep the amp running cool, necessary when it delivers 110 watts per channel, continuous power output, minimum RMS into 8 ohms, from 20Hz to 20kHz, with no more than 0.03% THD.

The heavyweight of the new Nikko Audio professional gear is the Alpha I basic stereo power amplifier, shown in the bottom cabinet.

However, there is nothing really basic internally about the Alpha I. It uses a 3-stage Darlington direct-coupled OCL, pure-complementary quadruple push-pull circuit, rarely found on anything less than exotic amp circuits.

The Alpha I delivers 220 watts per channel, continuous power output minimum RMS per channel into 8 ohms from 20Hz to 20kHz, both channels driven. THD is 0.08%.

The revolutionary Beta I preamp's circuitry consists entirely of high-voltage FET's. It's a mate to the Alpha I and is DC and non-coupling for better frequency response.

The Gamma I stereo FM tuner also appears in the lower cabinet below the Beta I stereo preamplifier.

Now, that's enough product

and specs to satisfy the most discerning audiophile and professional.

Ask your Nikko Audio dealer for a definitive tour of the new Nikko product line.

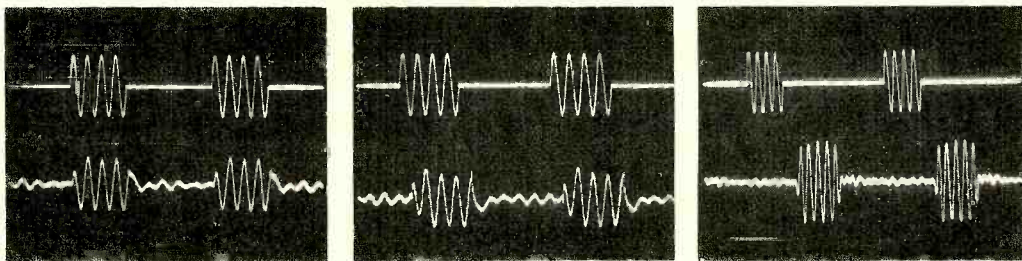
Nikko Audio

For those who take their stereo seriously

Nikko Electric Corp. of America
16270 Raymer St., Van Nuys, Calif. 91406
(213) 988-0105 ©Nikko Audio 1977

in Canada: Superior Electronics, Montreal, Quebec

The excellent tone-burst response of the ADS 810 at frequencies of (left to right) 100, 1,000, and 7,000 Hz. The upper trace is the input signal.



perfect as we can recall seeing (and it was not affected by rather large changes in microphone position).

● **Comment.** As often happens, the sound of the ADS 810 could be predicted quite well from the general shape of its response curve. It has a slightly "distant" character, with strikingly clean, un-boomy bass and a crisp, detailed high end that compares very favorably with the sound of some of the most highly regarded and sophisticated speaker designs. Although there is no particular emphasis on any part of the spectrum, and the speaker's overall balance is outstanding, we felt that the clarity and definition of the high end was its most notable characteristic.

Our simulated "live-vs.-recorded" test

confirmed this impression. These days, many speakers are surprisingly good in their ability to imitate our "live" sound source, but almost all of them seem to have some weak point—such as a heavy mid-bass, or a lack of extreme high-end response, or limited dispersion—that prevents them from simulating the original sound in a completely convincing manner.

The ADS 810 was one of the very few speakers we have tested in the past ten years or so that was so accurate that we could not distinguish its sound from the original in a side-by-side comparison. As we have pointed out on occasion, a speaker that has this ability will not necessarily suit every listener, since there are also personal taste (many people like coloration in their sound), individual room

acoustics, and speaker performance below 200 Hz to be considered.

The apparent mid-range depression in the measured response of the ADS 810 is not audible as a defect of any sort, but rather as "an absence of presence" compared with the sound of many speakers that emphasize this region. Presence peaks may sell a lot of speakers in the showroom, but they tend to become tiresome in the home.

The bass coverage of the ADS 810 is certainly competent—but it may not satisfy pipe-organ and bass-drum buffs. For us, the smoothness and remarkable polar dispersion of the sound from the ADS 810 make it competitive with just about any other system we have heard, and much better than most.

Circle 106 on reader service card



Yamaha CR-620 AM/FM Stereo Receiver

FROM their first appearance on the American market, Yamaha audio products have conveyed an image of outstanding quality, and for the most part they have been priced somewhat above competitive units. As a result, Yamaha is not a name one associates with a budget-price music system. However, the company has made a policy of maintaining a uniform performance-quality standard at all price levels, which is effectively illustrated by their current line of stereo receivers. For example, from the high-price Model CR-2020 to the lowest-price Model CR-620, they all have

a rated audio distortion of 0.05 per cent from 20 to 20,000 Hz when delivering their rated power to 8-ohm loads.

The CR-620 we tested is rated at 35 watts per channel. It has an almost stark satin-aluminum-finish front panel whose long dial cut-out is unadorned by any bezel or multi-color illumination. Red LED's to the right of the dial scale serve as power and stereo FM indicators, and others to the left show whether the FM or AM tuner function is in use. Two large, legible meters to the left of the dial show FM center-channel tuning and SIGNAL Q

(for "quality"). The Q reading combines relative signal strength and FM multipath distortion. Tuning a signal and orienting the antenna for a maximum meter reading with minimum needle fluctuation results in the best signal quality—hence the meter's name.

Below the meters are the bass and treble tone controls, each having eleven detented positions. Their center settings give a true flat frequency response, eliminating any need for a tone-control bypass switch. To their right is a LOUDNESS control of the same type that has been used with great effectiveness on previous Yamaha models. It, too, has eleven detented positions, with the clockwise limit being a flat position. One first sets the main volume control for the highest listening level one expects to use; thereafter, the desired listening level at any time is selected by turning the LOUDNESS knob counterclockwise from its flat position. As it is turned, the low and high frequencies are automatically cut to a lesser degree than the mid-range. This gives them an effective relative boost as the overall volume is varied through a maximum range of 20 dB. Because Yamaha's loudness compensation is thus linked to the actual listening level, it is far more effective and less obtrusive than the type normally used.

At the right of the row of control knobs are the concentric VOLUME and BALANCE controls (the latter is a center-detented ring) and a tuning knob. In the center of the control panel are two bar-knob switches that give the Yamaha CR-620 a degree of flexibility rarely

(Continued on page 46)



There are certain other instruments every serious musician should know how to play.

The implements used in every art form except music both create and preserve the art. If music isn't captured at the time it's created, it's gone forever.

But the instruments used to capture music can also be used to alter, refine and improve it.

Instruments like the A-2340SX and A-3340S 4-channel tape recorders with Simul-Sync for multitrack recording and over-dubbing, as well as mastering decks like the A-6100 and A-3300SX-2T for mixing down multichannel tapes to stereo.

Instruments like the Model 2A Mixing Console with an

MB-20 Meter Bridge for control of volume, tone, blend and spatial positioning. There are also microphones for every recording need along with accessories like the PB-64 Patch Bay and cables to help organize the process.

TEAC is the leader in multitrack. Less than a decade after multitrack equipment was introduced to the professional industry, TEAC introduced it to people serious about their music. Today, thousands of musicians and recordists are getting many of the important elements of the studio experience but without the studio bill. And TEAC continues its

commitment to multitrack excellence.

To find out more about the adventure of multitrack recording and to hear the quality of music that can be made on TEAC multitrack equipment, send \$2 to Dept. 31 for our "Home Made With TEAC" Album.* Or, if you can't wait to get your hands on the instruments every musician should know how to play, see your TEAC dealer now.

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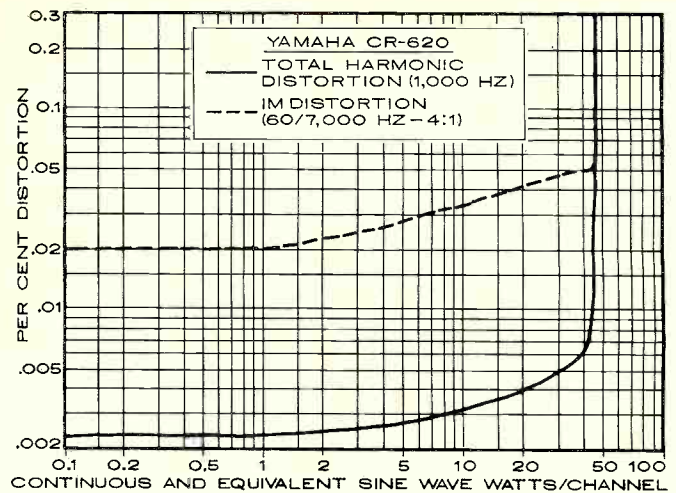
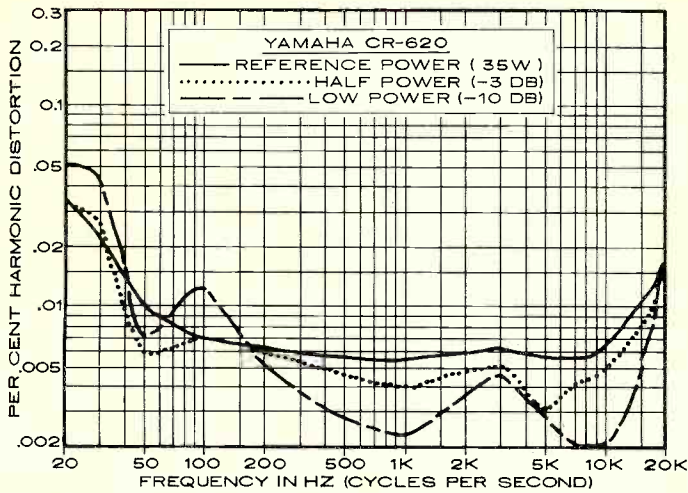
First. Because they last.

Multitrack

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found in any receiver, let alone one of its price. The input selector is conventional, with positions for two tape decks, TUNER, PHONO, and AUX (another button on the panel selects either AM or FM when the tuner position is used). The other control, REC OUT SELECTOR, determines the program source that appears at the two sets of tape-recording outputs in the rear of the receiver. Its TUNER, PHONO, and AUX positions correspond to those of the input selector. The others are TAPE COPY 1-2 and TAPE COPY 2-1, for dubbing from either tape deck to the other.

The selection of programs for listening and tape recording is entirely independent. Together with the dubbing facility, this lets the CR-620 serve as a tape-recording control center without disturbing one's normal listening habits. By selecting either TAPE 1 or TAPE 2 on the input selector, one can monitor from either tape deck while dubbing.

Across most of the panel width near its bottom is an inset area containing the remaining controls. These include pushbuttons for POWER, SPEAKERS (separate output switches for two pairs of speakers) and both low and high filters (these have 12-dB-per-octave slopes), followed by the previously mentioned tuner selector, a STEREO/MONO MODE switch, and finally the FM MUTING switch. The latter is a dual-function control, converting the tuner to mono when the muting is disabled. There are also two stereo-headphone jacks on the panel. On the rear panel of the CR-620 are screw-type binding posts for 75- and 300-ohm FM antennas and a wire AM antenna, as well as a hinged ferrite-rod AM antenna. The speaker terminals are insulated spring clips. One of the three a.c. outlets is switched.

The Yamaha CR-620 is furnished in an attractive walnut-finish wooden cabinet. It is 20 inches wide, 6½ inches high, and 15½ inches deep; it weighs 25 pounds. Price: \$330.

● **Laboratory Measurements.** We measured the performance of the CR-620 in our usual manner, in general accord with the IHF test standards. The one-hour preconditioning at one-third power left the top of the cabinet over the output transistors only moderately warm. The power output at 1,000 Hz with both channels at the clipping level driving 8-ohm loads was 45.6 watts, and the 4- and 16-ohm outputs were 55.5 and 31.1 watts.

The THD at 1,000 Hz was indeed extraordinarily low for an amplifier of any price. It

measured about 0.0025 per cent (the test equipment residual-distortion level) from 0.1 watt to several watts output, reaching 0.005 per cent at 30 watts and 0.006 per cent at 40 watts. The IM distortion was generally somewhat higher, measuring 0.02 per cent up to about 1 watt and 0.05 per cent at 40 watts.

At the rated 35 watts per channel, the distortion was about 0.05 per cent (as rated) at 20 Hz, dropping to 0.01 per cent at 50 Hz and 0.006 per cent across most of the audio range. It rose slightly at high frequencies, to 0.015 per cent at 20,000 Hz. At half power and one-tenth power, the distortion characteristics were similar, with somewhat lower distortion levels (at 3.5 watts output, the distortion was under 0.005 per cent from 200 to 15,000 Hz).

The AUX input sensitivity was 61 millivolts for 10 watts output, with a very low -82-dB unweighted noise level. The PHONO sensitivity was 1 millivolt, and its noise level was also lower than average, -75.5 dB. Phono overload occurred at a very safe 145-millivolt input at 1,000 Hz.

The tone-control curves were hinged at about 400 Hz for the bass and 2,500 Hz for the treble. The first three steps from center gave only a slight response change, but at maximum settings the boost or cut was more than adequate. With the controls centered, the response was flat within ±0.5 dB from 20 to 20,000 Hz.

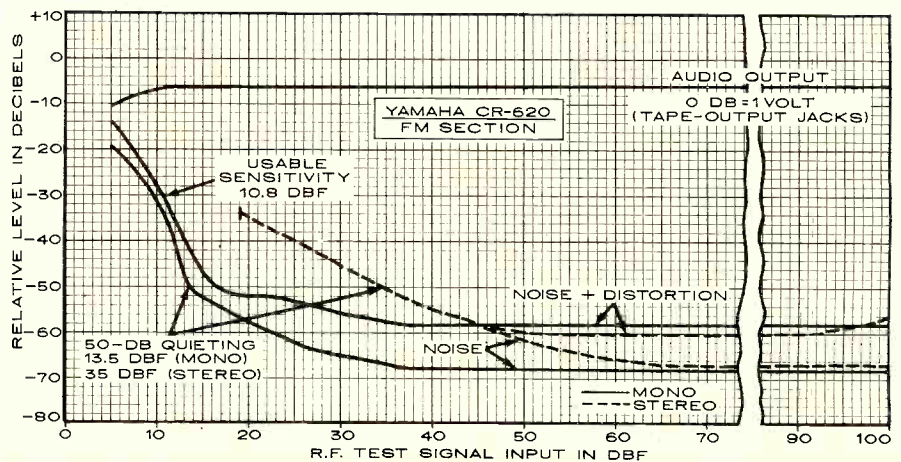
The HIGH FILTER response was down 3 dB at 8,000 Hz and the LOW FILTER cut the re-

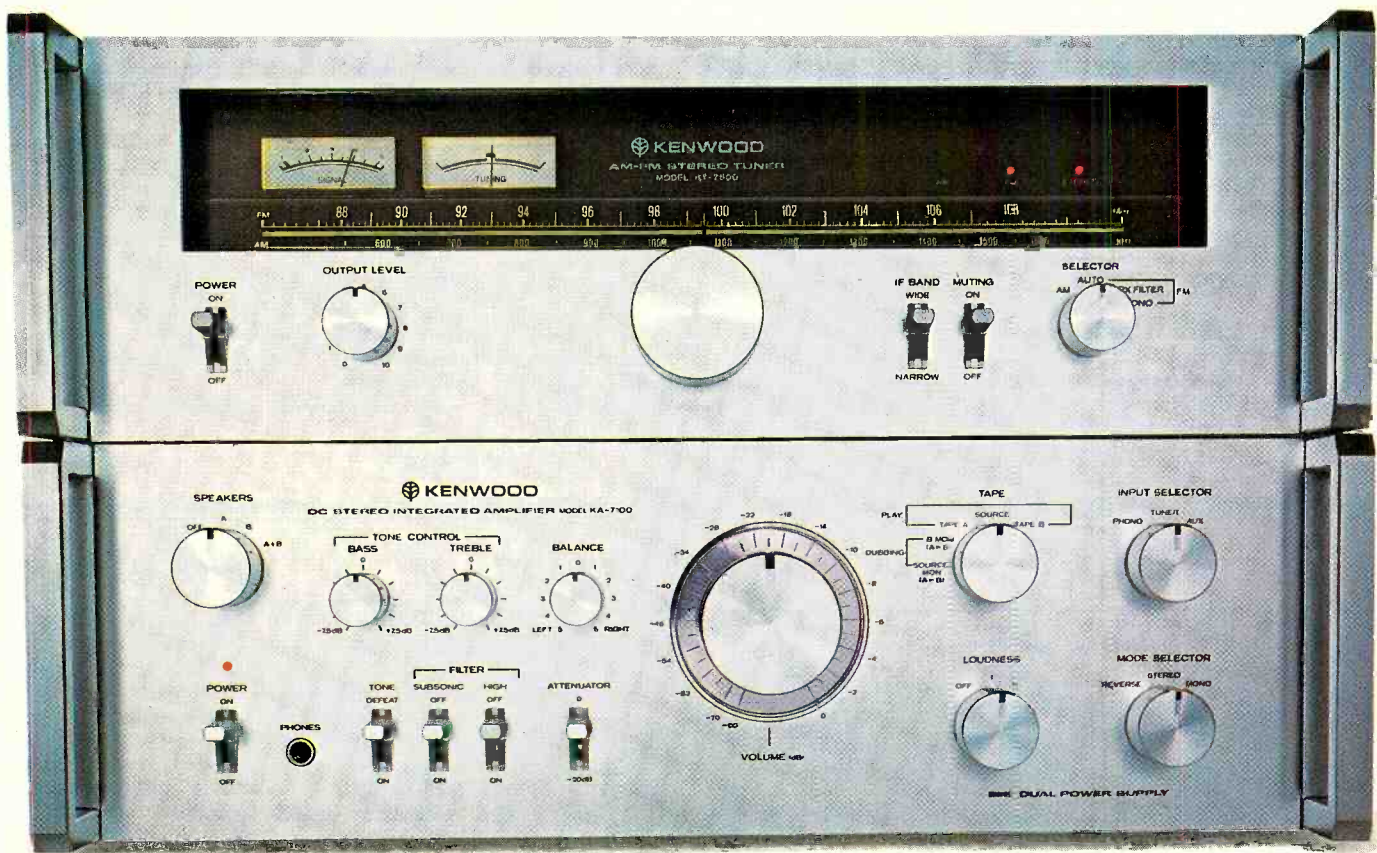
sponse by 3 dB at 27 Hz. The loudness contours were very mild near maximum volume (as set by the loudness control), but boosted both lows and highs quite markedly at the lowest settings. The RIAA phono equalization was within ±0.5 dB over the extended range of 20 to 20,000 Hz. Measured through the inductance of a phono cartridge, it showed a slight high-frequency rise beginning at about 1,000 Hz, reaching a maximum of about +1.2 dB between 10,000 and 13,000 Hz before falling to -0.8 dB at 20,000 Hz.

The FM-tuner section of the CR-620 had an IHF sensitivity in mono of 10.8 dBf, or 1.9 microvolts (μV). The stereo sensitivity was set by the switching threshold of about 19 dBf (5 μV). The more important 50-dB quieting sensitivity was 13.5 dBf (2.5 μV) in mono and 35 dBf (30 μV) in stereo. The low tuner distortion of 0.13 per cent in mono, 0.1 per cent in stereo seems to confirm that a high level of performance is also carried through the tuner sections of the Yamaha receiver line. The signal-to-noise ratio was 68 dB in mono and 67 dB in stereo. Stereo distortion at 65 dBf (1,000 μV) with L-R modulation was 0.56 per cent at 100 Hz, 0.14 per cent at 1,000 Hz, and 0.032 per cent at 6,000 Hz. The only measurement made on the AM tuner section was of its frequency response, which was quite restricted: down 6 dB at 45 and 2,000 Hz.

The stereo performance of the CR-620 FM tuner section was also excellent. The frequen-

(Continued on page 48)





The 1980 Kenwoods.

No. We're not kidding. By 1980, the kind of performance these new Kenwoods deliver will be considered commonplace. Here's a summary:

1. The KA-7100 is an integrated DC amplifier with dual power supplies delivering 60 watts per channel, minimum RMS at 8 ohms from 20-20k Hz, with no more than 0.02% total harmonic distortion. Not only is that the lowest THD of *any* integrated amp, the KA-7100 is the lowest priced DC integrated amp on the market. (\$300*)

2. The KT-7500 marks the next plateau for FM tuners. For optimum reception under any condition it has two independent IF bands: the narrow band virtually eliminating interference when stations are close together, the wide band for lower distortion and maximizing stereo separation. In addition, we've developed new circuitry which eliminates the high

frequency beat distortion (that is, swishing noises) thought to be inherent in stereo FM broadcast. Even we're impressed that it costs only \$275*

This combination of separate amp and tuner not only gives you performance unheard of in other separate components, it gives you performance that will remain elusive in receivers for quite a while.

The Kenwood KA-7100 and KT-7500. Solid evidence that the breakthroughs occurred ahead of schedule, and available to you now for a truly remarkable price. \$575* for the pair.

*Nationally advertised value. Actual prices are established by Kenwood dealers. Handles optional

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cy response was within 0.5 dB from 30 Hz to beyond 10,000 Hz, falling to -2.4 dB at 15,000 Hz. The channel separation was between 35 and 45 dB from 70 to 10,000 Hz, decreasing to 30 dB at 30 Hz and 25 dB at 15,000 Hz.

The capture ratio was 1.5 dB at 45 dBf (100 μ V) and 1 dB at 65 dBf input. AM rejection was 70 dB. Image rejection was only fair at 50 dB, but the alternate-channel selectivity of 73 dB was very good. Adjacent-channel selectivity was 5 dB. The muting and stereo thresholds were, respectively, 20 and 24 dBf. In spite of the effect of the multiplex filter on the 15,000-Hz response, the 19-kHz pilot carrier in the audio outputs was suppressed to only -56 dB. The tuner hum was -67 dB.

● **Comment.** Looking at the overall performance of the Yamaha CR-620, it is easy to see where Yamaha engineers have decided to carry a given level of performance through their

product line. Aside from its power output, the audio amplifier of this receiver would rank with some of the most sophisticated designs we have seen. Even its transient capabilities are well beyond what one would expect to find in its price class, with a 1.5-microsecond rise time and a 15-volt-per-microsecond slew rate. The latter represents very respectable performance indeed for an amplifier of this power, to say nothing of one that is part of a \$330 receiver.

The tuner is also first-rate with respect to the important factors of noise, distortion, and separation. Moderate sacrifices have been made in such areas as sensitivity, image rejection, capture ratio, and pilot-carrier suppression, although all of these parameters are at least adequate.

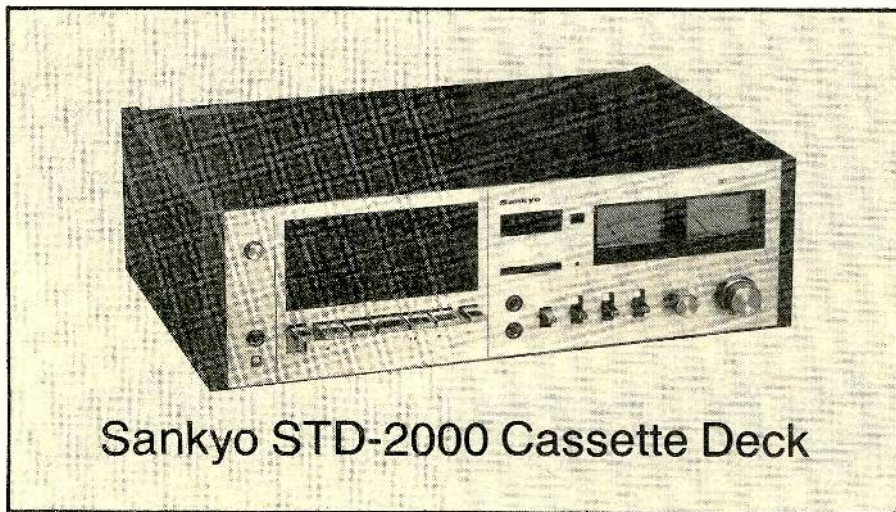
In its mechanical construction and general "feel," the CR-620 is Yamaha through and through. We had the opportunity to use it side by side with the top-price Yamaha CR-2020,

and we can attest to their essential similarity.

The SIGNAL Q meter worked well. It is perhaps not quite as sensitive an indicator of multipath distortion as the *best* of the specialized multipath meters, but it is certainly far better than most, and its combination with a signal-strength reading merits high praise for convenience (although the meter saturated at 1,000 μ V, which gave a reading of 90 on the scale of 100).

When we first received the Yamaha CR-620, its price had not yet been fixed. From its features and specifications, we guessed that it would sell for \$400 to \$450. When we learned that the price was about \$100 less, we were, to put it mildly, surprised. It brings a superior quality of performance and styling, plus novel and useful control versatility, to the budget-price range. Altogether, we judge the CR-620 to be one of the better values in stereo receivers.

Circle 107 on reader service card



THE Sankyo STD-2000 is a full-feature moderate-price cassette deck whose performance matches its impressive array of operating conveniences. The STD-2000 is a front-loading recorder with an automatic tape-loading system similar to those of some other Japanese cassette machines. In addition to the Dolby noise-reduction circuits found in any high-fidelity cassette deck, it has separate three-position bias and equalization switches that make it compatible with almost any type of tape.

The cassette compartment, at the left of the front panel, is normally covered by a clear plastic door, below which is a row of piano-key operating levers. Pressing the EJECT lever causes the door to withdraw into the body of the machine and a cassette loading platform to appear, angled slightly upward to the rear, at the front of the compartment. When the cassette is placed on the platform, it moves up into the machine automatically, dropping the cassette into its playing position. The angle of the cassette, the front lighting, and the contrasting-color background make it easy to see

how much tape is on the hubs at any one time.

The control keys perform the usual functions, and they can be operated in any sequence without going through STOP (although the tape must be halted before the RECORD key can be engaged). Whenever the EJECT key is pressed (even when the tape is in motion), the door flies open and the cassette is moved forward to where it can be grasped.

To the left of the cassette compartment are the pushbutton power switch and a headphone jack. To its right are the index counter (which has a memory feature that stops the tape automatically in rewind when the counter returns to a 999 reading) and two microphone jacks. Small lights in a row in the center of the panel glow to show that the tape is in motion and whether it is at normal speed or in one of its fast-winding modes. A red RECORD and a green DOLBY light are nearby.

At the lower center of the panel is a row of four lever switches. One switches the recording inputs between LINE and MIC (or DIN) sources; the different sources cannot be mixed. The three-position DOLBY switch turns

the Dolby system on when it is moved either up or down. In the up (MPX) position, it also inserts a low-pass filter in the recording amplifier to prevent interaction with a tuner's pilot-carrier leakage when recording FM.

The next two switches, BIAS and EQ, are tape-type selectors. They each have settings marked NORM, CrO₂, and FeCr, and they are normally set to the same point for a given tape. However, the separation of the functions does give the user some added flexibility. The EQ switch adjusts both recording and playback equalization, using the 120-microsecond characteristic for normal tape (ferric) and 70 microseconds for the others.

Continuing to the right, the next control is a small OUTPUT LEVEL knob, which adjusts the playback level ahead of the meters. To its right are concentric RECORD LEVEL knobs. At the upper right of the panel are two large, well-lit meters, calibrated with the standard Dolby level at their +3-dB marks. Between them is a red LED PEAK light that flashes at +3 dB. Phono-jack inputs and outputs and a DIN socket are in the rear of the recorder. The Sankyo STD-2000, including its standard simulated-walnut-veneer wooden side panels, is about 18 inches wide, 5½ inches high, and 11¾ inches deep. It weighs 18.3 pounds. Price: \$299.95.

● **Laboratory Measurements.** The instruction manual does not recommend specific tapes to be used with the STD-2000, or even suggest bias and EQ settings for popular tapes. Therefore, we measured record-playback frequency response with a number of tapes, looking for the ones that gave the flattest and widest response with our particular machine.

Eventually, we chose Maxell UD-XL I for the normal tape, Sony CrO₂, and Sony FeCr (Scotch Classic was slightly flatter in the FeCr category, but since it has been superseded by Scotch Master III, we did not base our measurements on it).

The UD-XL I response was within ± 1.5 dB from 25 to 14,000 Hz. Scotch Master (not the current version) and Memorex MRX2 were

(Continued on page 50)

The headphones that made believers out of the toughest reviewers in the world!



Burwen Research

The English publication *Hi-Fi News & Record Review* and the prestigious German magazine *Stereo* are hardly known for their effusiveness. ("Acceptable" is tantamount to a rave review.) But reviewers in both publications adjudged PMB Stereo Headphones "Best" among those tested (included in the tests were Audio-Technica, Yamaha, Koss, Pioneer, Beyer and practically every other important name in the business). And *Hi-Fi Stereophonie*, perhaps the most important high fidelity journal in Europe, in an

uncharacteristic display of enthusiasm described the PMB 8 and the PMB 6 as "Outstanding." (Burwen Research markets two Orthodynamic Stereo Headphones, the PMB 8 and the PMB 6, and three Dynamic Stereo Headphones, the PMB 4, the PMB 40, and the PMB 20.) The line, styled and developed by Burwen Research, is manufactured in Germany. The combination of talents and techniques on both sides of the Atlantic has produced stereo headphones that are not only very beautiful, but, indeed,

outstanding within every important performance parameter. Burwen Research PMB Headphones are now available at a select number of audio dealers. Listen to a pair soon. We think you'll agree that they are worthy of your most critical attention.

For technical information and excerpts of reviews, write to Burwen Research, University Avenue, Westwood, Mass. 02090. In Canada: the Pringle Group, Don Mills, Ontario, Canada.

nearly the same, with the high end rolling off above 12,500 Hz. TDK AD gave a slightly rising high-end response, varying ± 3.5 dB from 25 to 16,500 Hz.

With CrO₂ settings, Sony CrO₂ tape gave a response within ± 2 dB from 25 to 14,500 Hz. BASF Chromdioxid Super had a "hotter" top end; it was ± 4 dB from 25 to 16,500 Hz. A popular "chrome-equivalent" tape, TDK SA, also had a rising high end; it was ± 4 dB from 25 to 15,000 Hz. The similar Maxell UD-XL II showed a drop at the extreme high end in this machine. Sony FeCr had a slightly rising top end and was within ± 3 dB from 25 to 15,500 Hz. Scotch Classic was extremely flat to 10,000 Hz, dropping off at higher frequencies to -5 dB at 15,000 Hz.

The Dolby system tracked within 2 dB (the change in response with Dolby in or out) at all frequencies at levels of -20 , -30 , and -40 dB, which meets Dolby specifications. The MPX filter began to take effect above 10,000 Hz. The playback frequency response was measured with some of the new TDK "AC"

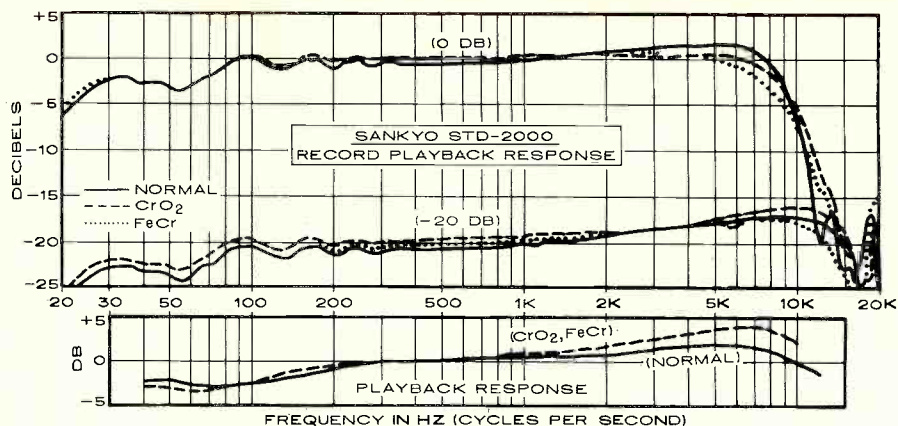


series of test tapes. It was within ± 2.5 dB from 40 to 12,500 Hz with the TDK AC-337 test tape. The 70-microsecond equalization was measured with a Teac 116SP tape, giving an upward-sloping response of ± 3.5 dB from 40 to 10,000 Hz.

For a 0-dB meter reading, the line input at maximum gain was only 25 millivolts, and through the MIC input the sensitivity was 0.29 millivolt. The microphone input overloaded at a fairly safe 56 millivolts. The playback output level from a 0-dB recording varied from 0.42 volt with FeCr tape to 0.46 volt with UD-XL I tape.

The playback distortion (third harmonic of a 1,000-Hz signal) at a 0-dB recording level was 0.5 per cent with UD-XL I, 1 per cent with CrO₂, and 1.3 per cent with FeCr. The respective 3 per cent distortion levels were reached with recording inputs of $+9.5$, $+5$, and $+5$ dB. The unweighted signal-to-noise (S/N) measurements, referred to the 3 per cent distortion level, were 55.5 dB with UD-XL I, 52.2 dB with Sony CrO₂, and 51.3 dB with Sony FeCr. With IEC "A" weighting, these measurements improved to 61, 57.4, and 57 dB, respectively. With CCIR weighting, and using the Dolby system, the respective S/N readings were 66.5, 63.6, and 63.3 dB. The noise increase through the microphone inputs, even at maximum gain, was a negligible 2 dB.

The wow and flutter in a combined record/



playback measurement was 0.08 per cent (unweighted rms). In fast forward or rewind, the recorder moved a C-60 cassette from end to end in about 82 seconds. The meters were slightly underdamped, with an overshoot of about 20 per cent on 0.3-second tone bursts. They were accurately calibrated in terms of standard recording levels, with the Dolby level of 200-nW/m reading $+3$ dB and the 250-nW/m reference of the TDK tapes reading $+5$ dB. The PEAK light began to glow at $+3$ dB. The headphone volume was excellent, even with 200-ohm phones, which often cannot be driven to usable volume levels by the headphone outputs of tape recorders.

● **Comment.** The sound of the Sankyo STD-2000, either on tapes recorded with it or using high-quality prerecorded tapes, was excellent, which is not surprising in view of its measurements. The "acid test"—recording FM-tuner interstation hiss at a -10 -dB level and comparing the playback to the incoming signal—completely confirmed our test results and listening impressions. The input and output sounds were indistinguishable with Maxell UD-XL I and NORM settings or with Sony CrO₂ and using CrO₂ settings. Only a slight emphasis of extreme highs kept the TDK tapes and the Sony FeCr from doing as well.

The auto-load feature is convenient and

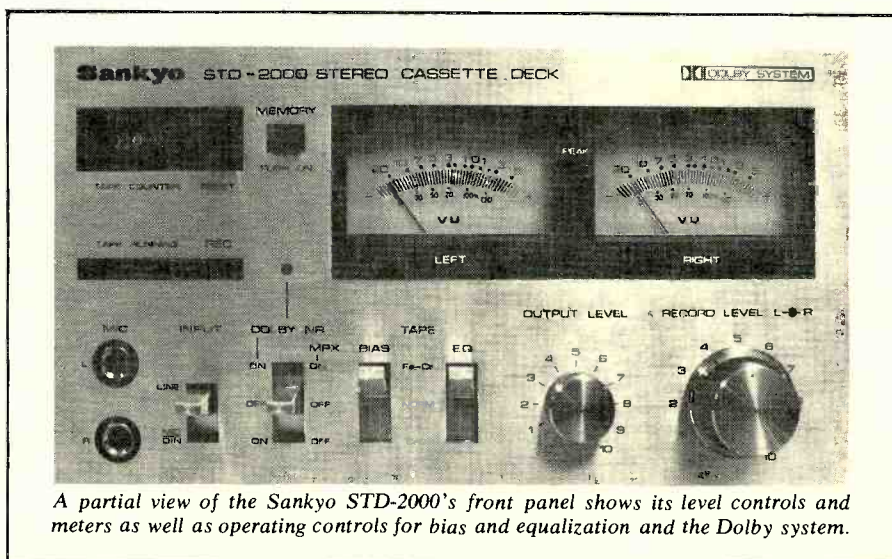
works well, but it does take a little getting used to. In particular, when a cassette is ejected, one must be careful to grip its edge firmly for withdrawal. Even a slight inward pressure on the cassette will cause the machine to draw it back in, ready for operation.

When all aspects of the performance of the Sankyo STD-2000 are considered, it is clear that this is an above-average machine selling at an average price. Perhaps one can obtain more impressive measurements on some more expensive machines, but this one is the audible equal of any of them, at least when recording from FM or discs. We did not try any "live" recording, but, noting the extremely low noise level of the microphone amplifiers, we suspect that it would do a fine job, especially with low-output microphones that could not overload its inputs.

We also found, as we have with some other recorders, that the best overall S/N performance is obtained with a good grade of ferric-oxide tape. Chromium dioxide and ferrichrome may have slightly extended high-frequency response and slightly more headroom, but they distort at a lower level and thus do not have quite as great a margin between the overload point and the background noise.

Circle 108 on reader service card

(Continued on page 52)

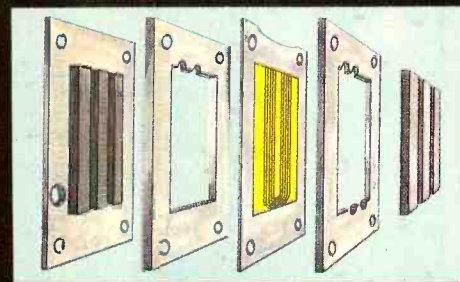


A partial view of the Sankyo STD-2000's front panel shows its level controls and meters as well as operating controls for bias and equalization and the Dolby system.

Most car speakers that are advertised as "true high-fidelity for your car" sound about as convincing as a used-car salesman's pitch. More often than not, the music comes out sounding as if it were recorded in a closet full of winter clothes. The truth of the matter is that if a manufacturer wants to make car loudspeakers sound as good as the ones you hear in your home, he has to make car loudspeakers as good as the ones you hear in your home. Which means

no tricks. No short cuts. No nonsense. Which is why the new KLH Model 693 DMSC automotive stereo loudspeakers sound about as good as anything you've ever heard anywhere. Maybe better. Consider the components. We use Controlled Acoustic Compliance Woofers with 30-ounce magnets for extended bass response. Hemispherical soft dome midrange drivers (found in only the most expensive speakers). And the most advanced driver found in any loudspeaker system — The Samarium Cobalt Tweeter (an ultra thin Kapton[®] diaphragm with "printed" voice coil suspended between the most powerful magnet material known to man — rare earth Samarium Cobalt!). The 693 DMSC can be driven nicely by the stereo electronics in most cars. (You won't believe the performance if you decide to add a quality power booster.) Now instead of hearing a muffled mess from the back of your car, you can look forward to hearing every nuance of the music — the timbre of the tympany, the bite of the brass, and the sweet, mellow

The Samarium Cobalt Tweeter



sound of the strings. And when all is said and done, isn't that what high fidelity is all about?

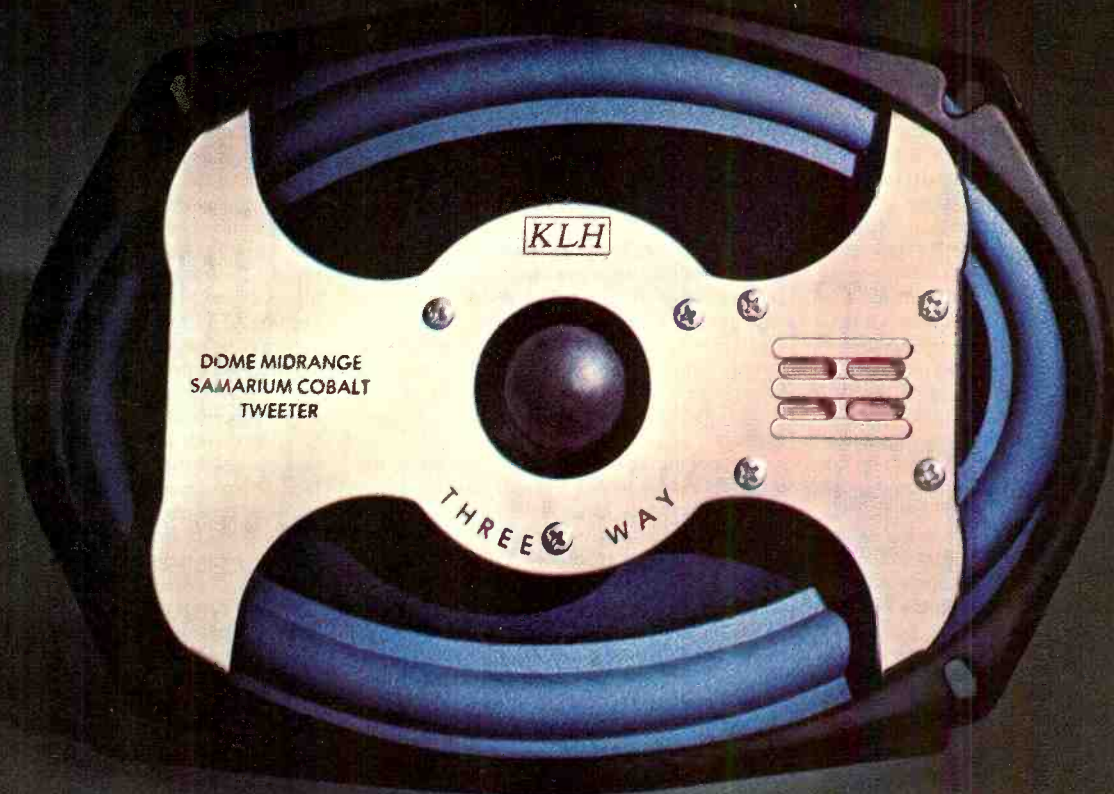
For more information on KLH automotive loudspeakers (we also make two-way systems, additional three-way systems, and a totally new concept in automotive sound. The Headliner series), write to KLH Research & Development Corp., University Avenue., Westwood, Mass. 02090.



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CIRCLE NO. 34 ON READER SERVICE CARD



dbx 128 Dynamic-range Enhancer/Noise-reduction System

In only a few years, dbx has earned itself a name as "the other" noise-reduction system. One difference between Dolby and dbx is that, while a Dolby-B encoded program can be listened to without decoding (if you are willing to accept a slight added brightness), all dbx-encoded programs (as with the professional Dolby-A system) are quite unlistenable unless properly decoded. As might be expected, the two systems are completely incompatible with each other.

The new dbx Model 128 is a highly versatile tool for enhancing the dynamic properties of any program material, and its usefulness is certainly not confined to tape-recorder noise reduction. It has two completely separate functions that can be used individually or together, as desired.

The dynamic-range enhancement effect of the dbx 128 is accomplished by its adjustable compressor/expander, which is much like that of previous dbx units. With a single front-panel control knob, its input/output relationship can be varied from "infinite" compression, or full limiting, to normal linear operation, to an expansion mode with a slope as great as 2.0. This means that a 10-dB increase in the signal-input level will produce a 20-dB increase in the output. Conversely, a 2.0 compression slope will give an output-level change of only 5 dB for each 10 dB of input-level change. At the center (1.0) setting, the device has no effect on the input/output transfer characteristic.

The compressor/expander can be used in two modes: "linear" operation over the full dynamic range of the program, and "threshold" operation only when the input level exceeds a preset threshold (set by a knob on the panel of the dbx 128). In the latter mode, red and amber LED's above the slope control show whether the signal is above or below the threshold level. The lights also glow in the linear mode, but the setting of the threshold control has little effect except to vary the average program level from the unit.

Linear expansion can be used to restore some of the dynamics to a program that has been compressed, and it is also an effective noise-reduction technique. When the program is expanded, the gain of the device drops appreciably during quiet passages, thus attenuating or even removing hiss and hum. Compression is useful for processing music that is to be used as background, or for play-

back in an automobile or other noisy environment. Another practical application is as an automatic level control when recording a number of voices having different levels. In its threshold mode, the expander serves as a "peak unlimiter" that is especially valuable for processing FM broadcasts whose peaks are limited at the transmitter.

The second basic function of the dbx 128 is to reduce noise in tape recording (more accurately, to prevent noise from being added by the tape-recording process). This is essentially the function of the Dolby system as well, but the two work very differently. The Dolby system affects only the higher frequencies (above 500 or 1,000 Hz), and operates only on low signal levels. The dbx, on the other hand, compresses the signal with a 2.0 slope before it enters the recorder. The compression takes place at all signal levels and over the full frequency range. In playback a complementary expansion takes place, restoring linearity while dramatically reducing any noise that might have been added in the record-playback process. Instead of Dolby's maximum noise reduction of about 10 dB, the dbx system provides some 30 dB of noise reduction, and it does not require any critical input-level matching.

The very magnitude of the dbx noise reduction is both its strongest and weakest point. Its total subjective effectiveness is far greater than that of any other consumer noise-reduction system. Unfortunately, a dbx-processed signal is not listenable in its "raw" state (it sounds very shrill and compressed). To be useful, it must be expanded in the correct manner.

The compression/expansion process is not quite so simple as has been described. Internal pre-emphasis circuits in both the signal and control paths give the signal leaving the dbx 128 (to the recorder) a low-frequency boost, a mid-high-frequency dip, and a rising response at the highest audio frequencies. The opposite response is applied to the playback signal from the recorder, resulting in a flat overall response. The dbx system employs a proprietary rms-level detector to operate the signal-processing circuits. Therefore, playing back a dbx-encoded program through any other expander, even if it has the correct slope, cannot produce the correct results (unless it also has the same type of detector and the same frequency-response shaping).

The dbx 128 is especially convenient to use as a tape-recorder noise reducer, since 2.0 compression and expansion slopes are set internally when the REC or PLAY buttons are pressed (the earlier dbx devices required that the slope control be set to the correct value for each phase of the recording and playback process). Only a single pair of processing channels is available, so the unit must be switched manually between REC and PLAY modes and one cannot monitor the program from the tape while it is being made. The decoding circuits of the dbx 128 can also be used to process the playback from a dbx-encoded LP record, only a very few of which are available at present.

The dbx 128 is identified on its panel as the "dbx II." Although similar in principle to the original dbx (which was, and is, used in professional applications), the dbx II has been modified slightly to meet the special needs of home high-fidelity systems. It has low- and high-frequency filtering to remove the effect on the rms-sensing circuits of turntable rumble and high-frequency response aberrations in the tape deck. Because of the detail differences between them, tapes made with one of the two dbx systems cannot be properly decoded by the other.

Most of the operation of the dbx 128 is controlled by six pushbuttons. Three are for the noise-reduction system and are marked REC, BYP, and PLAY. In the BYP condition, the noise-reduction circuits are completely bypassed. Another button selects TAPE or DISC operation. This connects the dbx processing circuits either to the playback output of a tape recorder or to the tape-recording output of the amplifier. In the latter case the signal processing affects any program selected within the amplifier. Although this can be a dbx-encoded disc, it can as easily be an FM program or any other source.

The dynamic-range enhancer is controlled by two buttons marked PRE and POST. In the TAPE mode, these buttons place the enhancer circuits in the signal path either just before the tape deck or in its playback output (in the dbx DISC mode, these buttons have no effect). The former gives the dbx 128 its unique ability to improve the sound of the original program by increasing its dynamic range and reducing its noise level *before* it is recorded. (Since the dbx circuit adds some 30 dB to the dynamic range of a tape recorder, it is perfectly feasible to expand the range of a signal before recording it, without exceeding the range of the recorder or adding noise during the recording and playback process.)

In addition to the controls already mentioned, the front panel has a pushbutton power switch with LED pilot and a PLAY LEVEL MATCH knob that matches the playback level from a dbx-processed tape with that of a non-encoded tape played in the BYP mode.

The dbx 128 is meant to be connected in the tape-monitor path of an amplifier or receiver. On its back panel, there are input and output jacks for connecting a tape recorder. A QUAD COUPLER jack interconnects two dbx 128 units for quadrasonic operation, so that their expansion and compression characteristics "track" to prevent wandering of apparent sound positions.

The dbx 128 is 11 inches wide, 10 $\frac{3}{4}$ inches deep, and 3 $\frac{3}{4}$ inches high, weighs 8 pounds, and consumes only 10 watts from the power line. Price: \$450.

(Continued on page 54)

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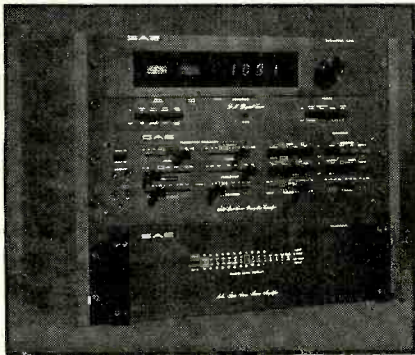
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CIRCLE NO. 4 ON READER SERVICE CARD

dbx 128 . . .

(Continued from page 52)

● **Laboratory Measurements.** Conventional measurements on a dynamic signal processor such as the dbx 128 would be valueless, and in any case there are no comparable products against which to make a comparison through such measurements. We did verify that the input/output slopes followed the markings on the panel and that the recording and playback frequency responses were as represented, accurately complementing each other. The specifications of the dbx 128 show that it is compatible with virtually any type of amplifier or recorder (of course, the amplifier must have a tape-monitoring path or access to the preamp outputs and power-amplifier inputs). The dbx 128 will not add any detectable noise or distortion to a program. Beyond these determinations, it is clear that the performance of the dbx 128 can be judged only in actual use.

● **Comment.** The noise reduction afforded by the dbx 128 with a moderate expansion slope was very worthwhile. The slope control must be set with care while one listens for unnatural sound qualities, and it should then be backed off until they disappear. As the control is advanced clockwise, the background noise drops off and soon disappears. Unfortunately, there is an inevitable modulation-noise effect that can cause a "fuzz" of noise to appear on transient sounds, such as those made by a piano or other solo instrument recorded against a quiet background (which becomes dead silence when heard through the dbx 128). The instruction manual explains the effect, which it claims is audible only because the background noise with dbx is so much lower than with any other noise-reduction system. Be that as it may, the cure is simple—use less expansion. Settings beyond 1.4 are never needed, and usually 1.2 or 1.3 is sufficient. A 1.3 expansion means that a 40-dB program's dynamic range is increased to more than 50 dB. The extra 10 dB means that one should be careful not to mate a powerful amplifier with speakers that cannot handle its output. And also bear in mind that an under-

powered amplifier may be driven into clipping by the expanded signal.

As a recording-noise reducer, the dbx 128 can virtually overcome the chief limitation of the cassette medium—its tendency to saturate at high levels and lose its high-frequency response. Many recorders, although measuring flat at -20 dB, have little response above 10,000 Hz when the signal level is 0 dB. This is largely responsible for the dulling of high-frequency transient sounds in cassette recordings and their general lack of "openness" compared with open-reel tape.

One obvious solution is to record at lower levels, such as -20 dB. Unfortunately, tape hiss makes that impracticable—or it did until dbx came on the scene. With the added 30 dB of dynamic range provided by dbx, it becomes perfectly feasible to record at -20 dB, barely moving the recorder's meters, and yet have a hiss level in playback that is at least as low as the recorder's normal signal-to-noise ratio with Dolby or ANRS (the latter processes should *not* be used simultaneously with dbx, as they would serve no purpose).

Can the dbx system be heard in operation? Generally not, although this may depend on the specific program material. After hours of use, we could never be certain that we heard any unnatural effects produced by the dbx noise-reduction system. If there were any anomalies introduced by the process, they were far less objectionable than the noise or tape-saturation effects that had been eliminated. The two-step noise reduction must not be confused with the dynamic-range enhancement mode, which definitely can be heard when used to excess; success with it requires a light touch on the part of the user. With an open-reel machine, the dbx 128 allows a recording to be made at almost any level, with literally *no* audible noise being added.

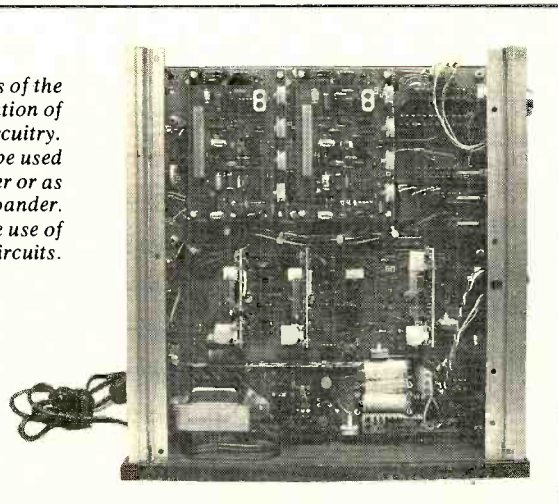
Although the dbx 128 can, in a sense, make a silk purse out of a sow's ear, its cost makes it an unlikely choice for that role. Used with a really *good* cassette recorder, however, it may change a few minds about the limitations of cassettes. Also, if (like us) you find the faint hiss remaining in the background of many stereo FM transmissions annoying, this device will get rid of it *completely* and will usually enhance the program's sonic quality in the process.

Circle 109 on reader service card

Top view of the chassis of the dbx 128 gives an indication of the complexity of the circuitry.

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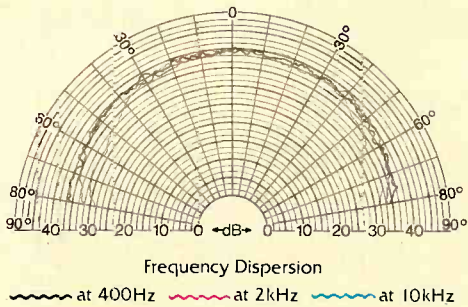
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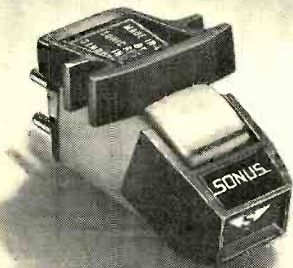


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CIRCLE NO. 49 ON READER SERVICE CARD

The Pop Beat

By Paulette
Weiss

Gary Lawrence (right) and
vocalist Frank Scafuri
with Pop Editor Weiss
during a recent Sizzling
Syncopators engagement
(photo by Bill Spilka)



BING CROSBY (1901-1977)

BING CROSBY made an appropriate last exit (laughing, you may be sure) on a golf course near Madrid last October. We were saddened, but not shocked as we were at the death of Elvis Presley, for Bing had led a long, rich, thoroughly enviable life. Written tributes, eulogies, and perhaps even scholarly musical studies will continue to keep his image before us for some time to come, but it took the "hot" medium, television, to put into focus for me one aspect of this artist that I have always found particularly appealing: Bing performing in tandem with another pro is, I think, proof positive of God's good will toward mankind.

On October 24, CBS rebroadcast the TV special celebrating Bing's fiftieth anniversary in entertainment. Although the one-and-a-half-hour-long program featured him soloing often and delightfully (notably in one sparkling medley of twenty-two hits), he rekindled my affection most endearingly in a series of brilliant, laid-back duets with other famous folk. His comedic timing was exquisite with the mock-raunchy Pearl Bailey on *Gone Fishin'*, his scatting with the Mills Brothers on *Dinah* was a piece of jazzy improvisation that warmed the heart, and the jaunty duet on *Accentuate the Positive* with Bette Midler illustrated on the spot why the Divine Miss M said she would have been content just to "stand here and worship you up close."

The TV camera caught Bing in one rare accidental moment that spoke volumes about his art. As Pearl May rose from her seat in the audience, robustly complaining in a "spontaneous" reaction to Bing's performance, Bing could be seen ever so faintly mouthing her lines. Even when she joined him on stage and the rehearsed nature of the little skit became obvious, all those prepared quips still seemed as bright as new pennies.

Bing was a master of that kind of easy repartee, a fine recent example being the wonderful extra-musical dialogue with Fred Astaire on their last album together, "A Couple of Song and Dance Men" (United Artists LA-588-G). That material was authentically spontaneous. Still, the moment of revelation on the tube started me wondering just how many of those light, witty past collaborations were actually plotted out. But after hours of rummaging happily through old discs pairing

Bing with the likes of Frank Sinatra, Louis Armstrong, and Johnny Mercer, and giggling as the famous team of Hope and Crosby once again trekked down all those *Roads* on the TV screen, it hardly mattered. Manufactured or not, the flip, improvisatory dialogue has kept its freshness over the years.

I look forward to more of the same in Bing's last two TV specials (yet to be aired at the time of this writing), one with David Bowie, the other the traditional Crosby family Christmas show. Recordings of these pro-



grams seem destined to join the flood of memorial discs that has already begun. MCA, now the owner of the Decca label for which Crosby recorded the bulk of his early work, has reissued a two-disc "Best of" package (MCA 2-4045), plus a disc of Christmas material, two more of Irish ditties, and another "Greatest Hits" album (MCA 3031). Polydor is to release Bing's last recording before his death, "Seasons," in early December. United Artists will be adding a two-disc collection including material from Bing's 1977 London Palladium stint to be called "Something to Remember You By" on the heels of a disc called "Beautiful Memories," and London, Columbia, Epic, RCA, and small labels like Vocalion, Biograph, and Spokane are all moving into production with their own bits of Crosbyana.

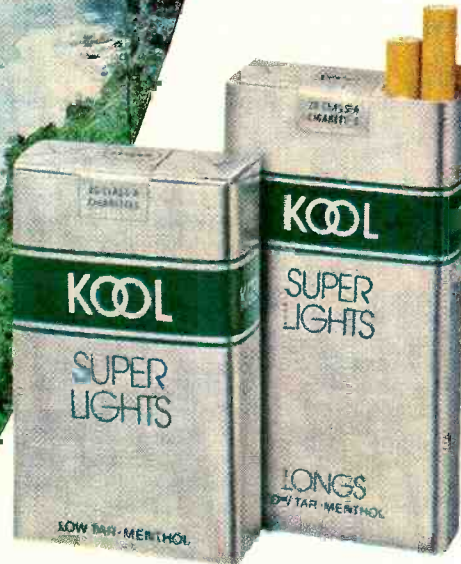
Bing Crosby taught pop music how to lean back, relax, and talk to us. Leaving us late in a year of extraordinary loss in the entertainment world (Elvis, Groucho Marx, Paul Desmond, Leopold Stokowski, Maria Callas, Marc Bolan, three members of Lynyrd Skynyrd, Guy Lombardo . . .), Bing is one old acquaintance who will not soon be forgotten.

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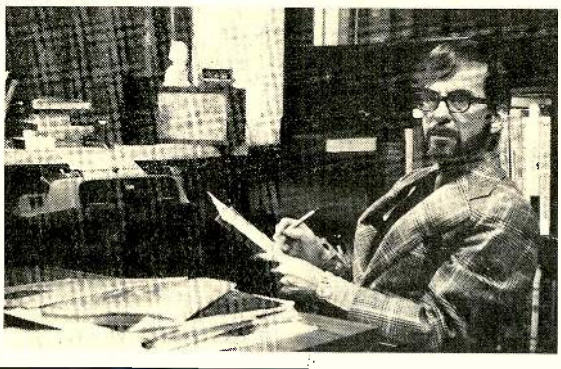
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Going on Record

By James Goodfriend



PIPE DREAMS

YEARs ago I was doing a lot of research in European libraries and archives, searching for music, particularly seventeenth- and eighteenth-century trumpet music, that had sufficient interest to be worth recording. Such was a major part of my low paying but highly interesting job at the time. In my researches, I ran across a mention of a trumpet concerto by Wolfgang Amadeus Mozart. Now *that* would obviously be a major find. I had never heard of a trumpet concerto by Mozart, but if it in any way approached the level of the Haydn concerto—and how could it not, seeing it was by the great Mozart?—it would have to turn out to be one of the masterpieces of the trumpet repertoire.

It has been too long for me to remember just where I saw that reference, but I know I followed the trail of the Mozart trumpet concerto until it petered out in the wilderness. Wolfgang Mozart's trumpet concerto was either irretrievably lost or had never existed at all. Perhaps the commentator had mistaken the trumpet concerto by the father, Leopold Mozart, for an early work by the son. Leopold's concerto, fairly well known and recorded a number of times, is quite a different animal from what his brilliant son might have produced (being technically rather difficult and musically something of a bore).

I still want to hear Wolfgang's concerto, even if it never existed. And the tantalizing thought of it recently set me to imagining what *other* works that had never been written I was also hungry to hear. Composers, even long-lived ones, don't always get around to doing everything they plan, and lots of prom-

ising compositions get left at the sketch or even the thought stage. But even beyond those, there are works one simply wishes the composer had essayed, works he may never even have considered.

I can think of few more desirable works to have in the repertoire than a string quartet by the mature Gustav Mahler. Why? Because the particular style and tone cultivated by Mahler does not otherwise exist in the quartet literature, and the restrictions of that medium might well have drawn from him a tighter and more consistently intimate music than he composed elsewhere. It is quite a historical jump from the last quartets of Beethoven and Schubert and those of Brahms to the Schoenberg First. Mahler would bridge the gap.

One might also wish for an opera from Mahler, or, if not actually wish for it, at least wonder why this man who was so great an opera conductor never tried to write one himself. Certainly he knew how to write for the voice (witness his songs), and certainly he knew what made operas work. But he never got around to trying one, and that is a disappointment.

Hugo Wolf had far less going for him to be a successful opera composer, and yet he did write one opera (*Der Corregidor*) and begin another. Unfortunately, he *didn't* seem to know what makes operas work, and his, despite many fine things in it, doesn't. Wolf, of course, was a great admirer of Wagner. It is a pity he didn't like Brahms better, for he might then have chosen to write us a set of *Liebeslieder* Waltzes in emulation of the two sets by the older man. A bittersweet love song was

something Wolf understood far better than an opera. A pity he didn't get around to writing a set of them for four voices and piano four hands.

One can think of all sorts of things to want from Schubert: more quartets, more symphonies, more songs, more trios, more Masses, and on and on; the man was both so great and so young when he died. One might reasonably ask for a piano concerto, though Schubert never wrote a real concerto of any sort and may simply have had no interest in the form. What I *really* want from Schubert, though, is a Viennese operetta. Operettas have been made from his music (it is absolutely amazing the melodic inspirations Schubert threw away in little dance pieces for piano), but the genre of Viennese operetta developed after his death, and he never had the chance to write one. His operettas are of a different genre entirely, and the Vienna in which he lived became "romantic" only retrospectively.

FROM Brahms, I think, I would like a triple concerto, for he did so well with the Double. Whether it should be the Beethovenian combination of violin, cello, and piano, or something else, like violin, viola, cello, I haven't yet decided. From Beethoven himself I can see an oratorio on the lines of Haydn's *Creation*. As a matter of fact, I can virtually hear it in my head, and I'm sure I'm not the only one who can. Beethoven and Haydn had some words together about *The Creation*, and that may very well be why he never tried anything of the sort (I'm sorry, but *Christ on the Mount of Olives* is not in the same league).

Moving farther afield, I would certainly request from Rossini a symphony or two. Yes, he wrote a *Sinfonia* of sorts, but that turned out to be an operatic overture, and I want a real four-movement symphony in his best quicksilver style. And speaking of quicksilver, I have always wanted another string octet to play after the Mendelssohn. I'm sure *he* could have given us a second one, but how about one by Maurice Ravel?

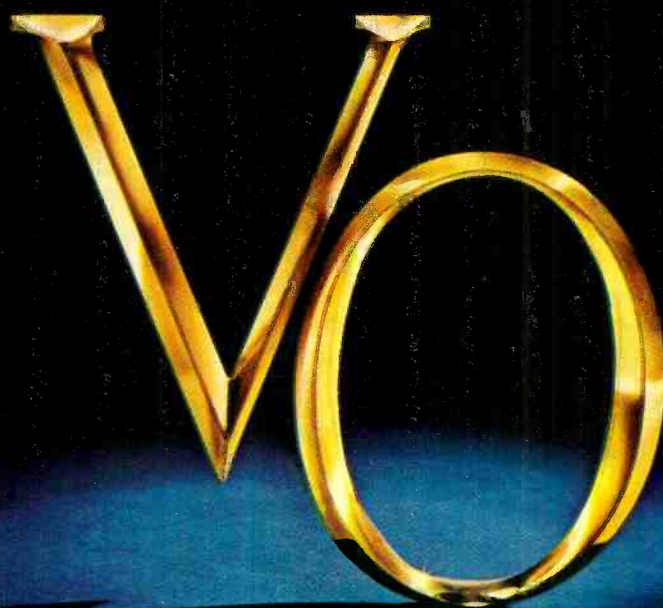
I certainly would have liked another opera from Debussy, not to show that he could write *Pelléas* again (though I'm a great booster of *Pelléas*), but to show another side of his complex and fascinating personality. Debussy wanted another one too, and he had exactly the right story for it: Edgar Allan Poe's *Fall of the House of Usher*. He never got beyond sketches for it; another pity.

We did get a few operas from Vaughan Williams (though God knows we hear them seldom enough), but not the one I want. VW's literary taste never did seem to go in that direction, but can you imagine a *Pickwick Papers* from him? Or some other Dickensian subject? I can. I can almost *taste* it, let alone hear it.

THE imagination tends to work faster the more one gets into this sort of thing. To close with a rush then, let me just list the others. From Vivaldi, a concerto for two trombones. From Grieg, a violin concerto based on Norwegian fiddle tunes (as is his *Slätter* for piano solo). From Purcell, a bawdy oratorio. From Weber, a ballet score (a real one). From Moussorgsky, a movie score. From Haydn, some viola quintets. From Copland, a set of "little operas" based on short stories by Irwin Shaw. From Chabrier, a group of cabaret songs. And from Leonard Bernstein, all I want, alas, is another *Candide*.



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A TALK WITH JAMES TAYLOR

By Rick Mitz

RIGHT at the start, there is something you should know about James Taylor, something that will forever change the way you feel about rock superstars, taxi drivers, and life in general. And that something is this: James Taylor drives a yellow cab.

True, it doesn't have a meter in it. He doesn't charge a fare, and he certainly doesn't

accept tips. And he did have the light on top surgically removed. But that's what he drives—a yellow cab.

"It's a good car. I don't care what happens to it. I drive it. Anyone can drive it. The babysitter can drive it. A total stranger can drive it, because I don't have any great love for the vehicle. Which is why I love it so much."

Now, maybe the taxi isn't the love object highest on James Taylor's list these days. Perhaps his family and a few friends and—oh, yes—his music come first. But you ought to know that it's 'way up there. You should also know that James Taylor doesn't wear glasses that light up, he rarely destroys hotel rooms, and his favorite groupies are his two children, whom he adores. And what he'd really like to do (his latest preoccupation) is run a brewery. He's already got a name picked out: Taylor's Lighthouse Lager.

In the meantime, though, he brews himself a cup of tea. He's in his white New York kitchen, huddled over the boiling water, communing with the tea leaves. As he dunks the tea bag in and out of his cup, he looks all knees and elbows. But there's plenty of in-between too. At six feet three inches, taut and tight, James Taylor has the body of a long distance runner.

In the pop durability contest, the marathon race of the music business,

Taylor has completed more than his share of laps. While other performers have long since pooped out, James is still running. Not *from*, but *to*.

At thirty, he's already into his eleventh year as a successful musician, and that's quite a track record. He is a pioneer in a business littered with followers. When he first started, he was dubbed the "New James Dean." Now, neophyte musicians are touted as the "New James Taylor." He is an institution, and he has also become an industry, complete with posters, T-shirts, souvenir books, and all the other trappings of adulation. In short, he's got just about everything: fame and success, good health and good looks, a lot of talent, and a lot of love.

IF you look closer, though, you will find a man bothered by self-doubt and insecurity, a man who is supercritical of himself, as easily wounded by the bullets of the press as by the lack of them on the weekly record-rating

charts. "If I have a successful album," Taylor says, "it'll make a difference in a whole year. If an album doesn't do so well, it hurts."

According to that criterion, Taylor has had a lot of good years. It began, of course, with the song *Fire and Rain* in 1970, a painfully lonely and lovely anthem that heralded the transition from the acid-hard Sixties to the mellow-soft Seventies. Now more than a dozen hit songs later—*Don't Let Me Be Lonely Tonight*, *Long Ago and Far Away*, *How Sweet It Is*, and *Handy Man* among them—James Taylor is still with us. He has survived and thrived in a business that eats up its musicians like popcorn. Unlike the scores of singer/songwriters who have faded from public view and are now driving taxis because they must, James Taylor is still up there on top, driving a taxi by choice.

For example, his latest album, "JT," first went gold, then double-platinum, and is swiftly heading for uranium. His



“Sweet Baby James” was Warner Bros.’ hottest-selling album at more than three million copies until Fleetwood Mac came along and edged it out. All told, Taylor has sold more than eleven million records, and by the time you finish reading this sentence, he’ll undoubtedly have sold a few dozen more.

The man may sing, but he doesn’t often talk publicly. Although he’s surprisingly articulate, interviews with Taylor have become so rare they’re almost extinct, killed off by careless typewriters who twisted the words and garbled the sense of a more than usually complicated story.

Says Taylor: “I think what the press has found to sell in me has been my self-destructiveness. They spent a lot of time—and I’m guilty of it too—talking about my hospital days and my drug problems. That, coupled with songs like *Fire and Rain*, has created an image of someone who is having a hard time. They found that salable. It was

really overdone—things simply never were that bad. But if people came into my house and saw me playing with my kids . . . well, that wasn’t a salable image; *everybody* has kids. Of course, nowadays, everybody has kids who are strung out on dope or in a mental hospital. So I guess it’s time for me to move along to another character—if I want to keep those cards and letters coming.”

SITTING and sipping his tea (the beverage would later change to beer, then to coffee, then back to tea again), Taylor talked generously and thoughtfully. He perched himself on the edge of a couch in the den. The sounds of music, children laughing, phones ringing, and vacuum cleaners whining wafted their way into the conversation. In a sky-high apartment overlooking Manhattan, James Taylor somehow managed to be quite down-to-earth.

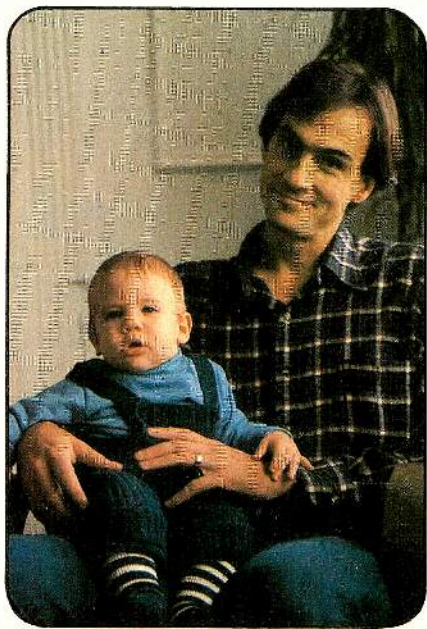
“There is no doubt that success has made me happier with myself. A psychiatrist I used to see, and occasionally

go back to visit, said to me that nothing succeeds like success. It’s true. It increases your self-image and it makes you feel more confident. You perform better. You know, I’ve had my problems, and you tend not to fall back into those problems or onto old crutches. So success is really great, and I thank everybody who contributes because it really increases my self-esteem. I have found, though, that when it hasn’t been too easy for me, it’s because I’m taking myself too seriously. It never hurts to lighten up, to de-emphasize the urgency of the situation. Because there’s just not that much to worry about.”

He gingerly moves his cup onto the floor. Against one wall of the den is a beautiful antique baby bed. Against another is a desk piled with memos and newspaper ads to be approved, promotional pictures, and business correspondence. James Taylor, Inc. . . .

“I am more business conscious now. And I’ve squared up somewhat. I guess it came about from being in the busi-

TAYLOR...



"I think I'm probably much more guarded in my personal life than I am in a song lyric."

ness such a long time. In ways, it may be poison. But I think you square up as you get older and pick up a family. If you make money and accrue things, you tend to become more conservative, and I think responsibility squares you up too."

He picks up the cup and looks at a few tea leaves that have escaped from the bag and are floating on the top. "Things are different now than they were seven or eight years ago. Today the music business is much more a *business*, there's much more competition. It seems to me that things are very tightly packed and there's very little room to move around any more. It seems like, if someone goes up, someone else comes down: it's very close to a total saturation point with popular music.

"It's a whole different thing from the romantic idea we used to have of being a rock star. It's sobering for a guy like me who at one point had the romantic idea of being a 'troubadour.' It sure is an education to see what goes into selling records. It really *is* a matter of sink or swim. Nice guys, in a sense, finish last. That's not to say that you have to be a rat to do well in this business. What I mean to say is that you have to blow your own horn. And that's really

all I'm doing anyway. I would be deluding everybody including myself if I said I were not.

"But an artist doesn't *necessarily* have to grow up and take care of himself. I mean, I have relatively few responsibilities, and I have the luxury of not having to yell at anyone, and it's my good fortune in life to be able to take a bath rather than make someone else take a beating. I get paid for doing what I love, so I'm in the catbird seat."

TWELVE years ago, Taylor was far from that catbird seat. He went to New York in 1966 to form a band (which disbanded after one year) called the Flying Machine. Then, in 1968, he arrived in London, an unknown street musician trying to peddle a demonstration record. He ended up recording his first album for the Beatles' Apple Records. Although well-received critically, it didn't sell well. He left the label, returned to the U.S., and signed with Warner Brothers (today he records for Columbia). In 1970, "Sweet Baby James" was released, and music history took a little turn.

Music history took a turn. . . ? Taylor doesn't like to hear that kind of talk.

"It still doesn't seem to me that I was doing anything different from the other people around me. I was listening to folk music in Boston and Cambridge. It was really acts like Peter, Paul, and Mary, Bob Dylan, Ian and Sylvia, the Kweskin Jug Band, Tom Rush, and the Kingston Trio that brought folk music to popularity. You know, it's actually *all* folk music, what we listen to today. It has a self-made tradition, people who go out and shop for their own education rather than having one delivered to them. Sure, I'm a folk musician. And it's not only because I can't read or write music; it's because I'm a product of the happenstantial kind of random musical environment that I grew up in. I was influenced by the people we called folkies. I was introduced to and strongly influenced by black music. I was introduced to jazz a little bit. And the country music that I heard on the radio down South—these were pretty much what I listened to all the time. And I consider all of that whatever roots I have."

He's branched out from those roots. Today there is a whole James Taylor style, characterized by rich melodies and the careful melding of music and lyric. A song such as his *Sunny Skies*, for example, has been consciously crafted for effect, with its dark lyric fused to a joyous melody. But the distinguishing trademark of his style is self-revelation through lyrics. Carly Si-

mon's songs are similar in that respect. In fact, it's been said that if you listen to James' albums and then listen to Carly's, you can figure out what's going on in their relationship at any given time. James laughs at the suggestion: "Well, then you probably know as much about our relationship as we do. . . ."

He is reluctant to talk about his song lyrics, though, and when asked to describe a song, he'll talk about the chord changes rather than the mental changes that went into the writing.

"I think I'm probably much more guarded in my personal life than I am in a song lyric. But it's not like really being open in a song; it's not like relating directly with someone. A song is a form, you know, it's like something that you're putting in the air, and if it's a personal statement, that's okay—if that's the type of thing you're trying to do. In other words, if I were to explain myself to you, it would be as if to elicit some response from you. But you don't do that in a song. There *is* no interchange. It's just a statement. Oh, I get a lot of mail, and I suppose some people do respond to a song in that way. Some people write me and tell me they like my songs or they'd like me to come over for dinner or that they're in a tight jam—and that's the closest thing to an interchange in a song."

He pauses for a moment. "But you know, they're gonna do it anyway—they're going to try to figure out who you are from the lyrics of a song. If you try to be a star and you're in the public eye, they're going to do it. And it's not just a matter of whether they'll be right or wrong in their assumptions. Obviously they're going to be wrong, but *how* wrong they're going to be is the question."

Another rest, another sip. "There is a songwriter's *place*. There is a place you are *at* when you write a song, and I'm not there all the time. I'm there twelve times a year. Or less. I don't know if it has to do with alpha rhythms or biorhythms or what food additives they've been popping into you. I don't know what goes into you to allow you to reach that state of feeling so that you can write a song. And the song's lyrics are not necessarily the views of the person who's doing the writing. That's just the state. Different songs happen different ways."

One source of mild discontent for Taylor is that he hasn't written a hit song for some time. "I've had mostly oldies as hits for a while now. I really haven't had a big record since *Don't Let Me Be Lonely Tonight*. Carole King wrote *You've Got a Friend*, and then there were a string of oldies—*Mocking-*

bird, *How Sweet It Is*, and *Handy Man*. I would very much like to have a hit with something I've written myself."

What Taylor forgets, of course, are the songs he's written that have been hits of varying degrees—songs like *Mexico*, *Shower the People*, and, of course, his latest, *Your Smilin' Face*, which he calls "bubblegum" and which he wrote for his daughter. Also, he's hard at work writing songs for *Working*, a musical theater adaptation of Studs Terkel's book, scheduled for Broadway.

But whatever he sings, his concert audience loves it, showing their appreciation with loud cheers, paying homage to him with standing ovations and lighted matches, sporting his picture on their T-shirts. Taylor became something of a sex symbol with his slow, sensual version of *Handy Man*. And so his photo hangs on a lot of thirteen-year-old girls' bedroom walls lately. "I don't really put much time into thinking about that," he says shyly. "But I don't mind being hung on walls—in fact, it pleases me to think about being hung on a young girl's wall and to have her look at me. That's fine."

THERE IS, of course, nothing about a picture on a bedroom wall that gives any clue whatsoever about what it took in terms of work and sheer nerve to get there.

"Performing—it's terrifying. And it has to stay that way. You really need that energy and that urgency, or else you'd get complacent after a number of years doing it. You'd just lay back and nothing would happen. But if you're

ready, if your throat is in good shape and your head is in good shape, and you know that the arrangements are there and your instruments are together and your sound and lights and everybody are all organized, then it's all okay.

"What I say to myself before I go on stage is that I'm the right person to be here now—you know, that this is my job. The performance that's about to be given is my performance and nobody else can do it. And I just sort of get into a frame of mind where I'm fated to do it. It's sort of like Zen archery—there's the target and I'm the arrow, and there's the space to be covered between the two of us. Sometimes walking on stage becomes an out-of-body experience. I start to come around the guy wire that's holding up the backdrop, and the curtain and the monitors are on my right. The stage manager is holding up his hand with the headset on, waiting to tell the spotlight operator to hit me, and the house lights are out and the audience is beginning to make some noise. And then the stage manager points at me—the spot hits the corner, and I come around the corner, and every step is like it takes . . . a vision of myself rises about three feet out of my body. I purposely go into a song that's familiar to me—it'll either be *You Can Close Your Eyes*, *Sweet Baby James*, or *Riding on a Railroad*—something that I can sing if a lion is chewing my foot off. And by the time I've done a couple of numbers, it's cool, you know. I can always be drawn forward by the music and become excited, but I try to keep myself a little cool.

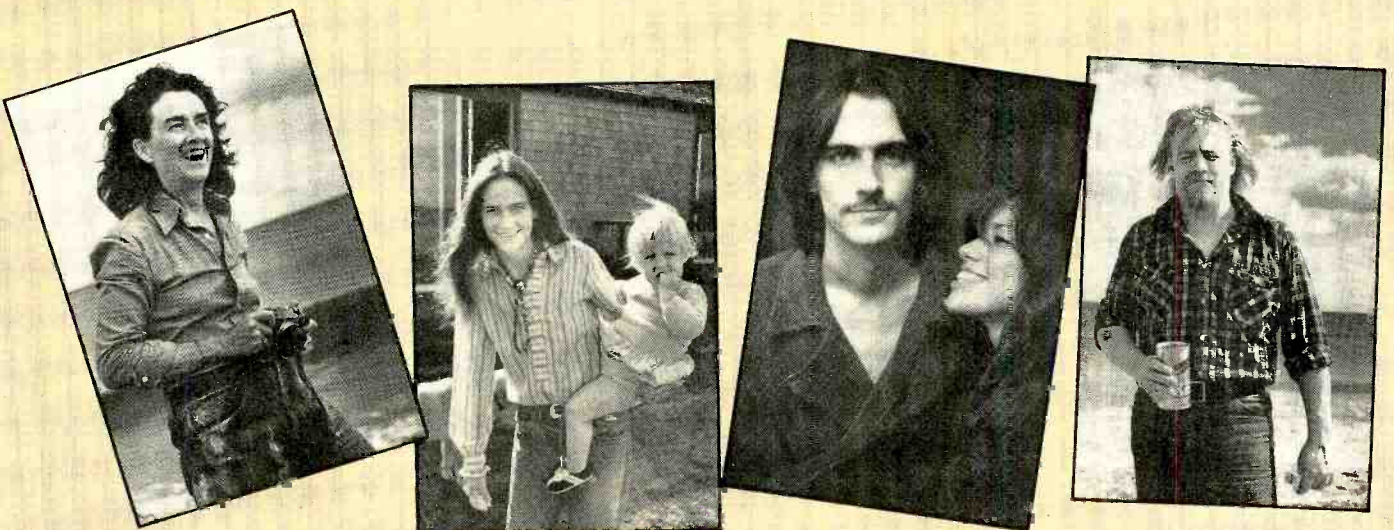
"I think you have to be in as good shape as you can to give a show. I quit smoking about three years ago, and it takes about three years for your voice to feel the effect of no cigarettes. I'm not a terrific singer. I've got a pretty good instrument, and I've got a good musical sense and I phrase well. But I don't have a good enough voice that I can abuse it. If you're given one of those terrific instruments by whoever passes them out, then you can do anything to it and still sound relatively okay. But in my case, a little rest makes all the difference."

Taylor's on-stage patter is sparse. "It used to be that sometimes I would say silly things on stage, things like, 'I know you'll like this song because it sounds like all the rest of my stuff.' I guess I really do feel, though, that if I had put out five instead of eight albums in my career, today I would have five really good albums. And three albums of stuff that maybe I would have wanted to leave off. I think my favorite album is 'Walking Man.' Then comes the 'Gorilla' album, but I'm used to loving 'Sweet Baby James.' I like 'JT' too."

Critics have always had a lot to say about Taylor's albums. Many performers claim they don't read their reviews or, if they do, they just don't care. Taylor wishes he felt that way.

"I listen to my critics and absolutely read my record reviews. I try not to read beyond my name in print, but when I read something, I take it seriously, even though I know better. I remember one review that said the reviewer was tired of my stuff, that it was all the same, it was all romantic pap and I was beating myself and wasn't

"Family is the byword . . .": left to right, mother Trudy, sister Kate and her daughter Elizabeth, James and Carly, brother Alex.



TAYLOR...



"I purposely go into a song that's familiar to me . . . something that I can sing if a lion is chewing my foot off."

taking any chances—that I was boring. That review just poked a hole right through the bottom of things for a couple of days. But that's what you set

yourself up for if you're playing for the public. You takes your chances. . . . Generally, though, I've been well-treated by the critics."

While music critics have written about his professional life, another kind of journalist—the gossip-monger—has taken aim at his private life, trying to spot anything controversial in his past, zeroing in on his problems, even his marriage to Carly Simon—which is all very strange, because he lives simply and conservatively, and their marriage is durably old-fashioned.

Perhaps his reluctance about accepting the role of public personality goes back to Taylor's early experience with fame. He started out as a musician and quickly ended up as a media figure. While most other young men his age were still sitting in classrooms, James Taylor was sitting on the cover of *Time* magazine.

"I think that the early success and recognition really froze me up," he says now. "The *Time* magazine thing was a big deal. I don't know that there were a lot of rock-and-rollers on the cover of *Time*. Back then it was a big thing. I can't remember that well. But in my career, a lot of things that have happened have been amazing, and I haven't really noticed them happening. When I turn away from them a little bit, when I get some distance, then I notice them.

"Now it all just seems kind of natural. I don't know about anything else besides being famous. It's about perfect, you know. If I want to, I can always find someone to recognize me in a place if I need the advantage of being famous. If someone won't take my

check, for example, then just give me five minutes and I'll find someone who's heard *You've Got a Friend*. Somebody in the place will know of James Taylor—enough to consider cashing my check. There are about two or three things that it's worthwhile being famous for.

"As far as being bugged on the street or not allowed to eat in a restaurant or stuff like that, I haven't got that problem. I guess I change my appearance enough so that people just don't recognize me. Or, if they do, they're just very kind about it. I hear people complain about what a bummer it is to be famous, and I think that when that happens, it's usually because someone's handled it poorly. People who recognize me usually have positive feelings about me. I may be proved wrong tomorrow, but my fame doesn't carry much notoriety with it."

FAME is something that seems to run—no, gallop—in Taylor's large, extended family. In addition to Carly, James has two musical brothers, Livingston and Alex, and his singing sister Kate, and then there are Carly's songbird sisters Lucy and opera diva Joanna. When Carly and James first got together, it was as much a musical merger as a marriage. It's practically impossible to turn on the radio without hearing some Simon or Taylor singing—sometimes even together or in assorted multiple-choice combinations.

Taylor speaks of his wife in a low, loving voice.

"Carly is an extraordinary person to know because she is probably as positive as anybody you will ever meet.

James is the performer in the family, but a concert tour with stage-shy Carly is rumored.



Baggage Claim & Terminal ↑



She's really a bouyant personality and she refuses to let criticisms of her get her down. Maybe it's just her happiness and positiveness that the press like to criticize, but they're missing the point 100 per cent if they're looking for someone to knock down. I mean, Carly's really a seeker, you know. People don't really see her as such, because they have this image that they're trying to color in. They have an outline in their minds that's been given to them by some cultural lie somewhere of what someone's supposed to be like. And she doesn't fit that outline. She is the most remarkable person I've met.

"I'm sure that I would have bot-tomed out a few times had it not been for Carly. Her positiveness has definitely counteracted my negativness. She can suggest an alternative and positive way of life."

James is also having an ongoing love affair with his brothers and sister.

"They're really exceptional people, you know. I don't know how it turns out that way, but Kate, Livingston, Alex, and Hugh (his only nonmusical sibling) are all . . . if you knew any of them, you'd know what I mean. Maybe we're so close because of our being close in age; we're five children born within seven years. We grew up feeling in ways either special or alienated. My mother really felt she was from the North, but we grew up in a small academic town in North Carolina and maybe we just sort of got real tight for that reason. We didn't have a lot of neighbors or anything; we lived out in the country. Today, I don't make friends easily, and I have only three or four friends whom I consider terribly

close. For the rest, it's just my brothers and my sister."

Family is the byword at Taylor's homes—both his apartment in New York and his house on the New England coast. People predominate more than things. Two bicycles—twenty speeds between them—sit in a corner of his apartment hallway. Elsewhere, the furnishings are simple. His living room, for example, consists of a sort of maze made out of couches, a colorful Richard Lindner print over the fire-place (under which is propped a snapshot of Carly with her longtime lyricist-collaborator Jacob Brackman), some stereo equipment, a piano, and a coffee table. No sable rugs on the floor, no crystal chandeliers on the ceiling.

"I'm aware of heat loss in my home and I'm aware of gas mileage in my car—and financially it doesn't make a damn bit of difference, you know. I think it's just a matter of what you're used to. It's just what I feel comfortable with. I mean, if you ride downtown in a chauffeured mother-of-pearl 1975 Lincoln Continental limousine and step out with your shades and white suit and your mink coat and your gold coke spoon and strut into the Ritz de Ritz, people are gonna say, 'Heyyy . . . there goes *somebody* . . . ahhh. . . .' But that wasn't the way I was brought up. I think it's fine to flaunt it—if you want to. Bad taste is terrific; people love to see some flash—it's a real crowd pleaser. But I don't think I could handle it. I guess I have a feeling that there is a finite amount of things to go around, and that if I take too many of them, it will amount to taking them away from somebody else.

My father and mother told me not to waste and taught me that greed was an ugly thing. It won't keep me from riding in a limousine, but it will keep me from buying a Cadillac."

A carpenter knocks on the door of the den to announce that he wants to install a light fixture. Taylor looks around the house for another room in which we can sit and talk. But someone's already in the kitchen, and Carly and the children are in the living room where Sarah is showing-and-telling how she can leap from the window sill onto the couch. She's a regular tinkerbelle. The baby is sleeping quietly. So James walks into the babysitter's room and, once he gets there, realizes that he has very little left to say.

PERHAPS there really is very little left to say about James Taylor. The hundred-odd songs he's recorded speak—and sing—for themselves, already testifying to a long and fruitful career in the music business. But what about the future? Recently, Taylor's been doing a little record production (an album for his sister Kate) and a lot of work on *Working*. There's also been some whispering—heavy breathing is closer to it—about a possible concert tour with stage-shy Carly. Maybe James Taylor, the country boy from North Carolina, will become a music mogul. Or write a symphony. Or take up tap dancing. Who knows? In a career peppered with the unpredictable, James Taylor just might give it all up and go off somewhere to brew his Lighthouse Lager. Or decide to put the meter back in his yellow cab. There's a song in there somewhere. □

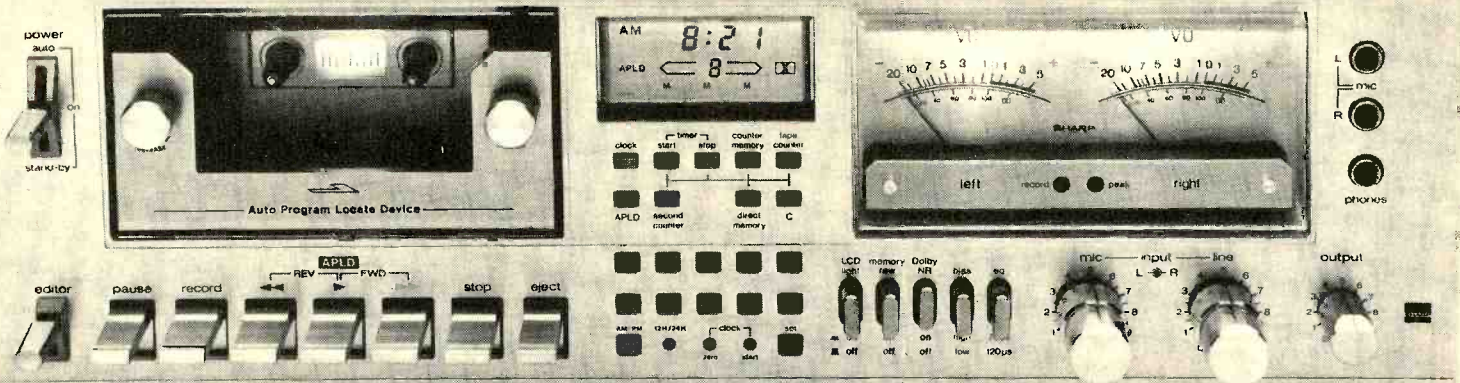
The house that handy-man James is building is as stubbornly original as his music. (All photos by Peter Simon.)



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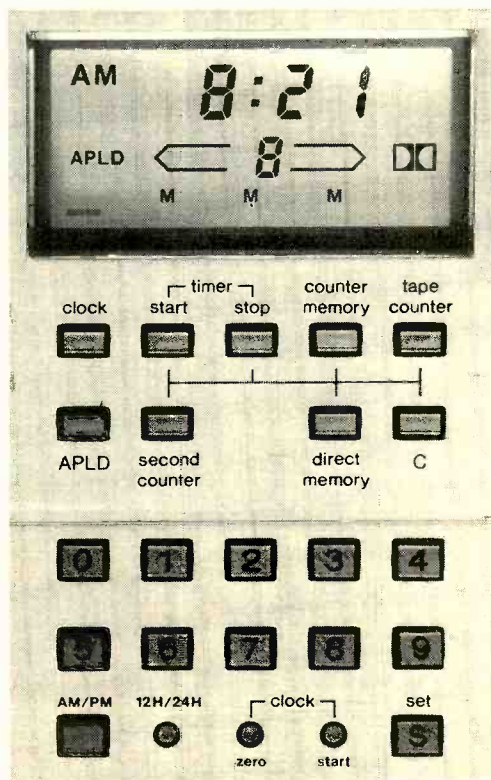
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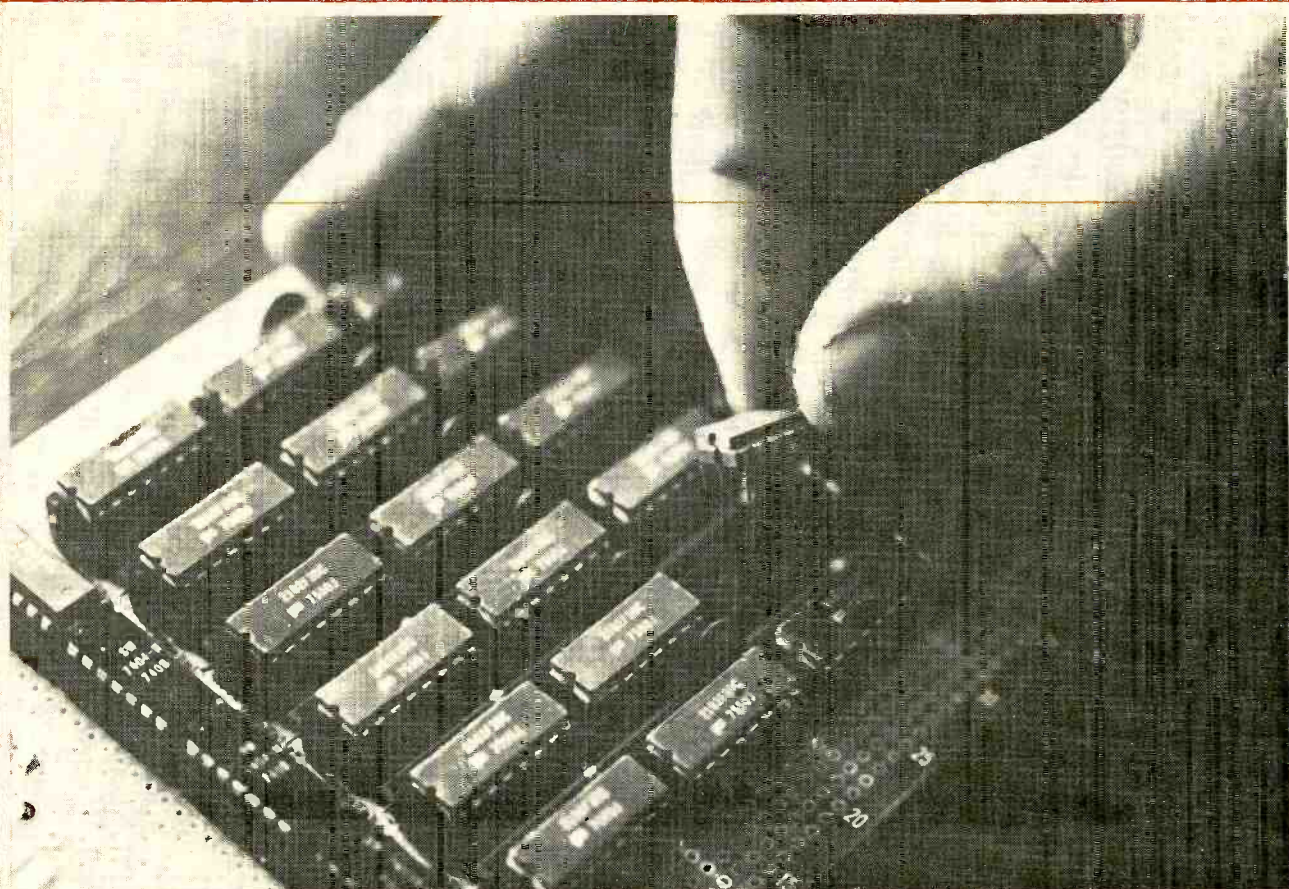
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“AUDIO BREAKTHROUGHS”

What effects will new technology have on the future of hi fi?

By Peter Sutheim

IN many manufacturing fields, the actual importance of a new technique, technology, or device can sometimes be established only by the test of time. If a new product category, circuit, or solid-state device achieves rapid, widespread use in the electronics area, it most probably *is* a genuine advance—if sometimes only because it produces the same results at lower cost or with greater reliability. Though it is obviously much too soon to pass judgment on the ultimate significance of many of the most recent audio “breakthroughs,” they bear examination and merit understanding to the extent that they are already affecting the design of present-day products.

Since mere common sense, even assisted by a technical background, can

provide only very sketchy guidance through the new technology's tangle of claims and counterclaims, we have asked Peter Sutheim, a gentleman with a good grasp of these matters, to discuss some of the new devices—and some of the new wrinkles in old ones—that have caught his eye recently. It is certain that, by the time his observations reach the reader's hands, there will be at least one brand-new device or technique that we will wish we had included. But, not unlike Alice and the White Queen in Wonderland, we in the land of audio have to run as fast as we can simply to maintain our level of understanding. And so, panting, we apologize for the possible omission of some recent development of merit, pleading lack of insight, foresight, and/or space.

"High-Class" Amplifier Designs

Most audiophiles are accustomed to considering *speaker* efficiency, but they seldom think about how wasteful or thrifty their *amplifiers* may be. Yet, as amplifier power ratings climb ever higher, designers *are* concerning themselves with efficiency—not because of energy shortages, but because whatever power the amplifier draws from the a.c. line that is not turned into audio-power output is turned into heat.

A typical component amplifier designed to operate in "Class AB" (the usual mode) is quite efficient when delivering its *maximum* power output, but in practice a music amplifier is hardly ever called upon to do that. At average power outputs of one-tenth to one-half of maximum (typical when playing music) the amplifier is considerably less efficient and may actually heat up more than it does at maximum output. The amplifier's power supply must of course be designed to provide even that part of the power that is wasted, which means heavier, bulkier, and more costly parts. And the finned heat radiators for the output transistors must be large enough to radiate away the waste heat before destructive overheating occurs. The more powerful the amplifier, the greater the cost advantage of a slight increase in efficiency. A truly significant increase in efficiency would mean a high-power amplifier that is smaller, lighter, and perhaps somewhat cheaper

than its less efficient, hotter competition.

One radical approach to higher efficiency has been considered for a dozen years or more, but it has only recently appeared in a few commercial products. Referred to as "Class D," this technique uses the output transistors as switches rather than as "linear" amplifiers. The input signal to the amplifier is used to vary some aspect—let's say the width—of a continuing series of pulses generated by a circuit in the amplifier. The nature of the pulses is such that, regardless of their width, they cause the output transistors to be either fully conducting or fully nonconducting. Either way, the output transistors dissipate much less power than they do in the "in-between" states normal to operation as conventional linear amplifiers.

In order to insure that it won't make trouble, the pulse train has to have a rate, or frequency, at least ten times higher than the highest audio frequency to be amplified. This very high frequency permits the pulses to be filtered at the output, essentially causing them to disappear and restoring the audio signal. Despite the chopped, "on-off" nature of the process, the result can be a very precise (low-distortion) amplification of the input signal. And an efficiency of 90 per cent or better at all power levels can be achieved.

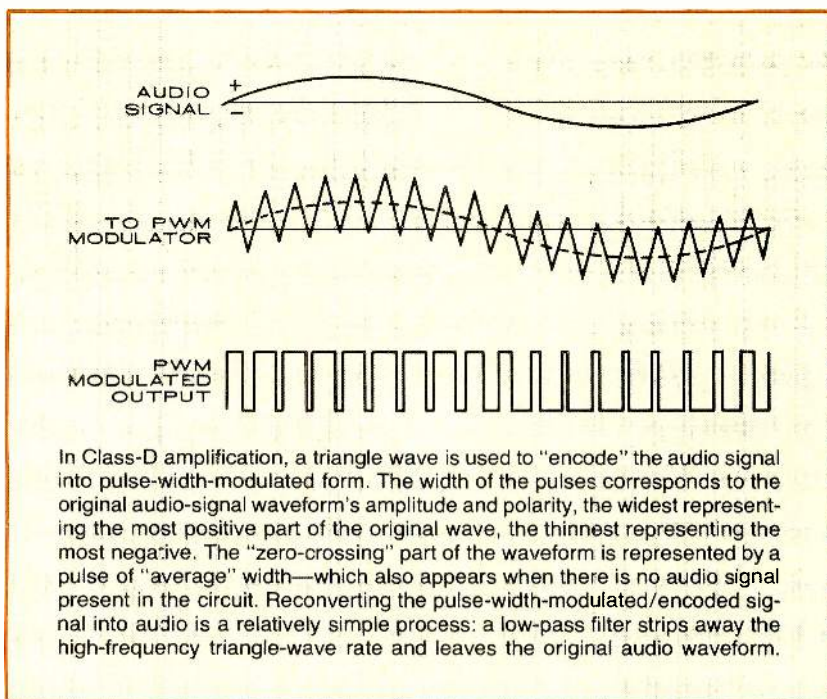
A somewhat less dramatic attack on the efficiency problem has been mounted by Hitachi in several of their products. Called "Class G," it uses fairly conventional solid-state power-amplifi-

er design (as contrasted with switching amplifiers, anyway), but with an important difference: instead of the conventional paired set of output transistors for each channel, Hitachi has *two* sets of transistors per output channel. The "lower" or "inner" pair operates approximately like any other low-power Class AB output fed from a moderate supply voltage. When a high-amplitude signal peak comes along, the higher-power transistors are turned on, fed from a power-supply voltage more than twice as high. In effect, Hitachi has an amplifier that operates as a low-power unit (with its low current drain) until high power is required—at which time the high-power section is switched on.

A related development is Soundcraftsmen's recently announced "Class H" amplifier. Again, the approach is to use two different power supplies—in this case without separate sets of output transistors. The output transistors are operated from a relatively low-voltage power supply most of the time, but when strong musical peaks are encountered, the other, higher-voltage supply (nominally one and one-half times the voltage of the low-voltage supply) is brought into action. The higher-power supply voltage is also controlled by the level of the incoming audio signal.

TECHNICS has recently come up with a somewhat similar design which they call "Class A Plus." It, too, involves a power-supply voltage that is controlled by the audio signal, but there's only one supply and the action takes place continuously rather than on a "threshold" basis as it does in the Soundcraftsmen unit. The Technics amplifier utilizes a Class-A output stage, the varying voltage supply for it being provided by another independent amplifier whose output is controlled by the audio signal. In this way, according to Technics, the linearity advantages of the Class-A design are realized with a vast improvement in efficiency over the conventional Class-A design.

While the attention being paid to efficiency is commendable and would probably have come about sooner or later anyway, it was stimulated by the Federal Trade Commission's ruling on amplifier-power ratings, according to which an amplifier must be "preconditioned" before test by being run for one hour at one-third its rated operating power. The one-third level happens to be very nearly the most inefficient operating point for a Class-AB design, no matter whose product it is, and the amount of heat that must be dissipated in even a relatively modest amplifier is enormous. This requires notably larger



"BREAKTHROUGHS"

"Even relatively efficient speakers convert about 95 per cent of the audio power . . . into heat."

heat sinks, and of course a heftier power supply to cover all that waste—which in turn increases the bulk, weight, and cost of the amplifier with little or no audible benefit. The more efficient the output stage for a given power-output rating, the less need for excess capability in power supplies and heat radiators. It is necessary to keep in mind that efficiency and sound quality are not necessarily related. How good these designs sound is still determined by the care and judgment exercised in the engineering and not by any magic associated with a glamorous "new circuit."

Carbon Fibers

The key to much good design in the field of transducers (devices such as speakers and phono cartridges that

change energy from one form to another) is to eliminate or minimize resonances. Musical instruments derive much of their special tonal qualities from resonances, but with audio equipment these have to be controlled to prevent undue emphasis of frequencies that would result in coloration (distortion) of the reproduced sound.

Recently, that most astonishing and ubiquitous of elements, carbon, has been combined with paper pulp to produce woofer cones of great stiffness and high internal damping. The last factor is quite important, since it minimizes the tendency of a substance to vibrate or "ring" when excited. What is actually used is *carbon fiber*, one crystalline form of the element (graphite and diamond are others). The carbon fiber, made by carbonizing polyacrylic fiber at high temperatures, is mixed with the paper pulp in an amount up to 30 per cent of the total weight. The practical effect of this compound material is to make a woofer cone that is less prone to breakup, ringing, and stored-energy problems.

Carbon fiber has also been applied in tone-arm design, where it is used as part of the structural material for the tone-arm tube. Here the purpose is to raise the frequency and to reduce the intensity of certain inevitable reso-

nances in the arm assembly in order to make them less audible. The intended result is, again, less coloration of the reproduced sound.

High-polymer Molecular Film

Although speakers and headphones made with high-polymer molecular (HPM) film seem to resemble electrostatic designs, technically they are more closely related to the *piezoelectric* principle. As in electrostatic drivers, the element in the HPM device that actually moves the air to produce sound is a thin (about 1.2 mils thick) plastic film curved into a cylinder or hemisphere that radiates sound energy uniformly from its entire outer surface. The film's vibrating motion is produced by a molecular structure that literally expands and contracts in accordance with the applied audio-signal voltage. The mechanism is quite simple, but the chemistry that produced it is extremely complex. Pioneer, the manufacturer principally identified with HPM film, describes the expansion-contraction motion as "breathing," as contrasted with a reciprocating (back-and-forth) action.

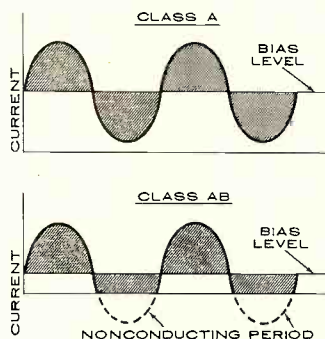
Does HPM technology provide a real

THE CLASS STRUGGLE AMONG AMPLIFIERS

RECENT developments by Hitachi, Soundcraftsmen, and Technics, among others, have caused the notion of amplifier "class" to receive renewed competitive attention from amplifier designers. What is meant by the "class" of an amplifier? A good in-depth description can be found in Julian Hirsch's "Technical Talk" in the January 1977 issue, but here's what it means in brief:

An amplifier is labeled Class "A," "B," or "X" according to the way its output stage operates. Currently, there are three basic classes suitable for audio applications: A, AB, and B (other classes recently devised are D, G, and H). The Class-A design consists in its simplest form of a single output transistor through which a high biasing current flows at all times, whether or not a signal is being handled. It is a very low-distortion amplifier when designed properly. However, its inefficiency becomes a problem when high powers (more than 20 watts or so) are required, because the inefficiency is expressed as heat—lots of it.

Class-B design involves two (sets of) output transistors arranged in a so-called "push-pull" configuration. If the input to a Class-B amplifier is a



sine wave, the positive half of the waveform is handled by one transistor (or a set of them) and the negative half by the other. The outputs of the two halves of the circuit are com-

bined to give an amplified sine wave at the outputs. In effect, the bias current flows through each half of the output stage only for the time that the output-stage half is required to handle its part of the signal. The Class-B amplifier is therefore considerably more efficient than the Class-A one.

The problem with Class-B design is that "crossover" distortion can occur where the positive and negative halves of the signal meet and one transistor shuts off before the other turns on. This causes a "glitch" or discontinuity in the "crossover" area between them. The solution (Class AB) makes use of the same output configuration but is biased somewhere between A and B. This minimizes crossover distortion while providing much of the efficiency of a Class-B amplifier.

Amplifier designers are continually seeking ways to provide higher power with lower distortion and lower heat, and this search has brought us the most recent developments, Classes D, G, and H; see text for the details.

improvement in reproduction compared with conventional dome, cone, and other surface-driven reproducers? HPM techniques may produce new designs that are measurably and audibly superior, or—just as important—designs that are as good as anything else but cheaper to produce, in which case the lower cost of manufacture ought to result in more good, low-price speaker systems. Offsetting this is the fact that HPM speakers, like electrostatic units, require step-up transformers to raise the audio-signal voltage to an appropriate level, and of course the transformers raise the cost.

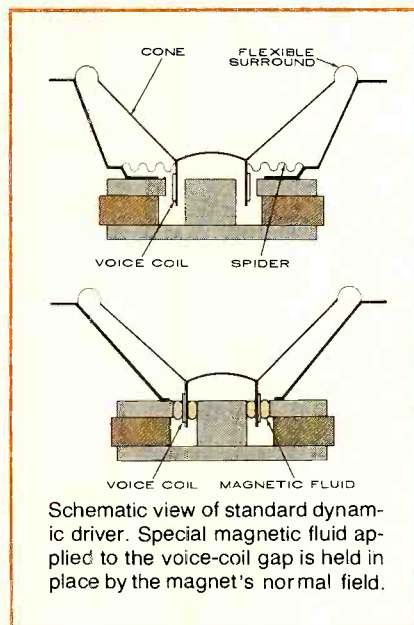
At this writing, the HPM principle is applied only in drivers operating at frequencies above about 2,000 Hz (but full-range HPM headphones are avail-

fers to vibrate. This is desirable in a bell, a tuning fork, or a musical instrument, where we expect to get a specific note in return for the energy we expend in blowing, stroking, striking, or plucking. Resonances can also be undesirable, in a speaker system for instance, which we expect to respond to a signal without adding any tonal contribution of its own. We also want a speaker to stop responding as soon as the input signal stops. Getting this performance from a speaker system requires careful attention to *damping*, which is simply the absorption of unwanted energy (it gets turned into heat). The devices called shock absorbers in cars are really dampers. They soak up and dissipate (as heat) the energy stored in the mass and springiness of the car's body and suspension. Without them, the car would continue to bounce indefinitely after hitting a bump in the road.

A woofer, tweeter, or mid-range can be damped in several ways, and many of these methods are used in various combinations in current designs. The load presented to a woofer cone by the air enclosed in the cabinet is one source of damping. The amplifier that drives the speaker also aids in damping. The mechanical design of the driver itself—its cone material, suspension, and magnetic circuit—influences damping.

RECENTLY, another method of damping has come into fairly wide use: a ferromagnetic fluid is injected into the gap in which the voice coil moves. To make this comprehensible, check the drawing (at the top right of this page) that shows how the usual speaker mechanism works. A speaker driver operates under the same principle as an electric motor. A powerful, steady magnetic field is created in a circular gap by a permanent magnet. Suspended in this gap—without touching the magnetic poles—is a coil of wire called the voice coil. One end of the voice coil is rigidly cemented to the diaphragm (usually a cone or a dome). When an audio signal is applied to the voice coil from the amplifier's output, a *varying* magnetic field is created around the coil, which interacts with the *steady* permanent-magnet field to cause the coil to vibrate in and out of the gap, moving the cone or dome also, and it is this vibrating diaphragm that produces sound waves.

The narrow gap in which the voice coil has to vibrate back and forth suggests an opportunity for damping its motion. A moderately thick fluid (perhaps of the consistency of motor oil) injected into the gap would do the trick, but *keeping* it in the gap would not be easy. However, a ferromagnetic

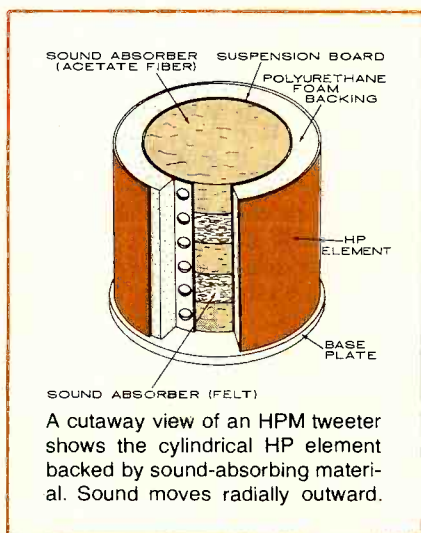


fluid—one that behaves, in its liquid way, as iron does in response to a magnet—would stay in the gap because of the powerful magnetic field there.

If the ferrofluid can also retain its properties at high temperatures, it can benefit the speaker driver in another way: helping to draw waste heat out of the voice coil and into the surrounding magnet structure. Even relatively efficient speakers convert about 95 per cent of the audio power they receive from the amplifier into heat. And considering the power available from today's amplifiers, keeping the voice coil cool is a real problem. The air flow in the voice-coil gap helps some, but a suitable ferrofluid can improve heat transfer by as much as three times. As of this writing, the cost of ferromagnetic fluids is quite high. However, many speaker manufacturers have discovered that a little drop will do the job.

Phase-coherent Speaker Systems

Both "phase-coherent" and "time-compensated" are terms (there are others) that describe a speaker that has been electrically and physically designed with the intention of permitting all the frequencies in the sound it reproduces to arrive at your ear in the same time order (in addition to the same *strength*) in which they occurred in the original sound, the idea being that such a phase-accurate or linear-phase speaker is going to be more true to the original program than a speaker which is designed according to conventional principles. (Continued overleaf)



able). However, the HPM principle would seem to offer all the potential advantages of electrostatic speakers without one of the significant disadvantages: the need for a very-high-voltage power supply. Given a sufficiently large radiating area, there seems to be no theoretical reason why we can't have full-range multiple-driver HPM speakers operating down to as low a frequency as desired. The next obvious step would be a four-foot-high (about a foot across) driver used as a low-frequency radiator. The mid- and high-frequency units would be stacked on top of this bass radiator, with their front edges pretty much lined up. Why not?

Magnetic Fluid

Almost every moving system has resonances, the specific frequencies at which the system—or parts of it—pre-

"BREAKTHROUGHS"

"... synthesizers manipulate the difference signal electronically, sometimes with quite spectacular pseudo-quad results."

Most speakers are *not* phase-accurate, chiefly because of the general practice of using an assortment of drivers each designed to cover a particular part of the audio-frequency range. It is usually not the drivers themselves that create the phase shifts, but rather how they are interconnected and installed that creates problems. These are of two kinds: one resulting from the fact that the drivers must necessarily be spaced apart, creating a difference in path length (to the listener) for sounds emerging from the two or more units; the other resulting from the need to divide (cross over) the audio spectrum electrically into two or more frequency bands, sending to each driver only the band it is designed to reproduce. Since sound travels at a specific speed in air, a difference in sound-path length for the woofer, mid-range, and tweeter can result in different "arrival" times for different frequency components.

One thing the designer can do to avoid this is to position the drivers in such a way as to equalize the sound-path lengths. This means taking into account the fact that the "virtual" depth of a woofer—the area of the cone where the sound really "comes from"—is different from that of a mid-range or tweeter. Woofers are deep—several inches in the case of typical 12-inch units. Mid-range units and tweeters are much shallower, and some may even protrude from the front plane of the baffle. Hence the appearance of stepped or "setback" cabinet designs, or designs with sloping fronts, to bring the woofer's specific acoustical "point of sonic origin" in line with those of the other drivers.

Unfortunately, appearance alone is no guarantee of anything. The design and selection of drivers, their spacing on the panel, the choice of crossover frequencies, the design of the crossover network itself, the acoustical properties of the enclosure—all these things profoundly influence the phase characteristics of a speaker system, and none of them can be evaluated by a simple visual examination.

The audible benefits of phase-coher-

ent loudspeakers remain debatable, in part because so little available program material is itself phase-coherent. The multitrack techniques of today's recording studios actually insure copious phase scrambling in the mixing console, and indeed even tape machines themselves introduce phase shift. When and if recording studios ever get around to paying closer attention to phase factors, linear-phase loudspeakers may get a chance to prove their merits. This is not to say that many speakers designed to be phase-accurate (or whatever proprietary descriptive term the manufacturer chooses to use) today are not superb reproducers. The question being discussed is whether those speakers are excellent *because* they are phase-accurate or whether they happen to be excellent and are *also* phase-accurate. And, of course, we still have speakers that both test and sound excellent while paying no attention to phase linearity whatever.

Time-delay Devices

It is certainly no secret that reproduced sound lacks much of the ambience, the sense of "acoustic space," of live performances. It was recognition of this fact that ushered in an era of experimentation with stereophonic (from the Greek, meaning literally "solid sound") techniques which continues today. There are two basic approaches to the problem. The first is to attempt to re-create, more or less literally, the sound-space in which the original event took place by using stereo, binaural, and quadrasonic recording techniques. The second is to attempt to generate, by various means, some sort of *plausible* sound-space. Into this second category fall the electronic time-delay and reverberation devices and the various quadrasonic-ambience synthesizers that work with the "difference signals" that are embodied in almost all stereo recordings. The difference signal contains random phase information that, when fed to the rear channel(s), can help provide a hall-sound illusion. More complicated synthesizers (usually part of a quadrasonic decoder) manipulate the difference signal electronically, sometimes with quite spectacular pseudo-quad results.

Since sound travels in air at a rate of about 1.1 feet in a thousandth of a second (or 1,100 feet per second), an average living room will provide mostly "early" reflections of the reproduced program. While the more delayed reflections of the recording-location hall may in fact be recorded along with the music, just playing them back through

the front stereo speakers does little to re-create the acoustic presence of the hall. Using a pair of rear speakers (with or without some sort of synthesizer or decoder) helps, but it is still less than convincing because of the short time delays encountered in a typical-size listening room.

The best type of device available for overcoming this problem is the electronic time-delay unit. When properly used, it can have the effect of "pushing back the walls" of the listening environment. And it isn't simply that the music is heard as though it were in a larger room; the musical performance sounds more like it is taking place *within* the room rather than being somehow inappropriately overlaid on the room's acoustics.

At this time, there are three manufacturers with commercially available audiophile time-delay units: Audio Pulse, Bozak, and Sound Concepts. There are several other hi-fi companies with units already designed waiting in the wings, cautiously trying to estimate the potential market for the product before they commit themselves. And, of course, there are numerous non-audiophile reverberation devices designed for recording-studio use.

The time-delay units presently available operate either on the "digital" or "bucket-brigade" principle. A digital unit, such as the Audio Pulse Model One, converts the audio signal into a pulse train which carries all the audio information in binary digital form. Simply explained, this encoded form of the audio signal is moved successively from one electronic storage cell (called a "shift register") to another, virtually without deterioration. The delay depends simply on the number of shift registers the encoded signal is "loaded" into and out of. The Sound Concepts units use a "bucket-brigade" circuit that passes a given signal step-by-step through the circuits, achieving cumulative delays of 5 to 100 milliseconds. It samples, delays, and reassembles the audio signal itself instead of first converting it to digital form and then decoding it.

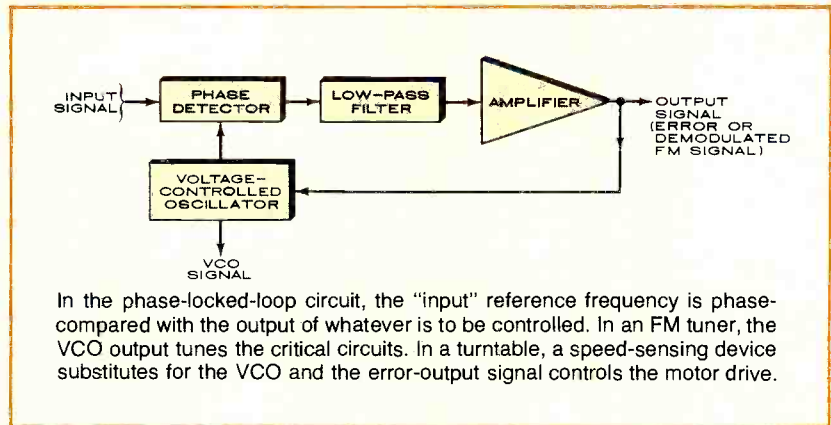
All these devices employ psychoacoustic principles "unnaturally" in the interest of more realistic reproduction. Since we know to some degree what produces the subjective sensations of acoustic space, we can "pretreat" the program material in such a way that the ear-brain system has difficulty differentiating between the illusion of acoustic space and its reality. Though it is possible at times to fool the ear and brain into thinking that a reproduced sound is the "original," the illusion remains rare and difficult to achieve.

Crystal Control

Even the seemingly simple and unglamorous task of making a record rotate at a precise and unwavering speed has received a lot of engineering attention, leading to the most recent development in turntable drives: the quartz-crystal-controlled, phase-locked-loop servomotor. Its basic element, the servomotor, is not new. Servo techniques have been used in industrial and military applications for decades. And their governing principle, negative feedback, has likewise been used in amplifiers for decades.

Conceptually, the idea is simple. The turntable platter is driven by an electric motor whose speed can be made to vary by changing either the voltage or the frequency supplied to it. The motor's basic speed is determined in a rough way by appropriate design. Then a means of sensing the motor's (or the platter's) speed of rotation is added. A wide variety of sensing techniques is employed—everything from magnetic pulses recorded on a stripe on the underside of the platter to Hall-effect elements—semiconductor devices that

control a voltage in response to a magnetic field. The output of whatever kind of sensor is used is an electrical signal (proportional to the turntable speed) that can be compared with a reference voltage or frequency. The reference is needed to peg the turntable's speed to some fixed value. The result of this comparison is an *error signal* which, by definition and design, will be zero when the turntable's speed is exactly correct.



The error signal is then used to change the motor's speed appropriately when it drifts, bringing it back to the correct value.

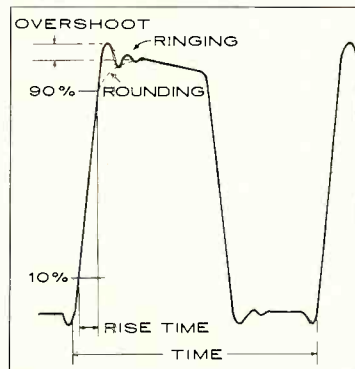
Two things determine how well such a feedback system will work. The first is obviously the accuracy of the reference, and the second is the speed and precision with which the correction process can function. If, for example, the platter's mass is too large and the

THE NEW DISTORTIONS: TIM, SID, ETC.

SPECIFICATIONS having to do with the "speed" of audio circuitry have recently caught the attention of some audiophiles, who believe that "transient intermodulation distortion" (TIM) and "slew-induced distortion" (SID) result from certain inadequacies in the response time of audio circuits.

One might assume that all circuits respond instantaneously to input signals, but this is not so. Each circuit has its own rate of response, which can be judged by its "rise time." Suppose we feed an instantaneous pulse into a circuit and observe the circuit's response at its output. The time that elapses between the point at which the circuit has reached 10 per cent of its final output level and the point at which 90 per cent of output is reached is referred to as the *rise time* of the circuit. Rise times for amplifiers are typically on the order of microseconds, which means that it takes several microseconds for the output level to go from 10 to 90 per cent of its final value.

The slew rate of a circuit is a measure of the maximum rate of change of voltage with time that it is capable of. Consider the instantaneous pulse again. Theoretically, the rate of change of the voltage at the



leading edge of the pulse is infinite, but if we put such an ideal pulse through any real amplifier (or other device) we will be able to observe a finite rate of change of voltage with time—a lag, in other words—at the leading edge of the waveform. Slew rates, expressed in volts per microsecond, vary over a wide range; values from about 10 up to 50 volts per microsecond can be found in audio preamplifiers and rates above 50 V/ μ sec in a few power amplifiers.

Certain types of distortion relate directly to the limitations on a circuit's rate of response. Transient intermodulation distortion is one such

phenomenon; it may occur in feedback amplifiers (which is to say virtually any high-quality audio amplifier). In negative-feedback amplifiers, the input signal is passed through the gain stage and part of it is then routed back to the input of the device (by the "feedback loop") and added, out of phase, to the input signal. The resulting signal passes through the amplifier "corrected" for any nonlinearities the gain stage introduces.

This works well with steady-state sine-wave inputs, but what about such rapidly varying inputs as musical waveforms? When the input signals change very rapidly, problems can arise if the returning feedback signal undergoes any delay; the result is TIM. Distortion can also result from the inability of an amplifier to slew fast enough. Imagine an amplifier called upon to handle signals at the high end of its rated power bandwidth. As the amplitude at which it is called upon to produce these signals is increased, it will be driven into distortion as its slew rate is exceeded, and this is slew-rate limiting or slew-induced distortion.

The degree to which TIM and SID are audibly important factors in today's amplifier designs is still being vigorously debated.

"BREAKTHROUGHS"

"... we can confidently say that the best is yet to come."

motor's power too low, the correction will be slow no matter how fast the circuitry does its job, and the turntable speed will wander accordingly.

A circuit called the phase-locked loop (PLL), developed in the early 1930's, is a refined all-electronic form of this servo scheme. Distressingly unwieldy when it had to function with tubes, it was still cumbersome with transistors until about 1970, when the first integrated-circuit PLL was introduced. Now it's popping up all over the place—stereo and quad decoders, FM tuners, even telephones.

Because the PLL works with the relative *phases* of the reference and the sensor signals (that is, their time relationship over much less than a full cycle of the signals), it can serve as a particularly rapid and sensitive controller for a servo system.

But what about the reference? The more accurate and stable it is, the more perfect will be the turntable's rotation. A quartz crystal, properly ground, polished, and mounted, has a natural resonance (when it is electrically excited) that is very sharp and precise. But speed accuracy (how close it is to 33 $\frac{1}{3}$ rpm or 45 rpm) is really less important than freedom from the short-term variations called wow and flutter. If you measure carefully enough, you can discover not only that setting the tone arm down on the record slows the turntable slightly (because of the record/stylus friction), but that the exact degree of slowing is influenced by the intensity of the modulation in the record groove! One manufacturer of a quartz-crystal turntable is able to show a speed variation of well under 0.001 per cent when the tone arm plays heavily modulated grooves, as compared with ten to twenty times that amount with less sophisticated servo systems. Very impressive, but whether this sort of precision is really necessary is ultimately up to the ears (and budget) of the potential purchaser.

THE accuracy with which you tune the front end of your FM tuner determines to a great degree how much noise and distortion will be added by the tuner to the received FM signal. And when a test report refers to "tun-

ing ease," what is meant is *not* how smoothly the tuning knob turns, but rather how precisely and easily the chosen station can be tuned in with a minimum of fiddling to secure lowest distortion.

For decades, when the utmost in frequency precision has been required, tuned circuits have been controlled by quartz crystals. Such crystals, when carefully made and temperature-compensated, can provide frequency accuracy to 0.0001 per cent (these are the same crystals that are finding their way into turntables). However, in a tuner designed to receive all the stations on the FM band, it is obviously not practical to provide a crystal for each tuned frequency—hence the frequency-*synthesizing* tuner. With a single quartz crystal and a combination of frequency multipliers and dividers, all the required FM tuning frequencies can be generated, each having the accuracy and stability of a quartz crystal.

FET's (MOS- and V-)

The FET (field-effect transistor) is by now pretty well known. It is often described as a semiconductor device that combines the best features of vacuum tubes and ordinary transistors without any of their disadvantages. This is an oversimplification, but it's not wrong. FET's proved to be especially advanta-



One power FET can replace as many as four or five conventional output transistors. The photo indicates their quite substantial size.

geous in the input stages of FM tuners, where their lower sensitivity to overload made them less prone to *cross-modulation* of FM-station signals than bipolar transistors. (Crossmodulation occurs when the tuner is overloaded by strong stations which then appear haphazardly at several frequencies on the tuning dial.)

A further evolution of the FET is the MOSFET, or metal-oxide-semiconductor field-effect transistor. These de-

vices have an extremely high input impedance which greatly increases the effectiveness of the tuning circuits in the front end of tuners. They also appear in *dual-gate* versions that have two mutually isolated control elements. This especially versatile configuration has become common in the better FM-tuner front ends, for it allows the signal and a control bias (for automatic gain control, for example) to be applied simultaneously to the transistor without the drawbacks that would result from their interaction. MOSFET's have also become common in audio control circuits, where they are used as voltage-controlled attenuators—in effect, volume controls or switches that can be adjusted by the application of a control voltage.

Another novel type of FET is the so-called "V-FET," or power FET. Conventional FET's have current limitations which make them unacceptable for use in power amplifiers; the V-FET is capable of large enough outputs for this purpose—in fact, one V-FET can replace as many as four or five conventional power transistors. Power FET's are now being manufactured by Sony, Hitachi, and Yamaha. Hitachi has even announced a power MOSFET which it will incorporate into at least one of its 1978 integrated amplifiers.

CONSIDERING the history of the audio industry, it seems likely that today's innovative state-of-the-art component may become merely another good run-of-the-mill product tomorrow. But it is important to realize that this does not mean that the innovation originally lacked merit. On the contrary, it had so *much* merit that competing manufacturers rushed to build it into their own equipment, thereby reducing the unique to the ordinary. Which should, of course, be cause for rejoicing rather than regret, for it means that everyone involved in the pleasures of hi-fi benefits. The newcomer with his low-cost system sooner or later inherits the advanced innovative engineering originally supported by the interest and dollars of perfectionist audiophiles. Altogether, a very satisfactory arrangement.

As for tomorrow, a few innovations—Hall-effect tape heads, pure-metal tape coatings, digital recording (and other) techniques—are already peeping over the horizon. We have not dealt with them here because they are not yet generally available to the consumer. Their introductions cannot be far off, however, and if they live up to their advance notices, then we can confidently say that the best is yet to come. □

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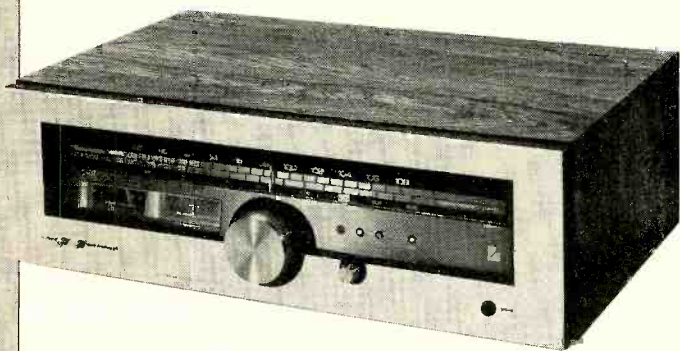
These superb components combined performance, styling and precision in a manner new to the U.S. audiophile. They prompted one audio publication to state: "Almost overnight, the name 'LUX Audio' has earned itself a place of

respect in the hi-fi marketplace."

That was fine. Not so fine, however, was our resulting reputation for being very expensive. Thus, many audiophiles were deprived of enjoying LUX quality and performance simply because they were unaware of our less expensive products.

We're now rectifying that. The units shown below are representative of our more moderately priced components. The differences between them and our top models are more a matter of power or flexibility than any variation in quality. You'll see that even our lowest priced units have specifications any manufacturer of fine components would be proud of.

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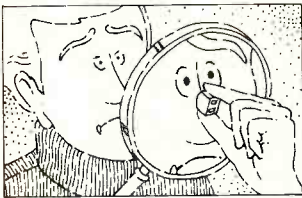
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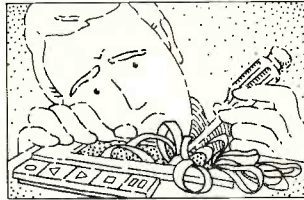
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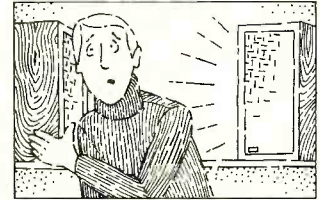
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Orlando Paladino:
A Dream Cast for a
Haydn Opera Buffa of
Mozartean Freshness

ORLANDO PALADINO was Haydn's one real operatic success in his own lifetime, and it is probably his best theater score. It has been neglected for a long time, however, even compared to some of the lesser Haydn operas that have been printed and revived in recent years, perhaps because, great masterpiece of the musical stage though it is, the opera also turns out to be outrageously unstageworthy.

Orlando was written for a projected visit of Russian nobility to the Esterházy estate in Hungary where Haydn was employed (for thirty-odd years) as Kapellmeister, and it was clearly intended as entertainment of an important sort. The libretto, based more or less on Ariosto's great Italian Renaissance poem *Orlando Furioso* (*The Madness of Roland*), is labeled "*dramma eroïco-comico*"—an extraordinary designation that reminds us of the tragicomedies of Shakespeare or, more to the point, the *dramma giocoso* of Da Ponte and Mozart. Indeed, we find many extraordinary features in *Orlando* that remind us of *Don Giovanni*: Pasquale, Orlando's stuttering squire, sings a number that is astonishingly like Leporello's catalog aria; elsewhere, in a state of abject terror, he is required by his master to address a supernatural being—just like Leporello. There are a supernatural statue, a charming peas-

Title page of the third edition of Ludouico Ariosto's Orlando Furioso, published in Milan in 1524.

ARTUR RUBINSTEIN: *looking pleased with himself—as well he might.*

ant girl of the Zerlina type, and a Donna Anna character who is eagerly chased by our anti-hero (she prefers her sappy tenor boy friend instead). These characters spend their time looking for and running away from the mad Orlando, but in the end it takes supernatural forces to tame the outcast.

In this single opera Haydn seems to have demonstrated a truly Mozartean skill at composing extended scenes as well as delineating a human-comedy array of characters and types—a pair each of major soprano, tenor, and baritone roles plus a mezzo-soprano sorceress and a one-aria bass part. All very Mozartean. It takes nothing away from *Don Giovanni* to speculate that its authors must have been familiar with the earlier work. It was hardly unknown, for it had some twenty performances at Esterháza and major performances, mostly in German, in twenty major Central European cities. Librettos were printed and widely circulated and manuscript versions must have been around. The work was published only in 1972, however, and this is indubitably its first recording. What took so long? The obvious diagnosis is that dread affliction of the musical theater, terminal pain-in-the-libretto. Nunziata Porta's "*dramma eroico-comico*" is, Ariosto or no, a hopeless farrago of burlesque scenes utterly innocent of any dramatic qualities. It is redeemed by only one thing: Haydn's music. But this is, without a doubt, a genuine musical redemption. Porta's librettistical hodgepodge brought out qualities in Haydn that much better texts did not: a warmth and even passion which, combined with real musical scope, produced a score that has truly epic and dramatic qualities, even in the midst of the slapstick heroics. The ravings of Orlando, the baritone posturing of the terrible King of Barbary, the faint-hearted tremblings and lyrical outbursts of the lovers, the pastoral lyrics of the shepherdess, the magic music of the sorceress, the swagger and pathos of Pasquale—all are depicted musically on a level that only Mozart ever reached consistently. My favorite is Orlando's third-act aria after he is given to drink from the River of Forgetfulness (in order to cure his madness). *Eroico-comico* here achieves an epic level.

This is a dream cast, vivacious, musical, vocally beguiling and fresh-sounding, perfectly Haydnesque. Perhaps George Shirley in the title role makes the deepest impression; his sing-

ing is rough and penetrating at the start, but in the end it is also simple and suggestive of profounder qualities in a role that might otherwise seem merely silly or "stylish." None of the other parts offer this kind of opportunity, but the two buffo baritones are vocally amusing and musically excellent. Claes H. Ahnsjö (everybody's favorite classical tenor), Gwendolyn Killebrew (the only dark, serious voice in the cast), and two delicious sopranos named Arleen Auger and Elly Ameling (!) all sing with unending and exquisite lyricism. The Lausanne Chamber Orchestra sounds like a first-class classical ensemble given the benefits of first-class direction and recording. The *buffa* spirit is perfectly captured—more so, perhaps, than it ever could be in the theater. Here, in our opera without walls, in our theater of the mind's eye, is the freshest, newest, most wonderful eighteenth-century *opera buffa* performed just the way it ought to be.

—Eric Salzman

HAYDN: *Orlando Paladino*. Arleen Auger (soprano), Angelica; Elly Ameling (soprano), Eurilla; Gwendolyn Killebrew (mezzo-soprano), Alcina; George Shirley (tenor), Orlando; Claes H. Ahnsjö (tenor), Medora; Benjamin Luxon (baritone), Rodomante; Domenico Trimarchi (baritone), Pasquale; Maurizio Mazzieri (bass), Caronte; Gabor Carelli (tenor), Licone. Lausanne Chamber Orchestra, Antal Dorati cond. PHILIPS 6707 029 four discs \$35.92.



Wholehearted, Knowing, Altogether Magical Music Making at Ninety-plus

USUALLY, when we speak of "vigorous" in performances recorded by a pianist in his ninetieth year, it is generally understood to mean "very energetic for a man of his years." But the vigor that is so striking on Artur Schnabel's new RCA disc of Beethoven's Sonata in E-flat, Op. 31, No. 3, and Schumann's *Fantasiestücke*, Op. 12, is the sort that would be remarkable from a musician of any age—not headlong and breathless, but charged with subtlety, wit, and profound understanding. This is perhaps best epitomized in the scherzo of the Beethoven sonata, whose easy, good-humored swagger, shot through with the most exquisitely judged dynamic shadings and superb rhythmic control, creates an impression of inspired spontaneity that makes us forget all about Schnabel as performing middleman. The contrasting expansiveness of the preceding allegro and the elegance of the succeeding minuetto are no less fully realized, and the aristocratic vivacity in the marvelous presto finale sets the final seal of conviction on a musical realization that

leaves nothing unsaid—or, one might better say, leaves no miraculous factor of the work *uncelebrated*.

In the *Fantasiestücke*, too, Rubinstein does not hold back on the vigor, but he seems to be telling us that music needn't be viewed as some frighteningly fragile thing wrapped in a gossamer haze for its poetry to be felt. Like the sunlit presentation of the Beethoven, this is wholehearted, knowing, altogether magical music-making. Considerations of vintage aside, this is Rubinstein at his best—which means Beethoven and Schumann at *their* best, too. Since the piano sound itself is absolutely first-rate and the surfaces exemplary, anyone with ears should be hard put to find a reason for denying himself the exceptional pleasure this disc affords. —Richard Freed

BEETHOVEN: Piano Sonata No. 18, in E-flat Major, Op. 31, No. 3. SCHUMANN: Fantasiestücke, Op. 12. Artur Rubinstein (piano). RCA ARL1-2397 \$7.98, © ARS1-2397 \$7.98, © ARK1-2397 \$7.98.

lier B-flat Concerto is scaled down to Mozartean proportions and an appropriately sparkling transparency. The glory of the C Minor is its noble slow movement, and this gets its full due under Brendel's fingers. His handling of the finale is surprisingly restrained in the early pages but develops in properly cumulative fashion as it proceeds.

In the opening of the G Major Concerto, Brendel attempts—with considerable success—to achieve a compromise between the Classic and the Romantic view of the music. Again, it is the great dialogue slow movement that comes off most movingly. In the first movement, Brendel, like Emil Gilels, uses Beethoven's second, lesser-known cadenza.

In the *Emperor*, Brendel finds a most effective middle way between proto-Lisztian display and Classical discipline. It is a pleasure to hear the sometimes galumphing finale go with such flow and nuance.

The Choral Fantasy, that strange work anticipatory of the Ninth Symphony finale, comes off delectably here

as the *jeu d'esprit* it seems to have been intended to be. Brendel swarms up and down the keyboard as if he were Beethoven himself improvising (which is what happened at the work's 1808 premiere), and the choir acquits itself well in Christoph Kuffner's text in praise of music and the human spirit.

Haitink and the London Philharmonic provide sterling orchestral partnership for Brendel's pianism. As to recording quality, things fare best in the first two concertos, less well in the last two. The recording of the C Minor seemed to my ear to be troubled by muzzy bass in the first-movement piano-orchestra climaxes—a problem, I suspect, stemming mainly from the reverberation characteristic of the recording locale. —David Hall

BEETHOVEN: Piano Concertos Nos. 1-5; Choral Fantasy, Op. 80. Alfred Brendel (piano); London Philharmonic Choir; London Philharmonic Orchestra, Bernard Haitink cond. PHILIPS 6767 002 five discs \$44.90, © 7699 061 three cassettes \$26.94.

(Continued overleaf)

Alfred Brendel's Beethoven Has Character Without Idiosyncrasy

As he did for his performances of the Beethoven piano sonatas, Alfred Brendel brings to his new Philips recording of the five piano concertos (and the piano part of the Choral Fantasy) a combination of *élan*, intelligence, wit, and tenderness that makes the end result altogether stimulating to the mind and nourishing to the soul. These interpretations have real character without idiosyncrasy.

In the C Major Concerto, the opening movement goes with irresistible flair and *brio*, reaching a high point in Brendel's terrific solo sweep down the keyboard into the recapitulation. In contrast, the slow movement emerges as the acme of poised Classicism, and it is followed by a finale that, while filled with rhythmic tension, never becomes uncomfortably taut.

That sort of comment applies in general to all the concertos here. The ear-

ALFRED BRENDEL: stimulating to the mind and nourishing to the soul.



Ron Carter Quartet: Have We Found The Modern Jazz Quartet's Successor?

ALTHOUGH it turned out, in the end, to be an above-average example of the genre, I must confess that I listened to Ron Carter's last album for CTI with great apprehension: he had been transferred to the company's pop-oriented Kudu label, and he was treading—albeit delicately—on disco territory ("Anything Goes," Kudu 25). Then came the move to Milestone and an album called "Pastels" (Milestone M-9073) which featured Carter playing superbly against Don Sebesky's slightly-above-Muzak string arrangements, a throwback to earlier CTI sessions. Both of these were of *some* jazz interest, even though they did pander to broader tastes, but neither can begin to approach the Ron Carter Quartet's new "Piccolo," an album that embodies all the qualities that make jazz an enduring, vital art form.

Ron Carter, who will be forty this spring, started—as his playing gives evidence—on the cello and received extensive classical training before entering the jazz arena. He played with Chico Hamilton, Cannonball Adderley, Jaki Byard, Eric Dolphy, and Miles Davis in the Sixties and has appeared on more than four hundred recordings

over the past ten years. The present quartet is about two years old and quite unlike any group jazz has spawned: the two basses—Carter on a piccolo bass and fellow Miles Davis alumnus Buster Williams in delicate rapport on the larger, regular acoustic kind—give it its unique sound. Carter makes much use of the bow, and he and Williams, never less than superb, are at their best when they are playing countermelodies. Superb is also the word for the work of pianist Kenny Barron and drummer Ben Riley.

"Piccolo" was recorded at Sweet Basil, a New York club, during two nights last March, and engineer Jim Stern deserves a bow for capturing this fine quartet so well. The program ranges from the 1930 Tin Pan Alley hit *Three Little Words* to Thelonious Monk's *Blue Monk*, Oscar Pettiford's *Laverne Walk*, and Carter originals. Most endearing of the last are *Saguaro* and *Tambien Conocido Como*, reflecting Carter's previously demonstrated love of Spanish music. The sophistication, swing, and high-caliber musicianship offered by the late, lamented Modern Jazz Quartet are to be found in the Ron Carter group, and a commensurate popularity will surely follow.

—Chris Albertson

RON CARTER QUARTET: *Piccolo*. Ron Carter (piccolo bass); Kenny Barron (piano); Buster Williams (bass); Ben Riley (drums). *Saguaro*; *Blue Monk*; *Laverne Walk*; *Three Little Words*; *Little Waltz*; *Tambien Conocido Como*; *Sun Shower*.

MILESTONE M-55004 two discs \$8.98, © 8161-55004 (Z) \$9.95, © 5161-55004 (Z) \$9.95.

Townshend/Lane: A Collaboration Alive, Friendly, And Inventive

PETE TOWNSHEND, the once and future Godfather of Punk, and Ronnie Lane, who was smart enough not to have gotten involved in the recent Small Faces comeback bid, have come up with a fascinating and altogether lovely collaborative album for MCA. The word "collaborative" is a bit misleading, however, for in "Rough Mix" the British veterans sing together on only two tunes. Although Townshend and Lane are linked by friendship and a common devotion to the teachings of Meher Baba (the Silent Cal of the spiritual set), their musical approaches are strikingly different. Think of this effort, then, as two halves of two unfinished solo albums.

Lane's music is only marginally rock-and-roll. He is intent on exploring and expanding the possibilities of the English folk tradition, and his songs

PETE TOWNSHEND AND RONNIE LANE: *grab 'em!*



MCA Records

MERLE HAGGARD: *putting us on again?*



Capital Records



RON CARTER QUARTET:
left to right, Carter,
Kenney Barron, Buster
Williams, and Ben Riley

here—particularly *Annie* and *Nowhere to Run*—despite their seeming primitivism, have the same kind of purposefully haunting, almost elegiac mood that Rod Stewart's work exhibited before he started working with American musicians and hanging out with movie stars. It is decidedly uncommercial stuff all the same, and Townshend is to be commended for giving it the kind of exposure his name ensures.

Townshend is to be commended as well for his own contributions to the album. His new songs may not be as epochal as anything he's done with the Who (or even the best things on his earlier solo effort, "Who Came First"), but they are worthwhile on several levels, not least of which is their indication that Pete has finally come to terms with (a) middle age and (b) his nervousness about the territorial encroachment of the Sex Pistols' Johnny Rotten. *Misunderstood*, for example, finds the Old Punk concerned with his status in the neighborhood, vowing to be feared and to make people cry when he puts them down—which is sort of refreshing coming from rock's premier Mr. Nice Guy. More important, the music here is so ingeniously put together and filled with such fresh energy (my nomination for the Addictive Rock Riff of the Year Award: *My Baby Gives It Away*) that Peter can go one-on-one in a Battle of the Bands with the Jam any day.

"Rough Mix" is by no means perfect—the title tune is a throwaway blues work-out, and *Street in the City*, the orchestrated centerpiece of the record, is

an uncomfortably sentimental slice of Moody Blues-style kitsch—but in its best moments it is so alive, so friendly, so inventive, that the lapses hardly matter. In short, it's a gem, and you should grab it immediately, no matter which side of the New Wave you're on.

— Steve Simels

PETE TOWNSHEND/RONNIE LANE: *Rough Mix*. Pete Townshend and Ronnie Lane (vocals and instrumentals); Eric Clapton (guitars and dobro); Henry Spinetti (drums); other musicians. *My Baby Gives It Away*; *Nowhere to Run*; *Rough Mix*; *Annie*; *Keep Me Turning*; *Catmelody*; *Misunderstood*; *April Fool*; *Street in the City*; *Heart to Hang On To*; *Till the Rivers All Run Dry*. MCA-2295 \$6.98, © MCAT-2295 \$7.98, MCAC-2295 \$7.98.

Haggard the Populist: Another Win for Up-to-snuff Style And Personality

MERLE HAGGARD must be one of our more talented populists. He's been paid handsomely for it, and that, theoretically, is supposed to undermine populism. In fact, until about two albums ago I'd begun to wonder whether

booze and high living weren't getting to him, but he must still remember pretty precisely how it felt to be an ordinary working man or something, for the title song here is a bona fide piece of populism. He wrote four of the others too and didn't goof too badly at picking out the rest, and, yes, one of his new ones will raise eyebrows: *I'm a White Boy*, it's called. It's one of those that, well, could be taken two different ways. Haggard has the ability to seem to mean it, and yet he seems to be putting us on at the same time (of course you remember his *Okie from Muskogee*). There's a touch of that in this one, although what it mostly seems to be is a typically populist reminder, if we need one, that poverty is color-blind. Anyway, there's personality and style in what he does, when he's up to snuff as he is in this album. His band, the Strangers, is one of the better country bands. It's super here in the title song, and no slouch in any of the others, and the production is of that good, neutral kind that you can't hear. Artistically, it's the second winner in a row for Hag.

—Noel Coppage

MERLE HAGGARD: *A Working Man Can't Get Nowhere Today*. Merle Haggard (vocals, fiddle); the Strangers (instrumentals). *A Working Man Can't Get Nowhere Today*; *Making Believe*; *Blues Stay Away from Me*; *Got a Letter from My Kid Today*; *When My Last Song Is Sung*; *Moanin' the Blues*; *Goodbye Lefty*; *Blues for Dixie*; *Running Kind*; *I'm a White Boy*. CAPITOL ST 11693 \$6.98, © 8XT-11693 \$7.98, © 4XT-11693 \$7.98. □



CLASSICAL DISCS AND TAPES

Reviewed by RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH
STODDARD LINCOLN • ERIC SALZMAN

J. S. BACH: *Violin Concerto in E Major (BWV 1042); Violin Concerto in A Minor (BWV 1041); Concerto for Two Violins in D Minor (BWV 1043); Air from Suite No. 3, in D Major (BWV 1068).* Henryk Szeryng (violin); Maurice Hasson (violin in BWV 1043); Academy of St. Martin-in-the-Fields, Neville Marriner cond. PHILIPS 9500 226 \$8.98, © 7300 537 \$8.98.

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

This is a typical good twentieth-century performance: the works are neatly and accurately executed, the tempos are steady, and the dynamics are well worked out. Bach's music, so strong that it will tolerate almost any stylistic approach, comes off very well. However, no performance practices from the past are reflected here, nor is any individuality or personal artistry brought to the music. It is, pure and simple, a modern, objective rendering of the notes. There is more to the music than this. S.L.

BEETHOVEN: *Irish, Scottish, and Welsh Folksongs. Sweet Power of Song; Love Without Hope; Glencoe; O Let the Night My Blushes Hide; Farewell Bliss, and Farewell Nancy; Sion, the Son of Evan; The Sweetest Lad Was Jamie; The Return to Ulster; the Shepherd's Song; Auld Lang Syne.* Ac-

cademia Monteverdiana, Dennis Stevens cond. VANGUARD SVR 365 SD \$8.98.

Performance: **Sophisticated**
Recording: **Excellent**

BEETHOVEN: *Folksong Settings. God Save the King; Sir Johnie Cope; My Harry Was a Gallant Gay; A Health to the Brave; By the Side of the Shannon; O Sanctissima; The Miller of Dee; The Soldier; Since All Thy Vows; La Biondina in Gondoletta; Charlie Is My Darling; I Am Bowed Down with Years.* Accademia Monteverdiana, Dennis Stevens cond. NONESUCH H-71340 \$3.96.

Performance: **Expressionless**
Recording: **Unbalanced**

Considering that Beethoven arranged these folk melodies for voices and piano trio with no knowledge of the texts, it is a miracle that the final product is as good as it is. The melodies are, for the most part, strongly British, while the accompaniments are strongly Beethoven. Sometimes the marriage works, but sometimes there seems to be grounds for divorce or at least separation.

Although both of these records were made by the Accademia Monteverdiana and employ the same personnel, the results are unaccountably vastly different. The Nonesuch disc embodies a parlor performance in the worst sense of the word. It is polite and expressionless, and the music seems to have no meaning to the singers. Despite the fact that the singers overpower the trio accompaniment, the words are hard to understand. The Vanguard disc, on the other hand, contains a better selection of music and the performance is great fun; the singers seem to be into the texts, which come out clearly. The recorded sound is bright, and the balance between instruments and voices is excellent. S.L.

BEETHOVEN: *Piano Concertos Nos. 1-5; Choral Fantasia, Op. 80* (see Best of the Month, page 81)

BEETHOVEN: *Piano Sonata No. 18, in E-flat Major, Op. 31, No. 3* (see Best of the Month, page 80)

RECORDING OF SPECIAL MERIT

BRITTEN: *Saint Nicholas, Op. 42.* Robert Tear (tenor); Bruce Russell (treble); Andrew Davis, Ian Hare (pianos); Cambridge Girls' Choir; King's College Choir, Cambridge; Academy of St. Martin-in-the-Fields, David Willcocks cond. SERAPHIM S-60296 \$4.98.

Performance: **Rewarding**
Recording: **Excellent**

Benjamin Britten's *St. Nicholas*, which had its première at the first Aldeburgh Festival in England back in June 1948, is certainly not the Santa Claus of Christmas cards and department-store displays. The patron saint of sailors, children, and pawnbrokers is depicted in this cantata as the friend of widows and orphans who brings back to life three pickled boys about to be eaten at a banquet, ransoms the daughters of a needy father from a life of prostitution, and saves the sailors on a ship bound for Palestine from drowning in a storm, all through the power of prayer. These completely unauthenticated but convincing legends about the saint's works, as well as the story of his humble birth, rise to eminence in the church, and martyr's death, are most skillfully woven into Eric Crozier's text, and Britten's score, with its pulse-quickening waltz tune sung by the children to celebrate the birth of Nicholas, its exalted hymns, rich choral passages, and dazzling orchestral tapestry, is good to have back on records. There was an excellent mono version on London for some years, recorded at the Aldeburgh Festival of 1955 with Peter Pears and David Hemmings as the soloists and the composer conducting several children's choirs and a festival orchestra, but the Seraphim stereo treatment is musically every bit as rewarding and technically far more advanced. *Saint Nicholas* is not a merry work, but it is a very moving one. P.K.

RECORDING OF SPECIAL MERIT

CIMAROSA: *Il Matrimonio Segreto.* Dietrich Fischer-Dieskau (baritone), Geronimo; Julia Varady (soprano), Lisetta; Arleen Auger (so-

Explanation of symbols:

- Ⓡ = reel-to-reel stereo tape
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Monophonic recordings are indicated by the symbol Ⓜ

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

prano), Carolina; Julia Hamari (mezzo-soprano), Fidalma; Alberto Rinaldi (baritone), Count Robinson; Ryland Davies (tenor), Paolino. English Chamber Orchestra, Daniel Barenboim cond. DEUTSCHE GRAMMOPHON 2709 069 three discs \$26.94.

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

Domenico Cimarosa (1749-1801) was only a few years older than Mozart, but he was far more famous in his lifetime: a musician who held honored positions at the courts of Naples and St. Petersburg. In 1792, when Antonio Salieri briefly fell out of favor with the Viennese Imperial Court, Cimarosa was his temporary replacement. (Mozart, who had died only a few months before, was never in the running.) It was, in fact, in Vienna that *Il Matrimonio Segreto* was introduced, with enormous success. To this day it has proved to be the most durable of Cimarosa's sixty-odd operas.

Il Matrimonio Segreto is no stranger to records. The version on Everest 422/3, which is still in the catalog, dates back to a Cetra original of around 1950, decently sung but sonically outdated, and the now deleted Angel 3549 offered a fine cast of young singers who appeared in Piccola Scala's 1955 revival: Graziella Sciutti, Eugenia Ratti, Luigi Alva, Franco Calabrese—all subsequently headed for distinguished careers. Deutsche Grammophon's new recording is the first in stereo; its cast is of comparable excellence, and it seems to be complete—which the Angel set was not.

It is safe to say that *opera buffa* reached an apex in Cimarosa's *Il Matrimonio Segreto* before Rossini (who was born in 1792) swept everything before him with his *Il Barbiere di Siviglia*. Cimarosa possessed a fine gift for melody and a flair for concerted ensemble finales that rivaled Mozart's, and he knew how to provide witty and stimulating orchestral support without its getting in the way of the singers. In this opera, he also had the benefit of an excellent libretto by Giovanni Bertati (whose *Don Giovanni* text had been liberally borrowed from by the resourceful Lorenzo da Ponte).

A prosperous merchant named Geronimo has two daughters. Carolina, the younger, is secretly married to Paolino, an employee of her father. Lisetta, the older, is intended to marry a titled gentleman, Count Robinson. Carolina and Paolino hope that once Lisetta's marriage is arranged, Geronimo will be in a benign enough mood to accept their marriage too. Count Robinson arrives and instantly falls for the *wrong* sister—and thereby hangs the opera.

The music sparkles in the best *buffa* fashion, but Cimarosa also wrote some exceptionally tender scenes for Carolina and Paolino. Balancing these romantic elements with the traditional *buffa* ingredients is a delicate task Daniel Barenboim brings off only partially: he provides vigor and momentum for the comic scenes, but he does not unbend sufficiently to capture all the lyricism in the music. Still, he gets exceptionally neat ensemble work from his singers and draws an exquisite tone from his orchestra.

The singing is on a high level, and only the recitatives make me wish for a more authentic Italian sound. Julia Varady as the haughty Lisetta offers the most successful characterization with her Donna Elvira-like music. Arleen Auger's vocal skill is no less impressive, but

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Angel

she does not make all the interpretive points in the charming aria "Io meschina vo alla buona." Julia Hamari's "problem" is different: her tone is too sexily appealing to suggest the *buffa* character of the aging Fidalma.

The men are also good, if not ideal. Ryland Davies sings stylishly, with clean articulation in the florid passages, but his light tone tends to lose steadiness under pressure. Rinaldi handles the predicament of Robinson with skill and intelligence, though not with the tonal smoothness Franco Calabrese imparted to the role in the old Angel set. Least convincing is Dietrich Fischer-Dieskau. He does get into the spirit of his comic part, but his vocal gestures are overdone and artificial-sounding.

However, a performance in which Dietrich Fischer-Dieskau is the least effective cast member must have a lot going for it. This one surely does, and it is engineered and annotated to perfection. *G.J.*

DVOŘÁK: Serenade for Strings in E Major, Op. 22 (see VAUGHAN WILLIAMS)

GLAZOUNOV: Symphony No. 5, in B-flat Major, Op. 55; From the Middle Ages, Suite, Op. 79. Moscow Radio and Television Symphony Orchestra, Vladimir Fedoseyev cond. COLUMBIA/MELODIYA M 34522 \$6.98.

Performance: **Sumptuous**
Recording: **Excellent**

Alexander Glazounov, who was Rimsky-Korsakov's pupil and a sworn enemy of dissonance (he walked out on the 1916 première of Prokofiev's *Scythian Suite*), had written four symphonies by the time he was thirty. Like his symphonic poems, his suites, and his ballet scores, the symphonies abound in melody and ingratiating orchestrations, but they convey little of substance and go nowhere. His Symphony No. 5, a boisterous work with hard-breathing climaxes, attractive tunes that never flower, and a never-ending finale full of rhetoric and stomping rhythms, plumbs no depths either, even though it's referred to in the Soviet Union as "Glazounov's *Eroica*" because it sounds so big and expansive and ambitiously constructed. The fact is, it's not easy to tell one of this composer's nine symphonies (he never finished the ninth) from any of the others, though each makes a pleasant commotion while it is going on. At the moment, this is the only recording of any of them listed in Schwann.

From the Middle Ages is a work of more charm, if not more substance. Its finale is intended to suggest, as annotator Phillip Ramey puts it here, "trumpets summoning the troops . . . a procession of priests chanting and blessing the soldiers, their march blending with the priestly intonation, ending in a climax of popular enthusiasm as the priests' chants gradually die away." I mean, if you care for that sort of thing. . . . *P.K.*

HAYDN: Orlando Paladino (see *Best of the Month*, page 79)

HAYDN: Symphony No. 88, in G Major; Symphony No. 99, in E-flat Major. Concertgebouw Orchestra, Amsterdam, Colin Davis cond. PHILIPS 9500 138 \$8.98. © 7300 534 \$8.98.

Performance: **Neat**
Recording: **First-class**

Neither of these Haydn masterworks has lacked for distinguished recorded perform-

ance over the years, Bernstein's and Reiner's of No. 88 and Szell's and Bernstein's of No. 99 being my preferences among those available singly. But the combination of super-fine ensemble work from the great Dutch orchestra, a perfect blend of masculinity and refinement in Davis' conducting, and a beautiful recording job by Philips puts this new issue right up in the same class. Any choice will probably depend on matters of stylistic taste, preference in recorded sound, and pairings. *D.H.*

RECORDING OF SPECIAL MERIT

HAYDN: Symphony No. 100, in G Major ("Military"); Symphony No. 103, in E-flat Major ("Drum Roll"). Academy of St. Martin-in-



Glazounov (center) with composer compatriots Lyadov and Rimsky-Korsakov

the-Fields, Neville Marriner cond. PHILIPS 9500 255 \$8.98.

Performance: **Fresh and crisp**
Recording: **Exemplary**

If Philips has it in mind to give us an extensive Haydn symphony cycle from Neville Marriner and his crack body of players, this disc presages a truly outstanding and exciting achievement—even considering the many other distinguished recorded performances that these masterpieces have enjoyed over the years.

While I sense somewhat more drama in the *Military* Symphony than Marriner does, particularly in the introduction, the music as a whole has a wonderful transparency of texture and rhythmic vitality under his baton, and the reading is most enjoyable and stimulating. But it is the *Drum Roll*—my own favorite of the Haydn symphonies—that is the real prize here. There is drama aplenty from start to finish, in the wonderfully somber coloration of the opening pages as well as in the pacing of the slow movement that lends the music an almost Beethovenian inevitability.

Not only are these performances marvels of elegance, *élan*, and precision, but the recording fits them flawlessly, with just the right blend of space and presence throughout. The Philips playing surfaces are exemplary. *D.H.*

(Continued on page 88)

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The Granger Collection

Gagliano's "La Dafne"

ALTHOUGH this record runs just over an hour, it contains all of Marco da Gagliano's 1608 "music-drama" *La Dafne*. The range of emotions traversed in this comparatively short time is remarkable. The work has a conventional poetic-pastoral setting populated by the usual nymphs, shepherds, and classical deities. The mood at the beginning is one of horror occasioned by a frightful monster, but when Apollo slays the monster the mood turns to triumphant joy. The nymphs and shepherds laugh as Venus (Venere) and Cupid (Amore) banter about the power of love, but they are first astonished and then grief-stricken as they watch the love-crazed Apollo (victim of one of Cupid's darts) pursue their own dear Daphne—and turn her into a laurel tree for refusing him.

All of this is presented in monody interspersed with delightful choruses; the magnificent libretto is by Ottavio Rinuccini, who was also the librettist for Monteverdi's more celebrated *L'Orfeo*. Monody can be tiresome, as many a seventeenth-century listener suffering from "tedio del recitativo" would attest. But Gagliano was a master of the style, and his unexpected twists of melody, daring use of harmony, and careful attention to the text are of constant interest. We are also fortunate in having here a cast of excellent singers who understand the style and project the words with clarity and feeling.

Nigel Rogers is one of the outstanding current practitioners of the monodic style. He has a light, agile voice and a gift for word coloration that enables him to portray Apollo's shifting emotions effectively. Perhaps the high point of the opera is his lament "Un guardo, un guardo appena." Rogers' ornamentation of the two stanzas beginning "Non curi la mia pianta" is hair-raising and can hardly be equaled among singers today. Barbara Schlick is also excellent, and her per-

formance of Cupid's little aria "Chi da' lacci d'amor" is an especially fine example of the monodic art. Others deserving special mention are Ian Partridge, for his narration of Daphne's transformation into a tree ("Quando la bella ninfa"), and David Thomas, for his virile description of Apollo's battle with the dragon.

The choral singing is a pleasure to hear, and the dance quality of the homophonic writing is contagious. Moreover, the same clarity is maintained in the few polyphonic passages. I especially recommend the exquisitely decorated trios beginning "Tu non curi" in the final ensemble. Solo ornamentation is one thing, but to hear it so boldly and neatly done in ensemble work is rare indeed.

THE singers are accompanied by a pithy-sounding ensemble of original instruments, which give incredible color and zest to the ritornellos and choruses. The continuo support, alternating between harpsichord and organ, is at once imaginative and discreet, never encumbering the vocal lines. *La Dafne* is a masterpiece to which this performance does full justice. In terms of historical accuracy, performance quality, and the inherent value of the music itself, this is probably the best recording of seventeenth-century Italian opera currently available. —Stoddard Lincoln

GAGLIANO: *La Dafne*. Norma Lerer (soprano), Dafne, Venere; Barbara Schlick (soprano), Amore, First Nymph; Ine Kollecker (soprano), Second Nymph; Nigel Rogers (tenor), Apollo, Ovidio; Ian Partridge (tenor), Tirsi; David Thomas (baritone), First Shepherd; Berthold Possemeyer (tenor), Second Shepherd. Monteverdi Choir of Hamburg; Camerata Accademica of Hamburg, Jürgen Jürgens cond. DEUTSCHE GRAMMOPHON ARCHIV 2533 348 \$8.98.

HOVHANESS: *The Rubáiyát of Omar Khayyám; Sunrise; Meditation on Orpheus; And God Created Great Whales; Fantasy on Japanese Woodprints; Floating World.* Douglas Fairbanks, Jr. (narrator, in *Rubáiyát*); Carmen Carozza (accordion, in *Rubáiyát*); orchestra. André Kostelanetz cond. COLUMBIA M 34537 \$7.98. © MT 34537 \$7.98.

Performance: **Good**
Recording: **Very good**

Most modern music goes its austere, cerebral, experimental way; Alan Hovhaness goes another. The Massachusetts-born composer, now well into his sixties, has rummaged through a variety of styles in search of his own, which has echoes of Asia Minor, India, and Japan. He once destroyed a thousand of his works, but he has been prolific in replacing them with new ones, many of them strikingly imaginative and adventurous in their way, all highly seasoned and sometimes unabashedly emotional. André Kostelanetz has long felt a special affinity for this accessible music—some of the pieces on this program are reissued here from earlier discs—and he does it justice. In fact, it was Kostelanetz who commissioned Hovhaness to tackle *The Rubáiyát of Omar Khayyám*, which gets its recorded premiere in this collection. It is, alas, on several counts the most disappointing item on the agenda. First, there is the orchestral setting itself, drenched in cheap sonic perfume, which might have striven to be the musical equivalent of a colorful Willy Pogány illustration of Omar's Persia but in performance is redolent of the cosmetics counter at a five-and-ten. Then there are the readings by Douglas Fairbanks, Jr., who is allowed to emote like an old-time elocution student.

The rest of the material, however, makes the album worth acquiring. *Sunrise* is a magical impressionist interlude, an *aubade* evoking dawn on some enchanted island. *Meditation on Orpheus* is a tone poem in a somber mood, suggesting less the joyous bard than the bereaved widower of Euridice. *And God Created Great Whales*, an intricate blend of music suggesting great heaving currents underseas and actual recorded "songs" of whales, holds up as a hypnotic listening experience. *The Fantasy on Japanese Woodprints*, for xylophone and orchestra, is a mood piece of extraordinary delicacy. And *Floating World*, with its "mysterious procession of past civilizations and heroes, breaking off in a cry," is one of the composer's best-realized tonal pictures. P.K.

RECORDING OF SPECIAL MERIT

JOSQUIN DES PRÉS: *Motets, Chansons, and Instrumental Music.* *Missa La Sol Fa Re Mi; Miserere Mei, Deus; Tu Solus Qui Facis Mirabilia; Sanctus de Passione; Qui Velatus Facie Fuisti; Absalon, Fili Mi; Planxit Autem David; El Grillo; Fortuna d'un Gran Tempo; Allégez Moy; Ile Fantazies; La Plus de Plus; Je Ne Me Puis Tenir d'Aimer; La Bernadina; Adieu Mes Amours; Scaramella; Inviolata, Integra et Casta Es Maria.* Capella Antiqua of Munich, Konrad Ruhland cond. ABC/SEON AB-67017/2 two discs \$13.98.

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

Of all the albums devoted to the music of Josquin des Prés, this is certainly the most com-
(Continued on page 90)

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prehensive and, in general, the best performed. The repertoire is well chosen to reveal Josquin in all of his genres and moods.

The Capella Antiqua of Munich is a devoted group of singers and instrumentalists who began studying and performing together as students about twenty years ago. Their readings demonstrate the maturity of their achievement in such factors as ensemble, blend, and clarity of line. The sound is perfect for this music, for the vocalism is designed to cut through rather than to create the typically modern homogenized choral sound. Color and fullness are achieved through instrumental doubling (by original instruments). Since the group formed its vocal style at a time when smoothness and a fine legato were considered the ideal, some listeners might miss a sense of articulation in its work. In *El Grillo*, for instance, the forces at hand seem rather ponderous. But certainly the moving performance of *Je Ne Me Puis Tenir d'Amour*, first played by instruments and then repeated by voices, proves the validity of a suave, continuous sound. The album is a must for Renaissance lovers and is highly recommended for anybody who wishes to delve into the riches of this greatest of the Renaissance masters. S.L.

RECORDING OF SPECIAL MERIT

LECOQC: *La Fille de Madame Angot*. Mady Mesplé (soprano), Clairette; Christiane Stuzmann (mezzo-soprano), Mademoiselle Lange; Bernard Sinclair (tenor), Ange Pitou; Charles Burles (tenor), Pomponnet; Michel Roux (baritone), Larivaudière, Buteux, Le Cabaretier; other soloists. Chorus of the Théâtre National de l'Opéra; Orchestra of the Théâtre National de l'Opéra Comique, Jean Doussard cond. CONNOISSEUR SOCIETY CS2-2135 two discs \$15.96.

Performance: **Scintillating**
Recording: **Stunning**

Charles Lecocq was born in poverty in Paris in 1832. Although he had a crippling bone condition and walked on crutches all his life, he became one of France's most successful composers of light opera. His early operettas were failures, but by the time *La Fille de Madame Angot* had its Brussels première in 1872, Lecocq was making it big. The operetta ran for 500 performances in Brussels and packed them in at the opera houses of 103 French cities and twenty-four world capitals, including New York, where it was sung in both French and English. Seventy years later Leonid Maslone fashioned a delightful ballet for the American Ballet Theatre to a suite put together from the music of this operetta and other Lecocq scores; it is in that form that modern audiences are chiefly acquainted with Lecocq's music (London reissued a lovely recording of the suite in its Stereo Treasury Series a few years ago).

La Fille de Madame Angot is a curious mixture of sexual intrigue and revolutionary politics, and it is the political aspect of the libretto that probably prompted the revival of the piece by the Moscow Art Theater in the Soviet Union back in 1920 and led to a Soviet recording some decades later. There are few other operettas in the repertoire where plotters plan the overthrow of a government to the swaying strains of waltzes, rondeaus, and a "chanson politique." The plot in question is an attempt to bring down the leaders of the



MADY MESPLÉ
A model daughter for Madame Angot

Directoire, the government that functioned in France between the Reign of Terror following the French Revolution and Napoleon's ascent to power. The heroine is Clairette Angot, the daughter of a Parisian fishwife; the scene is the old Paris market, Les Halles. There is a satirical balladeer named Ange Pitou who is inciting the people against the government, and an actress named Mademoiselle Lange, herself a crypto-conspirator and double agent. The deceptions, jealousies, and intrigues of the piece proliferate to the accompaniment of a series of alluring and colorful ballads, choruses, and set pieces, including a spectacular third-act ballet, and everything sorts itself out in a smashing finale at a ball.

The delights of the piece unfold irresistibly on these discs. All the music is here, and the essentials of the dialogue are delivered in that typically rapid-fire *opéra comique* style. Mady Mesplé, a soprano of considerable charm and with a firm grasp of the style, makes a model Clairette. Christiane Stuzmann is equally convincing in her mezzo role as the wily Mlle. Lange. On the masculine side, the two tenors vie for our admiration and both of them earn it. Others deserving of mention in a large and superbly directed cast are Michel Roux as Larivaudière, the banker, and basso Gérard Chapuis as the police agent Louchard. Conductor Jean Doussard brings off the entire production with marvelous panache. *La Fille de Madame Angot* really needs an accompanying libretto but has been released without one. As compensation, though, there are Eric Salzman's thorough background notes and plot summary to help the listener keep up with things, which move along from start to finish with exhilarating Gallic velocity. P.K.

LISZT: *Hungarian Rhapsodies: No. 1, in F Minor; No. 4, in D Minor; No. 6, in D Major ("Carnival in Pest")*. Rákóczy March; *Hungarian Battle March*. Philharmonia Hungarica, Willi Boskovsky cond. ANGEL □ S-37277 \$7.98.

Performance: **Spirited**
Recording: **Fine**

Willi Boskovsky shows a surprising flair for all five pieces recorded here, and he is abetted
(Continued on page 92)

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CIRCLE NO. 20 ON READER SERVICE CARD

with enthusiasm by the Philharmonia Hungarica. The three rhapsodies (No. 4, as usual, is not the one to which Liszt gave that number but No. 12 of the piano set) are presented with still more panache by Antal Dorati and the London Symphony Orchestra on Mercury SRI 75089, but the dated sound on that disc cannot compare with the fine, up-to-date sonics on the new Angel. Boskovsky's inclusion of the two marches, otherwise unavailable on record, is a further recommendation. R.F.

MAHLER: *Songs from Des Knaben Wunderhorn*. *Der Schildwache Nachtlied; Verlorne Müh; Trost im Unglück; Wer Hat dies Liedlein Erdacht?; Das Irdische Leben; Des Antonius von Padua Fischpredigt; Rheinlegendchen; Lied des Verfolgten im Turm; Wo die Schönen Trompeten Blasen; Lob des Hohen Verstandes; Revelge; Der Tambourg'sell.* Jessye Norman (soprano); John Shirley-Quirk (bass); Concertgebouw Orchestra, Amsterdam, Bernard Haitink cond. PHILIPS 9500 316 \$8.98, © 7300 572 \$8.98.

Performance: **Good to excellent**
Recording: **Excellent**

This latest recording of the orchestral *Wunderhorn* songs of Mahler follows the general practice of omitting *Es Sungen Drei Engel* and *Urlicht*, which appear in the Third and Second Symphonies, respectively. Like the two major competitive collections, Schwarzkopf/Fischer-Dieskau/Szell on Angel and Ludwig/Berry/Bernstein on Columbia, this one has its strong and weak points. I am inclined to recommend acquiring and holding the new Philips issue together with the Angel recording, since they are complementary. This involves not only matters of performance style—Fischer-Dieskau is more overtly dramatic in his approach than Shirley-Quirk—but also the voice assignments, which are reversed on these two discs in *Wer Hat dies Liedlein Erdacht?* and *Lob des Hohen Verstandes*. Moreover, the haunting *Wo die Schönen Trompeten Blasen* is done in the usual solo soprano version on the Philips disc, while Schwarzkopf and Fischer-Dieskau treat it as a duet.

By and large, it is Jessye Norman's exquisitely controlled and beautifully inflected performances that take the honors here. Shirley-Quirk improves in the later songs, giving a delightful *Fish Sermon* (*Des Antonius von Padua Fischpredigt*) and a grisly, grimly poignant portrayal in the concluding *Drummer Boy*, but he is unable to handle the nasty upward leap at the opening of *Der Schildwache Nachtlied*, and he exhibits a distracting vibrato throughout much of the great *Revelge* (one must turn to Fischer-Dieskau to experience the searing impact of this last song). As in all his Mahler performances, Haitink leads his superb orchestra in a flawless collaboration, and the solo trumpet work at the end of *Lied des Verfolgten in Turm* is a veritable miracle. Superb recorded sound. D.H.

MENDELSSOHN: *A Midsummer Night's Dream: Overture, Op. 21; Incidental Music, Op. 61.* Lilian Watson (soprano); Delia Wallis (mezzo-soprano); Finchley Children's Music Group; London Symphony Orchestra, André Previn cond. ANGEL □ S-37266 \$7.98.

Performance: **Good to excellent**
Recording: **Very good**

As Raphael Frühbeck de Burgos did on his 1969 London disc, André Previn includes here

every scrap of Mendelssohn's music for *A Midsummer Night's Dream*. In some instances it's a nice bonus, but in others it is just plain distracting without Shakespeare's text or some form of connecting narration.

The excellence of the recorded sound, beautifully transparent yet amply full-bodied (even more so in four-channel playback), is a big plus for the new Previn disc, as is the superb wind playing of the London-Symphony first deskmen in the scherzo and the nocturne. The songs and choruses come off nicely, too, most particularly "You spotted snakes," in which Delia Wallis' brief mezzo part adds a note of special distinction. Previn's use of children's voices instead of the usual female choir is a real inspiration, definitely adding to

\$8.98 in this country. In this case the price is more than justified by the quality of both the performances and the sound, the latter having been improved in the new Dutch mastering to eliminate the wiry edge on the violin and provide an altogether richer and warmer acoustic frame. The surfaces are absolutely silent, and the cover is now graced with one of Mendelssohn's own water colors. Among the surprisingly few current versions of either of the two works, none is quite so persuasive as these, and there happens to be no other single-disc release offering this sensible pairing of titles. Highly recommended. R.F.

MENDELSSOHN: *Symphony No. 4, in A Major, Op. 90* (see SCHUMANN)



JESSEY NORMAN:
*Exquisitely controlled,
beautifully inflected
Mahler songs*

the other-worldly feeling that Mendelssohn's score needs but doesn't always get. My only reservation about the performance is that the overture is played just a little bit too neatly to be altogether comfortable. Of the modern recorded versions, I like best the dash and youth of Kubelik's. D.H.

RECORDING OF SPECIAL MERIT

MENDELSSOHN: *Piano Trio in D Minor, Op. 49; Piano Trio in C Minor, Op. 66.* Beaux Arts Trio. PHILIPS 6580 211 \$8.98.

Performance: **Elegant**
Recording: **Improved**

These elegant performances of the two Mendelssohn trios were recorded when Daniel Guilet was still the Beaux Arts' violinist. Issued exactly ten years ago (about the time Guilet was succeeded by Isidore Cohen, the present partner of the group's original pianist and cellist, Menahem Pressler and Bernard Greenhouse) on Philips' short-lived World Series budget label, they have been treasured by collectors lucky enough to have picked up PHC-9082 while it was available. The very welcome reissue is in Philips Universo series, whose price on the other side of the Atlantic is comparable to that of the defunct, domestically pressed "World Series," but is the full

L. MOZART: *Musikalische Schittentfahrt; Bauernhochzeit; Sinfonia Burlesca.* Ensemble Eduard Melkus. DEUTSCHE GRAMMOPHON ARCHIV 2533 328 \$8.98, © 3310 328 \$8.98.

Performance: **Lively**
Recording: **Bright**

All three of these works qualify as "entertainment music" pure and simple. They were conceived in a spirit of unpretentious fun, and the two bigger ones were actually introduced in an Augsburg tavern during Carnival in January 1756, about two weeks before the birth of Leopold's famous son. The edition from which the *Musical Sleigh Ride* is performed is the one by Ernst Fritz Schmid that was used by Carl Gorvin in his earlier Archiv recording with the Berlin Bach Orchestra (APM 14084), but some sections are repeated here, and there are some additions: a fanfare from Josef Starzer's ballet *Roger et Bradamante* by way of prelude, a whip complementing Leopold's sleigh bells, and sound effects of yelping dogs and neighing horses. While I find the fanfare and the whip agreeable, the animal sounds seem gratuitous at best, and become irritating after more than a single hearing. The same must be said of the human whistling and shouts of "Yahoo!" in the *Peasant Wedding*. This work has less to recommend it than the *Sleigh Ride*, anyway, though the sounds of the

hurdy-gurdy and the bagpipe are enjoyable. Substance is much more apparent in the ten-minute *Sinfonia Burlesca*, a curious chamber work for two violas, two cellos, and continuo (bass, bassoon, and harpsichord), whose outer movements seem to echo—or parody—one or more of Bach's *Brandenburg* Concertos.

The playing throughout the three works—on period instruments or modern copies—is lively, pointed, and for the most part highly polished (Melkus himself plays viola in the *Sinfonia Burlesca*, as well as solo violin in the *Sleigh-Ride*), and the sound is bright and well balanced. R.F.

PURCELL (arr. Stokowski): *Dido and Aeneas: Dido's Lament* (see VAUGHAN WILLIAMS)

RACHMANINOFF: *Songs* (see Collections—Nina Koshetz)

RECORDING OF SPECIAL MERIT

RAWSTHORNE: *Symphony No. 1; Symphonic Studies*. London Philharmonic Orchestra, John Pritchard cond. HNH 4044 \$7.98 (from HNH Distributors, Ltd., P.O. Box 222, Evanston, Ill. 60204).

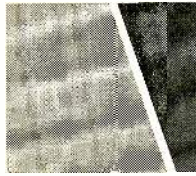
Performance: **Persuasive**
Recording: **Exemplary**

Alan Rawsthorne (1905-1971), a member of the same generation of English composers as Walton, Tippett, and Lennox Berkeley, remains (like Berkeley) a still largely unknown quantity beyond the borders of his own country. In ours, he enjoyed some celebrity in the 1950's for his *Practical Cats*, an orchestral score to accompany recitation of T. S. Eliot's verses, and went unnoticed as the composer of numerous excellent film scores. Even in England, where his First Symphony was hailed in 1950 as "a major event in English musical life," the work waited more than twenty-five years for its first recording. It is a serious, compelling work, in which one seeks in vain for models. Rawsthorne's is an individual style. The *Symphonic Studies*, composed just before World War II, has been his most successful work, and not without reason. In content, contrasts, and craftsmanship, it is one of the most stunning works of its kind, and it ought to be part of the so-called standard repertoire by now. Since it is not, we have all the more reason to be grateful to HNH for the opportunity to enjoy it and the symphony in these very persuasive performances under John Pritchard. The sound is exemplary and so are the surfaces. R.F.

ROSSINI: *Overtures: The Barber of Seville; La Cenerentola; La Gazza Ladra; L'Italiana in Algeri; Semiramide; William Tell*. Royal Philharmonic Orchestra, Carlos Païta cond. LONDON SPC-21164 \$7.98.

Performance: **Bracing**
Recording: **Very good**

In terms of covering the "basic" bases, this is probably the most attractive single disc of Rossini overtures available at present, and the performances themselves are invariably fine. I miss the tricky syncopated bit Peter Maag and George Szell attempted (successfully) in *La Gazza Ladra*, but Païta's bracing presentations offer a nice balance of subtlety and brilliance, with unusual attention to detail and unusual clarity in the reproduction (free of the close-up exaggerations that have marred

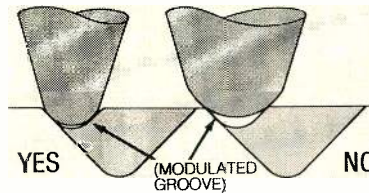


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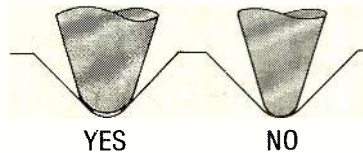
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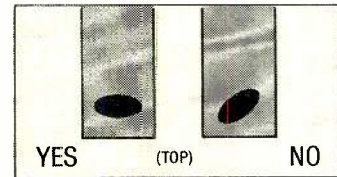
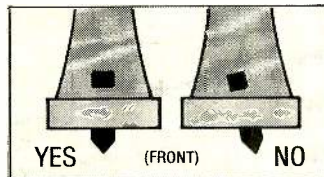


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some earlier Phase 4 releases). My ideal Rossini overture collection is still Maag's inexpensive disc of four big pieces (*Semiramide*, *Tell*, *Gazza Ladra*, and *Cenerentola*—London STS-15030) plus Neville Marriner's imaginative package of eight generally lighter ones (Philips 6500 878), but for anyone limiting himself to one disc of Rossini overtures, Paita's is the one I'd recommend. R.F.

RUDHYAR: *Tetragrams, First Series.*
WEIGL: *Night Fantasies.* Dwight Peltzer (piano). SERENUS SRS12072 \$6.98.

Performance: **Excellent**
Recording: **Okay**

Daniel Chennevière, born in Paris in 1895, immigrated to this country in 1917 and took the name Dane Rudhyar. Like Edgard Varèse, with whom he has much in common, Rudhyar was disillusioned with European civilization and came across the ocean looking for a New World—literally and figuratively. Like Varese he broke with European tradition and forged an independent, highly dissonant modern style. Rudhyar was (is?) basically a philosopher and mystic, and his craggy, uncompromising music is the expression of a visionary mind. *Tetragrams*, the first of several series of works with that name, was written in the 1920's; the sections are titled "The Quest," "Crucifixion," and "Rebirth." The intensity and originality of this music is undeniable—it is related to the block-like forms of Varèse and Ruggles but is even more uncompromising. This is music of a very limited range, but it is powerful nonetheless—a mountain with a fire underneath.

Karl Weigl came to America from Europe too, but there his similarity to Rudhyar ends. Born in Vienna in 1881, Weigl was brought up in the last flowering of the old Romanticism, and his musical style is very Old World. The *Night Fantasies* was written in 1922 in the style of a quarter-century earlier. It is rich, artful, and Romantic, and it is nicely played here by Dwight Peltzer, who does equal justice to Rudyhar's contemporaneous, but so very different *Tetragrams*. E.S.

SCHUMANN: *Fantasiestücke, Op. 12* (see Best of the Month, page 80)

SCHUMANN: *Papillons, Op. 2; Three Romances, Op. 28; Kinderszenen, Op. 15; Blumenstück, Op. 19.* Claudio Arrau (piano). PHILIPS 6500 395 \$8.98.

Performance: **Idiosyncratic**
Recording: **Very good**

Claudio Arrau's comprehensive survey of Schumann's major solo piano works appears to be approaching completion with this issue. As with Arrau's other Schumann interpretations, I react to this latest disc with mixed feelings. The first two of the Romances, with their relatively free-flowing lyricism, are right up Arrau's alley, but I find his tendency to highlight contrasts between episodes unsettling in those works, such as *Papillons*, that are chains of short pieces. The emphasis on intensity of detail at the expense of continuity runs against my aesthetic grain. *Kinderszenen* fares nicely here, however, particularly in the *Träumerei*, and Arrau effectively captures the capricious aspect of the *Blumenstück*. Big, full-bodied piano sound throughout. D.H.

(Continued on page 96)

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CIRCLE NO. 9 ON READER SERVICE CARD

Solomon's Dedicated Beethoven



Angel Records

Solomon is seventy-five years old now, and he hasn't performed in nearly twenty-two years. It seems that many who have heard of him but never *heard* him have assumed that his use of his given name alone signified the outlook of a showman, and so, without actually experiencing his playing, they have formed an entirely erroneous impression of one of the greatest musicians of this century. Few pianists have been *less* concerned with showmanship, few more self-effacing in their total dedication to the music they perform. A conductor who lived across a narrow London street from Solomon some thirty years ago once told me he would hear him practicing on the day of a recital, right up to the time he had to leave for the hall—and then hear him going over the music again, *after* the recital, sometimes till day began to break. He was always striving for perfection, never satisfied that he had come near enough. Vox, in its Turnabout Historical Series, recently gave us the first American release of Solomon's magnificent account of the Brahms B-flat Concerto, with Issay Dobrowen conducting (Ⓜ THS-65071, reviewed in STEREO REVIEW last October); now it is gratifying to find both Vox and Seraphim giving us some of the Beethoven sonatas with which the pianist was even more closely associated.

Solomon's Beethoven emphasized the music's Classical roots at least as much as its Romantic thrust; he never gave the impression of chiseling an epic out of resistant granite, but went for the clean line and the essential meaning. These sonata recordings, made a few years before a stroke brought a premature end to his career in 1956, show all the Solomon virtues: accuracy, clarity, great elegance, great heart, total adjustment of his own musical personality to that of the composer. And there is no shortage of passion and intensity, either, as we hear in the *Waldstein*

and *Hammerklavier*—the latter surely one of the most memorable performances ever of that work. The sound is a little plummy, but more than respectable. The remarkably poetic and dignified performance of the *Moonlight* is the one that is split for turnover (after the second movement) in the now standard "sandwich" on Seraphim. I hope the remainder of the eighteen Beethoven sonatas Solomon re-

few pianists have
been less concerned
with showmanship

corded are forthcoming, and that they are so distributed as to avoid "sandwiches" altogether—but, in any case, get hold of these records and get closer to Beethoven.

—Richard Freed

BEETHOVEN: Piano Sonata No. 8, in C Minor, Op. 13 ("Pathétique"); Piano Sonata No. 14, in C-sharp Minor, Op. 27, No. 2 ("Moonlight"); Piano Sonata No. 23, in F Minor, Op. 57 ("Appassionata"). Solomon (piano). SERAPHIM Ⓜ 60286 \$4.98.

BEETHOVEN: Piano Sonata No. 21, in C Major, Op. 53 ("Waldstein"); Piano Sonata No. 28, in A Major, Op. 101; Piano Sonata No. 29, in B-flat Major, Op. 106 ("Hammerklavier"); Piano Sonata No. 30, in E Major, Op. 109; Piano Sonata No. 31, in A-flat Major, Op. 110; Piano Sonata No. 32, in C Minor, Op. 111. Solomon (piano). VOX/TURNABOUT Ⓜ THS-65068/65070 three discs \$11.94.

SCHUMANN: Symphony No. 4, in D Minor, Op. 120. MENDELSSOHN: Symphony No. 4, in A Major, Op. 90 ("Italian"). New Philharmonia Orchestra, Riccardo Muti cond. ANGEL □ S-37412 \$7.98.

Performance: **First-rate Mendelssohn**
Recording: **Very good**

SCHUMANN: Symphony No. 1, in B-flat Major, Op. 38 ("Spring"); Symphony No. 4, in D Minor, Op. 120. Vienna Philharmonic Orchestra, Zubin Mehta cond. LONDON CS-7039 \$7.98. © 5-7039 \$7.98.

Performance: **Fourth superb, First uneven**
Recording: **Excellent**

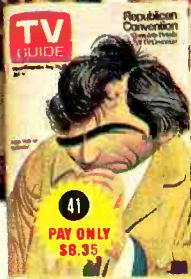
Carl Reinecke, who adored Mendelssohn and became one of his successors as conductor of the Leipzig Gewandhaus Orchestra, was fond of saying that the *Italian* Symphony embodied all one needed to know about the art of orchestration. Muti's performance brought this to mind because there is nothing of the picture-postcard approach in it, no thought of allowing the work's charm alone to carry it. Many listeners accustomed to a more extroverted approach will be surprised by the degree of substance revealed here in addition to the superb craftsmanship that has always been taken for granted in this well-beloved work. Muti's sense of proportion and balance never fails him. Everywhere the momentum is natural and unforced, phrases are molded with unselfconscious mastery, an elegant clarity of texture is maintained—and both the orchestra and the engineers come through admirably. Many of the virtues of Muti's Mendelssohn are to be found in his Schumann, but his identity with the idiom of the latter composer is simply less complete—and in the coda of the finale the elegant clarity gives way to a hard-driven scramble.

We have not had many opportunities to hear the Vienna Philharmonic play Schumann's symphonies. London/Decca in the 1950's sent Carl Schuricht to Paris to record the Second and Third, and the same company's more recent tries with the *Philharmoniker* under Georg Solti were dismaying examples of miscasting. Mehta is clearly a happier choice in this material: he has inherited a natural feeling for the music from his teacher Josef Krips, and the orchestra evidently loves playing it for him. Admirable as Muti's Fourth is, there can be no question that Mehta's is more Schumannesque; lyrical sections are caressed, dramatic ones prodded, but neither in excess, and one has the feeling that Mehta is not so much shaping phrases himself as simply encouraging the delighted musicians to express themselves. The effect is at once spontaneous and poetic. If only the overside account of the *Spring* Symphony were so consistently fine! Here the two inner movements are outstandingly successful, with gorgeous playing from the cellos and the various winds in their little solos, but the two outer ones are curiously bland. All the right motions seem to be made, yet the first movement never really comes to life and the last is distressingly unsmiling, as if Mehta had been intimidated by Schumann's remark that he did not want the finale to be taken "too frivolously." Had the outer movements of the *Spring* Symphony under Mehta been as successful as the inner ones and the entirety of his Fourth, this would have been one of the finest entries in the
(Continued on page 100)

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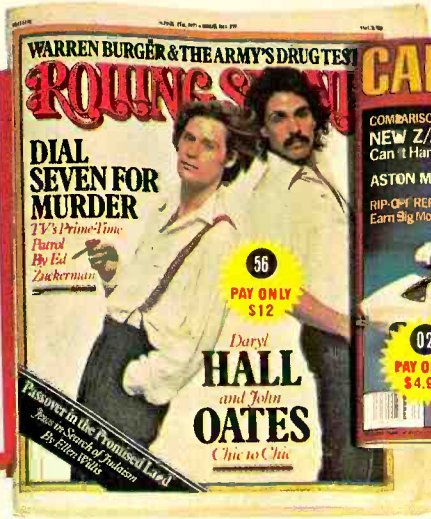
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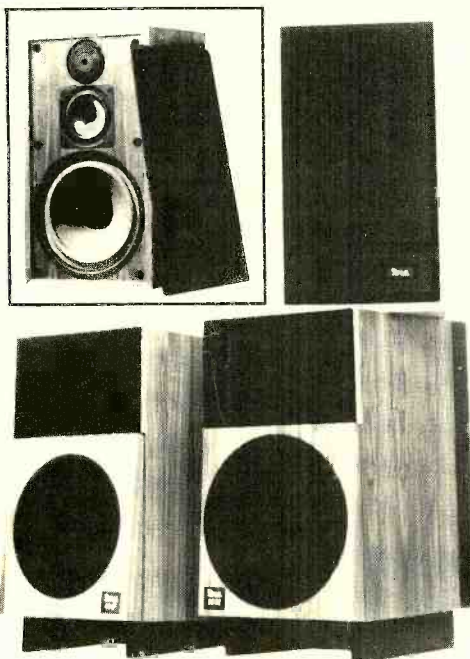
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Schumann discography. As it is, my allegiance to Klemperer in the First (Angel S-36353) remains unshaken, and the most satisfying coupling of Nos. 1 and 4 remains Karajan's (Deutsche Grammophon 2530 169), even though neither is recorded so richly as Mehta's and neither offers the peculiar eloquence the Vienna Philharmonic brings to this music. R.F.

SIBELIUS: Symphony No. 1, in E Minor, Op. 39; Scènes Historiques, Op. 25. Bournemouth Symphony Orchestra, Paavo Berglund cond. SERAPHIM □ S-60289 \$4.98.

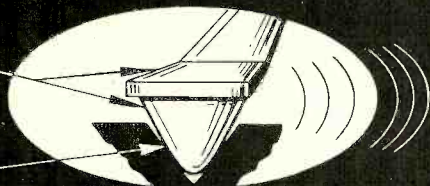
Performance: **Good**
Recording: **Good**

As a Finnish conductor of distinction, Paavo Berglund would be expected to know his Sibelius, and it is a thoughtful reading of the First Symphony that he offers here. The orchestra is responsive, especially the first-desk clarinet, but the music needs more string power than it gets. Perhaps the rather reverberant acoustics of the Bournemouth hall have a dissipating effect. What really goes well here are the three picturesque pieces of the first series of *Scènes Historiques*, composed at the end of the century to illustrate tableaux from Finland's history (*Finlandia* was part of this series but was published separately). The solemn opening piece, the rhetorical middle movement, and the bolero-like finale (*Festivo*) seem to bring out the best qualities of the Bournemouth Orchestra, and the recorded sound thoroughly enhances the whole. This is currently the only budget-price stereo (or quadraphonic) disc of the Sibelius First, and even with reservations it's an excellent buy. D.H.

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RECORDING OF SPECIAL MERIT

J. STRAUSS, JR.: *The Gypsy Baron—Entrance March; New Vienna Waltzes, Op. 342; Emperor Waltzes, Op. 437; Fairy Tales from the Orient, Waltzes, Op. 444; In a Viennese Park, Polka Française, Op. 336; Perpetuum Mobile, Op. 257; Tritsch-Tratsch Polka, Op. 214.* **J. STRAUSS, SR.:** *Chinese Galop, Op. 20.* Boston Pops Orchestra, Arthur Fiedler cond. DEUTSCHE GRAMMOPHON 2584 008 \$8.98.

Performance: **Affectionate**
Recording: **Shimmering**

Ever since his first recording of *Wo die Zitronen Blüh'n* with the Pops on a Victor 78 some time around 1935, Arthur Fiedler has been one of our most reliable suppliers of satisfying Johann Strauss, and this latest package is especially valuable for what it adds to the Waltz King's current discography. *Neu Wien* is one of the pieces cited in the Désormière-arranged ballet *Le Beau Danube*, but it has not been available in its own delicious complete form since the retirement of the early Camden transfer of Fiedler's 1939 recording. *Märchen aus dem Orient*, one of Strauss' least-known works, has not been represented on records in any form, apparently, since Marek Weber's heavily cut and modestly scored version of the early 1930's. Both qualify as the most worthwhile sort of discovery.

The polka labeled "In a Viennese Park" looked like another discovery, but it turned out to be the very familiar *Im Krappfenwald'l*—a title usually not translated at all, but

(Continued on page 102)

STEREO REVIEW



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sometimes rendered "In the Doughnut Forest." (How odd for a German record company to omit the original German titles of these works!) The lengthy liner notes are in English only and offer just another rehash of the background of the waltz and the Strauss family's contributions.

The documentary lapse aside, though, the disc is a winner. Veteran collectors intrigued by *Neu Wien. Märchen aus dem Orient*, and Father Strauss' enchanting little *Chinese Gallop* might wish for an entire package of similarly unfamiliar items (we could do with a recording of *O Schöner Mai!*, the *Motoren-Walzer*, *Gunstwerber*, etc.), but everything here is done to a sumptuous turn, and the shimmering, ungimmicky sound is a further plus. R.F.



MAURICE ANDRÉ: a bristling, virile Baroque trumpet recital

RECORDING OF SPECIAL MERIT

R. STRAUSS: *Don Quixote*. Samuel Mayes (cello); Joseph de Pasquale (viola); Philadelphia Orchestra. Eugene Ormandy cond. RCA ARL1-2287 \$7.98, © ARS1-2287 \$8.95. © ARK1-2287 \$8.95.

Performance: **Gorgeous**
Recording: **Vivid**

The big Strauss tone poems are not as popular now as they used to be—the craze for Mahler has ousted them from the niche reserved for late-Romantic large orchestral works. Also *Sprach Zarathustra*, popularized by its use in the movie *2001*, is an exception, of course, but it is more like Mahler than typical Strauss. *Don Quixote* also has special qualities, its size being tempered and clarified by the relative simplicity of the musical ideas and form (variations), the use of solo instruments (cello and viola) as protagonists, and by the surprising warmth and humanity of the music.

The new Philadelphia Orchestra recording is a gorgeous, autumnal rendition lit up by the glowing solo performances of two musicians associated with the orchestra: Samuel Mayes, formerly first cellist, and Joseph de Pasquale,

currently first violist. The orchestral sound is overwhelming, and Ormandy, who has a real feeling for this music, imparts a sense of drama and sustains the big line. E.S.

RECORDING OF SPECIAL MERIT

VAUGHAN WILLIAMS: *Fantasia on a Theme by Thomas Tallis*. **DVOŘÁK:** *Serenade for Strings in E Major, Op. 22*. **PURCELL** (arr. **Stokowski**): *Dido and Aeneas: Dido's Lament*. Royal Philharmonic Orchestra, Leopold Stokowski cond. DESMAR DSM 1011 \$7.98.

Performance: **Warm, vital**
Recording: **Splendid**

Until the very day of his death at the age of ninety-five last September, Leopold Stokow-

ski attacks the music with an almost Toscaninian fierceness—and gets absolutely brilliant results. Desmar's recording matches the performance in effectiveness.

Though Stokowski's transcriptions of early music have been criticized as overblown, such is not the case with the *Dido and Aeneas* lament, scored for strings alone with cello solo. Lyric intensity tempered with disciplined playing prevails here. All told, the record is a treasurable sound document from the last year of a long and remarkable musical life. D.H.

WEIGL: *Night Fantasies* (see RUDHYAR)

COLLECTIONS

RECORDING OF SPECIAL MERIT

MAURICE ANDRÉ: *Baroque Trumpet Concertos and Sonatas*. **Vivaldi:** *Concerto in C Major for Two Trumpets, Strings, and Harpsichord (PV 75)*. **Viviani:** *Sonata No. 1, in C Major, for Trumpet and Organ*. **Torelli:** *Concerto in D Major for Trumpet and Strings*. **Stölzel:** *Concerto in D Major for Trumpet and Strings*. **Telemann:** *Concerto-Sonata in D Major for Trumpet, Strings, and Harpsichord*. Maurice André (trumpet); Hedwig Bilgram (organ); Mauritz Sillem (harpsichord); English Chamber Orchestra, Charles Mackerras cond. DEUTSCHE GRAMMOPHON 2530 792 \$8.98, © 3300 792 \$8.98.

Performance: **Sparkling**
Recording: **Sparkling**

Here is a brace of splendid Baroque trumpet concertos and sonatas to set the spine at-tingling. The music is especially fine, ranging from a well-known Torelli concerto to the obscure, fascinating sonata by Giovanni Buonaventura Viviani. Telemann enthusiasts will be delighted by the Concerto-Sonata, which is strong and offers a particularly powerful slow movement.

Maurice André is in top form, as usual, and keeps the music rhythmically virile and clean. He also indulges in the stunt of playing both parts in the Vivaldi. Charles Mackerras whips the English Chamber players into militant ritornellos and accompaniments that emphasize the unique quality of Baroque trumpet music. It all bristles and sparkles appealingly. S.L.

GIACOMO ARAGALL: *Italian Opera Arias*. **Puccini:** *La Bohème: Che gelida manina. Tosca: Recondita armonia; E lucevan le stelle*. **Manon Lescaut: Donna non vidi mai**. **Donizetti:** *Don Pasquale: Cercherò lontana terra. L'Elisir d'Amore: Una furtiva lagrima. Lucia di Lammermoor: Tombe degli avi miei . . . Fra poco a me ricovero*. **Cilea: Adriana Lecouvreur: La dolcissima effigie**. **Giordano: Fedora: Amor ti vieta**. **Verdi: Luisa Miller: Quando le sere al placido. Don Carlo: Io la vidi. Rigoletto: La donna è mobile. Il Trovatore: Ah si, ben mio**. Giacomo Aragall (tenor); Orquesta Sinfonica de Barcelona, Gianfranco Rivoli cond. LONDON OS 26499 \$7.98.

Performance: **Good or better**
Recording: **Unspectacular**

This is not a particularly imaginative program but it serves to display Giacomo Aragall's manly and agreeable spinto tones to good advantage and to confirm his high rank in today's tenor hierarchy. His is a dark-hued
(Continued on page 105)

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CONSIDER this scenario for a movie or television serial. In Budapest (where else?) a little boy learns to sing before he can talk and picks out tunes on the piano at age two (and the following year on the harmonica as well). At five (by which time he is not only taking formal piano lessons but is also composing) he tells the dentist who asks him to stick out his tongue and say "La": "That's not 'La' you said—that was 'Fa'!"

The boy makes his recital debut at the age of six and is the subject of a six-year study

carnation of Liszt. But after a dispute with his manager and an interruption of his career, he is reduced to sleeping in the subway. He is rescued by an older woman who undertakes to manage his career in exchange for marriage. That contract proves too tough to keep up. Still, there are to be no fewer than eight subsequent marriages. There are random unpublicized recitals in Europe and America over the years, but thoughts of a career are abandoned. The man does not even own a piano, he never practices, and his hands

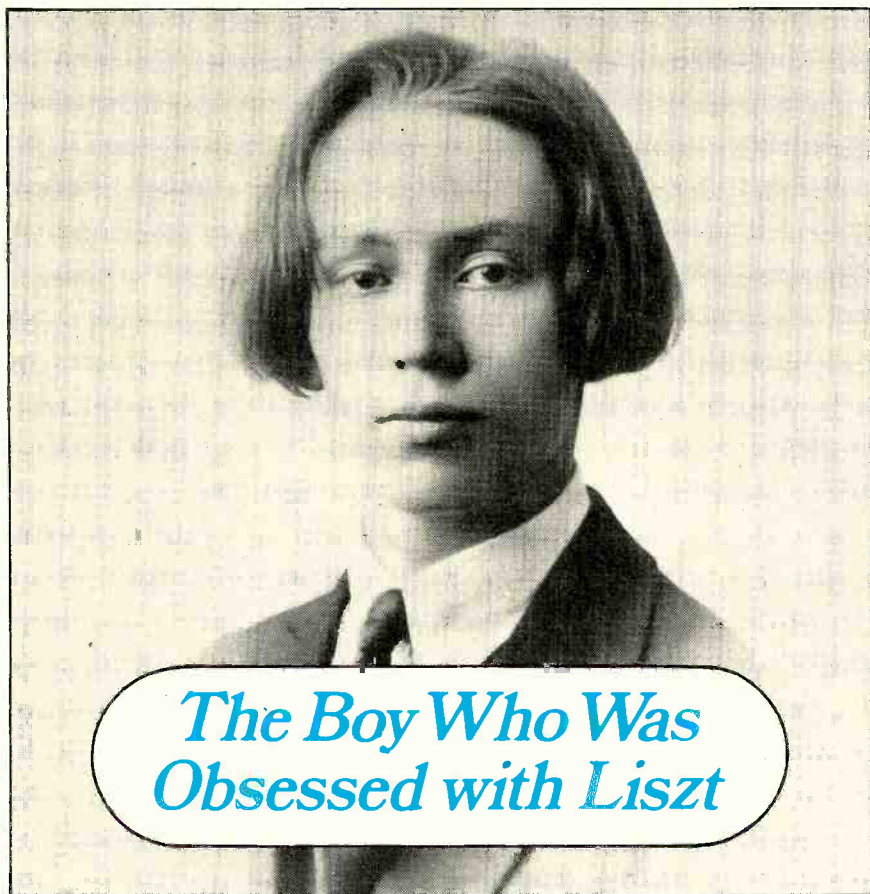
were not prepared to accept his style of playing, a free and intense "grand manner" that goes back to the heyday of Romanticism as exemplified by Liszt himself—and that has come to be regarded with suspicion and/or derision in our antiseptic age. This extraordinary, enthralling, and rather heartbreaking disc shows that we have been missing something unique and wonderful.

ONE side is given over to the *Deux Légendes—St. François d'Assise (La Prédication aux Oiseaux)* and *St. Francis de Paule Marchant sur les Flots*. The sound is execrable (taping was done on primitive equipment at a San Francisco recital in May 1973), but the very shortcomings in the reproduction contribute to the eerie sensation that the music is coming from Franz Liszt himself, transmitted from some Great Beyond by way of a magical but imperfect broadcasting arrangement. "Magical," in any event, is the only word for the performances, which come from deep inside the music, realizing the fantasy and exaltation in these scores to a degree quite beyond anything else preserved in the form of a recording. The color, the range, the sense of span are simply incredible. (Nyiregyházi told Benko "he felt he had at last been able to do those compositions justice, and would not be persuaded to perform them ever again.")

The other side, taped under studio conditions in Los Angeles in September 1974, requires no allowances for sound quality, which is in fact extremely realistic. The big piece on this side is the B-Minor Ballade of 1853, given a staggeringly large-scale performance, but one in which the rumblings and thunderings are proportionate to the design of the piece rather than an end in themselves. The effect is not one of aural bombardment, but of pure poetry, with a sense of limitless resources of power judiciously held in reserve. The other works here are *Sunt Lacrymae Rerum*, one of the last and most unusual pieces from the third year of the *Années de Pèlerinage*, and two short pieces from Liszt's penultimate year—the nocturne *En Rêve* and the Russian folk-song setting *Abschied*. To each of these Nyiregyházi brings a compelling and illuminating mastery that must indeed be instinctive: how can such insights, such total identification with the material, be taught or learned?

NYIREGYHÁZI'S last wife—whom he loved, he told Benko, "even more than I love Liszt"—died a short time after the 1974 session, and the pianist has not played at all since then. On the strength of what is heard on this disc, I most earnestly wish he might be coerced into returning to the studio to tape at least another dozen sides—beginning with the B-Minor Sonata. Whether that happens or not, we can only be grateful for the IPA's enterprise in producing this astounding and treasureable documentation of a unique keyboard artist. —Richard Freed

LISZT: *En Rêve; Ballade No. 2, in B Minor; Sunt Lacrymae Rerum, en Mode Hongrois; Abschied; Deux Légendes.* Ervin Nyiregyházi (piano). INTERNATIONAL PIANO ARCHIVES/DESMAR IPA 111 \$6.98.



The Boy Who Was Obsessed with Liszt

eventually documented in a book called *The Psychology of a Musical Prodigy*. He becomes interested in various academic and philosophical pursuits and considers a professional career in chess, but at twelve, a few months before making his orchestral debut with the Berlin Philharmonic, he is given a copy of Liszt's Sonata in B Minor, to which he responds with such intensity that, as he is to recall later, "It was the deepest, most profound experience I ever had. I became ill—I got a fever." He becomes obsessed with Liszt, whose music (including orchestral scores) he plays at sight—in a style older musicians who knew Liszt tell him is identical with the departed master's own.

Eventually he comes to America, where his first recital creates a furor and leads immediately to the scheduling of two more, following which he is described as "uncannily gigantic . . . even in these days of super-pianists." It is suggested that he must be the rein-

shake—but when they touch the keys there is no question that his old mastery has never left him. When he turns seventy-five his first record is released—three years after the recording session in which his fingers last touched the keyboard.

This hastily sketched outline is a true story, told in greater detail by Gregor Benko in his annotation for the International Piano Archives' record of works of Liszt played by Ervin Nyiregyházi ("NEAR-edz-hah-zy," according to what I understand of Hungarian pronunciation). Nyiregyházi has led an incredibly dramatic life, in which the nine marriages account for only a small part of the color, and it all seems somehow a "natural" consequence of the influence of the Lisztian demon that has possessed him since the age of twelve. One of the reasons his career didn't stay afloat, according to Benko, was that audiences, much as they admired his "astounding dynamic range" and his overall power,

voice with a free and ringing top. The technique is good; forcing the tone is rarely necessary, with the result that nearly everything in this familiar fare is well sung, and some ("Donna non vidi mai" and "Amor ti vieta," for example) are very beautifully sung indeed. There is sensitivity in the tenor's work: his voice is intelligently used, with equal effectiveness at various dynamic levels.

On the debit side I must point to some uncertain intonation here and there and some nuances of phrasing that are short of ultimate refinement. There is a certain emotional sameness, too, perhaps unavoidable in studio recitals where aria follows aria without true dramatic involvement. And this disc does not display the extensive repertoire that the annotations credit to Aragall. Where are the arias from *La Favorita*, *Catarina Cornaro*, *Lucrezia Borgia*, and the rest instead of these familiar chestnuts so many other tenors have done (and quite a few have done better)? Still, there is much to enjoy here. The orchestra is adequate, the conductor discreet, but the sound is a bit erratic in terms of balances.

G.J.

NINA KOSHETZ: Russian Romances.

Rachmaninoff: *All Things Pass Away; Loneliness; Sing Not to Me, O Beautiful Woman; The Island; How Sweet the Place; It Was Yesterday; Lilacs; Daisies; At Night; To the Children; Christ Is Risen.* **Tchaikovsky:** *None but the Lonely Heart; At the Ball.* **Arensky/Koshetz:** *Waltz.* Nina Koshetz (soprano); Celius Dougherty (piano). **Trad.:** *Dark Eyes.* **Sadero:** *Amuri Amuri.* Nina Koshetz (soprano, piano). INTERNATIONAL PIANO ARCHIVES/DESMAR © IPA 116 \$7.98.

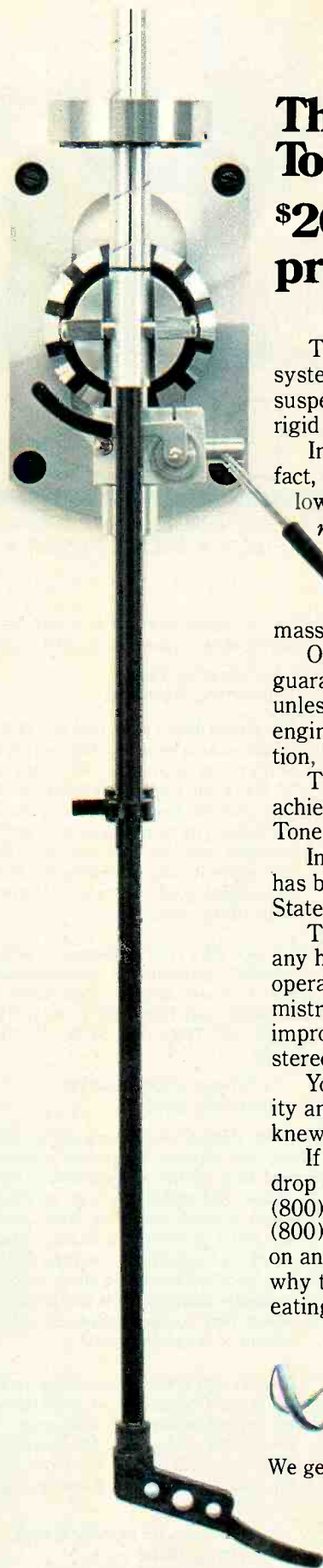
Performance: **Outstanding**
Recording: **Dated but listenable**

There is a fascinating bit of musical history captured here. Nina Koshetz (1894-1965) was a celebrated Russian soprano in the pre-1918 era. After she came to the United States in 1920 (with the aid of Prokofiev), her operatic appearances became infrequent, but her concerts were regarded as special events. In time she became the authoritative voice for a distinguished group of émigré composers: Rachmaninoff, Prokofiev, Gretchaninoff, Medtner, Stravinsky, Tcherenpnin. All these associations dated back to before the Revolution; in fact, Rachmaninoff—with whom Koshetz was romantically linked—dedicated the six songs of his Op. 38 to her in 1916.

The contents of this disc were recorded by the publishing house of G. Schirmer, Inc. in 1939, toward the end of Koshetz's career. By then the voice was that of a mezzo-soprano—still bright and vibrant on top, but with a rich and resonant mid-range. Except for shortness of breath, there was no weakening of artistic resources: the timbre was still velvety and alluring, the intonation unflinching, the technique remarkable. (Felia Litvinne, herself the pupil of Pauline Viardot-Garcia, had been her teacher.) The haunting *mezza-voce* effects in *Lilacs* and the subtle, poignant, expressive nuances in *At the Ball* are but two rewarding instances to note among many.

Celius Dougherty, with whom the singer apparently failed to reach interpretive agreement at these sessions (according to the liner notes), is nonetheless a very capable accompanist. The sound is good for its age, and the annotation by Francis Crociata is rich in pertinent detail.

G.J.



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POPULAR DISCS AND TAPES

Reviewed by CHRIS ALBERTSON • NOEL COPPAGE • PHYL GARLAND • PAUL KRESH
PETER REILLY • STEVE SIMELS • JOEL VANCE

LYNN ANDERSON: *I Love What Love Is Doing to Me/He Ain't You.* Lynn Anderson (vocals); instrumental accompaniment. *We Got Love; Desperado; Sunshine Man; He Ain't You; The Angel in Your Arms*; and five others. COLUMBIA PC 34871 \$6.98, Ⓞ PCA 34871 \$7.98, © PCT 34871 \$7.98.

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

Lynn Anderson is one of the real pros of the c-&-w scene, but she's never boring or mechanical about it. Oh, she's not above the muffled sob, the pleading tone, or the forlorn self-righteousness that seems to be built into c-&-w; it's just that she handles it all with a touch of briskness and humor. She's changed scarcely at all since her 1971 hit, *I Never Promised You a Rose Garden*, and this latest is another smoothly commercial bit of fluff that in other hands might have turned into lint. Taking no commercial chances either, Columbia has given the album a double title after the two songs most likely to succeed. My bet is on *He Ain't You*, into which Anderson injects flickers of asperity that suggest she's gotten to be quite an actress in a field that generally requires only melodrama. *P.R.*

THE BABYS: *Broken Heart.* The Babys (vocals and instrumentals); vocal accompaniment. *Wrong or Right; Give Me Your Love;*

Isn't It Time; And If You Could See Me Fly; and six others. CHRYSALIS CHR 1150 \$6.98.

Performance: **Fair**
Recording: **Excellent**

The Babys aren't punk rockers; they're more kiddie rockers who take themselves seriously as they sing about . . . oh, you know, love 'n' life 'n' girls with dope habits 'n' other esoteric stuff like that. It's all fairly loud and kind of klutzy. The recording is quite good, for the producer and the engineer knew their business when it came to miking the instruments and getting good separation. Unfortunately, their efforts were wasted. *J.V.*

LUCIO BATTISTI: *Images.* Lucio Battisti (vocals); instrumental accompaniment. *To Feel in Love; Song to Feel Alive; Keep On Cruising;* and four others. RCA TFL1-1839 \$7.98, Ⓞ TFS1-1839 \$7.98, © TFK1-1839 \$7.98.

Performance: **Squeaks by**
Recording: **Good**

Lucio Battisti looks like a moody Italian stallion, but he has a high voice (often accompanied here by his own dubbed-in background vocals) that makes the least of the songs he writes himself—and they aren't much in the first place. A heavy Italian accent fails to add charm to forgettable, overlong ballads about how good it feels to be alive, in love, and in Southern California. It is just possible that the whole thing was ground out on a pasta maker instead of in a sound studio. *P.K.*

HARRY CHAPIN: *Dance Band on the Titanic.* Harry Chapin (vocals, guitar); instrumental accompaniment. *Bluesman; Country Dreams; My Old Lady; Manhood; I Do It for You, Jane; Mismatch; We Grew Up a Little Bit;* and seven others. ELEKTRA 9E-301 two discs \$11.98.

Performance: **No wonder it sank**
Recording: **Good**

Harry Chapin is in his usual form here—this time distended into a two-disc set that runs

well over seventy-two minutes—which is to say that the only thing more pompous and portentous than his songs is his performance of them. A brief sample from the title track will serve: "Jesus Christ can walk on the water/Where a music man will drown/They say that Nero fiddled while Rome burned up/Well I'll be strumming as the ship goes down."

That particular little gem takes only a minute or so of playing time. The other seventy-one are also filled with Mr. Chapin's "strumming" and his illuminations of such subjects as *My Old Lady* and *Manhood* ("I was laughing horizontally/In my loose and lusty youth"). This listener's reaction is a certain panic, rather like awakening from a nightmare in which one has been drowning in an oatmeal sea. *P.R.*

CHER: *Cherished.* Cher (vocals); orchestra. *Again; Dixie; Thunderstorm; Pirate; L.A. Plane; Send the Man Over;* and five others. WARNER BROS. BS 3046 \$6.98, Ⓞ M83046 \$7.97, © M53046 \$7.97.

Performance: **Ah, sweet misery . . .**
Recording: **Good**

The greatest improvement on Cher's latest album—the *only* improvement, since she still can't sing—is that she's getting into the kind of material her public can have a wonderful weep with. Peter Allen's fine *She Loves to Hear the Music*, that ironic, sadly true song about a girl who is letting her life pass by because she's so "into" music and musicians, turns out to be just Cher's meat and potatoes, dramatically and lyrically. She misses the irony by a mile, bypasses its truth and reality, and isn't quite securely on key through most of it, but oh boy, it's the kind of girl-talk that won't leave a dry eye in the beauty parlor. *Send the Man Over* is the saga of a little backwoods girl stranded in Hollywood trying to make it as an actress who is forced (oh-migawd!) to turn part-time hooker since the calls aren't coming through from Metro and Warners. Certainly this is Cher's high point: it has all the hard-breathing, dreary pizzazz of an old Lana Turner epic—and something of the

Explanation of symbols:

- Ⓜ = reel-to-reel stereo tape
- ⓑ = eight-track stereo cartridge
- Ⓒ = stereo cassette
- Ⓛ = quadraphonic disc
- Ⓡ = reel-to-reel quadraphonic tape
- Ⓢ = eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol Ⓜ

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

same irresistible, gaudy fascination. When she intones the lines about hearing footsteps in the hall after turning mama's picture to the wall, you know that at last she has found her true *métier*—c-&-w schmaltz in a glossy Hollywoodish package. If she has the smarts she seems to have, Cher will ask Loretta Lynn to whip up some *real* gaspers for her. Loretta could probably use a few good laughs, Cher could use the money, and the rest of us could all enjoy a good, glamorous cry. P.R.

CHICAGO: *Chicago XI*. Chicago (vocals and instrumentals). *Baby, What a Big Surprise; Policeman; Till the End of Time; Vote for Me; Take Me Back to Chicago*; and six others. COLUMBIA JC 34860 \$7.98, © JCA 34860 \$7.98, © JCT 34860 \$7.98.

Performance: **And on and on and on . . .**
Recording: **Expensive**

Would you believe it? "Chicago XI"? Anything of any real interest that this group was doing surely faded at about "III" or "IV," but their public, easily the most loyal since Edgar Cayce's, continues to buy their albums in astonishing quantities. Listening to "XI" was—surprise, surprise—very much like listening to "X" and "IX" and "VIII" and so on. And on. For sure, they don't change the formula much, but the exactitude with which they reproduce the same sound from album to album has me suspecting that Caribou Ranch, where this was recorded and mixed, is actually Clone Haven, and that the real Chicago is off somewhere joyously living it up on their royalty checks and probably even going to live music concerts once in a while. The album is gorgeously and expensively produced, also as usual. Gee, just think . . . their next one will make an even XII! P.R.

DAVID ALLAN COE: *Tattoo*. David Allan Coe (vocals, guitar); instrumental accompaniment. *Just to Prove My Love for You; Face to Face; You'll Always Live Inside of Me; Play Me a Sad Song; Hey Gypsy*; and four others. COLUMBIA PC 34870 \$6.98, © PCA 34870 \$7.98, © PCT 34870 \$7.98.

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

David Allan Coe here turns his attention to how complicated (what an array of feelings!) a relationship can get. Of course he doesn't call it a sissy word like that, but still it's a switch for Coe, who usually tells you over and over how mean he is. Only one song here, really, dwells on being bad, and that's not one of Coe's simplistic ones but one of Mickey Newbury's anti-hero sort, *San Francisco Mable Joy*. In spite of the fact that Coe's progressive-country rival Waylon Jennings clobbers Coe at the art of covering *Mable Joy*, most of "Tattoo" is pretty well done. It doesn't show quite the *passion* Coe can call up on the subject of whuppin' asses, you understand, but he's a bona fide singer who can freshen up slightly used melodies, and some of these are still under warranty. N.C.

COUNTRY JOE AND THE FISH: *Reunion*. Joe McDonald (vocals, guitar, harmonica, trombone); Barry Melton (vocals, guitar, mandolin, dobro, synthesizer); David Cohen (keyboards, guitar); Bruce Barthol (bass); Gary Hirsh (drums). *Come to the Reunion; Time Flies By; Stateline, Nevada; Love Is a* (Continued on page 110)



Karla Bonoff: Category of One

METAPHOR, identifying and categorizing, tracing roots—all those techniques we use to persuade ourselves we understand things—sometimes don't work. Something comes along and puts the kibosh on analytical thinking. For example: Bonnie Raitt's version of a song called *Home* was for me the other shoe dropping where Karla Bonoff's songwriting talent was concerned—Linda Ronstadt's inclusion of three other fine Bonoff songs in an earlier album being the whump, metaphorically speaking, that set this up. But what an inelegant, inexact, inadequate way of looking at it. So's every other way I've tried. Now I have Bonoff's own debut album for Columbia, "Karla Bonoff," introducing four more of her songs and her voice, and I still can't figure out where her viewpoint, style, or whatever you want to call it came from or where it might go.

I have no doubt about her ability to keep on writing songs I'll like. One can use metaphor to talk *around* it, saying something like, "I have no doubt she will go to the well again." But the question is, which well is she going to? Where do the songs come from, what are their influences? Kenny Edwards, Ronstadt's friend and bass player, produced Bonoff's album and gave the songs an instrumental context similar to the one Peter Asher's been giving Ronstadt's albums. Edwards seems to see the music as rock, but not primitive rock. The instrumentation is dense but not disorganized; he and other Ronstadt musicians such as Andrew Gold (and Bonoff herself, on guitar and piano) take great care in getting a fairly ordinary series of chords miked just so and placed just so among the other sounds. He keeps the instrumental elements from fighting with one another and apports emphasis and priorities carefully. He gives the beat the pronunciation one expects in rock—but the under-

standing seems to be that he *chooses* to do it that way; the songs don't necessarily require it. They'd have come off just as well done a number of other ways.

These songs are not very complicated: their melodies don't involve off-the-wall chord progressions, and the lyrics are fairly easy to track—no arcane metaphors or tricky Faulknerian language here—and deal generally with the basic feelings associated with relationships. Yet the words and music seem new and fresh to the pop scene, and distinctly Bonoff. It could be that she absorbed ideas about melodic progression from listening to classical music; hers has a flow that suggests an awareness, on some level, of relationships and possibilities that might not occur to someone whose "schooling" was listening to the three-chord ditties that dominate the radio.

Or she may have learned more from pre-rock pop music than most songwriters her age have. But nostalgia has practically nothing to do with the appeal of her music. The dramatic buildup she likes to create (she definitely prefers the chorus to the bridge, structurally, and is smart enough to avoid repeating the chorus so much that it gets blunted) is a *characteristic*, all right, but the way she does it seems to come from no particular time or place. Above all else, the songs seem organic (in the folkie I-really-mean-it sense), where most songwriters working with the same ingredients would turn out stuff that sounded manufactured (in the Tin Pan Alley sense).

HER singing style is still developing. Her voice is pleasant but not yet decisive about some of the moves it makes. Strategically, it would have been advantageous to get this one out before Ronstadt and Raitt had at her songs, as it now seems *Someone to Lay Down Beside Me, Lose Again, and If He's Ever Near* were tailor-made for Ronstadt and that Raitt was *born* to sing *Home*. Bonoff's version of *I Can't Hold On*, my favorite among the remainder (she didn't write *Flying High* and *Faces in the Wind*), is the first version of it I've heard, and now it will take some doing to dislodge the notion that this is *the* version of it. This first-come, first-served advantage might have accrued to the other songs, but then she may actually have written them with Ronstadt and Raitt in mind. It's to her credit as a songwriter, if not as a strategist, that they sound as if she did.

It may be to her credit also that I can't find her roots. If we can't classify and pigeonhole her way of doing things—"Oh, that's Karla Bonoff and she synthesizes the blues and Gregorian chants" or whatever—then we might tend to listen a little more alertly to the song itself. So far, that's the main thing she needs an audience to do. —Noel Coppage

KARLA BONOFF. Karla Bonoff (vocals, guitar, piano); Kenny Edwards (bass, guitar, mandolin); Russ Kunkel (drums); Andrew Gold (guitar, keyboards); Dan Dugmore (steel guitar); other musicians. *Someone to Lay Down Beside Me; I Can't Hold On; Lose Again; Home; Faces in the Wind; Isn't It Always Love; If He's Ever Near; Flying High; Falling Star; Rose in the Garden*. COLUMBIA PC 34672 \$6.98, © PCA 34672 \$7.98, © PCT 34672 \$7.98.

ELVIS PRESLEY was many different things to many different people—such was the nature of his special gifts and powers—but above all else, as three widely varying new albums suggest, he was a religious man. Indeed, this may be the only part of the Elvis mythos that everyone agrees on. Both Merle Haggard's "My Farewell to Elvis" and J.D. Sumner and the Stamps' "Elvis' Favorite Gospel Songs" contain tributes to Elvis that stress his religiousness. Presley's own final album, "Elvis in Concert," is highlighted by his reading of the gospel song *How Great Thou Art*, which also appears on the Sumner album; according to Sumner, Elvis always called it "my song."

These three new releases are just the crest of the first wave of Elvis-related albums we can expect to see released in the coming year. It is pointless to ask whether they were done for money or for love, since they were obviously done for both. Fallen country stars have always inspired a rash of tribute albums—there were more than a dozen for Hank Williams—and country traditions die hard. Besides, Elvis was tastelessly and relentlessly commercialized (with his blessing) all his performing life, and there is no reason to expect anything different now.

Of the three, the Haggard album is the toughest to get a fix on. *From Graceland to the Promised Land*—with its catchy little acoustic riff, its country fatalism, its recurring Christian motifs, and the obligatory bank of strings for emphasis—is a memorable enough eulogy. For the rest, Haggard covers the spectrum of Elvis songs, from rock-'n'-roll to schmaltz, ending with a rather pointed *Are You Lonesome Tonight?* and a brief spoken farewell.

Now, Merle Haggard is many good things, but he is not a good rock-and-roll singer, and he knows it. While he does ape Elvis slightly in phrasing and delivery, for the most part he gives all the material a straight country treatment. The results are mixed, but not too good overall. Perhaps the single best effort is *In the Ghetto*, a late-Sixties ballad written for Elvis by Mac Davis that was one of the King's few forays into social commentary. Not surprisingly, the song lends itself well to mainstream country arrangement and instrumentation, and also to Haggard's grainy voice. I also like Haggard's interpretation of *That's All Right (Mama)*, though it has little in common with the Presley version and will undoubtedly displease purists. The song requires a sort of diffident arrogance—like saying "Who cares?" when you care, really, but can't come right out and say so. Elvis put this across one way, and Haggard does it effectively another way, with Buddy Emmons' biting dobro work helping him along.

Besides these two cuts and the opener, however, "My Farewell to Elvis" is full of near misses. Haggard lacks the creamy resonance needed for such songs as *Love Me Tender* and *Blue Christmas*, and the tunefulness of his version of *Don't Be Cruel* undermines the song's meaning. His double-tracked vocal and strong, hard-rock guitar solo give *Heartbreak Hotel* an appropriately eerie tone, but in the end it's overdone. Finally, he fails to catch the humor inherent in *Jailhouse Rock*

and *Blue Suede Shoes*, and any tribute to Elvis that misses his humor catches only part of the man.

Ironically, the best of these three albums is not only the hardest one to obtain but also the one that will probably appeal to the smallest number of potential buyers in the first place. But "Elvis' Favorite Gospel Songs" by J.D. Sumner and the Stamps provides a convincing argument that in this age of orchestras and synthesizers the human voice can still be the most impressive instrument of all. Sumner sings in a rumbling bass so compelling that it almost conceals his few minor difficulties with phrasing. He has a moan that makes him sound more black than white, and his two

The cut from "Elvis' Favorite Gospel Songs" that has so far attracted the most attention is *Elvis Has Left the Building*. This was the announcement always made at the end of Presley's concerts to fans calling for an encore, and in Sumner's tribute it becomes a perfect metaphor for his passing. The cut is a five-minute recitation bound to jerk tears from Miami to Seattle, from Bangor to San Diego. In short, it can't miss. Like Haggard's *From Graceland to the Promised Land*, *Elvis Has Left the Building* expresses a fatalism about Elvis' death: his fans may have demanded more of Elvis than he could provide, it says, but basically his death was as much a part of God's plan as his life. So what if in re-



main solo numbers—*Take My Hand*, *Precious Lord* and the magnificent *These Hands*—are masterpieces of distilled emotion.

Though Sumner is the top attraction, the Stamps' lead singer Ed Enoch (spotlighted most dramatically on *I Can Feel the Touch of His Hand*) and tenor Gary "Buck" Buckles (whose best solo is on *Walk with Me*) aren't far behind. Buckles is particularly interesting since his singing style is so close to Presley's own. While much has (rightfully) been made of Presley's original fusion of country and blues, his stylistic kinship with Buckles—and there's no telling which one influenced the other—indicates just how crucial an element in that fusion gospel music was all along. There is further evidence for this in *His Hand in Mine* (Enoch sings the solo part here), a gospel song that Elvis considered secularizing when he first began singing it. He eventually decided not to, but he would have needed to change only a few words to make it a romantic love song. And, since Sumner and the Stamps don't always follow strict gospel conventions, the romantic version could have used the same arrangement they present here.

counting Presley's career Sumner gets the chronology wrong a couple of times? Who could possibly get upset that he compares Vernon Presley to God because both gave us their only begotten sons? This is potent stuff, all the more so because of its utter simplicity, and it is probably the Elvis tribute that will endure longest.

Actually, the only flaw in "Elvis' Favorite Gospel Songs" is that they're all *slow*. The choice of material may have been determined by Presley's own preferences, but surely he liked at least *one* uptempo gospel shouter. In any case, including one for variety would have made the album easier to listen to.

THE one cut on "Elvis in Concert" where the King truly delivers is *How Great Thou Art*. It was a struggle for him, but he hits every note just right, phrases delicately, and all in all turns in a thrilling performance. Those who saw the CBS-TV special (aired October 3, 1977) that accounts for half of this double album (the rest is from various shows during Elvis' final tour) will probably recall that this was the only song he seemed to be really con-

centrating on as he sang it. *How Great Thou Art* is the kind of slow, "big" song that (according to Felton Jarvis, his producer) Elvis most enjoyed singing in his last years. Such songs gave him a chance to stretch out and show off, using both the full range of his voice and his knack for timing and phrasing.

The album begins with the rocking *See See Rider*, which is all misplaced freneticism (and rather distant-sounding to boot) until Elvis seems to grab hold of it halfway through, and it ends with the schmaltzy *And I Love You So*. Throughout the four sides it is the grandiose "big" songs that get the better performances, which means that such dreck as *Hawaiian Wedding Song* is treated with real pas-

and puff as he reaches for some notes, and he even misses a few; but that isn't unusual in a live recording, where there's only one take on each song and overdubs aren't allowed.

Most of the time he seems plagued more by boredom than by any problems with his voice. As *How Great Thou Art* demonstrates, he could still sing as well as he wanted to—he just didn't want to sing well very often, apparently. It's of no special significance that he blows the recitation in the middle of *Are You Lonesome Tonight?* and ad libs some cornball gag lines. That wasn't unusual for Elvis—in fact, it was one of his greatest charms—and he did exactly the same thing in some of his greatest shows. Nor does it matter that Sinatra's *My Way* had been so recently added to his repertoire that he had to read the lyrics because he hadn't yet memorized them. It's another of those "big" songs, and he could have sung it any time after his 1969 comeback and it would have seemed just as appropriate.

IN sum, "Elvis in Concert" is just another piece of Elvis product. It has a smattering of bright moments, but most of it preserves meaningless rote performances by a man who had nothing to prove. Had Elvis not died between the time it was recorded and the time it was released, it would attract no more special attention than any of his many other dubious albums. But his fans, of course, will not want to be without it. —John Morthland

MERLE HAGGARD: *My Farewell to Elvis*. Merle Haggard (vocals, guitar); vocal and instrumental accompaniment. *From Graceland to the Promised Land; In the Ghetto; Don't Be Cruel; Jailhouse Rock; Love Me Tender; That's All Right (Mama); Heartbreak Hotel; Blue Christmas; Blue Suede Shoes; Are You Lonesome Tonight?* MCA MCA-2314 \$6.98, © MCAT-2314 \$7.98, © MCAC-2314 \$7.98.

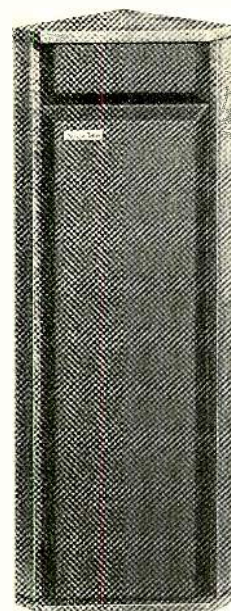
J.D. SUMNER AND THE STAMPS QUARTET: *Elvis' Favorite Gospel Songs*. J.D. Sumner, Ed Enoch, Ed Hill, Gary Buckles, and Larry Strickland (vocals); instrumental accompaniment. *Elvis Has Left the Building; Known Only to Him; His Hand in Mine; These Hands; Walk with Me; Sweet, Sweet Spirit; How Great Thou Art; Take My Hand, Precious Lord; I Can Feel the Touch of His Hand; He Touched Me.* QCA 362 \$6.98 (from QCA Records, 2832 Spring Grove Avenue, Cincinnati, Ohio 45225).

ELVIS PRESLEY: *Elvis in Concert*. Elvis Presley (vocals, guitar); vocal and instrumental accompaniment. *See See Rider; That's All Right; Are You Lonesome Tonight?; (Let Me Be Your) Teddy Bear/Don't Be Cruel; You Gave Me a Mountain; Jailhouse Rock; How Great Thou Art; I Really Don't Want to Know; Hurt; Hound Dog; My Way; Can't Help Falling in Love; I Got a Woman/Amen; Love Me; If You Love Me (Let Me Know); O Sole Mio/It's Now or Never; Trying to Get to You; Hawaiian Wedding Song; Fairytale; Little Sister; Early Morning Rain; What'd I Say?; Johnny B. Goode; And I Love You So.* Plus comments by Elvis and his fans and a special message from Elvis' father, Vernon Presley. RCA APL2-2587 two discs \$13.98, © APS2-2587 \$13.98, © APK2-2587 \$13.98.

sion while meaty numbers like *What'd I Say* and *Johnny B. Goode* are tossed away. Both of the latter consume less than a minute each—about the same amount of time it takes Elvis to introduce his father to the audience. The only real rocker that gets better than a perfunctory run-through is *Jailhouse Rock*; more typical is the way he handles *Hound Dog*, which he wanders in and out of several times. What we are left with is Elvis-as-bland-crooner, whose greatness is assumed but wasted on the likes of *If You Love Me* and the pleasantly jaunty *Trying to Get to You*. His introduction to the *I Got a Woman/Amen* medley shows he still had some of the fiery maverick in him, but he seems to have done it only to prove he could; once he's proved his point, he dissipates the atmosphere and scuttles right back into blandness.

Those looking for evidence of Presley's physical condition during his final shows won't find that here either. On television, his much-discussed weight problem didn't seem that bad (much more telling was his face, which looked like it belonged on an aging drag queen). On the record, he does have to huff

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STEREO Vol 10
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Mystery; Dirty Claus Rag; Not So Sweet Martha Lorraine; Thunderbird; and five others.
FANTASY F-9530 \$6.98, © 8160-9530H \$7.95,
© 5160-9530H \$7.95.

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

Country Joe's new album is rather hyper-aware of change, extinction, not being able to go home again, and the way we were—which makes it a better reunion album than, say, the one Quicksilver did a year or so ago that tried to pretend nothing had changed since 1969. The group is mellower than it used to be, the sound is augmented here and there with strings, and the lyrics are given to poking gentle fun at how they, as political round pegs, fit into the square holes of the late Seventies. "Lookin' angry, that's me having fun," drummer Gary Hirsh writes for McDonald to sing, "leading a band to save the whales" (Joe's cause nowadays). But then the bassist, Bruce Barthol, is both kidding and serious when he says in *Insufficient Funds* that there's only one thing left for poor people to do: "We'll have to start eatin' the rich." Fortunately, in musical terms the album is more appealing than the thought of roast leg of Rockefeller or—yuck—Getty steak. Though the album works best as nostalgia despite itself, it does suggest the band could stay together if they want to and give the present and the future, as well as the past, a going-over. Both McDonald and Barry "The Fish" Melton make better music in this company than they do out of it, and I'd like to hear what happens if they stay reunited long enough for a few more broadsides. N.C.

CRYER AND FORD: You Know My Music. Gretchen Cryer and Nancy Ford (vocals); instrumental accompaniment. *Big Bill Murphy; You Know My Music; Last Day at the Job; You Can Kill Love; Natural High; I Don't Want to Be Free of You;* and four others. RCA APL1-2146 \$7.98, © APS1-2146 \$7.95.

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

There's an air of distinction and quality about the work of Gretchen Cryer and Nancy Ford. Their scores and songs are consistently solid, craftsmanlike efforts that might not always send you out of the theater humming them but often give you something to think about. The same applies to this collection of their songs. *Last Day at the Job* is about a woman who, at sixty-two, decides to quit her lifetime job as a bank teller and just enjoy herself. The protagonist of *Big Bill Murphy* is a suburban commuter who is quietly but quickly getting sloshed on the way home: "Lately I've heard so much talk/About women wanting to be free/And I just can't help but wonder, honey/What about me?" These are relatively good examples of the real-life situations Cryer and Ford deal with, and they perform them excellently against a complementary orchestral background. So, where's the rub? Well, the songs do get a bit boring after a while, and the album itself has a salon quality about it that forced me into a strained listening position hoping like hell my chair wouldn't squeak. But there's no denying that Cryer and Ford are talented women, and for those who like to get all dressed up mentally and sit at attention, they're probably dynamite. P.R.

(Continued on page 112)

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DOOBIE BROTHERS: *Livin' on the Fault Line*. Doobie Brothers (vocals and instrumentals). *Nothin' but a Heartache; Little Darlin'; Echoes of Love; There's a Light; Chinatown;* and five others. WARNER BROS. BSK 3045 \$7.98, © M83045 \$7.97, © M53045 \$7.97.

Performance: **Plastic funk**
 Recording: **Average**

I once considered doing a magazine article entitled "Now that we've all had a good laugh, let's disband the Navy" but discarded the idea because I could see that the title would be far and away the best thing about it. So it is with this album. I find I don't mind the Doobie Brothers as much as I used to, but that doesn't relate to their being more interesting as much as it does to what disco and punk rock and such things have done to the rest of pop music. The group still seems to ride mainly on crossing watered-down soul with that amorphous Southern California non-style of rock, and if their lyrics are emptier than usual here, blame it on the times. I don't mind having to listen to it, but I surely wouldn't buy it with my own money. N.C.

FIREFALL: *Luna Sea*. Firefall (vocals and instrumentals); instrumental accompaniment. *So Long; Just Remember I Love You; Sold on You; Someday Soon; Just Think; Getaway;* and four others. ATLANTIC SD 19101 \$7.98, © TP 19101 \$7.98, © CS 19101 \$7.98.

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

Firefall's first album contained a quite lovely version of Steve Stills' *It Doesn't Matter*. "Luna Sea" has nothing like that. Instead, it offers new evidence for the theory that country-rock as a form has become so absorbed into the musical mainstream as to have achieved MOR status (hence Firefall's hit singles, which didn't sound a bit out of place on the radio surrounded by Barry Manilow and Foreigner). If you'd enjoy an album that has nothing to recommend it except that it supports critical theorizing, this should be just your cup of tea. S.S.

THE DAVID GRISMAN QUINTET. David Grisman (mandolin); Tony Rice (guitar); Darol Anger (violin, mandolin); Todd Phillips (mandolin); Bill Amateck (bass). *Blue Midnite; Pneumonia; Fish Scale; Richochet [sic]; Dawg's Rag;* and three others. KALEIDOSCOPE F-5 \$6.98.

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

These are weird tunes. No label fits them; some of them sound like jazz, traditional fiddle stuff, old show tunes, and European gypsy music all at once. Grisman wrote or helped write all but two; Tony Rice of the quintet wrote one of the others, and Artie Traum wrote *Fish Scale*. The David Grisman Quintet is about as "different" sounding as its music, at least in this time and place, and could turn out to be one of the more influential instrumental groups to come along lately. Every member of the group is impressive, violinist Darol Anger and Grisman especially so, and the album is ardently melodic. In a weird way. N.C.

MERLE HAGGARD: *A Working Man Can't Get Nowhere Today* (see Best of the Month, page 83)

LINDA HARGROVE: *Impressions*. Linda Hargrove (vocals); instrumental accompaniment. *Hangin' On; Impressions; Mem'ries; Mexican Love Songs; Not Even for Love; If You Will Walk with Me;* and four others. CAPITOL ST-11685 \$6.98, © 8XT-11685 \$7.98.

Performance: **Not bad, for burned toast**
 Recording: **Good**

"Impressions" features some moderately entertaining performances by Linda Hargrove, a c-&-w *diseuse* with a wryly raunchy style and an ability to write such amusingly sulky songs as, for example, *Not Even for Love* (he can stay in New Orleans, she's headed back for the red hills of Georgia). *Mexican Love Songs* (they and the beer are responsible for her waking up in the morning with a cowboy who takes up three quarters of the bed), and the disenchanted—and very funny—*Nashville, You Ain't Hollywood*. Her what-the-hell lyric readings have the morning-after solemnity of benumbed nerve endings and a certain singed indignation—like burned toast served on a paper plate. P.R.



CAROLE KING
Reflecting a time gone by

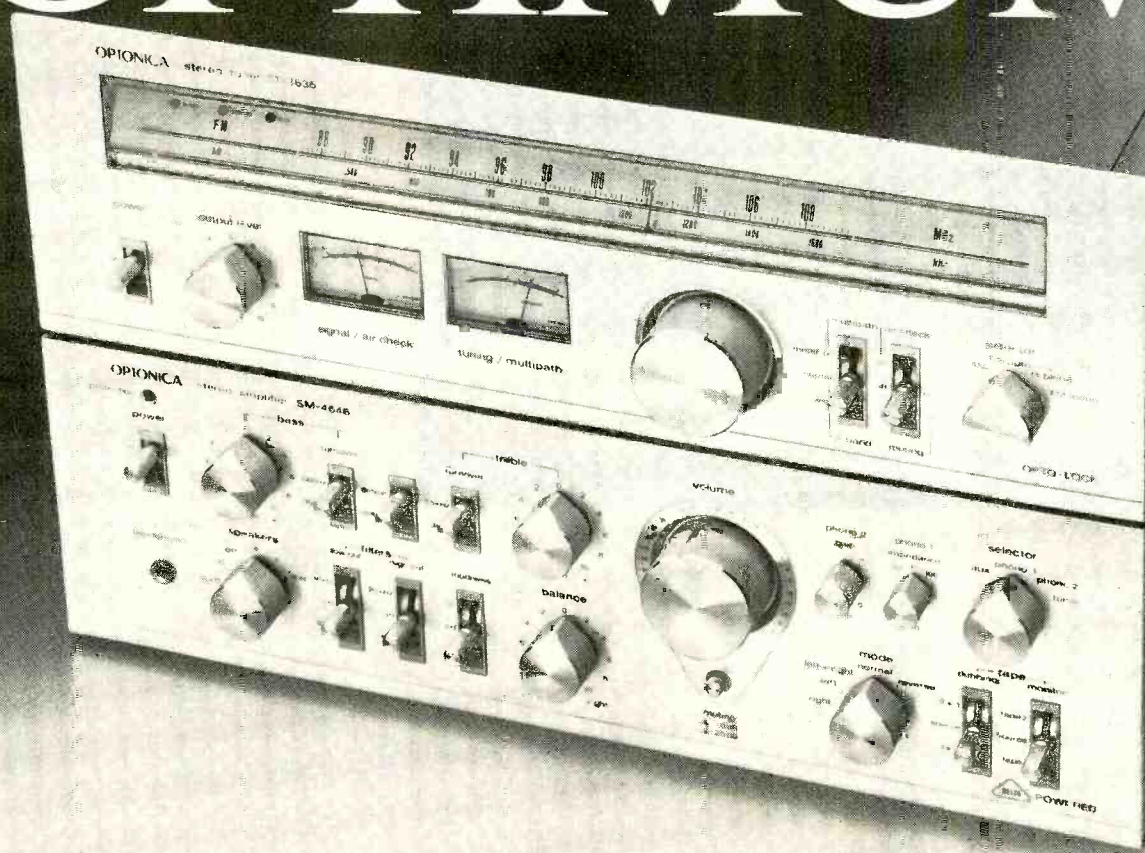
CAROLE KING: *Simple Things*. Carole King (vocals, keyboards, guitar); orchestra. *Simple Things; Hold On; In the Name of Love; Labyrinth; Hard Rock Cafe;* and five others. CAPITOL SMAS-11667 \$6.98.

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

The generation that Carole King mesmerized has grown a bit since the phenomenally successful "Tapestry" of 1971. The "Me Decade" that Tom Wolfe so brilliantly described is finally drawing to a sighing end with the slow, painful realization that the "outside" world is at the door, demanding that its dues be paid. King hasn't changed, though. "I never want to stop being a child," she sings here in the title song. The melodic structure of most of her songs and the style in which she performs them have an oppressive struggling-to-get-free quality which is always quickly and neatly resolved in the last few bars. There was a time, and that quite recently, when introspection and soul searching were appropriate. But this kind of precious, totally self-involved tender loving care of one's own teeny-tiny emotional world has gotten to be a bore. Every time Ms. King tries to draw me into her conservatory, fern-filled and steamy (Continued on page 116)

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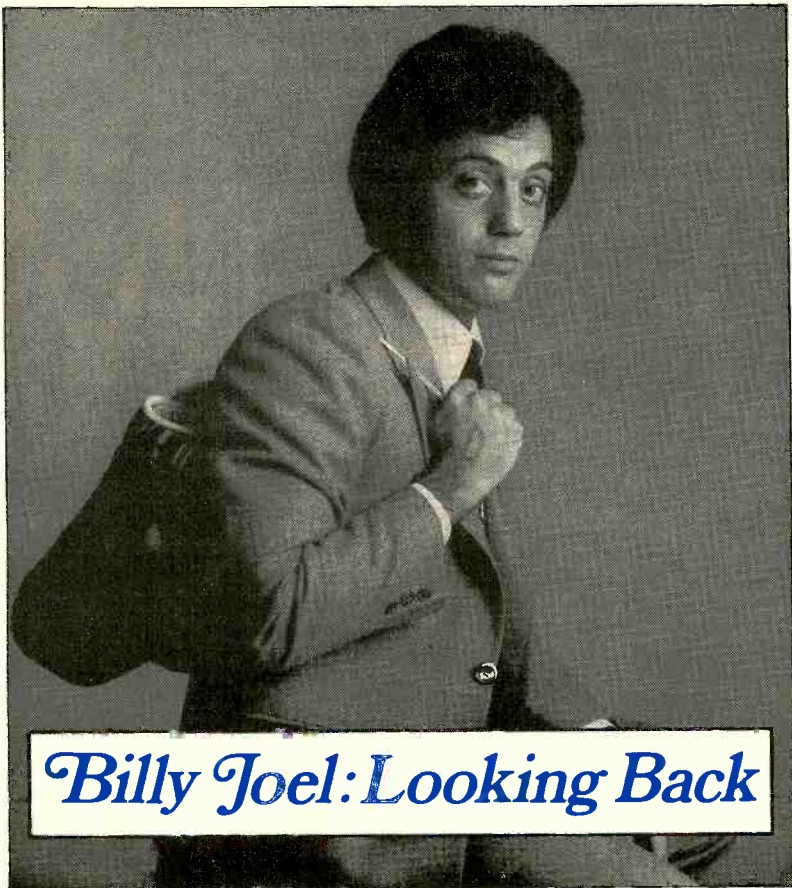
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Billy Joel: Looking Back

THE title of Billy Joel's newest release, "The Stranger," may echo the Albert Camus novel, but once into it you soon discover that it is much more like a *Remembrance of Things Pasta*, an Italian-American nostalgia trip. True, it has a directness that Proust would probably have found appalling, but it gives the listener a unique opportunity to get into the head and feelings of a now grown-up ex-greaser through a group of songs that are at once a love letter and a farewell to youth, by turns touching, mordant, funny, gross (new sense), melodramatic, and naïve. One indication that this is a real world that confronts us is the fact that none of these songs could possibly be sung convincingly by the thirty-four-year-old classically trained actor who plays "Fonzie," either of the young Beverly Hills matrons who play "Laverne" or "Shirley," or any of the other commercially confected personalities from Fernwood and beyond that the media have been offering up to satisfy that strange new longing for blue-collar times and places that never were.

"The Stranger" works because Joel knows his territory firsthand. Beginning with *Movin' Out (Anthony's Song)*, you know that the testimony you are about to hear is the truth, the whole truth, and nothing but. An ambitious kid works in a grocery store, saving his pennies for he knows not what. "Mama Leone left a note on the door/She said, 'Sonny, move out to the country.'" But, Sonny asks, "Who needs a house out in Hackensack?/If that's movin' up, then I'm movin' out." He goes on to question just what everyone else in the

neighborhood is doing with what *they've* earned ("He's tradin' in his Chevy for a Cadillac"), and comes to the angry and defiant conclusion that all he knows is what he *doesn't* want.

Another closely observed vignette is *Only the Good Die Young*, in which the tensions of sexual urge and sexual guilt are beautifully sketched. A young Casanova half cajoles, half pleads with a girl to let him ease her off her virgin pedestal with a technique as time-worn as it is dishonorable, pretended hurt feelings, pious illogic, and all. What really gets him is that her mother has warned her about him: "(All) I could give you was a repu-

songs that are at
once a love letter and
a farewell to youth

tation/She never cared for me/But did she ever say a prayer for me?" It is such accurate little touches that make Joel's work a delight.

Scenes from an Italian Restaurant is a lot moodier but no less candid. It is an eight-minute monologue about running into a buddy from the old neighborhood and catching up on what's happened to everybody—mostly to

Brenda and Eddie who were, to the narrator, the Scott and the Zelda, the golden kids of the hang-out set: "Nobody ever looked finer/Or was more of a hit at the Parkway Diner." Of course they had married—and divorced: "Brenda and Eddie had had it/Already by the summer of '75." The melody for this greaser *Tristan und Isolde* (and Joel is a melodist, something rather rare in Seventies pop) is in the hazy, smoky, yearning style of his own *Piano Man*, dust particles filtering through afternoon sunlight. Much of the impact of the song comes from the tone of resigned acceptance (that's the way things turn out) in which he sings it, the kind of sarcastic wisdom with which a man looks at the boy he was.

There are a couple of things here that don't work in the way they were probably intended, but they still carry weight because of Joel's performing intensity. The most ambitious is the title song, a thoroughly respectable failure that attempts the almost impossible—describing the stranger within us who knows all our secrets, shares all our lies, and tries to hide us from ourselves and from other people. It is a rather too abstractly presented attempt to ape the log-cabin philosophizing of a Harry Chapin or an Elliot Murphy. Joel's best work is too real and too wise for him to bother with such solemn chit-chat.

A WORLD apart from this kind of introspection is the melodramatic *She's Always a Woman*, about one of those five-and-dime Loreleis who can do an honest man in with the flick of a beaded eyelash. It gets fairly silly before it cranks down to its masochistic end, but then even greasers must have some myths to live by. *Everybody Has a Dream* (see what I mean?), *Get It Right the First Time*, and *Just the Way You Are* are all good tracks only slightly below the very top grade of *Scenes and Movin' Out*.

The production by Phil Ramone and the orchestrations by Patrick Williams serve Joel and his work perfectly by intruding not at all; there's not a "cute" gimmick to be heard anywhere in the album. Joel is singing better than I've ever heard him before, with an accent on clear-clearer-clearer diction and an avoidance of his old habit of underscoring "big" lines with an extra mood chord or two on the piano. "The Stranger" isn't a particularly showy or innovative album, but it is bone-honest, filled with a very privileged kind of insight, and as gritty as life.

The next time a young greaser sideswipes your car, gives you the finger, and roars off into the sunset, remember that he is probably one of those Anthonys cursed with the strong premonition that his personal sunset will begin promptly at the end of his teens. Billy Joel seems to be about the only artist who is pointing out what this sad little sociological footnote means in human terms, and that, I think, is important.

—Peter Reilly

BILLY JOEL: *The Stranger*. Billy Joel (vocals and piano); orchestra. *Movin' Out; The Stranger; Just the Way You Are; Scenes from an Italian Restaurant; Vienna; Only the Good Die Young; She's Always a Woman; Get It Right the First Time; Everybody Has a Dream.* COLUMBIA JC 34987 \$7.98, © PCA 34987 \$7.98, © PCT 34987 \$7.98.

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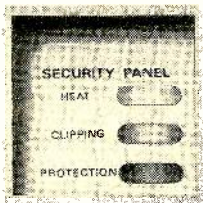
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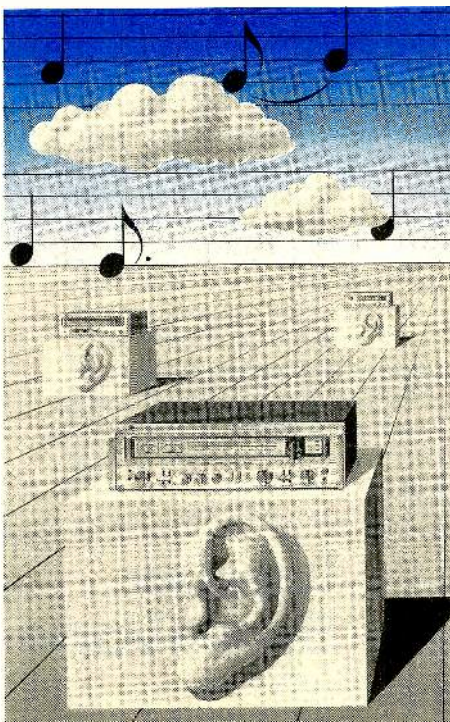


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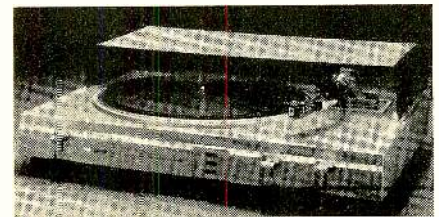
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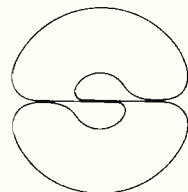
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Interface: 1,2,3, B Series II, D,C,A Series II.



with feelings, my first listening impulse is, "Not today, honey. I have a headache." The difference between a true woman of the Seventies, such as Janis Ian, and Carole King is the difference between gut reactions to a real world and the moony intellectualizing of the steadfast little girl sitting at the piano picking out one "poetic" cliché after another about "life." Pop music is meant to reflect its time, but Ms. King's music reflects a time gone by.
P.R.

MARILYN MCCOO AND BILLY DAVIS, JR.: *The Two of Us*. Marilyn McCoo and Billy Davis, Jr. (vocals); instrumental accompaniment. *Look What You've Done to My Heart: Wonderful: My Very Special Darling; Night-song; The Times*; and four others. ABC AB-1026. \$6.98, Ⓢ 8020-1026 (H) \$7.95, Ⓢ 5020-1026 (H) \$7.95.

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

Marilyn McCoo and Billy Davis, Jr., are cute but not corny and ostentatiously compatible. They have emerged from their summer TV variety show as one of the golden celebrity couples of the day, a sort of Captain and Tennille of a funkier feather.

Though they sing with enviable bounce and spirit, their recorded efforts on this and their previous album are not terribly exciting. Ms. McCoo coos appealingly, and Mr. Davis lends strut and swagger to their efforts with his somewhat nasal singing. Perhaps television, with its emphasis on the visual (they are an extremely attractive pair) is their true province. Bereft of that extra dimension, they sink to a level of pleasant but mindless mediocrity.
P.G.

RECORDING OF SPECIAL MERIT

THE NIGHTHAWKS: *Side Pocket Shot*. Nighthawks (vocals and instrumentals); instrumental accompaniment. *Are You Lonely (for Me Baby); Slow Down; I Keep Cryin'; James' Hawaiian Punch; Honky Tonk Queen; I'll Get the News*; and five others. ADELPHI AD 4115 \$6.95 (from Adelphi Records, Inc., P.O. Box 288, Silver Spring, Md. 20907).

Performance: **Very good**
Recording: **Good**

A two-fisted, frisky combo with a sense of humor, the Nighthawks offer original material for the first time on this, their fourth album. Their songs are lean and spare, designed to allow as much room as possible for instrumental fills and passages. The best items are *Tramp on the Highway, I'll Get the News*, and *Love's So Hard (to Understand)*, the last being especially persuasive. Mixed in with the originals are hearty workouts on *Are You Lonely (for Me, Baby)*, a mid-Sixties shouter written by Bert Berns, and—a happy surprise—guitarist Leo Kottke's *Vaseline Machine No. 2* performed by Jim Thackery.

The combo is crisp and driving as always, with the rowdy sense of fun that distinguishes them. Lending notable support are pianist Dave Maxwell of the James Cotton Blues Band, the horns from a Pittsburgh group called the Rhythm Kings, and pedal-steel guitarist Tommy Hannum of the Roslyn Mountain Boys, a country band from Washington, D.C., where the 'Hawks headquarter. J.V.

(Continued on page 118)

THE INSIDE STORY ON THE PERFECT COUPLES.

INTEGRATED AMPLIFIERS

AM-2800: Power output meters w/100 or 3 watt Scale Selector. Low and High/Low Loudness Control, High & Low Frequency Filters w/Alternate Levels, Audio Mute (-15 dB or -30 dB), Bass, Midrange and Treble Controls. 2 phono inputs, 2 tape inputs. **Power Bandwidth (IHF):** 7 Hz to 40 kHz/8 ohms. **Residual Noise:** less than 0.5 mV at 8 ohms.

AM-2600: Power output meters w/80 or 3 watt Scale Selector. Low and High/Low Loudness Controls, High & Low Frequency Filters w/Alternate Levels, Audio Mute (-15 dB or -30 dB), 2 tape inputs, 2 phono inputs. **Power Bandwidth (IHF):** 7 Hz to 40 kHz/8 ohms. **Residual Noise:** less than 0.5 mV at 8 ohms.

AM-2400: Bass and Treble Controls w/Two Step Turnover Controls, Audio Mute Control, High & Low Frequency Filters, 2 tape inputs. **Power Bandwidth (IHF):** 7 Hz to 40 kHz/8 ohms. **Residual Noise:** less than 0.5 mV at 8 ohms.

AM-2200: 20 watts per Channel Continuous Output Power, min. RMS at 8 ohms from 20-20,000 Hz with no more than 0.5% T.H.D. High & Low Filters, Loudness Control, 2 tape inputs, detent volume control and tape monitor. **Power Bandwidth (IHF):** 10 Hz to 45 kHz/8 ohms. **Residual Noise:** less than 0.8 mV at 8 ohms.

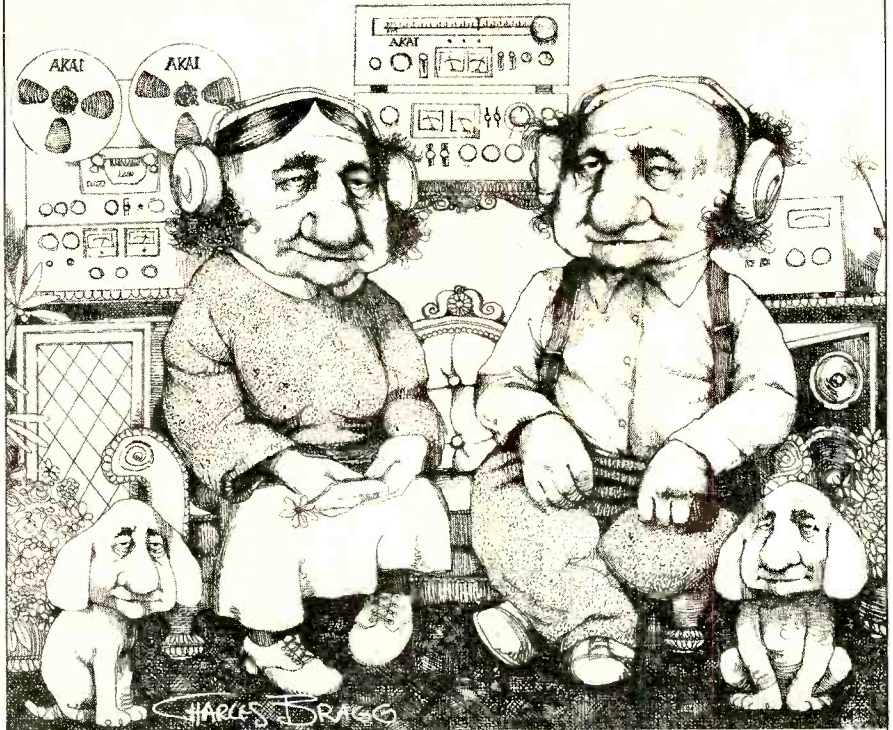
All Units: S/N (IHF): Phono—better than 75 dB, Aux—better than 95 dB.

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AT-2400: PLL MPX Circuitry, FM Mute Switch, High Blend Switch, Separate Signal Strength and Tuning Meters, Output Level Control and Automatic Frequency Controls. **Sensitivity (IHF):** 1.8 μ V; **Capture Ratio:** 1.0 dB; **Stereo Separation:** more than 42 dB (1 kHz).

AT-2200: PLL, FM Mute Switch, Separate Signal Strength and Tuning Meters, Output Level Control. **Sensitivity (IHF):** 1.9 μ V; **Capture Ratio:** 1.3 dB; **Stereo Separation:** more than 40 dB (1 kHz).



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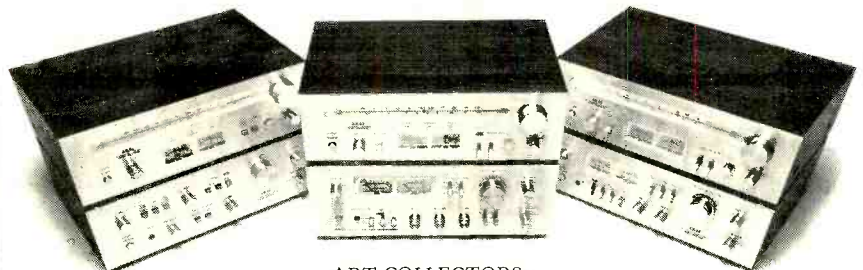
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PIPER: *Can't Wait*. Piper (vocals and instrumentals). *Can't Wait; Drop By and Stay; See Me Through; Little Miss Intent; Now Ain't the Time*; and four others. A&M SP-4654 \$6.98, © AAM 4654 \$7.98, © AAM 4654 \$7.98.

Performance: **Slick**
Recording: **Excellent**

Sometimes there's really no point in intellectualizing over a record, and this is one of those occasions. It's contrary to all my most cherished prejudices, but it turns out that I like "Can't Wait," Piper's second effort. Considering it dispassionately, I know that it's just another of those tedious Sixties pop-revival albums made by a band of dubious sincerity (they're managed by the folks who

brought us Kiss) whose imagination is limited to endless rehashes of Lennon and McCartney. (Billy Squier, who fronts Piper, is capable of a lot worse; as a member of the Sidewinders he once perpetrated a surf-guitar version of *The Flight of the Bumblebee*.) Even if I believed these guys were serious, there is simply no way that any band today can come on like a real Sixties group convincingly singing about high school and adolescent love. This is 1978, and the context for such songs and sentiments no longer exists. Sing about such things and you sing in a vacuum.

But, as I said, I like this record anyway. For blatantly second-hand melodies, these are awfully seductive, and Piper really has a flair for all the little, almost subliminal production

touches that made the records they loot so enthralling. Why Piper should hit me this way when, say, Dwight Twilley and Pezband, who do the same sort of thing, leave me cold. I haven't the foggiest. It probably has something to do with my DNA coding. S.S.

RECORDING OF SPECIAL MERIT

DIANA ROSS: *Baby It's Me*. Diana Ross (vocals); instrumental accompaniment. *Gettin' Ready for Love; You Got It; Baby It's Me; Too Shy to Say; Your Love Is So Good for Me*; and five others. MOTOWN M7-890R1 \$7.98.

Performance: **Radiant**
Recording: **Excellent**

Her latest record finds the invincible Diana Ross in a state of infectious euphoria. She and her arrangers have turned the mood of the blues inside out so that the entire album glows with a warm radiance that is especially refreshing. "I'm getting ready for love," she sings, and proceeds to sail blithely through a series of ballads that deal with love required rather than the pining and yearning that make up so much of the pop-vocal repertoire nowadays. There are a few downbeat interludes, such as *The Same Love That Made Me Laugh*, but most of the time everything here seems to be going right for Diana. Her style is more polished, less primitive, less mannered than it's ever been. Can it be that we're headed into a renaissance of sophistication and subtlety in the pop-music business? Not that the songs here are old-fashioned—far from it. Most of them are in an idiom that grows directly out of the soul approach this singer herself helped make popular, while Stevie Wonder's *Too Shy to Say* is an affecting ballad that transcends the manner of the moment and gets a most moving treatment. This new, tamer, warmer Diana is a welcome visitor, and the whole program is distinguished, despite the lush arrangements, by a spirit at once exhilarating and pleasantly civilized. P.K.

RUSH: *A Farewell to Kings*. Rush (vocals and instrumentals). *A Farewell to Kings; Xanadu; Closer to the Heart; Cinderella Man*; and two others. MERCURY SRM-1-1184 \$6.98, © MC8-1-1184 \$7.95, © MCR4-1-1184 \$7.95.

Performance: **High-energy**
Recording: **Good**

Rush is a Canadian trio that over the past few years has played to a lot of packed houses on tours. They are a high-energy, heavy-metal, rock commando squad who've built a large following in the Midwest, the South, and parts of the Eastern Seaboard through those in-person appearances.

All of which leads up to the flaw in this album: what Rush does on stage doesn't quite come across in a studio-made recording. Nor does their material. "A Farewell to Kings" is a loosely developed "concept" album whose theme is ambiguous; most of it seems to have to do with a suffocating society in which goodness and morality and so on are not rewarded. The trio is evidently serious about all this and delivers it with controlled vehemence, but Geddy Lee's high-pitched vocals sometimes collapse into mere keening—and that off-key. I would have enjoyed the album more if Rush had been a little more specific about what they intended to say; as it is, their

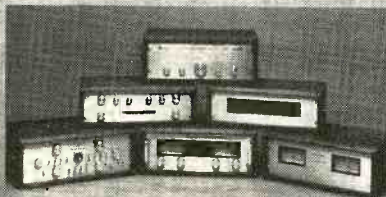
(Continued on page 125)

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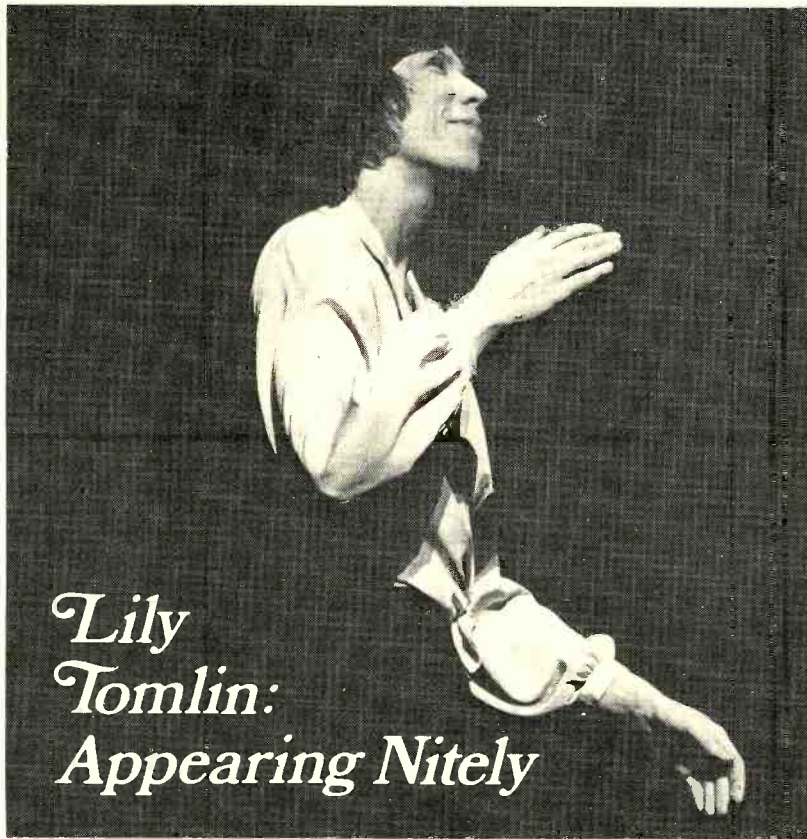
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Lily Tomlin: Appearing Nitely

WHEN Lily Tomlin's *Appearing Nitely* opened on Broadway last year, I was dubious; except for Richard Pryor, who defies any simple categorization, stand-up comedy seemed to me to be a dying art. Humor has always been the most subjective of affairs, and the cultural fragmentation of the Seventies has ensured that most of us can no more agree on what is funny—or, at least, safe to laugh at—than we can agree on anything else. I personally never found many thigh slappers in such popular comic institutions as the Fire-sign Theatre, Monty Python, *Saturday Night Live*, or even Woody Allen, and I was not about to take anyone's word that a one-woman show with an array of characterizations as diverse as Tomlin's could live up to its hype. But when I saw *Appearing Nitely* I realized that I had underestimated her gifts, not just as a comic but also as an actress and a writer.

"On Stage" is a recording of highlights from the show, and it reveals both Tomlin's virtuosity and her limitations. The album has been conceived (rather condescendingly) as a mock "night on Broadway," complete with the voice of a "Mr. Theater Goer" who invites the listener along: "My cab is waiting. Won't you join me? . . . The crowd is elegantly dressed. What a glamorous gathering!" Whether this is supposed to add a touch of camp or to make the folks out in the boonies feel they're really getting a taste of the Great White Way, it's irritating. The only function it serves is to help introduce two of Tomlin's new personae, the Shopping Bag Lady and the UFO Guy.

It hardly seems worth the trouble. *Appearing Nitely's* most audacious creation—the

quadraplegic who is determined to travel cross-country by wheelchair and to go hang-gliding off the California coast—was better conceived and far more incisive than either the Shopping Bag Lady or the UFO Guy, yet she has been left off the record entirely. It would be nice to be able to applaud Tomlin for her compassionate understanding of some of the most pathetic and wretched people in our big cities, but her portrayals of these two just don't work. Her down-and-outers seem far more like Walt Disney's Goofy than like the despair-maddened humans sleeping on the sidewalks and endlessly muttering to themselves that I encounter every day in New York. Whatever the bag ladies and UFO crazies really are, they aren't *cute*, which is what Tomlin makes them.

... in her ability to tell us about ourselves lies her true genius.

Cuteness has afflicted Tomlin's characters ever since *Laugh-In's* Edith Ann (the little girl in the huge chair), and here it undermines many of the one-liners as well. Most of these, in fact, are simple reversals of clichés—for instance, "I worry that drugs may have made us more creative than we really are." For a show celebrated for its brilliance, there are alto-

gether too many clichés. Tomlin's famous telephone operator, Ernestine, shows up, but do we really need to be told again that the phone company is an inefficient monopoly gagging on its own technology? (For that matter, is it really true?) The "Dixie cups and a thread" line is lifted straight from Lenny Bruce, who satirized the phone company a lot more pointedly twenty years ago.

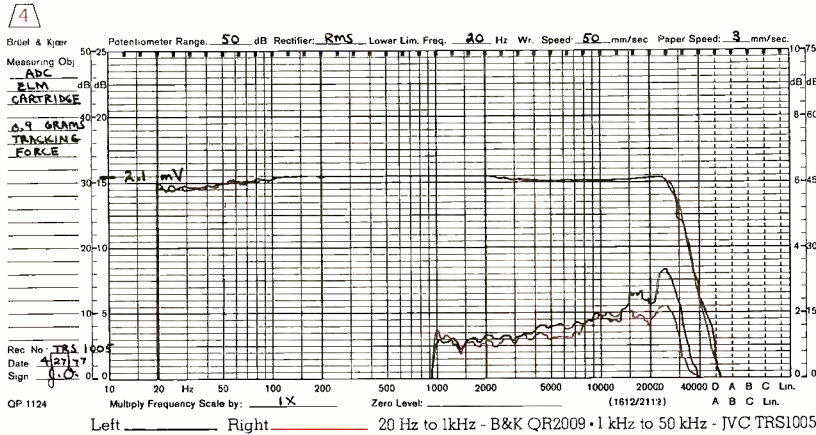
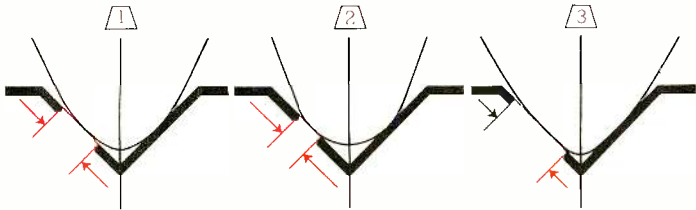
Glenna—A Child of the 60's, a twenty-one-minute routine that takes up half the record, is many people's favorite. You can probably guess most of the contents from the title alone: Beatles, drugs, protest marches, encounter groups, and so forth, all ending neatly with Glenna marrying a lawyer and having a Mexican maid—a joke worthy of Norman Lear, perhaps, but not of Tomlin at her best. Whatever the routine's resonances or revelations, they come more from Tomlin's vocal inflections than they do from the material itself; the only time it even comes close to saying something interesting about the Sixties is when a stoned Glenna turns off Vietnam news in order to watch *I Love Lucy* reruns. We never learn exactly what Tomlin's attitude toward the Sixties is: nostalgic affection? thinly veiled contempt? mythic awe? Perhaps we are still too close to the period, still too stunned by the disintegration of that decade's promise, to understand it. Tomlin's is not the only failed attempt to interpret it for us, but it might have been a more interesting failure. As Glenna herself might say, it's sooo . . . obvious, mannn. . . .

TOMLIN'S real strengths come through in two routines that by themselves make "On Stage" worth buying. *Lud and Marie Meet Dracula's Daughter* and *Tell Miss Sweeney Goodbye* are both classic pieces of heightened autobiography and high comedy, featuring a novelistic eye (and memory) for such details as the exact size, shape, and texture of clothes and the contents of school lunch buckets. They convey a sense of life as it was actually lived in a specific time and place (the Fifties, interestingly enough) that far transcends cliché. As Tomlin spins these childhood fantasies, she has the power to cancel your awareness that you are listening to a record and to pull you inexorably into her private yet somehow universal world. Just where many comedians turn self-indulgent, Tomlin creates authentic American folklore out of her most intimate material, giving us an oral history that goes beyond comedy to touch the heart and show up *Glenna* and the like for the cheap and basically lazy confections they are. I hope that Lily Tomlin will ease away from the wisecracks and glib stabs at social criticism and share more of her autobiography with us in the future. It is the story of all our lives, and in her ability to tell us about ourselves lies her true genius. —Lester Bangs

LILY TOMLIN: *On Stage*. Lily Tomlin (comedian); Norman Rose (voice of "Mr. Theater Goer"). *Mr. Theater Goer and Shopping Bag Lady; Mrs. Judith Beasley; Lud and Marie Meet Dracula's Daughter; Ernestine; Tell Miss Sweeney Goodbye; Shopping Bag Lady and UFO Guy; Glenna—A Child of the 60's; Lily and Shopping Bag Lady.* ARISTA AB 4142 \$7.98.

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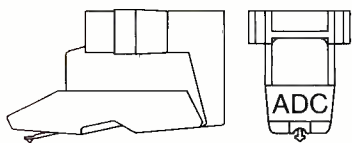
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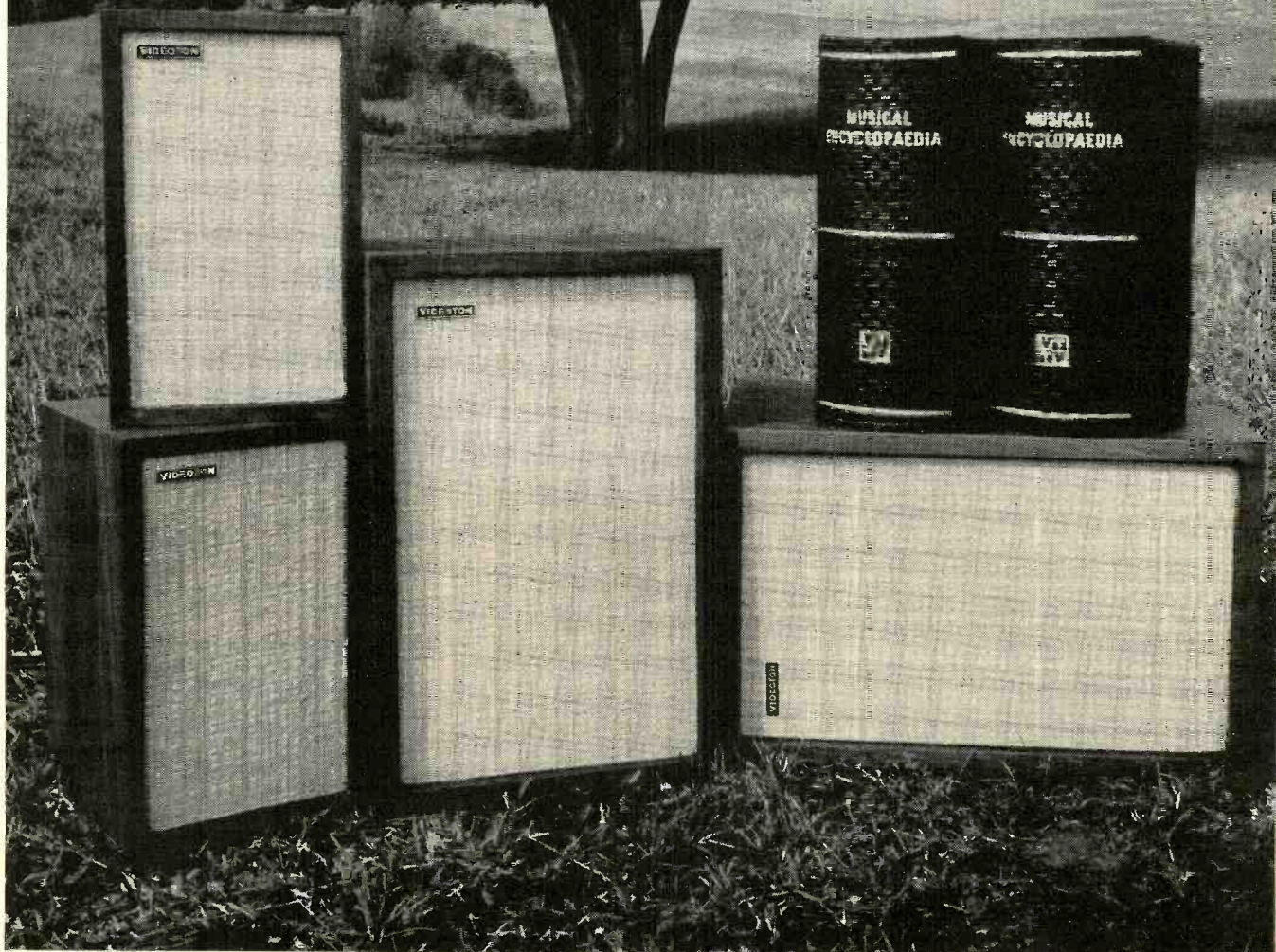
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point remains, if not a closely guarded secret, certainly one that is well chaperoned. J.V.

RECORDING OF SPECIAL MERIT

SANFORD-TOWNSEND BAND: *Smoke from a Distant Fire*. Ed Sanford and John Townsend (vocals, keyboards); instrumental accompaniment. *Smoke from a Distant Fire*; *Oriental Gate (No Chance of Changin' My Mind)*; *Shake It to the Right*; *Squire James*; *Does It Have to Be You*; and four others. WARNER BROS. BS 2966 \$6.98.

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

Good things come to those who wait. The Sanford-Townsend Band's first album was released more than a year ago to no great response. It was filed away and forgotten. Then a song from the album, *Smoke from a Distant Fire*, began to make a little noise on the radio. After the cut was released as a single and scored high on the charts, the album was reissued. It deserves a better response this time around.

The group plays a well-blended mixture of rock and jazz, they write exceptional material, and their performances are crisp and clean with a socking swing to them. Townsend's lead vocals are forceful and exciting; he is able to sing at the top of his range without exhausting himself or the listener, and when he hits a high note there is a *joie de vivre* to it that brings a grin.

The material is outstanding (especially *Smoke*), the arrangements throughout are spicy and surprising, and the band's lilting, biting execution is faultless. Don't pass up this second chance to hear a brilliant group. J.V.

THE STAPLES: *Family Tree*. The Staples (vocals); orchestra. *Hang Loose*; *Color Me Higher*; *Boogie for the Blues*; *Family Tree*; and four others. WARNER BROS. BS 3064 \$6.98. © M83064 \$7.97, © M53064 \$7.97.

Performance: **Very good**
Recording: **Good**

The consistently solid, honest kind of musicianship and the tightly coiled ensemble and solo performances that the Staples have been giving us over the years are something of a rarity in the music biz, where quality standards seem to be in the offhanded charge of a cross-eyed pizza-dough twirler. The Staples (Pop, Mavis, Cleo, and Yvonne) have delivered another very good session here, particularly the title song, which has an extra measure of that warm gutsiness that is so identifiable in all of their work. *Boogie for the Blues* is a slick, free-wheeling performance with some especially bumptious and funny wheedling by Pop to "get up and move." The Staples have been around for quite a while, and each new album clearly shows the reason why. P.R.

STEELY DAN: *Aja*. Steely Dan (vocals and instrumentals); Chuck Rainey (bass); Tom Scott (saxophone, lyricon); other musicians. *Black Cow*; *Aja*; *Deacon Blues*; *Peg*; *Home At Last*; and two others. ABC AB-1006 \$6.98, © 8020-1006(H) \$7.95, © 5020-1006(H) \$7.95.

Performance: **Excellent, but . . .**
Recording: **Excellent**

I have mixed feelings about this latest outing from Steely Dan. I admire the musicianship and writing talents of Donald Fagen and Wal-

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DENNIS WILSON
A stunning, California-lush solo effort

ter Becker, the two remaining members of what was once a six-man group, but I don't hear anything here that measures up to some of the intriguing and slightly spooky tunes they've done before. To be fair, I'm still hung up on *Pearl of the Quarter*, from their "Count-down to Ecstasy" album, which I consider one of the best ballads of the decade.

The seven selections in "Aja" are not so much pop songs as they are mood pieces taking a more or less jazz direction. In the title track particularly, the lyrics are unfathomable, though they serve as a nice excuse for some nifty instrumental work by the first-class jazz sidemen backing Becker and Fagen. The two strongest songs are *Black Cow* and *Deacon Blues*. In the former, a man contemptuously dismisses a lover who is doing her best to ruin herself. The latter is about a fellow who decides to become a jazz musician, and it contains the album's best lyrics.

The arrangements and performances are colorful and persuasive throughout, especially the solo instrumental work by Tom Scott, Wayne Shorter, Michael Omartian, and Becker himself, and Fagen's vocals, as always, personify the eerie world of bent characters that he and Becker summon up in their writing. The project is musically successful, then, but I still miss Steely Dan's songs. J.V.

PETE TOWNSHEND/RONNIE LANE: *Rough Mix* (see Best of the Month, page 82)

DWIGHT TWILLEY BAND: *Twilley Don't Mind*. Dwight Twilley Band (vocals and instrumentals). *Here She Comes; Looking for the Magic; That I Remember; Rock and Roll 47*; and five others. ARISTA AL 4140 \$6.98.

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

When Dwight Twilley and his bandmate Phil Seymour were growing up in Tulsa, Oklahoma, in the mid-Sixties, they were much impressed by the Beatles. This led to their emulating John and Paul's tight vocal harmonies. After a few false starts in the recording business, the Twilley group landed on hometown Leon Russell's Shelter label a few years ago, where they hit with a single, *I'm On Fire*.

Then and now, the band plays straightforward, occasionally decorated rock, with similarities to the Beatles not only in vocal harmonies but also in song construction and the sound mix. The music is aimed at the young

adult and late teenager, and Twilley's efforts seem designed to entertain and exploit that audience by exposing them to some of what they missed by not being around during the Beatles era. But to anyone who was around when the Liverpudlians held happy sway, Twilley's music will sound like an old story twice told. J.V.

RECORDING OF SPECIAL MERIT

DENNIS WILSON: *Pacific Ocean Blue*. Dennis Wilson (vocals, keyboards, drums); Ed Carter (guitars, bass); Earle Mankey (guitars); Bruce Johnston (vocals); other musicians. *River Song; What's Wrong; Moonshine; Friday Night; Dreamer; Thoughts of You; Time*; and five others. CARIBOU PZ 34354 \$6.98, © PZA 34354 \$7.98, © PZT 34354 \$7.98.

Performance: **Lush**
Recording: **Likewise**

Dennis Wilson, like the rest of the Beach Boys, has learned an awful lot about the potential of the studio from his big brother Brian. And, since Brian probably knows more about recording studios than anyone else in Christendom, it's not surprising that Dennis' debut solo project should be so stunningly put together. The sound of it is as California-lush as anything the Boys have come up with in the Seventies, with ethereal vocal choirs, relentlessly layered instrumentation, and snippets of melodies that suggest strange, primitive chants. Dennis has matured into quite a convincing r-&-b singer, and his hoarse, husky vocals here are almost irresistibly attractive. What he lacks, however, is a real point of view. For all the (apparently sincere) world-weariness of some of the lyrics, especially *What's Wrong* and *Friday Night*, which suggest the kind of self-doubt that we hardly expect from an ambassador of the West Coast Good Life, Dennis just isn't—yet—able to focus on anything really compelling. Nor does he match his brother's flair for turning personal anguish into moving, even if naïve, universal statements. For an overreacher, though, he makes some really lovely noises. Give this a B-plus and wait for a sequel. S.S.

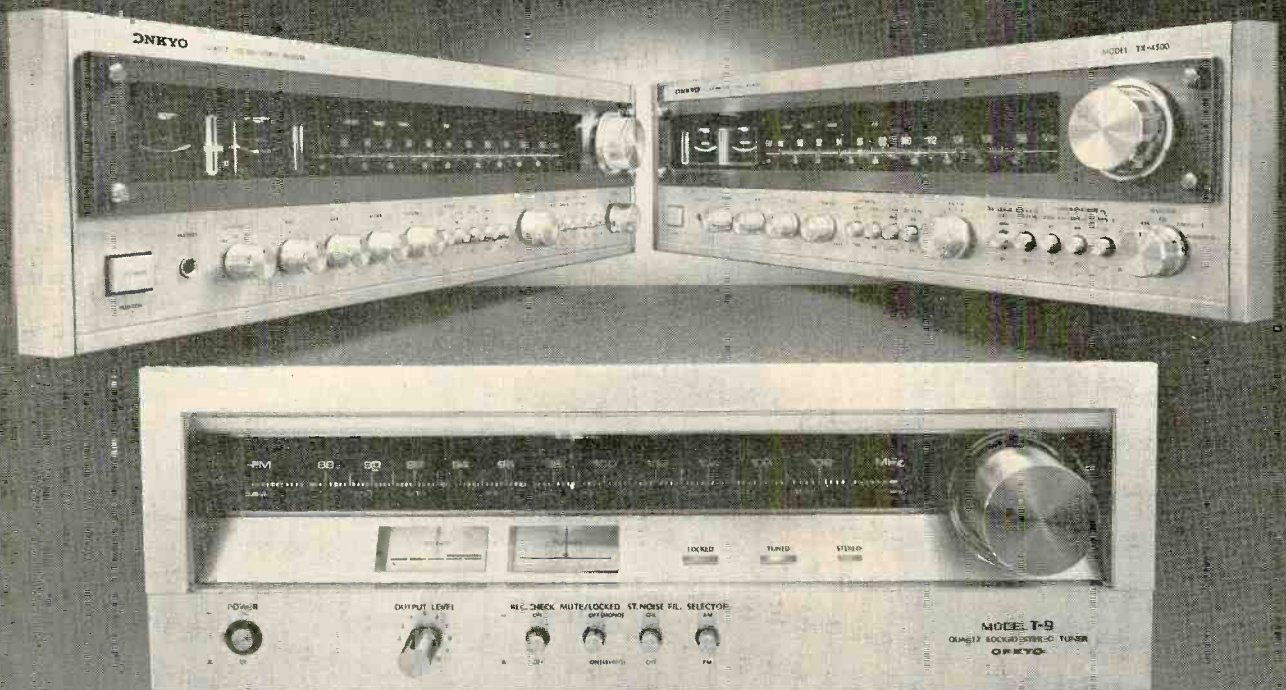


JERMAINE JACKSON: *Feel the Fire*. Jermaine Jackson (vocals and bass); Tower of Power horn section; other musicians. *You Need to Be Loved; Strong Love; Git Up and Dance*; and six others. MOTOWN M6-888SI \$6.98, © 7-888HT \$7.98, © 7-888HC \$7.98.

Performance: **Buoyant**
Recording: **Well balanced**

It is all but impossible to regard Motown mogul Berry Gordy's son-in-law as just another
(Continued on page 130)

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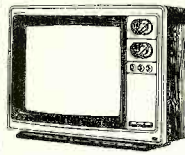
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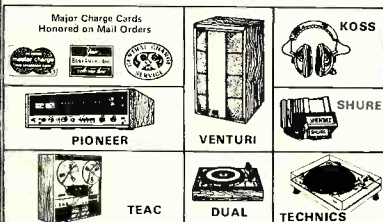
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CIRCLE NO. 19 ON READER SERVICE CARD

Randy Newman Without Tears

Russell Elton Peff



ACCORDING to my Webster's International, irony is "a sort of humor, ridicule, or light sarcasm which adopts a mode of speech the intended implication of which is the opposite of the literal sense of the words." They might have gone on to say that though this rhetorical form is a popular weapon among politicians and other jawboners, it is not a very common mode of expression among songwriters. Except for Randy Newman, who has just dumped "Little Criminals," another heavy load of irony, on America's doorstep and is lurking over there just around the corner waiting to be misunderstood—again.

"Misunderstood" refers to the big trouble with irony; whether you deal in the light or the heavy variety, and however carefully you balance yourself along the razor edge of your intention, a whole lot of perverse people are going to miss the point and take you literally. And others, even more perverse, will get your point—but fervently wish that you hadn't

made it. "Again" refers to Newman's last release, "Good Old Boys" (1974), which was widely—perhaps inevitably—misunderstood since there was more than a suggestion of unresolved ambiguity in Newman's own attitude toward his subject matter and a good deal of language that was not what one would exactly call . . . um . . . lyrical.

"Little Criminals" runs the gamut from no irony at all to light irony (one's own foibles), and heavy irony (society's foibles). Through it all thread several other themes—the Failure of the American Dream (is there anybody besides me who is having trouble figuring out just what *that* was supposed to be?), the movies (in their myth-making aspect), and the usual Newmanisms, bits and pieces of verbal Americana (mostly catchlines from songs).

Newman's voice is unremarkable—which is another way of saying that he doesn't have one. What he has is a splendid instrument of

“. . . you can't say Newman doesn't take chances.”

communication, a hoarse, husky, smoke-cured whisper that can sound confidential, confessional, even conspiratorial. He speaks the modish rock dialect (no final g's, no "a" in "about," no "be" in "because") fluently and without self-consciousness, and he has a uniquely characteristic, oddly endearing habit of chopping off the ends of lyric lines short-windedly, as if with a tape editor's knife. His lyric gifts are so compelling that they tend to draw attention away from his musical ones, which are just as outstanding but subtler. Most of his melodies are habit-forming on first hearing, and his arrangements have a lapidary quality—perfect setting, perfect fit—that permanently pre-empt the listener's affections. To top all this off, he has surrounded himself with the Eagles and others of Los Angeles' most skilled (and therefore ubiquitous) session gypsies, a tight little circle of super-pros of the kind that rise and soak up all the work wherever the competition is stiffest. (What do they call themselves, I wonder? Sons of the Holmby Hills Pioneers?)

There are no songs here that one could call less than beautifully crafted, but the spectrum is impressively broad and the listener is bound to be drawn more to some than to others. *Baltimore* ("... a hard town by the sea") is about a dying city, a vision grim enough to get this album banned in all of Maryland, but then the song might be about any metropolis anywhere that woke up one morning to find that it had fallen irrevocably behind in its housekeeping. *I'll Be Home* is that winsomely consoling ("You can always count on me") gospel tune Harry Nilsson sang so brilliantly on his "Nilsson Sings Newman" album (RCA LSP 4289). Newman's performance here is good enough, different enough, to make me prefer both. But is he kidding?

THE tension in Newman between the obscurantist impulse and the desire to communicate is nowhere more apparent than in the fine *In Germany Before the War*. It is one of the medium ironic songs (other people's foibles), but it ends up, largely because of its obsessively beautiful Kurt Weillish melody, pathetic as well. It is about—very allusively—the old German movie *M*, in which Peter Lorre starred as a child-murderer. It presents an interior landscape only hinted at in the film—Eros run amok in an inappropriate vessel, imprisoned in a squat, ugly figure behind the little round windows of Coke-bottle glasses. It neither adds to nor takes away from the song to know this (I had already replayed it compulsively about ten times before I tumbled to the plot); just remember that most native Los Angelenos are, like Newman, movie ridden ("Guess who I ran into at the laundromat today—Olympe Bradna!") and that they reach almost instinctively, when they do reach, for film metaphors. Better such fiction than such fact as Charles Manson or Son of Sam.

Jolly Coppers on Parade is, I suppose, lightly ironic too—an example of the condescension with which the grown man sees the child he was—but do I detect just a slight hint of "police brutality" as well? Newman tips his hand on the punkish *Kathleen* by subtletizing it "Catholicism Made Easier." He needn't have bothered, for the lyrics (who could possibly, these days, take "I've always been crazy

about Irish girls" seriously?) make it clear that the target is romantic cliché in that candy-box territory somewhere between Hollywood and Tin Pan Alley. The cameo *Old Man on the Farm* is probably straight; it is touching even if it isn't, and the melody is haunting. *You Can't Fool the Fat Man* didn't reach me lyrically, but the down-river flavor of the jazz arrangement is mighty tasty.

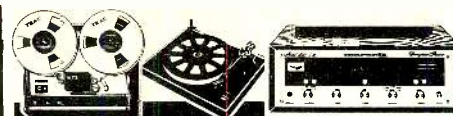
THE title song, *Little Criminals*, is a rocker, a piece of "American Dream" irony only slightly relieved by its black-comedy joke. It will be misunderstood, but you can't say that Newman doesn't take chances. *Rider in the Rain* is a spoof, a mock-heroic cowboy song (what kind of cowboy works in his uncle's feed store one day and is off rapin' and pillagin' across the plain the next?) probably intended to demythologize some of that sentimental Old West claptrap still triggering tear ducts on the Late Show. Pokin' cows is a nasty job for nasty people, but I predict that *Rider* will go straight to the hearts of old Gene Autry fans anyway.

Another "funny" song is *Short People*, and it will probably give Newman more trouble than anything else on this set. It is a kind of bigot's national anthem, a portmanteau that will accommodate any prejudice. If Newman is not already concocting his own additional verses (*Tail, Thin, Fat, Old, Young, White, Black, Red, Grey, Gay*, and, yes, *Straight People*), then somebody sooner or later is going to do it for him with gusto in finished-basement singalongs from coast to coast. Misunderstood again (ask Archie Bunker about that).

Sigmund Freud's Impersonation of Albert Einstein in America is also American-Dream-Ironic, a grab bag of nearly inaccurate history, national-anthem tags, and pop fantasy guaranteed to find friends only among the already persuaded. It ends with the line "And may all your Christmases be white," one of those monumental *non sequiturs* of the ironic mode that I think of as a "dorothy" (after Dorothy Parker, author of the most perfect example of the genre: "And I am Marie of Rumania"). Perhaps best of all, this bitterly comic mini-tirade of disaffection is mounted against a Salvation Army band background that makes all its artfully contrived jingoist vulgarity glitter like a chromium chamber pot.

BEST for last, as usual: *Texas Girl at the Funeral of Her Father* is quite simply one of the grandest inventions I can ever remember encountering in American pop music, an art-song jewel of passionately understated lyrical and musical yearning approaching the sublime. It's my kind of Mozart, and I'm not kidding. —William Anderson

RANDY NEWMAN: *Little Criminals*. Randy Newman (vocals and keyboards); other musicians. *Short People*; *You Can't Fool the Fat Man*; *Little Criminals*; *Texas Girl at the Funeral of Her Father*; *Jolly Coppers on Parade*; *In Germany Before the War*; *Sigmund Freud's Impersonation of Albert Einstein in America*; *Baltimore*; *I'll Be Home*; *Rider in the Rain*; *Kathleen (Catholicism Made Easier)*; *Old Man on the Farm*. WARNER BROS. BSK 3079 \$6.98, © M8-3079 \$7.98, © M5-3079 \$7.98.



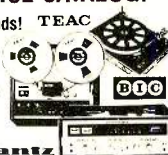
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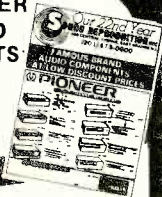
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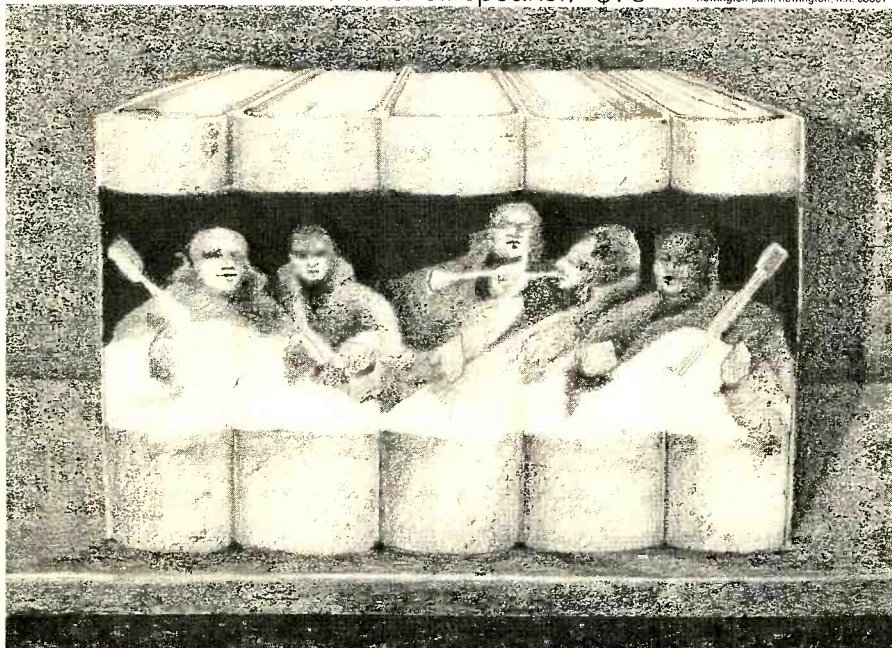
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struggling young artist in search of recognition. That he grew up as one of the ubiquitous and precociously sexy Jackson Five means that his deck was already stacked with aces when he severed professional connections with his brothers last year to strike out on his own. Yet Jermaine Jackson possesses a large enough talent to merit respect in his own right.

His decision to leave the Jackson family group was on target. Jermaine had outgrown the group musically, as this album indicates. Backed here by the Tower of Power horn section, he comes across as a high-energy performer who infuses his songs with an infectious, boyish fervor that never supplants his emphasis on solid singing. He has listened well to his gifted contemporaries, and there are stylistic traces of Stevie Wonder in his music, particularly in the ballads *I Love You More* and *Some Kind of Woman*. But he's at his best on two up-tempo stompers, *Feel the Fire* and *You Need to Be Loved*. Jermaine is indeed germane to the continually evolving sound of youth. P.G.

THE TYMES: *Diggin' Their Roots*. The Tymes (vocals); instrumental accompaniment. *Who, What, When, Where, Why; As Time Goes By; I Can't Explain; I'll Take You There; Kunta Kinte*; and three others. RCA APL1-2406 \$6.98, Ⓟ APS1-2406 \$7.98, Ⓞ APK1-2406 \$7.98.

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

The Tymes project a certain drive and vigor in their music, providing pleasantly danceable but undistinguished fare. Though they sing well and have a lead female vocalist who is above average, there is little to set them apart from many other groups who do the same kind of thing. There are two rather interesting tracks here. *I Can't Explain What's Happenin'*, a disco ditty featuring a background riff that sounds as if it was lifted from a Stephen Sondheim musical, and *Kunta Kinte*, a seven-and-a-half-minute condensation of the twelve-hour TV drama *Roots*. P.G.

RECORDING OF SPECIAL MERIT

ADAM WADE. Adam Wade (vocals); instrumental accompaniment. *Shine On Silver Moon; Dancing for Dimes; Five Will Get You Ten; Russell Never Had a Chance; Two Became a Crowd; I Could Write Sweet Love Songs*; and five others. KIRSHNER PZ 34919 \$6.98, Ⓟ PZA 34919 \$7.98, Ⓞ PZT 34919 \$7.98.

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

Ever since the early Sixties, when Adam Wade abandoned a budding career as a biochemist to assault the fortress of entertainment, he has hovered just at the edge of really making it. One problem during the early days was that his silken tenor voice too closely resembled that of Johnny Mathis, who cast a mighty shadow over other male balladeers. Furthermore, Wade often seemed to be in less than full control of his fine, natural vocal instrument. He was unable to come up with a style that would readily distinguish him from other good but hardly outstanding singers. Though he achieved some success on the night-club circuit, recording opportunities re-

(Continued on page 132)

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mained few, and he became sidetracked in such peripheral activities as acting, filming commercials, emceeing beauty pageants, and briefly hosting the TV game show *Musical Chairs*.

Those who have remained Adam Wade fans through all the uncertain years should rejoice at the release of his new album, which, at last, seems to be the perfect vehicle to introduce this gifted singer to a broader audience. Maturity has mellowed him as an artist, and he now has a full grasp of popular vocal nuances. Obviously, this is a disco album, but of an exceptionally high quality. That all too familiar danceable beat is subtly underplayed, permitting Wade to explore the full range of his voice and style.

Many of the tracks feature him in an up-tempo setting, but there is a substance to the lyrics that is readily digestible. Potent messages are tucked into such songs as *Dancing for Dimes* and *Russell Never Had a Chance*. For those who remember the Adam Wade of old, who stood out as a sort of more muscular Mathis, the bonus is *Two Became a Crowd*,

an almost painfully tender lament for love lost. This type of song has always been Wade's true forte, but he has also expanded his scope, which should enhance his appeal to old and new fans alike. P.G.

OTHER RECOMMENDED DISCO HITS

- **TINA CHARLES:** *Sweets for My Sweet*. COLUMBIA PES 90432 \$6.98.
- **FANTASTIC FOUR:** *Got to Have Your Love*. WESTBOUND WT 306 \$6.98.
- **ISAAC HAYES:** *A New Horizon*. POLYDOR PD1-6120 \$6.98.
- **THE JACKSONS:** *Going Places*. EPIC JE 34835 \$7.98.
- **RIPPLE:** *Sons of the Gods*. SALSOUZ SZS 5514 \$6.98.

(List compiled by David Mancuso, owner of *the Loft*, one of New York's top discos.)



RECORDING OF SPECIAL MERIT

JOHN BUNCH: *John's Other Bunch*. John Bunch (piano); Warren Vache (trumpet); Scott Hamilton (tenor saxophone); Michael Moore (bass); Connie Kay (drums). *I'll Take New York; Ellington '66; The Man I Love;* and five others. FAMOUS DOOR HL 114 \$6.98 (plus 52¢ handling charge, from Harry Lim Productions, 40-08 155th Street, Flushing, N.Y. 11354).

Performance: **Free-flowing mainstream**
Recording: **Very good**

Indiana-born pianist John Bunch isn't exactly a household name—not even in jazz households—but his musical background includes big-band experience with Woody Herman, Benny Goodman, Maynard Ferguson, and Buddy Rich and recording sessions with Rex Stewart, Cal Tjader, Urbie Green, and Joe Venuti. The pop world saw him act as musical director and accompanist for Tony Bennett from 1966 to 1972, and devotees of pre-bop jazz have recently been able to catch Bunch (and his colleagues on this album) at Eddie Condon's in New York.

There is no recognizable John Bunch style, but what he plays is a pleasant mixture of Wilson and Garner with an occasional touch of Bud Powell. He has a good sense of dynamics and a delightful capacity for gentle swing. Trumpeter Warren Vache and tenor saxophonist Scott Hamilton are in their early twenties, but their playing belies their age. Hamilton, whose own group is a regular Sunday-night feature at Eddie Condon's, combines the style of Lester Young with the tone of Don Byas, and Vache romps merrily in a boppish Eldridge style. Both are excellent technicians with tasteful, fertile imaginations. Bassist Michael Moore and drummer Connie Kay propel things along with appropriate agility (Kay was in the Modern Jazz Quartet), and the album is a joy, start to finish. C.A.

RECORDING OF SPECIAL MERIT

FRANKIE CAPP/NAT PIERCE: *Juggernaut*. Frankie Capp (drums); Nat Pierce (piano); Blue Mitchell (trumpet); Buster Cooper, Britt Woodman (trombones); Ernie Andrews (vocals); other musicians. *Dickie's Dream; Moten Swing; Roll 'Em Pete;* and five others. CONCORD JAZZ CJ-40 \$6.98 (from Concord Jazz, Inc., P.O. Box 845, Concord, Calif. 94522).

Performance: **Count and Duke revisited**
Recording: **Very good remote**

The Frankie Capp/Nat Pierce band lacks originality, to be sure, but it is a good big band with excellent musicians, most of whom are
(Continued on page 135)



Denita James, Pat Hodges, Jessica Smith—and friend

Hodges, James, and Smith

"HO-HUM," I thought when I received this album for review, "here's another soul-singing group. They seem to be proliferating like New York City roaches. Three girls in fancy-dress costumes with no first names—Hodges, James, and Smith. Sounds like a law firm. Hope they don't sing like one."

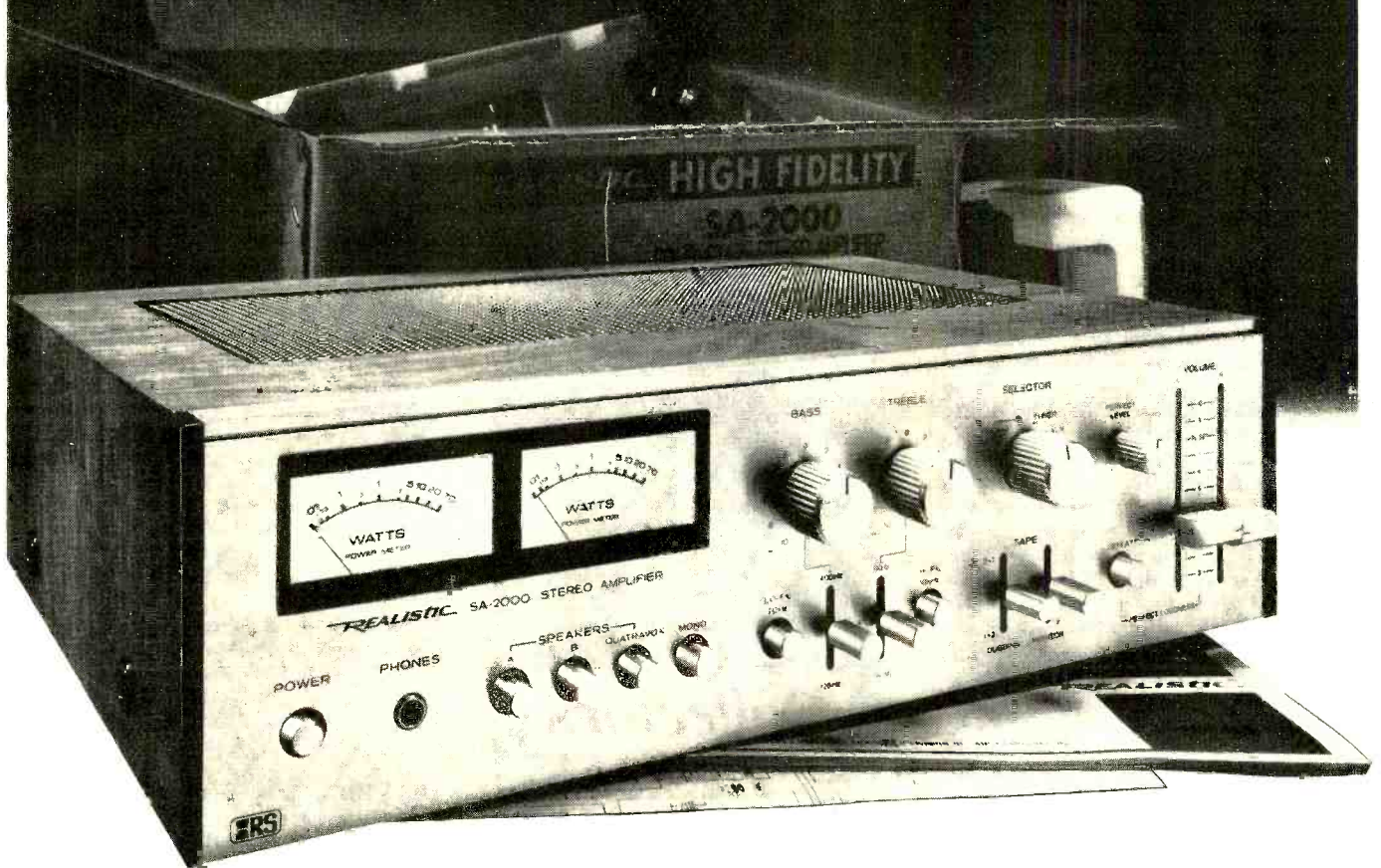
Then I slipped the disc onto the turntable and totally succumbed to these three young women as they blasted forth with all the gusto and relish of the mythical Furies, had those formidable beings been intent on shaking down the walls of every disco in town. Although it is the trio's raw spirit that is most immediately inviting, there are some touches of real talent here as well: a heavy pulse retained through varying tempos, a sure-footed gospel flavor on *People Needing People*, teasingly girlish flourishes on *Situation* and *What's on Your Mind?* Their unusual upbeat reading of the evergreen *Since I Fell for You* is the most joyous snatch of the blues I've heard in years.

I have often wished that the overexposed *Feelings* would be permanently retired, but Hodges, James, and Smith revitalize it with such an uncommonly robust rendition that it acquires a gutsiness devoid of the usual cheap sentimentality. The lead voice here is husky, biting into the lyrics like a young Della Reese. Every time the song ends, I want to set the stylus back at the beginning and hear it again. In short, this is *not* just another girl trio. They may call themselves whatever they wish, but Hodges, James, and Smith show all the signs in this first outing of real staying power.

—Phyl Garland

HODGES, JAMES, AND SMITH: *What's on Your Mind?* Hodges, James, and Smith (vocals); instrumental accompaniment. *Don't Take Away Your Love; One More Love Song; People Needing People; Feelings; Since I Fell for You; Situation; Love Baby; What's on Your Mind; Off.* LONDON PS 685 \$6.98, © PS8 685 \$7.95, © PS5 685 \$7.95.

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ALTHOUGH Coleman Hawkins was the father of tenor-saxophone jazz, Lester Young raised it to maturity. In the Twenties, when Hawkins' playing with the Fletcher Henderson band had every young tenor player striving to emulate his warm tone and rhythmic resilience, Young sought inspiration from a white man, Frankie Trumbauer, and tried to produce on the tenor the sound Trumbauer achieved on the C-melody saxophone. What Young came up with was a radically different, cooler tone which apparently took some getting used to.

In 1934, when Hawkins left Henderson's band to go to Europe, Young, who had been making \$15 a week with a struggling Basie group in Kansas City, was hired as his replacement—for \$75 a week plus uniform. "I had a lot of trouble there," he recalled some twenty years later. "The whole band was buzzing on me because I had taken Hawk's place. I was rooming at the Henderson house, and Leora Henderson would wake me early in the morning and play Hawkins' records for me so I could play like he did. I wanted to play my own way, but I just listened. I didn't want to hurt her feelings."

Young's stay with Henderson lasted only a few weeks, and a later job with Andy Kirk's Clouds of Joy lasted just six months, but he found his niche the following year when he returned to Count Basie. In October 1936 Young made his recording debut on Columbia's Vocalion label with a Basie-led quintet called Jones-Smith Incorporated to avoid a legal hassle with Decca (they had contracted with Basie but had not yet recorded him). The four resulting sides (and a second take of one, *Shoe Shine Boy*) begin the first volume of "The Lester Young Story," Columbia's long-awaited five-part chronological reissue of everything this extraordinary pacemaker recorded for that label. Three double albums have been released so far, taking us up to the summer of 1939 and a strange date with a pop organist named Glenn Hardman. The session was Columbia's attempt to cash in on Decca's success with pioneer Hammond organist Milt Herth, and the records may well have failed to achieve that goal for the very same reason that we are able to enjoy them today: Young's surging tenor totally ignores Hardman's chomping, slithering movie-house organ, forging the familiar melodies of *China Boy* and *Exactly Like You* into shapes that would hardly have pleased Milt Herth's followers.

IN between these two odd sessions lies a wealth of outstanding small- and big-band swing music featuring some of the most revered musicians and singers of the Thirties and Forties. It was an era when jazz greats did not necessarily front their own bands, yet they often participated in informal studio sessions that produced some of the most enduring music in the history of recorded jazz. Such small-band dates, made under the leadership of Teddy Wilson and Billie Holiday, complete Volume 1 of this set. The first of these dates, a Wilson session that included Benny Goodman, Buck Clayton, and the soon-to-be-famous Count Basie rhythm section, was recorded in January 1937, just four days after the Basie band began making its classic series of recordings for Decca.

Volume 2 is almost entirely devoted to some of these wonderfully cogent, informal all-star sessions featuring Billie Holiday in her prime. Through some vagary of chronology it also includes an inexplicably abbreviated version of the *Honeysuckle Rose* jam session from Benny Goodman's famous 1938 Carnegie Hall concert. With only a skimpy five to seven cuts per side (eight 78-rpm sides will fit nicely on a single face of a long-playing disc without distortion), I can think of no valid excuse for cutting ten minutes out of the fourteen-minute version originally issued by Columbia, ten minutes that rob us of solos by Buck Clayton, Johnny Hodges, Basie, and Goodman himself.



Many of the cuts in this volume have, of course, been reissued under Billie Holiday's name, but they are worth repeating, and producer Michael Brooks has included a good number of worthwhile alternate takes. Alternate takes are mostly of value to the collector or student for whom even the slightest variation may have significance, and I have always been against making reissues that ignore the majority of consumers who fall into neither category. But for the most part there are sufficient differences here in the alternate solos to pardon their inclusion.

Aside from the Glenn Hardman session and four more Wilson/Holiday sides, the third volume of "The Lester Young Story" concentrates on the tenor man's work with Count Basie, including a haphazardly arranged small-band session that took place only nine days after Basie left Decca (it was first released six years ago as part of the Basie collection "Super Chief," Columbia G 31224). Just as Basie left Decca, his band suffered the death of tenor saxophonist Herschel Evans. To Young it was a very personal loss, for the two tenor men had been kindred spirits who sparked the band's performances and many after-hours sessions as well. I don't think any

of Basie's Columbia records can measure up to the best he did for Decca, but it was still an exceptional band and there is much to be admired about the sides included here.

Producer Brooks has, of course, omitted those sides on which Lester Young participates but does not solo, and if I cannot wholly accept his reduction of the Goodman jam session to four minutes, or his inclusion of alternate takes, I must give him credit for some of the most useful, informative liner notes I have ever read. They tell the story in the words of Young himself, drummer Jo Jones, and the Basie band's Great White Father, John Hammond, all neatly tied together with Brooks' own astute observations and witty comments. Credit should also go to engineer Doug Pomeroy, who did a splendid job of keeping it all clean and clear. Having done reissues for Columbia myself, I know the awful state of much of the source material.

—Chris Albertson

THE LESTER YOUNG STORY. Volume 1: Jones-Smith and Wilson-Holiday Inc. Lester Young (tenor saxophone); Jones-Smith Incorporated; Teddy Wilson and His Orchestra; Billie Holiday and Her Orchestra. *Shoe Shine Boy* (two takes); *Evenin'*; *Boogie-Woogie*; *Oh Lady Be Good*; *He Ain't Got Rhythm*; *This Year's Kisses*; *Why Was I Born?*; *I Must Have That Man*; *Sun Showers*; *Yours and Mine*; *Mean to Me* (two takes); *Fooling Myself*; *Easy Living*; *I'll Never Be the Same*; *I've Found a New Baby* (two takes); *Me, Myself and I Are All in Love with You* (two takes); *A Sailboat in the Moonlight*; *Born to Love*; *Without Your Love* (two takes). COLUMBIA ® CG 33502 two discs \$9.98.

THE LESTER YOUNG STORY. Volume 2: A Musical Romance. Lester Young (clarinet and tenor saxophone); Teddy Wilson and His Orchestra; Billie Holiday and Her Orchestra. *Getting Some Fun Out of Life*; *Who Wants Love?*; *Travelin' All Alone*; *He's Funny That Way*; *My First Impression of You* (two takes); *When You're Smiling* (two takes); *I Can't Believe That You're in Love with Me* (two takes); *If Dreams Come True* (two takes); *Honeysuckle Rose*; *Now They Call It Swing* (two takes); *Back in Your Own Backyard* (two takes); *When a Woman Loves a Man*; *The Very Thought of You*; *I Can't Get Started* (two takes); *You Can't Be Mine*. COLUMBIA ® CG 34837 two discs \$9.98.

THE LESTER YOUNG STORY. Volume 3: Enter the Count. Lester Young (clarinet and tenor saxophone); Teddy Wilson and His Orchestra; Basie's Bad Boys; Count Basie and His Orchestra; Glenn Hardman and His Hammond Five. *Everybody's Laughing*; *Here It Is Tomorrow Again*; *Say It with a Kiss*; *I Ain't Got Nobody*; *Going to Chicago*; *Live and Love Tonight*; *Love Me or Leave Me*; *What Goes Up Must Come Down* (two takes); *Taxi War Dance* (two takes); *Don't Worry 'Bout Me* (two takes); *And the Angels Sing*; *If I Didn't Care*; *Twelfth Street Rag*; *Miss Thing*; *Lonesome Miss Pretty*; *Bolero at the Savoy*; *Pound Cake*; *You Can Count on Me* (two takes); *China Boy*; *Exactly Like You* (two takes). COLUMBIA ® CG 34840 two discs \$9.98.

well known to jazz followers. Pianist Nat Pierce proved many years ago that he had mastered Count Basie's style (in fact, he occupied the piano chair in the Basie band during the leader's recent illness), so it is not surprising to find that this orchestra favors the Basie band in style as well as repertoire. But it is not an attempt to re-create the Basie of old: Billy Strayhorn's *All Heart*, featuring Marshal Royal's alto sax, is more closely related to Ellington in terms of sound; *Take the "A" Train*, which features singer Ernie Andrews, gets off to such a slow start that it's positively original; and the two Pete Johnson/Joe Turner blues numbers that end the album jump from Basie to basics. Andrews sings the last two numbers, too, sounding much better than he did in the Sixties when he recorded with Cannonball Adderley. *Roll 'Em Pete* alone could establish him as the finest blues shouter around today. It is a rousing finish to a spirited, well-performed album. C.A.

RON CARTER QUARTET: *Piccolo* (see Best of the Month, page 82)

STEVE LACY/MICHAEL SMITH: *Sidelines*. Steve Lacy (soprano saxophone); Michael Smith (piano). *Existence; Time 2; Sideline*; and four others. IMPROVISING ARTISTS IAI 37.38.47 \$6.98 (from Improvising Artists, Inc., 26 Jane Street, New York, N.Y. 10014).

Performance: **Nourishing**
Recording: **Excellent**

Ex-Monk-sideman Steve Lacy and expatriate Michael Smith are a compatible team whose mostly somber, sometimes darkly humorous, studied duets are not for everyone. We are hearing more and more of this sort of partly arranged, partly free-form music from performers most closely associated with jazz. But is it jazz? That depends on where one draws the line; there are still those who insist that swing and jazz are divergent idioms. I prefer to think of the music of Lacy and Smith as a modern form of chamber music, and as such it is good nourishment for the musical mind. C.A.

JAY McSHANN/BUDDY TATE: *Crazy Legs and Friday Strut*. Jay McShann (piano); Buddy Tate (tenor saxophone). *My Melancholy Baby; Shakey George; Say It Isn't So*; and five others. SACKVILLE 3011 \$6.98 (from Coda Publications, P.O. Box 87, Station J, Toronto, Ontario M4J 4X8).

Performance: **Intimate**
Recording: **Very good**

Buddy Tate spent ten years in Count Basie's reed section before forming his own band in the Fifties. Jay McShann already had his own big band in the Thirties—a band that was perhaps most popular around Kansas City but is known internationally for having spawned Charlie Parker. Both men are now in their sixties, wonderfully compatible and totally unaffected by any of the directions jazz has taken over the past thirty years. Tate has the warm, round, and breathy tone of Coleman Hawkins, which, combined with his relaxed style, perfectly matches McShann's Basie/Garner sound. There is a rare intimacy to this album of very straightforward, butter-smooth jazz, the result of a beautiful, meaningful encounter that I hope will be repeated. C.A.

(Continued overleaf)

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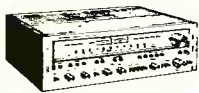
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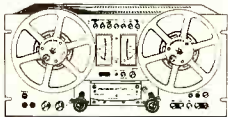
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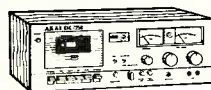
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RECORDING OF SPECIAL MERIT

PAUL MOTIAN: *Conception Vessel*. Paul Motian (percussion); Becky Friend (flute); Leroy Jenkins (violin); Keith Jarrett (piano, flute); Sam Brown (guitar); Charlie Haden (bass). *Georgian Bay; Rebica; Inspiration from a Vietnamese Lullaby*; and three others. ECM ECM-1-1028 \$7.98.

Performance: **Superb**
Recording: **Excellent**

As Polydor, ECM's U.S. distributor, brings that label's remarkable German catalog up to date, little gems from the recent past keep cropping up. One such is this 1972 set by drummer Paul Motian, a modern traditionalist who can turn a set of drums into an orchestra without overshadowing his fellow players. Side one of this album offers an excellent example of Motian in solo performance (*Ch'I Energy*) and in cohesive interplay (on *Rebica* and *Georgian Bay*) with guitarist Sam Brown and bassist Charlie Haden, two associates of long standing. Keith Jarrett—then well known, but not yet famous—noodles introspectively and effectively on the title tune, where he is sympathetically supported by Motian alone; I can think of no other percussionist whose playing can mesh as perfectly with Jarrett's. *American Indian: Song of Sitting Bull* features Jarrett on flute; it is the album's least interesting cut, but it forms a nice prelude to *Inspiration from a Vietnamese Lullaby*, a meaty piece of collective improvisation strongly flavored by Leroy Jenkins' violin. Good stuff. C.A.

ART PEPPER: *The Trip*. Art Pepper (alto saxophone); George Cables (piano); David Williams (bass); Elvin Jones (drums). *A Song for Richard; Junior Cat; Red Car*; and three others. CONTEMPORARY S7638 \$6.98.

Performance: **Solid and straightforward**
Recording: **Very good**

This is Art Pepper's second album since he renewed his professional career after a bout with narcotics and the law. It is even better than the first one ("Living Legend," Contemporary S7633), which rather impressed me when I reviewed it in these pages. There is nothing really extraordinary about this record; it breaks no new ground and is unlikely to be singled out in future jazz books. But it is uniformly excellent, unpretentious, inventive, and delightfully swinging music that should fall softly on ears seeking the timeless sounds of jazz as it flourished twenty years ago. C.A.

STANLEY TURRENTINE: *Nightwings*. Stanley Turrentine (tenor saxophone); Eric Gale, Cornell Dupree (guitars); Ron Carter (bass); Urbie Green (trombone); Hubert Laws (flute); other musicians. Claus Ogerman arr. *Papa T; If You Don't Believe Me; Joao; Birdland*; and three others. FANTASY F-9534 \$6.98. © 8160-9534 (H) \$7.95. © 5160-9534 (H) \$7.95.

Performance: **Predictable**
Recording: **Very good**

It might be unfair to refer to the music Stanley Turrentine has been producing in recent years as Jazz Muzak, but there *has* been a certain amount of bland predictability about it. In spite of the narrowness of his scope, however, Turrentine remains a solidly based tenor saxophonist who can draw a full-bodied, sing-

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Seals and Crofts perform, a kind of rock mélange of love songs with fresh tunes and stale lyrics that come across with a certain youthful energy despite having no particular relevance to the story line. *Lost* is a good song, *This Day Belongs to Me* is good despite its stupid words, and *John Wayne* ("Don't worry, 'cause I wouldn't hurt you, John Wayne"), with Western effects on the harmonica, gets its point across with a certain grace. The rest is bouncy stuff, by turns spunky and cute and, I suppose, as suitable an accompaniment for a basketball movie as anything else. As a record, though, the program tends to sound rather disjointed. P.K.



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Performance: **Shocking!**
Recording: **Good**

Richard Pryor's violent street-talk comedy is somewhat offensive at first, but once you get over being irritated or bored by the casual blasphemies and obscenities thrown in every third or fifth word, it becomes an example of how hilarious and accurate the vernacular can be for describing the human beastie in his more unhinged moments. Pryor's characters display an inferno of stupidity, greed, false pride, sexual appetites, drug habits, and general slobbery. But his affection for these sometimes nauseating folk makes their foibles funny if not always endearing. It is somewhat like Lautrec portraying the repulsive gaudiness of Montmartre or Céline raging at the human condition—horror and humor are about equally mixed.

This album, a compilation of tracks from previous LP's, did come as something of a shock to me. When I had seen Pryor before, I admired his macabre humor—especially a delightfully daffy routine about a nervous undertaker's assistant who's called upon at the last minute to say something nice about a client and winds up enjoying himself immensely, sitting on the coffin and swinging his legs back and forth like a happy kid as he extols the deceased. But on these tracks, apparently all recorded live, Pryor seems brutal and abrasive, so it is difficult to tell whether he is using his substantial comedic gifts to soothe his rage or using his rage to feed his gifts. The best humorists are commentators; perhaps Pryor has seen too much to be able to comment on his subjects without joining the smarmy parade of characters who simultaneously attract and disgust him. But if gruesome humor is to your taste, these schizoid routines are pointed and often hilarious. J.V.

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