Pioneer has conquered the one big problem of high-priced turntables.
The best way to judge the new Pioneer PL-510 turntable is to pretend it costs about $100 more. Then see for yourself if it’s worth that kind of money.

First, note the precision-machined look and feel of the PL-510. The massive, die-cast, aluminum-alloy platter gives an immediate impression of quality. The strobe marks on the rim tell you that you don’t have to worry about perfect accuracy of speed. The tone arm is made like a scientific instrument and seems to have practically no mass when you lift it off the arm rest. The controls are a sensuous delight to touch and are functionally grouped for one-handed operation.

But the most expensive feature of the PL-510 is hidden under the platter. Direct drive. With a brushless DC servo-controlled motor. The same as in the costliest turntables. That’s why the rumble level is down to -60 dB by the JIS standard. (This is considerably more stringent than the more commonly used DIN “B” standard, which would yield an even more impressive figure.) And that’s why the wow and flutter remain below 0.03%. You can’t get performance like that with idler drive or even belt drive. The PL-510 is truly the inaudible component a turntable should be.

Vibrations due to external causes, such as heavy footsteps, are completely damped out by the PL-510’s double-floating suspension. The base floats on rubber insulators inside the four feet. And the turntable chassis floats on springs suspended from the top panel of the base. Stylus hopping and tone arm skittering become virtually impossible. (Even the turntable mat is made of a special vibration-absorbing material.) But if all this won’t persuade you to buy a high-priced turntable, even without the high price, Pioneer has three other new models for even less.

The PL-117D for under $175? The PL-115D for under $125? And the amazing PL-112D for under $100? None of these has a rumble level above -50 dB (JIS). None of them has more wow and flutter than 0.07%.

So it seems that Pioneer has also conquered the one big problem of low-priced turntables. The low performance.

The best way to judge the new Pioneer PL-510 turntable is to pretend it costs about $100 more. Then see for yourself if it’s worth that kind of money.

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So it seems that Pioneer has also conquered the one big problem of low-priced turntables. The low performance.

U.S. Pioneer Electronics Corp., 75 Oxford Drive, Moonachie, New Jersey 07074.

*For informational purposes only. The actual resale prices will be set by the individual Pioneer dealer at his option.
At TEAC, our fundamental mandate for any new product is performance and reliability. First and finally. Qualities that are measurable in terms of mechanical stability and inherent design integrity.

These are essentials. Because our technological resources established the cassette deck as a true high fidelity component. So we demand that a new product possess that measure of TEAC quality.

And that's what distinguishes the A-170. Compare it with other inexpensive cassette decks with Dolby, please. Just call (800) 447-4700* for the name of your nearest TEAC retailer. We think you'll agree it's a value you can rely on.

*In Illinois, call (800) 322-4400.

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how can you really afford anything less?

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AUDIO BASICS
Speakers: A Short Course

TAPE HORIZONS
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THE CAPTAIN AND TENNILLE
"...playing with the Beach Boys, you have to be as good as you can get"  

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Editorially Speaking

By William Anderson

ALICIA AND WOLFGANG

T HERE are, it seems to me, two possibilities: either Clio, the Muse of history, has an off-beat sense of humor, or my mind has an unorthodox filing system. Just under two years ago, on this very page, Zeus' second daughter nodded over my shoulder as I brought together a rare cast of characters: W. A. Mozart, Alicia de Larrocha, and R. M. Nixon. The occasion was the eighth annual Mostly Mozart Festival then under way in New York's Avery Fisher Hall. Mme. de Larrocha, who had just recorded for London a disc of "Mostly Mozart, Vol. I" album, was a Mostly Mozart performer in years past, and I attended her concert the night of August 9, 1974, when the unadvertised intermission feature was the resignation speech of then-President Nixon. It was, Clio knows, an historic occasion I shall not soon forget. Isn't it odd, then, that just a few days ago, as I paused to enjoy the latest chapter in the continuing saga of our Congressional Casanovas and their scribbling doxies, there should appear on my desk an advance copy of Alicia de Larrocha's new London disc "Mostly Mozart, Vol. II," together with an announcement of her four appearances this year in the phenomenally popular Festival. She will be playing in Tully Hall (Fisher Hall, as you know, is being remodeled this summer) the nights of August 3 and 5, and wouldn't it be funny if Clio could arrange to have Wayne Hays (as well as whatever other poor sinners may have joined him in the pillo- ry by then) come on during one of the intermissions and... The rustication of political rascals is important, necessary, and even, at times, curiously refreshing, but, selfish sensualist that I am, I'd much rather attend to Alicia and Wolfgang. Which is why, rather than dashing off an intertemporal letter to the Times on the subject of Sex Among the Solons, I immediately began pestering the staff to come up with a Very Special Reviewer for the new London album. That VSR turned out to be very successful pianist Garrick Ohlsson, himself a Mozart Fantasia in D Minor ("MM, Vol. I") performer. Lincoln Center's management needed some kind of special small-orchestra programming to attract summer visitors, There were many suggestions, among them one for a "Mozart Festival." When it was observed that all Mozart might be a little heavy for summer fare, someone remarked, "Well, it could be mostly Mozart." And so it is.

One of the classic canards of music is the one about critics being failed performers. Mean, disappointed, and envious, they are said to derive the only pleasure their crabbled lives will accommodate from tearing down their betters. Nonsense, of course, but persistent nonsense. It is therefore instructive to see what reviewer Ohlsson, a performer of proved accomplishment, has to say on the subject of De Larrocha, for it turns out to be very much what professional critics have been saying about her all along. And I would not be at all surprised to learn that sensitive listeners have been saying it as well. I am delighted, for example, to find that Ohlsson dwells so tellingly on that one characteristic of De Larrocha's playing—her rhythmic sense—that has always so impressed me. Whatever it is she plays, whether the Bach/Franck Chaconne ("Mostly Mozart, Vol. I") or the Mozart Fantasia in D Minor ("MM, Vol. II"), she has an instinctive, distinctive flair for discovering and teasing out the dance element. This is as it should be, for we reduce music down to its two essential kinds, vocal and dance, it can be seen that the percussive piano is more suited to the second than to the first, despite some pianists' noble efforts to perfect the "singing tone" and the "seamless legato." The vocal element in music is better served at the piano by concentrating on the phrasing of the melodic line. Properly done—as De Larrocha invariably does it—it sounds, even in non-vocal music, remarkably and satisfyingly like breathing. The answer to the question "Why Mozart?" posed to me by a friend recently is not a flip "Why not?", but that it is another example of the peculiar grace that seems to accompany everything this composer touches. Printing presses, hotel beds, and concert halls are so costly that they cannot be left unoccupied for long. Lincoln Center's management needed some kind of special small-orchestra programming to attract summer visitors, There were many suggestions, among them one for a "Mozart Festival." When it was observed that all Mozart might be a little heavy for summer fare, someone remarked, "Well, it could be mostly Mozart." And so it is.
Blueprint for Flat Frequency Response

In the graph below, frequency response was measured using the CBS 100 Test Record, which sweeps from 20-20,000 Hz. The vertical tracking force was set at one gram. Nominal system capacitance was calibrated to be 300 picofarads and the standard 47K ohm resistance was maintained throughout testing. The upper curves represent the frequency response of the right (red) and left (green) channels. The distance between the upper and lower curves represents separation between the channels in decibels. The inset oscilloscope photo exhibits the cartridge's response to a recorded 1000 Hz square wave indicating its resonant and transient response.

Smooth, flat response from 20-20,000 Hz is the most distinct advantage of Empire's new stereo cartridge, the 2000Z.

The extreme accuracy of its reproduction allows you the luxury of fine-tuning your audio system exactly the way you want it. With the 2000Z, you can exaggerate highs, accentuate lows or leave it flat. You can make your own adjustments without being tied to the dips and peaks characteristic of most other cartridges.

For a great many people, this alone is reason for owning the Z. However, we engineered this cartridge to give you more. And it does. Tight channel balance, wide separation, low tracking force and excellent tracking ability combine to give you total performance.

See for yourself in the specifications below, then go to your audio dealer for a demonstration you won't soon forget.

The Empire 2000Z.
Already your system sounds better.

Frequency Response — 20 Hz to 20K Hz ± 1 db using CBS 100 test record
Recommended Tracking Force — 1/4 to 1/2 grams
Separation — 20 db at 500 Hz
30 db at 500 Hz to 15K Hz
25 db at 15K Hz to 20K Hz
I.M. Distortion — less than 0.08% 2K Hz to 20K Hz @ 3.54 cm/sec
Stylus — 0.2 x 0.7 mil diamond
Effective Tip Mass — 0.2 mg.
Compliance — lateral 30 X 10^-6 cm/dyne
vertical 30 X 10^-6 cm/dyne
Tracking Ability — 0.9 grams/sec 30 cm/sec @ 1000 Hz
0.8 grams/sec 30 cm/sec @ 400 Hz
Channel Balance — within 0.5 @ 1 kHz
Tracking Angle — 20°
Recommended Load — 47 K Ohms
Nominal Total System Capacitance required 300 pF
Output — 3.5 cm/sec using CBS 100 test record
D.C. Resistance — 1100 Ohms
Inductance — 675 mH
Number and Type of Poles — 16 laminations in a 4 pole configuration
Number of Coils — 4 (1 pair/channel — hum cancelling)
Number of Magnets — 3 positioned to eliminate microphonics
Type of Cartridge — Fully shielded, moving iron
TV and Music

- Noel Coppage's June article on the conflict between successful television and successful music was an accurate description of a phenomenon I have been aware of for some time. It was more than mere coincidence when John Denver began to delete songs such as Tom Paxton's "Jimmy Newman" from his concert program just as he was establishing a phenomenon I have been aware of for some time.

- The audience wildly applauding a half-finished performance by Johnny Cash that his new TV special was to be aired during a relatively new song, which might have had another verse. Second, after station identification, the program returned to "read my mind, Love," indiscernibly editing out not only the instrumental introduction but also "If you could." Finally, Terry Clements' lead guitar work in Sundown was interrupted by a proclamation by Johnny Cash that his new TV special was to be aired the following week. And then a return to an audience wildly applauding a half-finished song.

- My hypotheses are: (1) a musician can be made a victim of the TV cameras even when the lens cap is on; (2) television will permit no obvious omissions to be left to your annual pamphlet by Richard Freed, at least until certain seemingly obvious omissions are filled in. I welcome the revisions be left to your annual pamphlet by Richard Freed, at least until certain seemingly obvious omissions are filled in. I welcome the...
“Reruns” from now on will occupy about half the columns, new items (both “obvious omissions” in the orchestral area and excursions into chamber, solo instrumental, and vocal repertoires) the other half. Four separate columns would be lovely, but this is not, alas, the best of all possible worlds.

**Opera Quiz**

- I'm not an opera fan, but I am a Johnny Carson fan and I know the question that goes with the answer “Judith Blegen, Marilyn Horne, Beverly Sills, and Luciano Pavarotti” in the Editor's column in the June issue: “Name three American canaries and one Italian blimp.”

  **CARLTON POWERS**
  New York, N.Y.

- Editor William Anderson was right in his June editorial—opera is a spectator sport, as proved by the fact that the Metropolitan Opera played Puccini at Yankee Stadium in one of its “parks concerts” this summer.

  **VITO D’AMATO**
  Brooklyn, N.Y.

- Yes, and Anna Moffo was in the starting lineup. She was persuaded to pose in uniform for a Daily News photographer at a May press conference called to announce the June performance of Madama Butterfly (see photo above).

**Speaker Testing**

- Ours is an age oscillating between two false poles: the promotional hype and the pseudoscientific critique. It has become very unfashionable, even dangerous, to remark that the emperor is naked. All the more honor, then, to Julian Hirsch for blasting the “incredibly simple-minded approach to speaker evaluation” employed by that supposed paragon of scientific objectivity, Consumers Union (June). Too many Americans, disillu-

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**Memorex Advertisement**

*Is it live, or is it Memorex?*

The amplified voice of Ella Fitzgerald can shatter a glass. And anything Ella can do, Memorex cassette tape with MRX Oxide can do.

If you record your own music, Memorex can make all the difference in the world.

**MEMOREX Recording Tape.**

Is it live, or is it Memorex?
A new high performance additive for your car.

The all-new Jensen stereo speaker kits won’t help your car go faster. Or run better. What they will do is maximize the performance of your radio or 8-track in a way you never thought possible.

The next best thing to home speaker sound.

When our engineers designed these new Jensens, they incorporated all the things we know about making home speakers. That’s why inside you’ll find features like Flexair® woofer suspension and powerful Syntox-6® ceramic magnets. They combine to provide rich sound reproduction you won’t find in any comparably priced car speaker.

Another Jensen first—true coaxial car speakers in 4”, 5¼” and 6” x 9” sizes. Jensen is the only company that offers a true coaxial speaker in three compact sizes. Sweeter, our new space-saving solid state tweeter, is one of the reasons why. It allowed us to develop two revolutionary new models—the Jensen 4” and 5¾” coxials. Together with our 6” x 9” model, they now make it possible for anyone to obtain home speaker sound quality in his car.

Ask your local Jensen dealer for a demonstration.

You won’t know what you’re missing until you hear these new Jensen car speakers perform for you.

For a free catalog, write Jensen Sound Laboratories, 4310 Trans World Road, Schiller Park, Illinois 60176.

JENSEN SOUND LABORATORIES

Popular Music Editor Steve Simels replies:

Unfortunately, due to the recent bankruptcy of B&C Records and their Mooncrest subsidiary, many of the albums Mr. Smith mentions will soon be unavailable. For the moment, the bulk of Steeleye’s wonderful English catalog can still be obtained from my favorite importers, Jensen Records, Import Record Service, P.O. Box 362, 3001 Hadley Road, South Plainfield, N.J. 07080. I particularly recommend "Hark! The Village Wait," their earliest dalliance with a rhythm section, and "Commoner’s Crown," their most ambitious and successful album to date.

Glière Bargain

In his review of the new release of Glière’s Symphony No. 3 in the June issue, David Hall objects to “the short measure offered in this mammoth symphony uncut, it is a veritable bargain!”

Claudine’s Hit

Steve Simels may have forgotten who did the original Party Lights when he wrote his review of Annie McLoone’s “Fast Annie” (June). It was Claudine Clark, not Christine. That Party Lights was Claudine’s only hit ever, back in 1962, was verified on a special radio program, broadcast on Casey Kasem’s nationally syndicated American Top 40 in April 1975, about artists who had only one hit on the charts and were never heard from again.

Musical Snobbery

In the May issue, Editor William Anderson says a central tenet of Stereo Review’s editorial policy is “the encouragement of catholicity and the discouragement of snobulence in musical taste.” Then I turn to...
page 55 and find the following statement of musical snobbery: "Perhaps the parallel decline of music and monarchy in our own time lends credence to Schiller's words (that 'the singer should accompany the king: both dwell on the heights of mankind')." Please spare us from the prophets of doom who are always complaining about the quality of contemporary works. More and better music is being created now than ever before, whether or not it suits the taste of Mr. Bakshian. I laud Mr. Anderson's comment, but I more than occasionally detect signs of musical snobbery in your pages.

FRED N. BREUKELMAN
DOVER, DEL.

Mr. Bakshian replies: I am surprised and flattered that Mr. Breukelman should have taken an essentially light piece so deadly seriously. Schiller was no snob, although occasionally a bit of a bore, and as for myself, I simply happen to believe that the system of royal patronage has, over the years, been the most productive in the realm of classical music, a belief that is mathematically illustrated by the fact that Italy and Germany, which were divided into dozens of small individual monarchies and principalities from the sixteenth through the mid-nineteenth centuries, contributed the single largest body of great and near-great classical composers. For all their faults, kings are easier to compose well for than are congresses, foundations, or committees, and the reason, I would submit, has a great deal to do with individuality and very little to do with snobbery.

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Fiat Gobbledygook

It has been my ambition for a long time to catch STEREO REVIEW in a grammatical error, and now I have: in the review of the Sansui 9090 stereo receiver in the June issue you say that the "approximate nationally advertised value is $750." "Value" is like "worth," and it contains an element of relativity—what is "valued" at $750 by one person may not be "worth" 75 cents to another. "Cost" and "price," however, are absolutes—a manufacturer gives his receiver a "price" of $750, and that will be its "cost" when you buy it (unless you know a good discounter)! "Value" in this context is therefore a solecism and a tautology as well, for any possible fluctuations in price have already been covered by the word "approximately."

JOHN MACKENZIE
RICHMOND, VA.

The Editor replies: A nice unraveling of a knotty semantical problem, Mr. MacKenzie, reminding us of Oscar Wilde's definition of a cynic—one who knows the price of everything and the value of nothing. We tend rather toward the cynical side here, and find the word "value" pretentious and "inoperative" in the subject passage, rather more appropriate to the TV-spot vocabulary of a used-car salesman. It is not, however, the language of STEREO REVIEW or of Sansui, but of the regulation writers at the Federal Trade Commission. The national dialect shows every sign of turning shortly into an unmixed gobbledygook in which many fine (in both senses of the word) and useful verbal distinctions will have run into each other like water colors. When this results in watery and imprecise communication, a well-meaning but linguistically insensitive bureaucracy will have to take some of the credit.

The Sound Shaper.
Because all rooms are not created equal.

You can own the finest component system and still be getting inferior sound. Because unless you happen to have an acoustically perfect listening room, your system and space probably don't match. Hard walls, soft carpets, glass tables, even the size of a room can change sounds.

So ADC developed the new ADC 500 Sound Shaper Frequency Equalizer.

By adjusting the twelve frequency levels you can actually shape your sound to fit the shape of the room, and compensate for spaces and textures that interfere with sound. You can even tinker with the sound just for the fun of it: bring up a singer, lose a violin, actually re-mix your recording.

The new ADC 500 Sound Shaper can get your system into great shape.

ADC Professional Products Group. A division of BSR (USA) Ltd., Route 303, Blauvelt, N.Y. 10913

CIRCLE NO. 3 ON READER SERVICE CARD
Accusound Model 100B Speaker System

The Accusound line of speaker systems, manufactured by Technisound, now consists of four models in bookshelf and floor-standing configurations. The 100B is representative of the larger bookshelf designs. Like its brethren, the Model 100B employs an internal acoustic labyrinth terminated by a passive radiator rather than an opening or port. The active woofer itself is an 8-inch design mounted at the input end of the labyrinth; the passive radiator at the output has a 12-inch diaphragm. Frequencies above 1,400 Hz are provided by a 2-inch cone mid-range/tweeter that is mounted on a bracket several inches in front of the main mounting panel to enhance dispersion and reduce diffraction effects.

The power-handling capability of the 100B is 80 watts of continuous program material. Efficiency is said to be increased appreciably over that of sealed-box systems of comparable size. The system has a nominal impedance of 8 ohms. Dispersion, both horizontal and vertical, is said to be 145 degrees at 18,000 Hz. Dimensions of the 100B's wood veneer cabinet are 23 x 13 x 101/2 inches. A sculpted fabric grille projects to accommodate the tweeter bracket. Price: $140.

Circle 115 on reader service card

B.E.S. "Geostatic" Speaker Systems

Bertagni Electroacoustic Systems manufactures a line of loudspeakers with flat polystyrene-foam diaphragms activated by voice coils bonded to various points on their surface. The largest of these systems, the d120, is essentially a four-way design in two modules, the upper section incorporating one drive element for frequencies from 700 to 4,000 Hz, another that operates from 4,000 to 8,000 Hz, and a piezoelectric tweeter for the highest frequencies. The lower module contains a single drive element for low frequencies. Overall response of the system is rated at 35 to 20,000 Hz ±2 dB. The nominal impedance of the d120 is 4 ohms, and minimum recommended amplifier power is 25 watts per channel. The system has a power-handling capability of 100 watts continuous and is said to be usable with amplifiers rated up to 250 watts per channel. Two controls are provided to adjust mid-range and high-frequency levels.

Like the other B.E.S. systems, the d120 is a very shallow design (3¼ inches thick). It is framed in aluminum with dark grille cloth and supported by a solid oak cradle. Its frontal dimensions are 53¾ x 20½ inches. Price: $499. Other B.E.S. systems (shown) operate similarly and are priced as low as $129.

Circle 117 on reader service card

EPI Model 350 Speaker System

A new column speaker system, the Model 350, is the latest product from the EPI division of Epicure. The system's drivers are grouped into three modules, each consisting of a 1-inch inverted-dome tweeter and an 8-inch air-suspension woofer mounted on a different plane of the system's three radiating surfaces: the top and the two grille-covered sides. A 1,800-Hz crossover divides the frequencies going to the drivers, and a three-position switch adjusts the system's high-frequency output in 3 dB-steps.

Frequency response of the Model 350 is 36 to 20,000 Hz (36 Hz is the -3 dB point on the response curve). The system has a nominal impedance of 6 ohms, and it is recommended for use with amplifiers ranging in power from 38 to 125 watts per channel. The finish is oiled walnut with molded cloth grilles. The 350 measures 36½ x 15¼ x 13¾ inches and weighs 83 pounds. Price: $399.95.

Circle 116 on reader service card

Onkyo Model TX-4500 AM/FM Stereo Receiver

A circuit called a "Quartz-Locked" tuning system is a prominent feature of the new Onkyo Model TX-4500. This circuit provides a stable reference for the amplifier's frequency-setting circuitry. The TX-4500 is designed to be used with high-quality speakers and offers a variety of tuning options, including FM and AM bands. The unit is housed in a sleek, modern cabinet and offers a range of features, including dual-tuner capability, a PLL synthesizer, and a digital display. Overall, the TX-4500 is a versatile piece of equipment that will appeal to audiophiles seeking precision and performance. (Continued on page 12)
Bring home a legend.

When you go out to buy a stereo system, you’ll be matching sophisticated, expensive components from a vast array of choices.

More important (because good music means a lot to you), you’ll be selecting an important part of your personal environment.

So you don’t want to be let down, not even a little bit. That’s why the speakers you bring home should be Bose 901s.

You’ll be impressed with your new 901s as soon as you unpack them. They’re much more compact than their performance, reputation, or price would lead you to believe, and they’re beautifully crafted from fine materials.

By the time you have the system set up, you’ll somehow be expecting something new and better in the music, something you’ve never been able to hear before.

You won’t be disappointed.

You will hear an extraordinarily open, spacious sound that very effectively reproduces the feeling of a live, concert-hall performance, a sound that has been acclaimed by reviewers all over the world.

That unique sound is the result of several interrelated technical developments.

First, the 901s are Direct/Reflecting® speakers. Sound reflects off the walls of the room, surrounding you with the correct proportions of reflected and direct sound, all frequencies in balance, almost everywhere in the room. In contrast, conventional direct-radiating speakers tend to beam high frequencies, limiting optimum listening area, and producing a sometimes harsh sound.

Second, the 901 has no conventional woofers or tweeters, just nine identical, 4½-inch, full-range drivers, acoustically coupled inside that very compact 901 cabinet. Coupling tends to cancel out, across all nine drivers, the small imperfections found in any speaker (ours included). The result is a smooth, life-like sound that’s virtually free of distortion.

Third is the Active Equalizer, a compact electronic unit that automatically boosts power at frequencies that need a boost. This produces consistent sound output up and down the frequency range, with full, clear highs and solid, powerful lows.

The first time you listen to your new 901s, you’ll know you’ve brought home the right speakers. Years later you’ll have the continued satisfaction of owning and using a product of uncompromising quality.

We invite you to go to a Bose dealer, listen, and compare the 901 to any other speaker, regardless of size or price. Then you’ll begin to know why the Bose 901 has become something more than a loudspeaker system for thousands of music lovers all over the world.


The Mountain
Framingham, Mass. 01701

AUGUST 1976
A MICROCASSETTE recorder that's so unique, it's like having your own mini-studio in your pocket with remarkably good fidelity for music as well as voice. It's smaller than a checkbook (5¼" from top to bottom, slightly thicker than a pack of cards), and lightweight (12 ounces with batteries), but it's packed with studio precision and professional features:

- 60 minutes recording time.
- Capacitor drive for constant tape speed, built-in electret condenser microphone, AC bias, record-warning light.
- All metal construction for years of dependable service.
- One-hand operation; instant loading.
- Fast forward and rapid rewind.
- Automatic level control.
- Connects to your stereo or full-size recorder with a Compaticord, for both recording and playback.

The Pearlcorder-S performs beautifully in an office, in your car, even on airplanes; and it's backed by the reputation of the Olympus Optical Co., Ltd., a company famous for fine cameras, medical and other precision scientific instruments. The Pearlcorder-S carries one. And you have a studio with you.

Available at fine photographic, audio, and A-V dealers everywhere. Or write for our brochure, "Pocket Full of Miracles."

OLYMPUS CORPORATION OF AMERICA
120 NEVADA DRIVE/NEW HYDE PARK, NEW YORK 11040

60 minutes of sound in this actual-size MICROCASSETTE®
ty or use elsewhere. Dimensions are 7 1/4 x 3 3/4 x 9 1/2 inches. Price of the 250 alone is $275; the optional a.c. adapter costs $30. The ADS 2002 speakers come with cables, mounting hardware, and quick-release swivel brackets. Price: approximately $395 per pair.

Circle 120 on reader service card

SQ Four-channel Booklet

A twenty-two-page illustrated booklet titled "Spatial High Fidelity Through SQ Quadraphonic Recording and Broadcasting" has been specially prepared to answer questions about the "what" and "how" of quadraphonic broadcasting, recording, and home listening. It gives a concise, graphic description of the equipment and principles involved in CBS' SQ-matrix quadraphonic system. Included are sections on the encoding, recording, decoding, logic, and synthesizing systems that create and reproduce ambient and surround sound. Also covered is the simple conversion of a home stereo system to a quadraphonic system. Requests for the free booklet must include a long, stamped, self-addressed envelope and should be sent to Information Services Dept. SR, CBS Technology Center, 227 High Ridge Rd., Stamford, Conn. 06905.

Fuji Cassette Booklet

A free 26-page booklet available from Fuji Photo Film describes cassettes, their most effective use, and their numerous applications in non-technical, easy-to-understand language. Entitled "Cassette Tape and How to Make It Work for You," the publication describes the various types of cassette recorders and players and their features, the characteristics of good cassettes, plus professional and purely pleasurable uses for the cassette medium. The booklet concludes with a check list for cassette recording and a brief glossary of cassette terms. The booklet is approximately 3 3/4 x 8 3/4 inches and is printed in four colors on high-quality stock. Write: Audio Tape Division, Dept. SR, Fuji Photo Film U.S.A. Inc., Empire State Building, New York, N.Y. 10001.

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CIRCLE NO. 5 ON READER SERVICE CARD
Audio Q. and A.

By Larry Klein

Speakers and Damping Factor

Q. What effect does the "damping factor" of a receiver or amplifier have on its performance? Is the damping factor greater if the receiver or amplifier has more power or a certain frequency response?

A. Of all the amplifier specifications, damping factor is probably the least understood and most worried about. Let's see if by enhancing the understanding, we can assuage some of the anxiety. The damping factor of an amplifier refers only to the source impedance seen by a speaker at the amplifier's speaker-output terminals. This source impedance has nothing to do with the amplifier's ability to drive 4-, 8-, or 16-ohm loads, but refers only to how much effective "resistance" is in the output circuit of the amplifier.

Of what significance is this source impedance? If you were to put a single pulse of energy into a woofer, the woofer cone would be moved in or out depending upon the polarity of the signal. But whether or not it bounced about momentarily or overshot (went too far) at full excursion depends upon the damping of the system. After all, the cone is suspended on a springy compliance, and springy systems usually require some kind of mechanical damping to stabilize their performance. A low source impedance means that the speakercone movement will be provided with the required electrical damping.

A very high damping factor indicates that the source impedance is very low. However, for reasons having to do with the design of the speaker and speaker-output circuit, this is really of no significant advantage in terms of speaker performance. Here's why: a damping factor of, say, 20 means that an 8-ohm speaker will see a source impedance of 0.4 ohm. "Improving" the amplifier's damping factor to 200 would mean that the speaker would then see a 0.04-ohm source impedance. This turns out not to be a significant improvement because you have, in effect, the speaker's voice-coil resistance, the crossover network's resistance, plus the resistance of the wires (and possibly a fuse) between the amplifier and speaker. If these various elements total perhaps 6 ohms, then it's easy to see that any "improvement" that reduced the total series resistance from 6.4 ohms to 6.04 ohms would benefit an advertising copy writer more than it would an amplifier user. The consensus among the experts on the matter seems to be that damping factors much above 20 or so, while they don't hurt amplifier/speaker performance, do nothing to improve it—as long as all other factors remain the same.

However, there is one little-appreciated aspect of the question that shouldn't be overlooked. It could well be that the damping factor of a given amplifier is very high at mid-frequencies (where it is rated), but it falls to very low values at low frequencies where it is most needed. This used to be true of many tube amplifiers (because of deficiencies in their output transformers), but it should never be a problem with modern transistor equipment (which doesn't have such transformers).

What effect does a lower-than-20 damping factor have? Certainly nothing very terrible; it could cause the speaker's impedance variations at low frequencies to become audible. The bass might go from "tight" to "fuller" to "mushy" depending upon where it was to start. Anyone who would like to simulate the effect of a very low damping factor can do so by temporarily installing a 10-ohm, 10-watt resistor in one side of a speaker line. Of course, the volume control will have to be turned up to compensate for the loss in the resistor, but what you hear would be what you would get with an amplifier damping factor of about 1. Under some conditions, and with some speakers, you might even like the results!

Hi-fi and RFI

Q. A so-called "ham" (radio amateur broadcaster) moved into a building about 100 feet away from mine, installed an enormous antenna on his roof, and is now transmitting Morse code and distorted voice signals into my hi-fi system. What are my rights in the matter? How do I get him to stop?

A. It may come as something of a shock, but you have no rights in the matter, and you can't make him stop. The attitude of the Federal Communications Commission is that radio-frequency interference (RFI) problems caused by legal broadcasts from properly operating transmitting equipment is not the responsibility of the broadcaster; it is the responsibility of the owner of the interfered-with audio equipment to get his gear modified so that it will not respond to radio-frequency signals (the interfering ham will usually volunteer his help). And, as a matter of fact, a bill has recently been introduced into the 94th Congress giving the FCC the right to regulate the manufacture and design of home-entertainment equipment to insure that it "includes protective components . . . which are capable of reducing interference to such equipment from radio-frequency energy."

In truth, most manufacturers of audio equipment are somewhat insensitive to RFI problems even if their equipment isn't. I also have a nearby ham intermittently CQing through my system, but long before that I was troubled by TV-signal sync buzz heard in my telephone answering, portable cassette recording, and phono preamp. It is self-evident that much of today's audio equipment is simply not designed to operate in a dense radio-frequency environment. And there is no question that the "airwaves" are daily getting ever more crowded with everything from one milliwatt of CB to the megawatts of radar.

It's the FCC's job to regulate the various broadcasting "services" to insure that their performance is not mutually conflicting. However, the intrusion of the FCC into non-broadcasting areas, whether or not sanctioned by law, doesn't make me feel any easier. I have some literature from the FCC dealing with RFI elimination in amplifiers, and their remedial suggestions show little appreciation of audio design problems. For example, one recommended FCC fix is to solder disc capacitors across the woofer's terminals. This may not remove all of the RFI, but it will almost certainly cure most phono cartridge arcing of any tendency to provide a flat frequency response.

The FCC is loaded with electronic technical experts, but I suspect that their public credentials and private concerns lie more in the radio-frequency than the audio-frequency area. (This may also help to account for the atrocious audio quality heard on the television, FM, and AM broadcast bands, but that's a subject we've covered elsewhere.) In any case, if the FCC gets involved in audio-circuit design, I suggest that vigilance be exercised by hi-fi manufacturers to prevent anti-RFI modifications that may affect audio quality from becoming legal requirements. A second concern is the question of increased component costs. True, there are low-cost or no-cost design changes that could I believe do not affect daily equipment to minimize sensitivity to RFI; however, the stronger the r.f. field to be coped with, the more difficult the design task, and, likely, the more expensive the solution. Depending upon how immune from RFI the FCC demands the audio equipment to be, audiophiles may or may not run into heavy additional costs. It is therefore vital that the audio industry monitor the FCC (assuming the Congressional bill becomes law) to insure that technical standards and economic good sense are maintained for the audio manufacturer as well as for the commercial, amateur, and CB broadcaster.

One further thought: I suspect that a ham who installs a large-beam antenna driven by a 1,000-watt transmitter (the legal limit) on the roof of an apartment house in a heavily populated metropolitan area is probably engaging to create RFI problems, at least for his nearest neighbors, even after anti-RFI modifications of their audio equipment. It would be fair, therefore, if the Congressional RFI bill had a rider on it that made some rules about the maximum r.f. field strength those who broadcast as a hobby can impose on their neighbor's home electronic equipment.
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Wait till you hear what you’ve been missing.
Audio Basics

By Ralph Hodges

SPEAKERS: A SHORT COURSE

There is very likely no one—not even an established authority in the field—who has not run across an unfamiliar item of loudspeaker terminology from time to time. I recently encountered several while test-shopping local hi-fi stores. On investigation they turned out to be merely impressive names for some rather improbable concepts, but the ordinary consumer does not have my sources—or even inclination—for research into such matters, so how can he be expected to judge? The best way to tell when you are being "handed a line"—because you’re at the mercy of an uninformed or unscrupulous salesman, or one who has the verbal talent for making a little sound like a lot—is to know just enough about speakers and speaker language to be able to detect the illogic in the seller’s argument. Below, in no particular order, I’ve listed a number of technical terms that appear regularly in ads and product literature, along with enough explanation to put them (I hope) in useful perspective. And just remember that a given feature can be the crowning glory of one speaker-system design and the limiting liability of another.

Voice coils. Presently there are "high-temperature" voice coils, "edge-wound" voice coils, and "double-layer" and "triple-layer" voice coils, and it seems likely that there soon will be "bobbinless" voice coils. A high-temperature coil would seem to be a good choice where operating temperatures are likely to be high—perhaps because the electroacoustic efficiency of the driver is low. Edge-wound voice coils are well suited to high-efficiency driver designs—but there are reasons why high-efficiency drivers may not be appropriate for certain speaker systems. As to coils of other types, the rule is essentially the same: application determines choice.

Done-type tweeter. Despite the glamour that surrounds this device, its main advantage is simply that the dome shape is structurally rigid, which means that the diaphragm is likely to move as a unified whole instead of breaking up into sections that vibrate independently. This rigidity of shape is particularly important for so-called soft-dome tweeters, with diaphragms made of a rubberized material that has no inherent stiffness. However, if a suitably light, perfectly rigid material were available, the dome shape could be eliminated with no compromise in performance in almost every case.

Incidentally, depending on application, some speaker designers may not want an altogether rigid diaphragm, and so will turn to cone tweeters or other devices. The dispersion characteristics of a rigid diaphragm are gratifyingly predictable (one of its greatest assets), but that doesn’t mean that the designer can’t empirically determine that the generally less regular dispersion properties of some other diaphragm are suitable for his purposes.

Long-throw or long-exursion woofer. A long-throw woofer is capable, when driven with adequate amplifier power, of large linear in-and-out cone movements ranging up to perhaps half an inch or so. While this implies a correspondingly greater sound-output capability, it says little or nothing about efficiency (the amount of amplifier power needed to obtain that output) or even about linearity over the extended excursion range. Fact is, most high-quality speaker systems have long-throw woofers, whether specified as such or not. A prominent exception is the horn type of system, in which a long-throw design could not be particularly beneficial and is therefore not ordinarily used.

L-C (inductance-capacitance) crossover network. It would be difficult to find a crossover network that is not made up of inductors and capacitors, except in those cases where only a capacitor is used because that is the type of crossover appropriate for the specific driver(s) involved. Factors such as crossover frequencies, slopes, and the types of inductor and capacitor used should generally be determined by the characteristics of the drivers and not according to some "ideal" of intrinsic crossover quality. This is not to belittle the art of crossover design, which can be scholarly, complex, and fruitful. But it is to say that no lay person is equipped to evaluate crossovers, and should not attempt to do so.

Vented or ported enclosure. Vented enclosures (as opposed to "sealed-box" or "air-suspension" enclosures) have enjoyed a resurgence in popularity of late, probably because of the same appealing characteristic that kept them in vogue up through the 1950's: efficiency. In a vented system the sound energy that the woofer develops within the enclosure is permitted to emerge (through the vent) to somewhat reinforce the direct radiation of the woofer. When the enclosure is properly "tuned," the frequencies at which reinforcement takes place are precisely chosen and the frequency response of the overall system can thus be shaped to the designer’s liking.

The classic vented enclosure, the so-called "bass reflex," offers about twice the efficiency of a comparable sealed-box system. But, as many manufacturers have demonstrated, a large variety of enclosure "tunings" are possible and some are sonically attractive. These newer tunings do not always have enhanced efficiency as an objective, however, so you cannot simply note that an enclosure has a hole in it and assume that large sound output will be available for small amplifier inputs. In a subject as complex as vented-enclosure design, you have to rely on the guidance of the manufacturer and published test reports to...
there are at least twenty consummate myths.

- **Transmission line.** While the vast majority of vented enclosures are resonant devices, the transmission line is a vented enclosure that attempts to be totally nonresonant. The
  "line" is usually a highly absorbent duct intended to obliterate completely sound energy developed
  within the enclosure without significantly affecting the driver otherwise. This is, of course, an unrealistic goal in practical systems, but it is a perfectly valid approach to speaker design.

Efficiency is not one of the objectives of transmission-line systems. As a rule, their efficiency is on the order of what would be obtained with a sealed-box system using the same drivers. Other benefits provided depend entirely on the execution of the design. (Note: do not confuse transmission-line enclosures with the "wave-transmission-line" drivers sold by Ohm and Infinity. They are entirely different animals, although they have some similarities on the theoretical level.)

- **Horn-type enclosure.** Speaker systems employing horn enclosures for the woofer are offered by very few manufacturers nowadays, and they must of necessity be rather large (almost refrigerator size) to maintain output down to the lowest frequencies. They are, however, unparalleled in efficiency. Horn-type mid-ranges and tweeters are more common, but because of their high efficiency (their chief benefit) they can rarely be used at full strength with the less efficient woofers of small and medium-size speaker systems.

**Finally,** a few words about speaker specifications. The principal ones—frequency and power response, impedance, power-handling capability, minimum required power, and distortion—have already been discussed in some detail in these pages, and repetition here would be too lengthy for this "short course." But there are other specifications, not as thoroughly standardized, that inevitably enter into any serious discussion of loudspeakers. Prominent among them are factors having to do with time or phase delay, which comes about when a speaker system is measurably slower in delivering some frequencies to your ears than it is with others. This is a fairly esoteric area; the measurements involved are complex at the present state of technology, and their significance is controversial. For example, some authorities, backed by persuasive evidence, believe that the supposed advantages of a coherent-phase (nondelayed) speaker system can be heard only with coherent-phase program material, of which there is virtually none available on the commercial market. Others hold opposing views, and they have similarly impressive supporting data.

If your interest in speakers runs deep enough to take you into these waters, be aware that they are largely uncharted and that you will have to do your own navigating. Certainly, some of today's tenuous theories about loudspeaker performance may turn out to be tomorrow's established facts. However, don't be seduced by every new concept that comes along. The loudspeaker industry in particular has a long-standing penchant for taking fliers on technically intricate hypotheses based upon pure speculation or superficial testing. For every one that proves out there are at least twenty consummate myths.

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The phono cartridge that doesn't compromise any modern record.

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Tape Horizons

By Craig Stark

LOST IN SPACE

Last month we saw how the length of the playback-head gap (the distance between its two parallel pole pieces, also called "gap width") could radically restrict your recorder’s ability to reproduce the extreme treble frequencies. The key concept to remember is that of wavelength, which is equal to velocity (inches of tape per second for recording purposes) divided by frequency: \[ \lambda = \frac{V}{f} \]

At a given tape speed \( V \), then, the higher frequency \( f \) of the signal, the shorter is the length \( \lambda \) between each of its constituent waves. As these become so short as to approach the length of the playback-head gap, the head loses its ability to resolve them. For cassettes, this means that the optimum playback-head gap would be less than 50 millionths (\( \mu \)in) inch.

Gap losses are not the only wavelength troubles besetting the head as it plays back a recorded tape, however. Another is called “spacing loss,” and, as its name implies, it arises because the head does not always make perfect contact with the moving tape. Large-scale, momentary spacing losses are self-descriptively named “drop-outs,” and they are usually caused by tape defects. Less severe, but still serious, is the spacing loss that can be blamed on accumulated dirt or oxide/binder build-up on the head face, for this, too, pushes the tape surface away from the gap and causes high-frequency losses. But even with good tape and a clean head the contact is never perfect: given enough magnification, even a highly polished tape surface begins to look like a lunar landscape! And for best results, even 10 microrinches of spacing may be too much.

Ten millionths of an inch doesn’t seem like a lot of space, but the wavelength of the signals we want to reproduce can make it so. At 1% lip the wavelength of a 15,000-Hz tone is only 125 microrinches, which turns a 10-microrinch distance between the head gap and the tape surface into a 4.4-dB loss. (The formula for this calculation, which is even more significant in what follows, is: loss in decibels = 54.6 times the distance divided by the wavelength). By comparison, the spacing loss under the same conditions at 50 Hz (where the wavelength is 37,500 microrinches) is only about one hundredth of a decibel.

The spacing-loss formula above also gives us an insight into why it is that treble frequencies are often said to reside in a very thin layer at the surface of the tape. The average thickness of the oxide coating on a C-60 cassette is about 200 microrinches. (Open-reel tapes have a thicker oxide layer, typically 500 microrinches.) Now try to look at the oxide particles as the playback head “sees” them. Those particles right on the surface of the oxide coat can communicate their fields to the head with relatively little attenuation, whether they are magnetized at long or short wavelengths; little spacing loss is involved, even at 15,000 Hz. Those particles deepest in the coating, however, are located some 200 microrinches from the gap. At this distance the spacing-loss formula gives an attenuation of 0.29 dB for a 50-Hz wavelength. But at 15,000 Hz the distance loss would be more than 87 dB! From this, then, it is clear that at the short wavelengths only those oxide particles within the immediate vicinity of the gap can make any significant contribution to the playback output. From the high-frequency viewpoint, most of the oxide coating might as well not be there at all. On the other hand, at long wavelengths (low frequencies) even deep-lying oxide particles, if magnetized (see next month!), can add importantly to the playback-signal voltage generated in the head. Since the overall output of a tape—which is going to determine its signal-to-noise ratio, all else being equal—depends on long-wavelength response, a thick oxide layer seems desirable. But even this has limits.
Four questions you must ask about any multiple-play turntable.

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   Garrard engineers have attained remarkable results by combining the world famous Synchro-Lab motor and an inventive belt/idler drive combination. A 5 lb., die-cast, dynamically balanced platter is rotated via a flexible belt. Not only are the tiniest fluctuations of speed smoothed out, but an extraordinary -64dB rumble is only one example of the impressive specifications achieved. A variable speed control corrects out-of-pitch recordings and an illuminated stroboscope provides optical confirmation. The Z2000B combines all of these elements to achieve the main goal of Garrard engineering: superior performance at reasonable cost.

3. Does it handle records gently?
   All responsible turntable manufacturers are concerned with protecting your records. With Garrard, it's an obsession. The Z2000B boasts an array of features designed solely to prolong the life of your records. In addition to the exclusive, articulated tonearm, it incorporates an exceptionally accurate magnetic anti-skating device. Cueing is viscous damped in both directions. The ingenious built-in automatic record counter keeps track of how many LP sides the stylus has played. And unlike some of the highest priced changers that support records only at the center hole, the Z2000B supports them at the hole and edge, and the release mechanism operates at both points. Protection for your records indeed!

4. Does it eliminate tracking error?
   The grooves of a record are cut by a stylus that travels in a straight line. Conventional playback tonearms move in an arc. The difference between these two paths is called "tracking error." Simply stated, tracking error launches a cycle of distortion and record wear. In good design, the error is averaged over the record so that distortion is minimal. But such compromise was unacceptable in the Z2000B. What Garrard engineers did about it was summed up by High Fidelity Magazine which described the Zero Tracking Error Tonearm as "...the best arm yet offered as an integral part of an automatic player." The Z2000B is the only automatic turntable in the world without tracking error.


For your free copy of the New Garrard Guide, write to Garrard, Division of Plessey Consumer Products, Dept. A, 100 Commercial St., Plainview, New York 11803

CIRCLE NO. 14 ON READER SERVICE CARD

Garrard

The Automatic Choice
HOW TO JUDGE LOUDSPEAKERS:

Why do so many people shopping for their first good component system doubt their own ability to tell good sound reproduction from bad? I can only guess that, having been exposed for years to the miserable sounds produced by most TV receivers and portable phonographs, their critical judgment goes askew when first exposed to clean, wide-range sound.

However, I am less concerned with the root causes of this situation than with trying to show how anyone can learn to tell a good speaker from a bad one and, further, how to identify the more common aberrations that affect the sound of many speaker systems.

In deference to those who "know what they like," I will refrain from imposing my own standards of sound quality upon others. But I am assuming that many others of my readers are genuinely confused by the claims and the counterclamors which surround the purchase of speaker systems.

For example, I am sensitive to the kind of high-bass coloration that gives the male voice a heavy, unnatural quality. Few musical demo records will show this up, simply because there are no speaking voices on them. The voices of many male FM station announcers, however, make an ideal "test signal" for speaker mid-bass smoothness (say, from 80 to 200 Hz). Accurate reproduction of the voice is a severe test of a speaker's quality. Unfortunately, such accuracy is not necessarily related to the size, the price, or even some of the audio measurements usually applied to loudspeakers to judge their musical quality. You should be aware, however, that the voice quality on some FM stations is already unnatural and therefore a poor tool with which to check a speaker.

What about the deep bass? It may come as a surprise to learn that it is a rare recording that contains much energy below 50 Hz. A speaker system capable of useful output at frequencies below 30 and 50 Hz is usually costly in dollars, bulk, weight, and/or the amplifier power required to drive it (though not in all cases simultaneously, of course, since there can be a considerable tradeoff between them). So, unless you are a pipe-organ or bass-drum aficionado, do not place too much emphasis on the low bass of a speaker system as compared with its all-important mid-range performance. (Incidentally, a great deal of what some people think of as "bass" is really at frequencies from 60 to 100 Hz, well within the capability of most small and inexpensive speaker systems. A uniform—"flat"—energy output in this frequency range is much more important than an additional octave of very low bass response.)

The mid-range (200 to 2,000 Hz, give or take a few hundred cycles) is the most important part of the frequency range simply because most of the fundamental frequency content (and quite a bit of the harmonic structure) of music falls within it. If it is reproduced unevenly, a variety of unpleasant colorations can be added to the sound. Nasality, boxiness, honkiness, and some other qualities not as easily described come to mind. To further complicate matters, almost every speaker system has one or two crossovers in this frequency range, and the possibilities for response aberrations from this source have been well publicized. However, aside from phase shifts in the crossover region, it is an indisputable fact that without a smooth middle a speaker cannot convincingly produce "natural" sound from any program.

Most of what we perceive as "highs" are in the frequency range of 2,000 to
10,000 Hz. This is the portion of the spectrum that is often eliminated by the neophyte's misusing his treble tone controls to convert a wide-range program to a reasonable facsimile of typical "AM quality" (apologies to the few, but ardent, boosters of AM as a high-quality medium—but I did say "typical"). Once more, smoothness is the quality to listen for in this range. A peak anywhere in the upper treble will impart a shrill and unpleasant quality to any program. A response "hole" is much less obvious unless it is unusually wide and deep. Sometimes the response is fairly smooth but slopes upward or downward as the frequency increases. It may not be heard as a high-frequency aberration per se, but altering the octave-to-octave balance of sound can give an impression either of thin bass or heavy, warm bass. Fortunately, this sort of response error is often correctible by tone controls (it is one of the few that are).

If the sound quality changes significantly as you walk back and forth in front of a speaker, it has inadequate dispersion. The speaker does not have to be an "omni" to cover a normal listening area with a fairly uniform sound field, but it should have a reasonably constant output over an angle of at least 90 degrees facing into the room. Curves and measurements can be used to describe this property, but moving about and listening (to the high frequencies) yourself is the easiest and the best test.

Finally we come to the extreme highs, the frequencies that are absent from most available program material, and if present are often attenuated by the speaker itself. To me, frequencies above 10,000 Hz are the icing on the multilayer cake of high-fidelity music reproduction. The basic flavor and nutrition are in the cake itself and can be enjoyed and appreciated without the icing, but a little sweet plus-10-kHz topping certainly does add to enjoyment of the whole thing.

The sparkle and "liveness" contributed by the uppermost audible octave is easy to hear when it is added to or subtracted from the sound, but it is often not particularly obvious without that comparison, even to experienced listeners. It is, further, interesting to note that the presence or absence of the highest frequencies can be detected by many people who, by standard audiometry tests, have a considerable hearing loss in that frequency range.

Having gone through the frequency spectrum from end to end, I will now suggest that you avoid judging a speaker entirely on such a piecemeal basis. Instead, listen for overall balance, a sense of smoothness, and the absence of any special emphasis on a portion of the frequency range. A good speaker should not sound bassy, bright, dull, "forward," or thin. Ideally, it should be so neutral that the listener can forget it is there. Once in a while a good speaker may emit a floor-shaking thud or an airy transparent tinkle as a reminder of its capabilities and the content of the program, but most of the time you should be able to enjoy the sound without analyzing the process that created it. Leave that job to a spectrum analyzer. Your ears, with very little practice, can be more revealing than a laboratory full of instruments. Listen, and enjoy!
Introducing
the world’s most powerful receiver.
165 watts per channel.

With the world’s least distortion. Only 0.08% THD.*

The Technics SA-5760. More power and less distortion than any other receiver in the world at rated power. And that’s just for starters.

The SA-5760 also has the reserve power you need to float through complex musical passages without distortion, clipping or instability. Because we use single-packaged dual transistors in the differential amplifier stage of each channel. Along with high capacitance filtering and a bridged rectifier. There’s also direct coupling and heavy power supply regulation. So transient bursts in one channel remain isolated from the other.

And you’ll hear your records precisely the way they were recorded. Thanks to “current mirror loading”—a radically new circuit found in the SA-5760’s phono pre-amp. The results are an unsurpassed S/N ratio of 78dB. And a frequency response that’s accurate to within ±0.2 dB of the ideal RIAA curve.

On FM, the signal being broadcast will be the signal you’ll hear because we use flat group delay filters in the SA-5760’s tuner section. As well as a Phase Locked Loop IC. So you’ll also receive 38dB of stereo separation at 10kHz and 45dB at 1kHz. As well as inaudible distortion and a frequency response that actually exceeds the response of FM broadcasts.

The SA-5760’s controls are as sophisticated as its circuitry. Like a 26-step true attenuator click-stop volume control. Negative feedback tone controls with turnover selector. Two-way tape-to-tape dubbing. A truly linear signal-strength tuning meter for AM and FM that works the way other meters don’t: accurately. And all the other refinements you’d expect from the world’s most powerful receiver.

And to complement the SA-5760, Technics has five other new stereo receivers. All with excellent power. Outstanding performance. Sophisticated circuitry. And all at a good price. The concept is simple. The execution is precise. The performance is outstanding. The name is Technics.

* 165 watts per channel, minimum RMS, into 8 ohms from 20Hz to 20kHz with no more than 0.08% THD (total harmonic distortion).
The DA5 active AM antenna.

...four inches high and weighs 6 pounds. Its antenna section is 14 inches wide and stands about 12 inches above the base of the tuning section, into which it plugs. Price: AM5 $295; DA5 $175. The AM8 (not tested) has the same AM performance as the AM5 and includes a 20-watt amplifier section plus a volume control and headphone jack. Price: $320.

- **Laboratory Measurements.** The wide-band frequency response of the McKay Dymeek AM5 is about as close as one can come to conventional FM response within the limitations imposed by the spacing of the AM channels. It measured ±0.5 dB from 20 to 8,000 Hz and dropped sharply at 10,000 Hz due to the action of an incredibly sharp "whistle filter" which cut interstation heterodyne squeals by 30 dB with virtually no effect on the program bandwidth. The response sloped off above 10,000 Hz to −6 dB at 11,000 Hz and to −16 dB at 15,000 Hz. In the NARROW mode, response was similarly flat, but it was down 3 dB at 5,000 Hz and dropped sharply above 7,000 Hz.

The audio output, with a 30 per cent modulated signal, increased by 7 dB as the input was increased from 10 to 10,000 µV. The S/N —actually (S+N)/N—was an apparently unimpressive 15 dB at 10 µV, reached 30 dB at 250 µV, and was a constant 47 dB at 1,000 µV and higher inputs. These values should not be compared too critically with the typical performance of an FM tuner, which is inherently very quiet at low signal levels. The signal meter, calibrated from 0 to 80 in arbitrary units, read 20 with a 10-µV input and reached 60 at 300 µV (it did not increase much beyond this point even with a 10,000-µV input). In our suburban New York location, the meter read at least 60 on every signal we tuned in, and it was usually closer to 70.

The alternate-channel selectivity (which prevents interference from stations 20 kHz away from the tuned station) was about 35 dB in WIDE and in excess of 70 dB in NARROW. Stations only 10 kHz from the desired signal were attenuated about 6 dB in WIDE and 45 to 50 dB in NARROW. The distant sensitivity mode was used for all measurements; the local-switch setting reduced the sensitivity by 33 dB. Image rejection was unmeasurable with the available generator output but was greater than 75 dB. Unfortunately, AM distortion could not be measured due to test equipment limitations.

- **Comment.** Our test data generally confirmed the manufacturer's specifications, with due allowance for differences in test equipment and methods. It clearly defines the McKay Dymeek AM5 as a superb AM tuner that we would expect to be capable of high-fidelity performance to the extent allowed by the broadcast material. The real proof had to come in our listening tests, and these showed that, in this case at least, figures do not lie.

The most obvious difference between the sound quality from the AM5 and that from any other AM tuner (or tuner section) we have used was the absence of noise. There was no trace of the electrical noise, man-made or natural, that we have always associated with AM reception. In fact, the background noise between stations was lower than that of any FM tuner (with its muting off), and it was our impression that the effective S/N on received signals was also the equal of FM reception.

Fortunately, we were able to confirm our impressions by listening to a local classical music station (WQXR) that carries the same programs on its AM and FM outlets. Switching between the audio-output signals from an FM tuner (set to mono) and the AM5, we found that the differences were very slight, actually comparable to those we have sometimes heard between different FM tuners. Much of the time no difference at all could be heard. To our surprise, the background noise on AM was at the same level as on FM; it was, in fact, usually the record or tape hiss originating in the station program material.

When and if AM stereo becomes a commercial reality, we would expect the AM5 or its successor to be equally effective in the stereo mode.

At night, selective fading and co-channel interference prevent really high-fidelity reception from most stations. However, the DA5 antenna provided additional selectivity, since by orienting it correctly one could often eliminate or at least greatly reduce interference from far-off stations. On one occasion we were able to hear virtually interference-free programs from either of two distant stations, choosing between them merely by orienting the antenna.

We do have two small criticisms of the AM5, however. In the WIDE mode, since the meter reading varies negligibly over a considerable tuning range, tuning must be done by ear. This is a critical process if optimum results are to be obtained. In NARROW, the tuning is much less ambiguous (and the overall sound is still superior to just about any other AM tuner we have used). The second point concerns a small but noticeable frequency drift (at least in our sample), especially at the high-frequency end of the tuning range, during the first hour of operation.

In sum, we must admit to being convinced that AM, at its best, has the potential to be a true high-fidelity medium. However, to achieve this goal one must live fairly close to a station that broadcasts clean, wide-band sound and one must (for the present) use a McKay Dymeek AM5/DA5 combination. We are told that millions of people in the United States, to say nothing of other countries, lack effective FM service. This remarkable tuner gives that audience an opportunity to enjoy the best possible radio reception, even if it is not always of high-fidelity quality.
How much

Sansui

5050

6060
power
do you really need?
Power is an important element in high fidelity reproduction. But power alone doesn't make a receiver. Power is one of the many specs and features that should be considered in purchasing a receiver suited to your needs. Too much power can have damaging or detrimental side effects such as increased possibility of speaker distortion, the creation of excess heat, overloaded or damaged speakers, and of course, the unnecessary cost of unused power. Not to mention the fact that speakers have maximum power ratings as well as recommended minimums. Have you checked yours?

Sansui, therefore, is proud to present a complete line of highest quality high fidelity stereo receivers with specs you can use and features you will love in a price range right for you. Look at what Sansui offers:

All five Sansui receivers have a special microphone mixing control for blending mic signals with any other source as well as a 25 µsec de-emphasis for receiving Dolbyized broadcasts. From the medium priced and powered 7070, to the high end you will find Sansui's unique twin power meters calibrated into 8 ohms for monitoring power output, triple tone controls for midrange as well as bass and treble, tone defeat switch for instant flat response, and a seven position tape copy switch for two sources. Both the 9090 and 8080 are capable of handling three speaker systems for added musical pleasure. Top of the line Model 9090 gives 110 watts per channel, min RMS, both channels into 8 ohms from 20 Hz to 20 kHz with no more than 0.2% total harmonic distortion. In addition: triple protection circuits including red to green LED power/protector indicator; precision RIAA equalized phono pre amp with wide overload capability; and an excellent sensitivity of 9.8 dBf (1.7 µV). Brushed anodized aluminum face plate, control knobs and buttons and a walnut veneer finished cabinet add to the elegant styling of this unit.

See and hear the Sansui 9090 or any of the other fine receivers in this complete series at your nearest franchised Sansui dealer.

The 9090 is a superior value at less than $750.* If the 9090 is more than you need ask for the 8080 with 80 watts per channel, min RMS, both channels into 8 ohms, from 20 Hz to 20 kHz with no more than 0.2% total harmonic distortion at less than $650.* Or the 7070 with 60 watts per channel, min RMS, both channels into 8 ohms, from 20 to 20,000 Hz with no more than 0.3% total harmonic distortion at less than $520.* Or the 6060 with 40 watts per channel, min RMS, both channels into 8 ohms, from 20 to 20 kHz with no more than 0.4% total harmonic distortion at less than $420.* Or the 5050 with 30 watts per channel, min RMS, both channels into 8 ohms, from 20 to 20 kHz with no more than 0.5% total harmonic distortion at less than $320.* All four cabinets finished in simulated walnut grain.

*Approximate nationally advertised value. The actual retail price will be set by the individual dealer at his option.

Sansui. A whole new world of music.
is it worth to you?
The intermodulation-distortion (IM) readings for any given phono cartridge can vary widely depending on the particular test record used.

burst test bands of the FIR-102 and TTR-103 test records. These high velocities provide a severe test of a phono cartridge’s performance.

The Blue Label cartridge had slightly less output (2.4 mV at 3.54 cm/sec). Its tracking abilities seemed to be identical to those of the Red Label, and the 1/4-gram force is also recommended for best results. The distortion measurements as well were very similar for both cartridges, and we suspect that one would find as much variation between two samples of the same model as between the two cartridges we tested. Both units had the rated 20-degree vertical stylus angle.

The Blue Label frequency response in the audio range was almost identical to that of the Red Label except for somewhat better channel separation at 20,000 Hz. We also measured response over the 1,000- to 50,000-Hz range with the JVC 1005 test record. It was flat within ±1.5 dB up to 20,000 Hz, rose to a maximum of +10 to +11 dB at 32,000 Hz, and was still within 2 dB of the mid-range level at 50,000 Hz. The channel separation was 20 to 25 dB at 30,000 Hz and remained a strong 15 to 20 dB all the way to 50,000 Hz.

In the graph at left, the upper curve represents the smoothed, averaged frequency response of the cartridge’s right and left channels: the distance (calibrated in decibels) between it and the lower curve represents the separation between the two channels. The inset oscilloscope photo shows the cartridge’s response to a recorded 1,000-Hz square wave, which gives an indication of resonances and overall frequency response. At right is the cartridge’s response to the intermodulation-distortion (IM) and 10.84 kHz toneburst test bands of the TTR-102 and TTR-103 test records. These high velocities provide a severe test of a phono cartridge’s performance.

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Nothing gets a good thing going better than Sauza Tequila. That's because Sauza is the Number One Tequila in all of Mexico. And that's because Sauza Tequila — Silver or Gold — does best all the things anybody would want Tequila to do.

Try it the classic down-Mexico way: in a shot glass, with salt and lime on the side. Or in a Margarita. Or in a Sunrise. Who knows where it will all lead?

You'll appreciate some things about Dual right away. Others will take years.

Unlike receivers and speakers, whose operating elements are completely concealed, much of what a turntable does — and how well it does it — can be easily evaluated on the dealer's shelf. The mechanical feel of the control levers, smoothness of tonearm movement and overall evidence of solidity and precision are excellent clues to the turntable's general performance.

For many consumers, their own sense of quality is all it takes to decide on a Dual. And considering the many years that Dual has been the first choice of audio experts, nothing more is really needed. However, we'd like you to know about the differences between Duals and other turntables that are not so readily apparent.

The true measure of a turntable's quality and long-term reliability is not simply in its features, but is inherent in the materials used, the care in their manufacture and the quality control employed in assembly and testing.

As an example, consider the Dual tonearm. The same engineering approach is applied to all models: straight-line for maximum rigidity and lowest mass. Stylus force is set by a long coiled spring centered around the vertical pivot, and its accuracy is maintained independently of record warps or turntable level. Anti-skating, however, does change during play — automatically, to compensate for the inherent change in skating force that occurs as the stylus moves inward.

The tonearms of the five top Dual models pivot in a four-point gyroscopic gimbal suspended within a rigid frame. Each gimbal is hand-assembled, and special gauges are used to measure lateral and vertical friction to assure that each will conform to Dual's stringent specifications. Only by such rigid quality control can tonearm calibration be set and maintained with the accuracy required by today's finest cartridges.

Every one of the component parts in Dual turntables is built with similar care and precision. For example, the rotor of every motor is dynamically balanced in all planes of motion. And the motor pulleys that drive the belts or idler wheels are individually machined and examined with precision instruments to assure perfect concentricity. Thus, the virtual absence of drive-system vibration, the primary source of rumble.

Despite all this precision and refinement, Dual turntables are designed to be rugged; they need not be babied, by you or anyone else in your family. Chances are your Dual will outlast all your other components, so you should carefully consider which of the three types of Dual you want: semi-automatic, single-play; fully automatic, single-play; automatic single-play with multi-play facility.

When you visit your United Audio dealer, don't be in a rush to decide, since you're likely to own your Dual a long, long time — and appreciate it more, play after play, day after day, year after year.

The Dual 1225.
Fully automatic, single-play/multi-play. Viscous damped cue-control, pitch-control, 10½" platter. Less than $140.00, less base. Dual 1226, with cast platter, rotating single-play spindle. Less than $170.00. Dual 1228 with gimballed tonearm, synchronous motor, illuminated strobe, variable tracking angle. Less than $190.00.

The Dual 1249.
Fully automatic, single-play/multi-play. Belt-drive, 12" dynamically-balanced platter. Less than $260.00, less base. Full-size belt-drive models include: Dual 510: semi-automatic, less than $200.00. Dual 601, fully automatic, less than $250.00. (Dual CS601, with base and cover, less than $270.00.)

The Dual CS701.
Fully automatic start and stop, single-play. D.C. brushless, electronic direct-drive motor tuned anti-resonance filters. Electronic pitch-control (8%) for each speed, 33⅓ and 45 rpm, with illuminated strobe. Less than $400, including base and cover.

United Audio Products, 120 So. Columbus Ave., Mt. Vernon, N.Y. 10553
Exclusiv U.S. Distribution Agency for Dual
The Dual tonearm is centered within a four-point gyroscopic gimbal and pivots horizontally and vertically on identical sets of precision low-friction bearings. The metal used for the bearings is first hardened, then honed; a process which produces microscopically smooth surfaces. (Dual models with gimbal-mounted tonearms: 1228, 510, 601, 1249 and 701.)

Vario-pulley expands and contracts to vary speeds; belt is never distorted or twisted. Each Vario-pulley is precision-machined for perfect concentricity and balance. Drive belt is precision-ground to maintain speed constancy and eliminate weak spots.

Stylus pressure is applied by long coiled spring, centered around vertical pivot. This system applies stylus pressure perpendicular to record and thus maintains the pressure equally on both groove walls even if turntable is not perfectly level.

A) Dual's anti-skating system is located within the tonearm system. It applies the necessary counterforce around the pivot and directly opposite to the skating direction. B) The system also provides automatic compensation for the inherent change in skating force that occurs as the stylus moves toward the record center.

Multi-scale anti-skating provides accurate settings for all stylus types—conical, elliptical and CD-4—assuring perfectly balanced tracking pressure on record groove walls.

Ideally, the stylus angle in play should be identical to the angle used in cutting records. This is accomplished in the Dual 1249 by the Mode Selector (A) which moves the tonearm base (B) up or down according to the mode of play. In single-play the tonearm is parallel to the record; in multiple-play, parallel to the center of the stack.
particular release the sound was excellent in every respect. However, at that force it delivered outstanding quality from our library of CD-4 records, the very worst of them sounding merely strained at those places where other CD-4 cartridges often break up. On most of the recent releases the sound was excellent in every respect.

Like many top-quality cartridges, the Sonus models are not cheap (although with discounting they might be quite competitive with other well-known cartridges). On the other hand, their sound is as good as we have heard from comparable models tested recently, and often better. Even though the two cartridges sound alike, we can think of two reasons why the extra cost of the Blue Label might be justified, even if CD-4 playing is not contemplated: its tracking ability is slightly better, and (we assume) its multiradial stylus, like the Shibata and others designed for CD-4 reproduction, should produce less record wear than an elliptical stylus operated at the same force.

Circle 106 on reader service card
The High Profile Speaker
From The Low Profile Company

With products like the new 15T, no company could keep a low profile for long—by any measure, it’s a magnificent transducer system, with imposing proportions and classic lines that only hint at the performance within.

Its floor-facing cast frame woofer is loaded so effectively using 4th order Butterworth tuning plus linear phase delay elements that it can handle 1000 watt 32 Hz power surges with very little distortion! Crossover to the 8" midrange occurs at a low 200 Hz, preventing extreme woofer excursions from intermodulating with the midrange. The result is sound that’s as transparent and unstrained at full crescendo as at a whisper.

High frequencies are handled by our new “Superdorm” — a unique design that combines the low coloration of a soft dome with the efficiency of a horn, making it possibly the most advanced moving coil tweeter ever.

The 15T’s fourth driver, an adjustable rear-reflecting horn active above 2 kHz, adds a pleasingly spacious sound without compromising the transient reproduction of the carefully-phased primary radiators.

In the Cerwin-Vega tradition, the 15T is so efficient that a watt or two will drive it to a comfortable level, yet its 150 watt power rating gives it wider dynamic range than virtually any other home speaker.

Write us and we’ll send you full details on the amazing 15T and our many other advanced audio products.

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6945 Tujunga Ave., North Hollywood, CA 91605 (213) 769-4869
CIRCLE NO. 6 ON READER SERVICE CARD
At the rated output of 38 watts, and at levels down to one-tenth of that value, the THD was between 0.01 and 0.015 per cent from 100 to 1,000 Hz, increasing to 0.03 per cent at 20 Hz and to 0.1 per cent at 20,000 Hz. An 80-millivolt (mV) input at the AUX terminals, 1.7 mV at the PHONO jacks, or 1.3 mV at the mic input was sufficient to develop a reference power output of 10 watts. The respective signal-to-noise (S/N) ratios were 82, 74, and 56.5 dB. The phono-overload level was a very good 140 mV and the microphone circuit overload at 120 mV.

The first two or three positions of tone control boost or cut had only a slight effect on the frequency response, but the more extreme settings had a very large effect. In fact, the maximum bass boost of 22.5 dB at 35 Hz was one of the largest we have ever measured, and it is far greater than would ever be used in practice.

The filter slopes were gradual—only 6 dB per octave—with the −3 dB response frequencies being 200 and 4,000 Hz. The low filter removed an undesirably large portion of the program content together with rumble or hum. The loudness compensation boosted the bass moderately and the treble slightly at low volume-control settings. The RIAA phono equalization was accurate within ±0.5 dB from 40 to 20,000 Hz. There was a moderate amount of interaction with cartridge inductance, causing a downward-sloping frequency response when the phono input was measured through a typical cartridge coil. The loss was 1.5 dB at 15,000 Hz, and the output rose by 2 to 3 dB at 20,000 Hz. The microphone frequency response was down 6 dB at 77 and 7,700 Hz relative to the 1,000-Hz level.

The FM tuner section had an IHF usable sensitivity of 11 dBf or 2 microvolts (µV) in mono and 18.5 dBf (4.6 µV) in stereo. In mono, 50 dB of quieting was obtained with an input of 19.5 dBf (5.2 µV) for 0.67 per cent THD. In stereo, it was at 36 dBf (34 µV) with 0.47 per cent THD. The tuner distortion at a 65-dBf (1,000 µV) input was 0.2 per cent in mono and 0.21 per cent in stereo. The S/N at that level was 70.6 dB in mono and 68.3 dB in stereo.

The FM frequency response was ±1 dB from 30 to 13,000 Hz, down 3 dB at 15,000 Hz. The channel separation was very uniform—between 33 and 36.5 dB from 30 to 10,000 Hz and an excellent 30 dB at 15,000 Hz. Pilot-carrier leakage into the audio was 73 dB below full modulation. The AM frequency response was down 6 dB at 120 and 5,000 Hz. The Nikko 7075 had very good FM interference-rejection characteristics, with alternate-channel selectivity of 75 dB and 86 dB of image rejection. In accordance with current IHF standards, we also measured the adjacent-channel selectivity (against a signal only 200 kHz removed from the desired frequency) and found it to be 5.4 dB. Although this is not an impressive figure, it does not really imply a weakness in the tuner. In fact, a high numerical adjacent-channel selectivity is almost impossible to obtain without severe compromise of the tuner's distortion and stereo-channel separation characteristics, and the performance of the Nikko 7075 in those categories is above reproach. The FM capture ratio of 1.6 dB and the AM rejection of 73 dB are both indicative of good performance potential under multipath reception conditions. The FM muting took place smoothly between 5.5 and 11 dBf (1 to 2 µV) input, and the stereo switching threshold was at 12.5 dBf (2.3 µV).

Comment. The test results clearly show that the Nikko 7075 has an exceedingly good audio amplifier in combination with a first-rate FM tuner section. It would be difficult to surpass the low-distortion properties of the receiver in these two basic categories without moving into a much higher price range.

We were less impressed with the tone controls, principally because of the way they "came on" so strongly at the extreme settings, with almost no effect at intermediate settings. Anyone using the full bass boost could easily overdrive the unit's amplifier.

The real quality of the Nikko 7075 becomes evident in actual use. Its FM dial calibrations, in spite of the undesirably wide 2-MHz spacing between markings, was very accurate, so that we had no difficulty tuning to any desired frequency without the ambiguity that exists with an inaccuracy calibrated dial (no matter how many markings it has). The muting operated without noise bursts and only a slight thump. The subjective FM background hiss was lower than we have heard on some comparable receivers operating from the same antenna system. All the controls worked smoothly and positively, and the receiver conveyed an unmistakable impression of solid, precise construction.
Dual has designed the 510 for utmost simplicity of operation. The success of this effort can be appreciated from the fact that its only operating controls are the speed selector and a cueing lever. When the arm is on its rest, the cueing lever is in its "up" position. Picking up the arm by its conveniently shaped finger lift turns on the motor. When the arm has been placed over the desired point on the record, pushing the cueing lever to the rear lets the pickup descend slowly. It can, of course, be lifted at any time, and the action of the cueing system is smooth and damped in both directions of arm movement.

At the end of the record, the cueing device automatically lifts the arm and the motor shuts off. The arm must be returned manually to its rest, but this can be done by a simple lateral push on the arm since it is safely supported above the record. The 510 also features a uniquely simple yet effective arm-indexing device. When a small lever on the motorboard is set appropriately, a slight detent action can be felt at the lead-in diameters corresponding to 12- and 7-inch records when the arm is pushed horizontally. When the detent is felt, the cueing lever is merely flipped to the rear to begin playing. If the automatic indexing is not desired, it can be disabled by its control lever.

The tone arm of the Dual 510 resembles those of the company’s other record players. It is a straight, low-mass aluminum tube whose offset head accepts a plastic cartridge-mounting plate. The gimbal pivot structure uses identical low-friction bearings for both vertical and horizontal arm motion. The counterweight has an elastically mounted section for damping arm resonance. Tracking force is applied by a dial on the side of the pivot structure; it is calibrated from 0 to 1.5 grams in 0.1-gram intervals and from 1.5 to 3 grams in 0.25-gram intervals. On the motorboard next to the arm base is the anti-skating dial with separate scales for conical, elliptical, and CD-4 stylus.

Two types of mounting bases (wood and molded plastic with wood-grain finish) are available for the Dual 510, and there is a choice of low-profile or high-profile tinted plastic dust covers that will remain open at any angle. Mounted on the LB-19 base (plastic) and fitted with the DC-6 low-profile cover, the Dual 510 is 18¾ inches wide, 14¾ inches deep, and 6 inches high; it weighs 14½ pounds. Price: $10.95, under $19.95; LB-19 base, under $15.95; DC-6 dust cover, under $13.95.

**Laboratory Measurements.** At the 1-gram tracking force used in our tests, the calibration of the dial on the Dual 510 was exact. At settings of 2 and 3 grams, the actual force was within 0.05 gram of the indicated value. At 33⅓ rpm, the vernier adjustment had a range of +3.4 to −4.2 per cent. When the 33⅓-rpm speed was set exactly, the 45-rpm speed was 0.8 per cent fast. The vernier control had a range of +1.25 to −1.5 per cent at 45 rpm. The speed was not affected by line-voltage shifts from 95 to 135 volts.

The combined wow and flutter measured 0.04 per cent (unweighted rms), and our spectrum analyzer revealed that the speed variation was predominantly in the vicinity of 5 Hz. The unweighted rumble was −32 dB including vertical components, and it was −35 dB with the vertical rumble cancelled out. With ARLL audibility weighting, the rumble was a very low −61.5 dB.

The anti-skating compensation was approximately correct when its dial was set to agree with the tracking-force dial. The tone-arm geometry was so good that tracking error was difficult to measure. Except at a 2½-inch radius, where it was still a very good 0.4 degree per inch, the error was less than 0.33 degree per inch throughout. The capacitance of the arm wiring and the signal cables supplied was 165 picofarads per channel, but low-capacitance signal cables can easily be substituted for those supplied with the player if desired. The low-frequency arm resonance with a good high-compliance cartridge was at 7 Hz, amplitude 7 to 8 dB. The cueing device lowered the arm in 3 to 4 seconds with no outward drift.

The isolation from external vibration afforded by the spring suspension of the Dual 510 was average—approximately the same as we have measured on other Dual models as well as most competitive players. With normal precautions taken in installation, no difficulties should be experienced from acoustic feedback.

**Comment.** At a time when cosmetic decoration and "gimmick" features abound in consumer products of all types, we find the simplicity of the Dual 510 to be most attractive. This moderately priced record player is exceptionally easy to use, and its basic simplicity should pay dividends in long, trouble-free service. The automatic indexing aid is highly effective and useful (although, if the arm is cued in the usual manner instead of being pushed laterally across the lift bar, one would never suspect its presence).

The measured performance of the Dual 510 speaks for itself, and obviously places this unit in the same class with a number of much more expensive products, including many of the direct-drive record players we have seen.

*Circle 50 on reader service card*
HARMONIC DISTORTION. "An input signal of 0.2 volt drove the amplifier to a reference 10-watt output at maximum gain. We could not measure the output noise, which was less than our minimum meter reading of 100 microvolts (roughly -100dB referenced to 10 watts)."

TOTAL HARMONIC/IM DISTORTION. "With regard to the sound quality of the two components, since they add neither noise nor distortion, there is little to be said."

PREAMP & CONTROL CHARACTERISTICS. "The tone controls and filters are more effective than most."

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**Going on Record**

**By James Goodfriend**

**CROSSING OVER**

The classical rip-off has become so prevalent in American popular music that it might just as well be considered a subcategory of music rather than a mere aberration. Certain performers, of course, still try to take compositional credit for the music they have stolen—though Emerson, Lake and Palmer just happened, of course, to come up with the same notes, chords, and rhythms for their Barbarian as Bella Bartók did for his Allegro Barbaro. But at least as many others are generous enough to share the credit, feeling, perhaps, that the commercially successful Bach, Faure, and Pachelbel will add the same measure of “class” to their productions as the names Tchaikovsky, Rachmaninoff, and Chopin did to the songs of an earlier generation. It is a moot point, but obviously there is something here worth investigation.

Classical rip-offs have often enjoyed considerable commercial success and popularity in themselves, but no one has yet produced any evidence that they lead to any general interest in the music of those composers from whose works they derive. The only real beneficiaries of the appropriation are the rip-off artists themselves, for they get both the material and the “derived from the classics” aura at no cost. The original composer (whose work is invariably out of copyright) gets neither payment nor public interest, and the public itself gets only the single selection it pays for rather than any introduction to a new treasure trove of musical enjoyment.

However much they might need both the material and the “class,” though, one would think that a monetary saving would be, for successful rock groups at least, a matter of little or no importance. If I am correct in that conjecture, then I have what may be an eminently practical and profitable (if slightly revolutionary) suggestion.

Why rip off only dead composers? As a matter of fact, if money is not the object, why rip off anybody at all? We have, on the one hand, a number of rock and other pop groups who command large audiences and possess ample money. We have, on the other hand, several hundred (at least) living, serious composers who command considerable(approval and prestige but very small audiences indeed, and who, were it not for foundations and universities, would hardly have even the proverbial pot. Why not bring the two together? Let the rock groups commission the composers to write new works specifically for them. This would add new works to the repertoire, rather than subtracting old ones, which is the effect the rip-off process frequently has. It would give the groups the measure of intellectual prestige they desire, and put them, in company with cardinals, kings, dukes, and perspicacious classical performers, in the category of patrons of the arts rather than petty thieves. It would give the composers the hard cash many of them so sorely need and—perhaps more important—a real audience to write for. Granted, some of them would not be able to meet that challenge, but then perhaps they shouldn’t be composing in the first place. It would also give audiences something to look forward to rather than backwards on.

The idea has its possibilities. Gershwin, after all, wrote a pretty good piece for Paul Whiteman back in the Twenties. Stravinsky wrote another for Woody Herman in the Forties. Nobody fox-trotted to Rhapsody in Blue, but at least as many others are indeed rip-off anybody at all? We have, on the one hand, a number of rock and other pop groups who command large audiences and possess ample money. We have, on the other hand, several hundred (at least) living, serious composers who command considerable(approval and prestige but very small audiences indeed, and who, were it not for foundations and universities, would hardly have even the proverbial pot. Why not bring the


New World Records has just released its first ten discs of American music, a fact that would be of considerable interest to collectors were it not that the records, at least for now, are not available to be bought. New World Records is the company, set up by the Rockefeller Foundation to produce a set of one hundred discs that would systematically and fairly survey the whole of American music, taking some of its material from the archives of commercial companies and newly recording the rest.

The set of records is to be donated to certain libraries and educational institutions and made available at cost to others. The option of purchase by private individuals has not yet been investigated. It is senseless, therefore, to review such records in a consumer magazine, but it would be equally silly to ignore them completely. Hence, this note.

The initial release includes a record of American art songs, impeccably selected from old 78’s and annotated by Philip L. Miller, and one of experimental piano music by Cowell, Cage, Johnston, and Nancarrow, the first three brilliantly performed by Robert Miller, the last recorded from the composer’s own player pianos. There is a newly recorded disc of “music of the American Revolution” which seems to me to involve some rather odd choices and omissions, and which, by the way, has the life and drum ensemble in an inexplicably resonant ambiance. Also, a quite interesting disc of “country ragtime music,” selected from old 78’s, stretches the definition of ragtime far beyond what we are accustomed to today, perhaps even beyond the bounds of a useful category. Additional records include newly recorded ones of works by Charles Griffes, of American Indian music, of classical American marches by the Goldman Band, and of nineteenth-century American concert organ music. There is a record of bebop taken from commercial recordings of the Forties and early Fifties, and a composite, essentially complete, recording of Sissle and Blake’s 1921 revue Shuffle Along ingeniously put together from a variety of separate 78-rpm discs featuring a variety of performers, including the composers.

The transfers from old recordings seem generally fine, and the new recordings, apart from such minor lapses as the one mentioned above, are also good. Annotations on these records are extensive, exhaustive of the subject matter and even sometimes, nicely written as well. The packaging, though, is institutional in the extreme (different type faces for different albums provide the only variety), tombstone dull, and just made for the library shelf where the albums are destined to rest.
THE SURVIVING BEATLE—AND OTHERS

The Beatles were once the whole ball of wax for me, and though I certainly haven't given up on rock-and-roll since they disbanded, I think everyone pretty much accepts the fact that there's nobody else around now who can do what the Beatles did—exceed one's highest expectations with each new release. All the more distressing, therefore, for an unreconstructed Beatlemaniac like myself to have to contend with the bulk of Paule's Seventies output. Yes, he's made some good singles, most notably Junior's Farm; yes, I like isolated cuts on "McCartney" and "Wildlife"; and yes, I even think that most of "Band on the Run" is quality stuff. But "Ram" drives me up a wall, and that the Ramones, who have nothing going for them but two guitarists who look, respectively, like Lou (yawn) Reed and a slightly plumper Marianne Faithful; that the Stones have actually wangled a record deal and were glimpsed recently embarrassing the hell out of everybody on a double bill with the superb Doctor Feelgood, make the 1969 Stooges sound like the Philadelphia Orchestra.

But in concert? Well, all I can say is that, confronted with that voice, with that effortless, superb musicianship, with all those half-remembered Liverpoolian Beatles mannerisms, I reverted to the most shameless of adoring teenagers—he's so goddamned endearing that you can forgive him anything. Quite apart from that, the simple truth is that, as a performing unit, are about a zillion times better than their records lead you to believe. They made the most banal of McCartney's recent songs sound like the work of genius, and I suspect that this had less to do with my awe at seeing a real live Beatle on stage for the first time than with the fact that this is a very hot little band, and nostalgia certainly has nothing to do with that.

They rock as hard as anybody (McCulloch and Laine play marvelously aggressive guitars, and the bass work is splendid) and they have one of the strongest lead singers in the business. In fact, I think that's what amazed me most: after a long and grueling tour, Paulie can still belt it out the way he does in the studio (which, if you've ever heard any of the live Beatles bootlegs, you know was not always the case). A few observations in passing: the crowd was surprisingly young and very near hysteria through most of the show (it really did look like Beatlemania at times, so eat your heart out, Bay City Rollers). Paul did his newer stuff almost exclusively (no one seemed to mind, although the reaction to Yesterday seemed to be the most enthusiastic of the evening—personally, I got chills); I have not sensed such downright friendly vibes at any rock event in recent memory; and I would not hesitate to go see the show again (I'm almost annoyed that I couldn't go back for the second night). Still... given that Capitol's impending Beatles reissue plans are probably going to be hugely successful (what a pleasure it's going to be to hear Got to Get You Into My Life on AM radio), and that Paul has finally proved to his own satisfaction that he Still Has It, I live in the unambiguous, unrealistic hope that the time is now right for Our Boys to get together again, if only on a temporary, studio basis. Wings are wonderful (and I'm delighted that McCartney has had the honesty to just get out there and play), but they aren't the Beatles.

Moving from the sublime to the ridiculous, I'd like to put my two cents in about the current media focus on the New York Rock Scene, which embarrassingly refuses to die. I'm getting fed up with opening rock magazines and being assaulsted with reports about the latest avant-garde sensations appearing at CBGB's (they are generally written by personal friends of the band members). I mean, I like Patti Smith, but by and large we've been treated to some truly trivial music and a barefaced hype so brazenly self-serving as to make one nostalgic for MGM's quaint "Bootsound Sound" promotion of the late Sixties. The New Liverpool indeed.

For those out-of-towners who are still curious, let me observe that the New York Dolls, who started the ball rolling, have gone from being an incompent pastiche of the Stones to being a competent pastiche of the J. Geils Band, which is hardly progress; that Television has the single worst rhythm section in the history of rock-and-roll; that Talking Heads have nothing going for them but two guitarists who look, respectively, like Lou (yawn) Reed and a slightly plumper Marianne Faithful; and that the Ramones, who have actually wangled a record deal and were glimpsed recently embarrassing the hell out of everybody on a double bill with the superb Doctor Feelgood, make the 1969 Stooges sound like the Philadelphia Orchestra. My only consolation in all this is that the various writers were not entirely responsible for perpetrating this hoax on the folks are going to look pretty silly come Up-\n\n
I would also, at this juncture, like to say God Bless the King Biscuit Flower Hour, and not merely because they have made it possible for a horde of enterprising bootleggers to immortalize some really high-quality rock performances. It's simply that, in an era when most "progressive" FM radio is so tightly programmed, formulaic, and plain boring as to make the AM screamers of yore seem like an attractive alternative, and when rock-and-roll television has degenerated into an endless succession of appearances by such noted rockers as Helen Reddy and Paul Anka, the Biscuit and its various spin-offs (the British Biscuit, their new interview show) provide just about the only reason for listening to anything but records these days. Their artist roster has been gratifyingly catholic (would you believe that their first show, four years ago, featured Bruce Springsteen?!)—the presentations are invariably faithful to the artists' intentions, and many of them have been superior to the live albums these same artists have released.

Finally, I would like to alert you to one of the marvels of the age: Keith Emerson, the man who made Wretched Excess a household phrase, has made a good record. He has recently released—as yet only in Britain, but should change to West Coast, he and other members of Meade Lux Lewis' old boogie-woogie showpiece Honky Tonk Train Blues that is relative-ly faithful to the original (he adds a Forties swing band, which doesn't bother me), credits the composer (!), and, for once, puts his fingers to some meaningful musical use. Staunch ELP fans will undoubtedly detest it, but I urge the rest of you to act now.
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OPERATION ON THE TUBE

The Public Broadcasting System's programming of opera on TV was rather spotty after WNET's opera-producing unit closed in 1973. But this year PBS brought opera back to home video screens with a very solid season in April, May, and June. The repertoire was well balanced between familiar classics and modern works, between new productions and repeats from earlier seasons. Except for Carmen, all were sung in English, and each opera was broadcast three times to make it available to the maximum number of viewers.

Good reviews, good ratings, and an overwhelming response from viewers (keep those cards and letters coming in!) have led PBS to schedule a similar season for next year. When Douglas Moore's The Ballad of Baby Doe was telecast live from the New York City Opera in April (part of Exxon's Great Performances series), it was seen in the New York viewing area, according to the ratings, by more people than had attended the NYC Opera's spring season. When you consider that PBS carried the show from coast to coast live and repeated it on tape twice within a week, you realize that the audience reached by opera on television is so enormous that this medium simply has to be taken seriously as a part of the musical life of the country.

I watched the opera series with considerable interest and pleasure and then talked with a couple of the men involved with it. The producer of Baby Doe and some of the other operas seen on PBS this year was David Griffiths. A pioneer in developing the "simulcast" system of broadcasting classical TV programs simultaneously in stereo on FM radio stations, he won a 1976 Emmy Award for the most outstanding classical program on television: Leonard Bernstein and the New York Philharmonic in the Great Performances series.

Griffiths was pleased with the success of the opera series and said, "I think quality is what the audiences for classical music want these days. The public has become very sophisticated in the media, and some of our earlier techniques were simply not acceptable. I like to think the tremendous increase in music programming on television is a result of our ability to deliver sound of high quality. I'm glad we're getting back into producing opera for TV in America instead of just buying it from abroad, but it's so expensive that we have to do it on an exchange basis."

Filmed in London, two of the operas shown this year, Verdi's La Traviata and Wagner's The Flying Dutchman, were co-productions of the BBC and WNET in New York. The British baritone Norman Bailey starred in Die Meistersinger in English at the NYC Opera, and in October he will make his Metropolitan debut in the same role in German.

He has sung with the principal companies in Austria, Germany, and Italy, and in London he appears both with the Royal Opera at Covent Garden, where opera is sung in the original language, and with the English National Opera, where all performances are in English. In New York he performs similar feats of bilingualism. Last season he sang Hans Sachs in Die Meistersinger in English at the NYC Opera, and in October he will make his Metropolitan debut in the same role in German.

And he has recorded Wagner in both English and German. He participated in the English National Opera's recording of the Ring in London in 1974; two productions were taped and the series was transmitted to the leading educational stations, which made it available. The Siegfried is imported by Peters International (619 West 54th Street, New York, N.Y. 10019), and The Rhine Gold has been released by Angel. The Valkyrie, already recorded, will also be released by Angel. For London Recordings Bailey has recorded, in addition to Der Fliegende Holländer, the role of Hans Sachs (in German) in a Meistersinger still awaiting release.

The New York Times critic pronounced Bailey's performance of the Dutchman in English on TV "a personal triumph," and he got excellent reviews for his concert performance with Solti in German. "Learning a role in two languages is not such a problem," he said. "The difficulty is that there are various translations. I sing the Dutchman in German and two English translations. For real opera fans who are familiar with the repertoire, perhaps the original is better, but the translations help new audiences, particularly on television, to understand the work. And when we did the English Ring in London, even people who knew it quite well in German told me they were grateful for the English version because it brought them closer to the work."

While recognizing the documentary value of filming live opera performances, Bailey prefers that opera for TV be produced in studios. "It's like recording for stereo—in the studio the set is specifically designed for maximum effectiveness on television and for a variety of camera angles."

Bailey is optimistic about the effect of TV opera. "To put opera on television in the correct perspective, it should not be considered a reduction of the stage into the box, but as an extension of records. I think the future of recordings is tied up with the video disc or tape, and in time we will go into stores not to buy a sound recording of opera, but a video recording, or at least we'll have the choice. I feel the past, instead of diminishing attendance at opera houses and concert halls, records have generated greater interest. I think opera on television will have the same effect and will build larger audiences."

Both. This was a big Dutchman year for Bailey in the United States. He performed it with the opera companies of Hartford, Connecticut, and San Antonio, Texas, and in concert form with the Chicago Symphony under Sir Georg Solti. One of the concert performances was taped for future national radio broadcast in the Chicago Symphony series underwritten by Standard Oil of Indiana, and this summer Bailey recorded the Dutchman with Solti and the Chicago Symphony for London Records.

As befits the model of the modern major opera star, one who works in television, radio, and recordings as well as on stage, Bailey is keenly interested in the techniques of opera in the electronic media. He explained that in the filming of The Flying Dutchman the singers did not prepare a separate soundtrack but sang while they were being photographed.

"The orchestra was in another studio and we heard it through loudspeakers, which meant that the technicians had to be constantly alert to the possibility of feedback. I was not in England when it was shown there, but saw it here for the first time. I was aware of occasional shifts in the mixing, but I was pleased with the balances."

Born in Birmingham, England, Bailey received his musical training in South Africa and Vienna, where he made his professional debut with the Vienna Chamber Orchestra.

Stereo Review
PART TWO:
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More specifically, on our model NS-670 and above, Yamaha offers die-cast speaker frame baskets to eliminate potential resonance. Luxurious wood enclosures (even rare ebony wood!). Tangential-edge suspension for midrange and tweeter domes to provide smooth response. Acoustic equalizers on tweeters to flatten frequency response and enhance dispersion. Diagonally edge-wound voice coils for greater diaphragm control and increased transient response. Plus thick felt lining inside the cabinetry to isolate rear sound waves for distortion-free bass response.

But regardless of how much you pay, every Yamaha speaker is built to the same essential construction criteria and tonal accuracy.
Proven acoustic suspension design. Dome drivers for better high frequency dispersion. Carefully matched crossover networks. And heavily reinforced, extremely rigid enclosures.

The End of the Double Standard.
The single standard of performance found throughout the entire line of Yamaha speakers is a demonstration of product integrity that no other manufacturer can claim.
But in the final analysis, only your ears can be the judge.
That’s why we invite you to visit your Yamaha audio dealer soon. His knowledgeable salesmen and extensive demonstration facilities can save you time and trouble in selecting the speaker that’s right for your budget. And right for your ears.

In 1830, at age twenty, Fryderyk Franciszek Chopin left his native Poland, never to return. He went first to Vienna, where he found the populace intoxicated with the rhythms and flavor of the waltz. “Among the numerous pleasures of Vienna,” he wrote home, “the hotel evenings are famous. During supper, Strauss or Lanner play waltzes. ... After every waltz they get huge applause; and if they play a Quodlibet, or jumble of opera, song, and dance, the hearers are so overjoyed that they don’t know what to do with themselves.”

In a later letter a note of derision creeps in. “Here, waltzes are called works! And Strauss and Lanner, who play them for dancing, are called Kapellmeister! This does not mean that everyone thinks like that; indeed, nearly everyone laughs about it; but only waltzes get printed.”

These cynical words notwithstanding, Chopin himself had already caught the waltz contagion. His waltzes in E-flat Major (Op. 18) and A Minor (Op. 34, No. 2) date from his Viennese days. They are, however, personal and more introspective than the style of waltz he heard all about him—particularly so in the case of the thoroughly Slavic A Minor Waltz, sometimes called Valse Melancolique. Once he settled in Paris in 1831, Chopin began to compose the urbane, elegant waltzes that so reflect the elegance of the life he loved. Refinement, luxury, and sophistication were the essence of the salons Chopin frequented; he changed his name to Frédéric François, and he was invariably dressed in one of his ten dark-blue tailcoats, with a wide necktie and a diamond stickpin, white gloves, and a flowing cloak.

Only eight of Chopin’s waltzes were published during his lifetime, including the two from the Vienna period. Seven more appeared after his death, but he may have preferred that some of them, dating from his student years, should have been destroyed. At any rate, we possess nineteen of them today.

The sequence of Chopin waltzes contains several that are, in various ways, very special. The Waltz in A-flat Major (Op. 34, No. 1), all grace and elegance, is said to have been Paderewski’s favorite. The A-flat Major Waltz of Opus 42 is a brilliant virtuoso vehicle, and the three of Opus 64 are charming and chic; the D-flat Major Waltz of Opus 64 is the familiar “Minute” Waltz, and the C-sharp Minor Waltz from the same set is dedicated to one of Chopin’s wealthy patronesses in Paris, the Baroness de Rothschild.

Until recently, when one spoke of the Chopin waltzes one was referring to fourteen works: the Opus 18 Grande Valse Brillante; the three of Opus 34; the A-flat, Op. 42; the three of Opus 64; the two of Opus 69; the three of Opus 70; and the E Minor, Op. Posthumous. It is these fourteen that make up the Chopin waltz collections recorded by most pianists. Dinu Lipatti’s performances remain, for me, the touchstone by which to measure all others. Lipatti brought a rare quality of personal identification and perception to his playing of them, along with an inimitable sense of spontaneity. Two mono recordings by Lipatti are extant: a studio recording dating from the late 1940’s (Odyssey 32160057—avoid the electronic stereo rereissue 32160058E) and one taken down at his last public appearance, at the Besançon Festival in September 1950 (included in Angel 3556, a two-disc album of the entire concert). Regrettably in the festival recording is the absence of the Valse Brillante in A-flat (Opus 34, No. 1); racked with the pain of his terminal illness, Lipatti no longer had the strength to play it.

Of pianists who have recorded the “traditional” set of fourteen waltzes in modern stereo, Rubinstein’s is the one to have (RCA LSC 2726; cartridge ARS 1071; cassette ARK 1071). His playing has vitality and imagination, and the recorded sound, a product of RCA’s Rome studios, is full-bodied. Other pianists have recorded the full nineteen Chopin waltzes, adding the five fairly early works that remained unpublished until relatively recently. Abbey Simon’s (Turnabout 34580) is the account I would recommend from this group; his playing has an abandon that is quite appropriate, and the sound reproduction is rich.

The 1976 UPDATING OF THE BASIC REPERTOIRE is now available in convenient pamphlet form. Send 25¢ and a stamped, self-addressed No. 10 envelope (9½ x 4¼ in.) to Esther Maldonado, Stereo Review, 1 Park Avenue, New York, N.Y. 10016 for your copy.
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Listen to the RS 4744 at your Sylvania dealer's today. You'll find its specs sound every bit as good as they look.

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CIRCLE NO. 13 ON READER SERVICE CARD
ANATOMY OF THE LOUDSPEAKER

By Technical Editor Larry Klein
When an engineer is feeling particularly elegant and/or play-ful, or wants to impress a nontechnical acquaintance, he might refer to a loudspeaker as "an electroacoustical transducer." The mean-ing of "electroacoustic" is more or less self-evident; "transucer" signifies that the device in question converts one form of energy into another. So, although a speaker, like an amplifier, is driven by electrical energy, unlike an amplifier, it delivers acoustical energy. And insofar as it performs its task correctly, the sound that comes out of a speaker is a replica—in acoustic form—of the electrical audio signal that went into it.

Theoretically, the process is reversible: a microphone properly positioned in front of a speaker should convert the sound waves produced by the speaker back into the original electrical audio signal. Nothing, however, is that perfect or works that well in the world of electroacoustics. This is not to repeat in a roundabout way the old cliché about speakers being "the weakest link in the audio-reproduction chain," but simply to point out that loudspeaker design is a complex matter that eludes pat simplification. Anyone wishing to understand the problems of a speaker designer, however, has to know at the very least how a loudspeaker works. Readers should be warned, however, that the discussion following merely scratches the surface of a complicated, multifaceted subject.

**Back to Basics**

To begin at the beginning, we will first examine how a typical loudspeaker driver works and then look at some of its individual electromechanical elements to discover in what way they influence how well it works. The type of speaker driver we will be examining is the conventional "dynamic direct radiator," simply because it is found in perhaps 95 per cent of the systems on the market. (When we refer to a "speaker" we usually mean a speaker system which includes several drivers, a crossover network, and an enclosure. A "driver" refers to a woofer, a tweeter, or a mid-range unit that are part of a system.)

A loudspeaker, of course, is normally connected to an amplifier whose task is to provide the constantly varying voltage that represents the audio signal. The current flow produced by this voltage activates the electromagnetic mechanism of the driver, which in turn pushes and pulls a "cone" (also called a "diaphragm"), a structure compounded of paper, fibers, and any number of other substances. The cone's purpose is, quite simply, to move air in exact response to changes in the waveform of an applied electrical audio signal.

The magnetic mechanism that produces speaker-cone movement is sometimes, at least among speaker designers, referred to as a "motor." The term is actually quite descriptive in respect to both its operating principle and its function. Motion is imparted to a speaker cone through the interaction of two magnets; one is a permanent magnet, the other an electromagnet. The permanent magnet is part of the large, heavy assembly clearly visible from the rear of an unmounted speaker. The electromagnet, commonly known as the voice coil, on the other hand, is buried deep within the mechanism—in voice coil through a pair of highly flexible leads (not shown). The variations in signal current produce an equivalently varying electromagnetic field around the voice coil: a positive-going part of the electrical audio waveform will produce a north-south magnetic field in one direction, and a negative-going waveform will produce a field in the other. In short, the magnetic field around the voice coil varies in both polarity and strength in exact correspondence to the audio signal.

Next, since it is a fact (first established in the mid-eighteenth century) that magnetic likes repel and opposites attract, the fixed field of the permanent magnet, interacting with the varying polarity and strength of the voice coil, causes the loosely suspended voice coil to shuttle back and forth within the magnetic gap. The schematic diagram of a speaker's magnetic circuit (Figure 2) shows the relationship between the two magnetic forces. Since the voice coil is attached to the speaker cone, we are therefore at the source of the movement that pushes (or pulls) the cone that moves the air that produces the sound waves.

The voice coil cannot, of course, be permitted to flop about loosely within the magnetic gap; it must be held in precise side-to-side alignment while at the same time being free to move without restriction along its axis. The spider (see Figure 1) keeps the voice coil centered to prevent its rubbing against the sides of the magnetic gap, and it also returns the voice coil to a centered "rest" position when there is no audio signal. Finally, since the voice coil is already attached to the cone, the spider supports the inner rim of the cone as well.

The outer rim of the cone also requires support and some kind of seal to prevent air from leaking around the edge when the cone moves. Both of these functions (and several others) are performed by the surround, which may be made of corrugated paper, butyl or foam rubber, or other suitable materials. All of these elements are held together in turn by a metal frame or basket.

It should be clear that any spurious vibrations, floppiness, or cone movements that are not in direct response to voice-coil movement are going to introduce some aberration in the sound produced. So will any voice-coil movement that is not coupled accurately to the cone, and so will any electrical audio signal that is not accurately converted into equivalent voice-coil movement. There are, in fact, so many opportunities for the speaker's drive system to go wrong that it is a wonder any of them ever work well at all.
"A pressure variation that takes place slowly over an eight-hour period, too low a frequency to be heard, is usually called 'weather.'"

Some of the potential problems that must be avoided (or compensated for) in driver design are:

- **Flexing of the cone** at the point where it is driven by the voice coil.
- **Spurious vibrations** set up within the cone material itself, and
- **Inaccurate cone movement** resulting from limitations in its suspension or the uneven application of the magnetic field to the voice coil over the normal range of its excursion.

All these problems come under the general headings of "cone breakup" and "nonlinearity" (meaning that the output does not have a one-to-one analogous relationship to the input). The audible effects are large peaks and dips in the speaker's frequency response and a variety of distortions. The general solutions are to make the cone material as rigid and nonresonant as possible and to make sure that the magnetic field in the voice-coil gap impinges on an adequate and equivalent amount of the voice coil at all times. By making the voice-coil winding somewhat longer than the magnetic gap (Figure 2), the designer can ensure that a constant drive force is applied during the normal range of cone excursion, but this means a loss of efficiency unless a heavier (and hence more expensive) magnet is used.

**The Box**

You have probably noticed that speakers usually come in some sort of enclosure. Apart from such matters as aesthetic appearance and physical protection, there are good acoustic reasons for this. The main one relates to bass response. A woofer without an enclosure may push and pull at the air, but the results of its efforts—at least in the low bass—are nullified as they are produced. The reason is that while the forward-moving cone pushes air toward the listener, creating a high-pressure acoustic wave, it is simultaneously creating a low-pressure area in its rear. Thus the low-bass pressure wave from the front of the cone, instead of propagating into the room, rushes around the cone to compensate for the lower-pressure area, and the bass never reaches the listener. When the cone moves inward, the same thing happens, except that the air rushes from the rear to the front.

Keep in mind that all "sound" is actually minute variations in air pressure above and below the normal barometric pressure. A variation in air pressure, however slight, that takes place 440 times a second is the musical pitch "A." (And a variation that takes place slowly over an eight-hour period, too low a frequency to be heard, is usually called "weather.") The ear is a highly sensitive mechanism for detecting rapid changes in air pressure, although we are seldom aware of it in just that way—except, perhaps, during plane takeoffs and elevator rides.

The frequency at which cancellation starts depends on the wavelengths involved. Wavelength is the distance between adjacent peaks of the generated air-pressure pulses that normally travel outward from the vibrating source at—appropriately—the speed of sound. For an unmounted 12-inch woofer, the wavelengths are such that the bass response starts to cancel at about 700 Hz and falls at the rate of 6 dB per octave below that frequency. Above 700 Hz or so, the wavelengths become short enough for the speaker cone to serve as its own baffle for the front-to-back flow of air.

Installing the speaker on a baffle board extends the front-to-back airflow path lengths and therefore permits longer (lower-frequency) waves to be heard. If you wanted to use a baffle board instead of a box enclosure to get bass response down to 40 Hz, your woofer would theoretically have to be mounted in the center of a 200-square-foot panel. Possibly (!) for this reason, speaker-system designers have ignored the virtues of the flat baffle and have chosen instead to install their drivers in various types of enclosures.

The type of speaker housing used has a great influence on the performance of the bass reproducer, but tweeters and mid-range units require hardly any baffling at all. (Wavelength is the reason for this, of course: a tweeter operating in the frequency range above 5,000 Hz puts out waves shorter than three inches.)

Two bass-enclosure approaches—bass reflex and acoustic suspension—have dominated the speaker field for many years. (There are others too: horns, transmission lines, infinite baffles, and more. Manufacturers employing any of these in their products are pleased to send literature explaining their particular advantages; we will confine our discussion here to the two most popular enclosure designs.)

The bass-reflex (BR) enclosure has also been known at times as the ducted port, distributed port, Helmholtz resonator, phase inverter, vented system, and probably several other names I've forgotten. Its operating principle was first discovered in the last quarter of the nineteenth century by German physicist Hermann Ludwig Ferdinand von Helmholtz. (This was, of course, long before speaker systems were invented.) Helmholtz found that he could construct a sharply tuned acoustic resonator (as opposed to a mechanical resonator such as a tuning fork) by using a hollow glass sphere with an opening in it. The pitch of the resonator could be shifted by changing its size or that of the opening—within limits, certainly,
A loudspeaker driver also has a specific mechanical resonance frequency determined by the compliance (springiness) of its suspension and the mass (roughly, weight) of its moving parts. This is the frequency at which the cone prefers to vibrate, where its excursion is excessive, and its movement most uncontrolled. Also, for complicated acoustic reasons, this is also the point below which the speaker's bass-frequency response starts to fall off rapidly.

In 1932, a patent was awarded to A. L. Thuras, who had the bright idea of housing the mechanically resonant speaker in an acoustically resonant box (remember Helmholtz?) and adjusting the box’s resonance to control the speaker’s resonance. It worked in that it reduced the speaker’s resonant peak and extended the bass response below that frequency, but over the years all the designs using the principle did not work as well as expected, for reasons that were not quite clear. The problem was that there were just too many variables involved. Bass-reflex design at that time was a hit-or-miss proposition that produced some good systems but others that were boomy, lacking in bass, too large, and so on.

In 1954, Acoustic Research introduced what was to become known as the acoustic-suspension system. It dealt with the same problems of bass cancellation and resonance as the bass-reflex designs, but in an entirely different way. First, a woofer with a very low resonance was designed. It was then installed in a very small (for those days) box. The air trapped inside the box acted (because of its relative incompressibility) to stiffen the suspension of the cone to the degree necessary to raise the speaker’s in-box resonance to a selected frequency. Advantages of the technique are that (1) air suspension is far more linear than the problematical mechanical cone suspension, and (2) cone resonance can be completely controlled in respect to frequency placement and damping. The various electrical, acoustical, and mechanical parameters of the acoustic-suspension design were, in short, more manipulatable than those of other designs, and it became possible to obtain a very flat, clean, low-bass performance from a very small box.

But there was a price to be paid for all this: efficiency. For several reasons, the acoustic-suspension system needed about twice the amplifier power a bass-reflex system would need for a given acoustic output. Even so, the virtues of the acoustic-suspension design were generally recognized and accepted over the course of the following decade, and the bass-reflex designs faded into the background except where high efficiency was a basic design requirement. And, of course, many other designs—horn, transmission line, infinite baffle—continued to coexist as well.

Perhaps five years ago, however, there came a hint of a design-trend reversal. The variables of the bass-reflex system suddenly became well enough understood that a designer could achieve almost any performance he desired. The man primarily responsible for the breakthrough was an Australian, A. N. Thiele, an expert not in speaker design but in complex electrical filter-network theory. It had long been accepted that the driver/enclosure interrelationships could be analyzed through electrical-circuit analogies. The cone mass could be represented by one group of circuit components, the enclosed air by another, the air mass by a third, and so forth. Such analogs had been used previously, but the difference between them and Thiele’s was that his actually could be used to optimize the woofer design.

It has been observed by some audio cynics that speaker systems do not live by bass alone. And unfortunately, the factors that make a woofer good for bass get in the way when it tries to reproduce the higher frequencies. The cone of a conventional woofer is simply too heavy and too large to reproduce the very high frequencies at a reasonable level or to disperse them evenly. For that reason, the audio signal fed to a speaker system is almost always divided among two or more drivers. In a two-way system these are the woofer (which we have already dealt with) and the tweeter; in a three-way system there is in addition a mid-range. The frequency point(s) at which the amplifier energy (audio signal) is evenly split between the two drivers—or any adjacent (in frequency) pair of drivers—is called the crossover frequency.

Why are some speaker systems two-way, others three-way, and some even four-way? The usual goal of a speaker designer is to provide as wide a frequency range as possible for a product of a given cost. Additional drivers and crossovers are added to provide the “extras,” such as the ability to play very loud or have very wide dispersion or cover (with reasonable flatness) the entire audio range of 20 to 20,000 Hz. Perhaps any one (maybe two) of these “extras” could be achieved with a two-way system, but not all of them.

If you want a very loud loudspeaker system, it has to be able to accept and deliver lots of energy. And when an amplifier is pushing several hundred watts into a speaker system, it follows that the more drivers you divide those watts among, the better the chance each will survive—and play with reasonably low distortion. This is true.
of spurious vibrations. But the tweeter has even more problems:
- it must move enough air to be audible,
- it must disperse the sound over a wide area, and
- it must be able to handle enough drive signal to do the moving and the dispersing.

Various tweeter designs—the domes, the cones, the air-motion transformers, the electrostats, the crystals, the transmission lines, the ionics—have all attacked the problem in different ways, with different degrees of success. That there is such diversity of design indicates how little designers see eye-to-eye in this frequency area.

Hidden inside the speaker enclosure are the coils, capacitors, and resistors responsible for channeling the various bands of frequencies to the respective drivers. As we have seen, crossover points are chosen to provide each driver with that band of frequencies at which it works best. The crossover between woofer and mid-range will be made low enough that the woofer cone doesn't operate in its high-frequency-breakup area and will have reasonable dispersion—but it can't be too low, or the mid-range will be fed too much power and be forced into excessive excursion. The crossover between the mid-range and the tweeter must be chosen similarly: it must be low enough for the mid-range to avoid cone breakup and a ragged dispersion pattern, but it should not be so low that the tweeter is fed too much drive signal.

The crossover is also designed to provide—in conjunction with the electrical and mechanical characteristics of the specific drivers—carefully chosen slopes at the crossover points. This is the reason you can't wire any old set of drivers into a crossover network, even if the crossover points are "correct," and hope to get best results.

In this fast tour through the wonderful world of speaker design, we have covered territory both familiar and previously unknown. You should by now have some notion of the lay of the land and be somewhat better able to evaluate the "advances," "breakthroughs," and "revolutions" in speakers that will come your way over the next decade. However, don't feel bad if you can't render instant judgment as to the technical validity of some given design approach. Nobody can! The difficulty is this: there are many equally valid ways to skin a cat—or design a speaker. Some designs are easier to manufacture, some use less expensive materials, and some produce a more reliable product. Some designs sound better in some areas, others sound better in others. And it is no more possible to tell how a speaker will sound from its specification sheet than to predict a politician's post-election performance from his campaign promises. What is the ideal or best speaker system? I really can't say. If someone presented me with a product that sounded as good as the best, and was half the size, and had twice the efficiency, and sold for, say, $400 a pair, I would be inclined to judge it as "best"—but you might not.

**A Final Word**

**The Higher Highs**

The high-frequency reproducing end of the speaker has probably had more attention paid to it, and has generated more esoteric design efforts, than any other element in the system. It is enormously difficult to reproduce accurately sound waves of, say, 15,000 to 20,000 Hz for the same reasons a phonograph stylus finds it difficult to pick them up out of the record groove in the first place. The tweeter cone, like the phonograph stylus, must respond precisely to the driving force with neither too much nor too little excursion, and it must be free

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**COMPUTER-ASSISTED SPEAKER DESIGN**

**Earlier this year I visited Wharfdale's speaker plant in England and spent some time with a group of engineers who had perfected a computer program for speaker design based on the electrical analogs of A. N. Thiele. They asked me to supply two specifications to the computer; I decided on a cubic foot of space (there is such diversity of design indicates how little designers see eye-to-eye in this frequency area.

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**A Final Word**

In this fast tour through the wonderful world of speaker design, we have covered territory both familiar and previously unknown. You should by now have some notion of the lay of the land and be somewhat better able to evaluate the "advances," "breakthroughs," and "revolutions" in speakers that will come your way over the next decade. However, don't feel bad if you can't render instant judgment as to the technical validity of some given design approach. Nobody can! The difficulty is this: there are many equally valid ways to skin a cat—or design a speaker. Some designs are easier to manufacture, some use less expensive materials, and some produce a more reliable product. Some designs sound better in some areas, others sound better in others. And it is no more possible to tell how a speaker will sound from its specification sheet than to predict a politician's post-election performance from his campaign promises. What is the ideal or best speaker system? I really can't say. If someone presented me with a product that sounded as good as the best, and was half the size, and had twice the efficiency, and sold for, say, $400 a pair, I would be inclined to judge it as "best"—but you might not.
The best kind of loudspeaker is one that plays back the music on the record or tape with the greatest degree of fidelity. The best value is the loudspeaker that comes closest to this ideal at the lowest cost. This is true whether it is the music of The Stones, Coltrane, or Stravinsky. What you want from the record is exactly what the musicians, composers, and engineers put there. Nothing more, nothing less.

Acoustic Research has been designing and manufacturing high fidelity loudspeakers based on this approach for over 20 years. It is against this background of experience that we make the statement that the AR-16 is the best buy we have ever offered the public.

Performance

For a price of $115, the AR-16 offers a unique combination of uniform energy response and flat anechoic frequency response. A crossover network of much greater refinement than is found in other two-way speaker systems gives the AR-16 uniform radiation over almost as wide a frequency range and solid angle as the most expensive AR speakers.

The performance of the AR-16's 8 inch woofer has been improved to the level of most 10 inch acoustic suspension designs. With a system resonance frequency of 55 Hz and near-critical damping, usable response has been extended to below 40 Hz, approximately the lowest note on the orchestral double-bass.

A new cabinet design eliminates audible diffraction effects by avoiding all unnecessary projections and allowing for the mounting of both drivers flush with the front surface.

Cabinet diffraction effects, graphically illustrated above, are absent in the AR-16 because of the elimination of unnecessary moldings and projections.

These performance characteristics, rarely combined even in far more expensive speakers, are essential for the accurate reproduction of music under actual listening conditions and for maintaining proper tonal balance for listeners in various parts of a room.

Appearance

The special cabinet construction of the AR-16 has also made possible an attractive departure in appearance from conventional speakers. The oiled walnut wood finish of the cabinet sides is continued on the front. An acoustically transparent foam grill, mounted in the center of the front baffle, is the only element that projects beyond the flush-mounted drivers. The AR-16 is also available in a vinyl finish for under $100.

'Best-Buy' value

The AR-16 is an extremely accurate—and attractive—high fidelity reproducer. Its combination of price, performance, and styling place it at the point beyond which improvements are achieved only at disproportionately higher cost... exactly what value is all about.

Guarantee

The performance specifications of the AR-16, like those of the most expensive AR speakers, are guaranteed for five years.

For a complete description of the AR-16, fill out and mail the coupon today.

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CIRCLE NO. 1 ON READER SERVICE CARD
Cash prizes of $1,000 each were awarded Levintritt Foundation finalists (l. to r.) Marian Hahn, Lydia Artyomiv, Mitsuko Uchida, Steven De Groote, and Santiago Rodriguez. (There has been no first prize since Joseph Kalichstein's 1969 award.)


New York's association of Latin critics voted singer Nati Mistral's Town Hall concert the best of the year.

New York's Adelphi University made Peter Goldmark, inventor of the LP, an honorary Doctor of Science.

Conductor Eugène Ormandy received a Doctorate of Humane Letters degree from Moravian College, Bethlehem, Pa.

Union College, Schenectady, N.Y., made jazz clarinetist Benny Goodman an honorary Doctor of Fine Arts in May.

Russian cellist Gregor Piatigorsky received the degree of Doctor of Music from Columbia University.

Conductor-composer José Serebrier received Columbia University's 1976 Ditson Conductor's Award.

Samuel Barber (chatting with William Schuman) received the National Institute of Arts and Letters' Gold Medal.

Boston's Berklee College of Music made Newport Jazz Festival founder George Wein an honorary Doctor of Music.

The Catholic Actors Guild's George M. Cohan award went to famed chanteuse Hildegarde, 70-plus and going strong.
a crop of prizes, awards, and degrees

Keith Carradine (with Burt and Angie Dickinson Bacharach) won an Oscar for his song I'm Easy from Nashville.

N.J. Governor Brendan Byrne proclaims Jerome Hines Day to celebrate the bass-baritone's 30th year with the Met.

Gunther Schuller was awarded the American Composers Alliance Laurel Leaf by proxy Nicholas Roussakis.

A Drama Critics Award, 9 Tonys, and 1 Pulitzer for Chorus Line: choreographer Bob Avian, co-author Jas. Kirkwood, producer Joe Papp, actress Donna McKechnie, director Michael Bennett, composer Marvin Hamlisch, lyricist Edward Kleban.

Composer Jack Beeson (Lizzie Borden) has been elected a member of the American Institute of Arts and Letters.

The 1976 Pulitzer Prize in Music went to composer Ned Rorem for his orchestral work Air Music.

Composer-performer George Russell received a National Music Award for his work in the field of jazz theory.

New York's Handel Medallion went to dancer Dame Margot Fonteyn: shown here with Mayor Abraham Beame.

Avery Fisher Prizes ($1,000 awards and debuts with the N.Y. Philharmonic) for young American pianists Paul Schenly and Ursula Oppens, harpist Heidi Lehwalder, and violinist Ani Kavafian (donor Fisher is at center).

Doctor of Humane Letters is what it says on the sheepskin the University of Nevada dropped on Frank Sinatra.

Avery Fisher Prizes ($1,000 awards and debuts with the N.Y. Philharmonic) for young American pianists Paul Schenly and Ursula Oppens, harpist Heidi Lehwalder, and violinist Ani Kavafian (donor Fisher is at center).
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Sony's new, more powerful STR-6800ED receiver should get a warm reception. Because it not only looks different from other receivers; it is different.

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9. **An acoustic compensator for easy control of highs, lows and middles.** A conventional loudness control only lets you boost bass. Our acoustic compensator has three positions: For true loudness compensation, for bass boost and for mid-range presence.

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And more. To these specifications (remember, we state them conservatively) and Sony's proven reliability, you get a receiver that produces a sound that'll make you understand why you have ears.

That's the STR-6800SD at $500. Or, for less power and a few less features—but no loss in fidelity—the STR-5800SD at $500 and the STR-4500SD at $400 (all suggested retail prices).

A sound investment.
A NEWCOMER to high-fidelity sound reproduction soon discovers that the sound of a given speaker system is profoundly affected by the acoustical characteristics of the room in which it is being used. Not quite so evident, however, is the fact that there are also significant, audible changes in frequency balance as the position of the speaker—or of the listener—changes even slightly in the room.

The effects of all these variables have often been touched upon in a general way in articles dealing with room size, construction materials, and furnishings. Only recently, however, has it become possible to develop quantitative data on two important aspects of the complicated speaker/room/listener relationship. First, if a speaker system’s position with respect to the nearest three room boundaries (two walls plus the floor or ceiling) is known, the room’s effect on the speaker’s acoustic power output can be predicted quite accurately. Second, at least a close approximation of the way room boundaries affect the sound field at various listener locations can also be calculated if we know the distance of the listener’s head from the nearest three room surfaces.

When sound is fed into a room, it reflects successively from one room-boundary surface to another. This effect is known as reverberation. In those areas that are only a small fraction of a wavelength away from such a boundary, the direct and reflected sound pressure are in phase, and therefore combine by simple addition. For an area close to any one room surface but not to others (such as the center of a large wall), the maximum increase in sound pressure above that measured in the middle of the room (assuming that sound energy is arriving at the boundary equally from all directions) is 3 dB. (Note that in all our examples we are assuming that the sound field is diffuse—that is, it reaches the boundary after having been reflected from all directions.)

If the listener moves farther away from the reflecting surface (or if the wavelength is decreased by making the frequency higher), the reflected sound energy will eventually arrive back at the observation point opposite in phase to the direct sound, causing the sound pressure at that point to be about 1 dB lower than it is in the middle of the room. This pressure minimum occurs at a distance of 0.35 wavelength from the boundary. Beyond that distance the effects of the boundary are minor. A speaker system’s acoustic power output at low frequencies is in direct proportion to the resistive load presented by the air surrounding it, and that load depends on the speaker’s proximity to room boundaries. The measured effect of this loss on a speaker’s power output is of precisely the same magnitude as the audible variation in sound pressure for listeners near room boundaries. There is, however, no dependence on a diffuse field in the room, because the speaker’s output at low frequencies is omnidirectional.

Near the intersection of two room boundaries the additive reflections can increase the sound pressure by a factor of four, or a maximum of 6 dB. And the sound pressure at a location that is only a small fraction of a wavelength distant from a three-boundary intersection (two walls and a ceiling or floor) is increased nearly eight times by the multiple in-phase reflections, for a maximum boost of 9 dB. Thus the gain in sound pressure at very low frequencies is inversely proportional to the solid angle represented by nearby listening-room boundaries.

This proportionality does not, however, hold for the maximum reduction in sound pressure at the observation point which occurs when reflections are in phase opposition to the direct sound. At a single boundary (wall, floor, or ceiling) the sound pressure is...
techniques, but they cannot take into account the random acoustic factors that are introduced when a speaker is placed in a real room with unknown damping qualities, unspecified dimensions, and at unpredictable distances from adjacent room surfaces. Under such circumstances, speakers with smooth, flat response curves can develop quite audible dips and peaks in their sound output; others may lose clarity or suffer from subtle, distorting coloration.

Most of us are aware of—and can deal reasonably well with—the damping effects of the room. Simply stated, the “softer” the rugs, drapes, and furniture, the greater the high-frequency absorption and the less chance that the sound will be overly bright. Fortunately, most room furnishings provide acoustic absorption (damping) within the proper range. However, as many listeners have discovered to their dismay, improving room acoustics can involve a lot more than just proper damping.

Some sensitive and critical audiophiles have spent months moving their speaker systems about, checking the sonic effect of one randomly selected room location after another. They know what they are listening for, but they lack guidelines that will help them achieve it. Roy Allison, who has been particularly concerned with room/speaker interface problems, has worked out, with the aid of a computer, the specific effects of the major speaker- and listener-position variables encountered in a conventional listening room. It should be obvious that all the random room factors have not been reduced to an easily applied formula, but the article that follows should enable you to eliminate at least one important and disturbing unknown from the complex speaker/room/listener equation.

 reduces by 1 dB, as we have seen. But at a point approximately 0.3 wavelength distant from two intersecting room surfaces, the sound pressure reduction is 3 dB, and at about 0.3 wavelength distant from a three-boundary intersection the reduction is 11 dB!

This phenomenon has severe audible consequences. If a microphone (or a listener’s head) is located close to and equidistant from a three-surface room corner, the sound pressure will vary over a range of 20 dB (+9 to −11 dB) as the audio signal frequency (and hence the wavelength) changes, although the sound pressure in the middle of the room remains constant. Fortunately, the variation is less for locations off the line of symmetry from the corner, but it is still of considerable magnitude.

These relationships were first spelled out in several papers by scientists at the National Bureau of Standards. The mathematical operations required to plot a “response curve” for a particular speaker or listener location are tedious, but a large computer, properly programmed, can make short work of the dreary calculations. The curves presented with this article were plotted from data supplied by such a computer. They are of two kinds: first, there are speaker power output vs. frequency curves showing how the calculated power output of a standard “ideal” speaker system changes as its position in the room is varied. Second, there are curves showing the additional influence of room boundaries on the sound heard by listeners sitting in typical positions in a room. In addition, there are a few curves showing the result of combining a speaker’s response for a particular room location with a specific listener position.

The theoretical basis for predicting a listening room’s influence on speaker acoustic-power output has been tested experimentally and found to be applicable to real home listening rooms and speaker systems. Therefore, the loudspeaker/room curves shown herein can be relied on completely. Somewhat less confidence should be placed in the listener-position curves, however, since they assume a totally diffuse sound field such as might occur in a concert hall, and the home listening room suffers from resonance modes (standing waves) which are directional and, in a small room, usually widely spaced in the low-frequency range. However,
with the usual listener locations, the resonance modes tend to coincide with and reinforce the normal boundary effects at listener positions.

**Speaker Position**

To show how speaker output is affected by a real room, it is convenient to start with a "standard" or reference speaker. Figure 1 is a power-output vs. frequency curve (measured in an anechoic chamber; a near-field response measurement would yield the same curve) for a hypothetical "standard" speaker. The performance and the physical arrangement of the system are quite close to those of many high-price bookshelf units now on the market. This hypothetical system has a cabinet with dimensions of about 1 x 1 x 2 feet, and its woofer is mounted toward one end of the front panel. The system's normally damped bass resonance is at 50 Hz. (Although this hypothetical system is an acoustic-suspension type, the design principle is actually not relevant. The room effects to be shown would apply to any type of speaker system except those using bass corner horns; only the distance from the driver to the three nearest room boundaries is important.)

Suppose we take this standard speaker system into a home listening room and put it on a 32-inch-high table or shelf, with its back close to the wall. The center of the woofer will be 3.17 feet from one room boundary (the floor), and its average path length along the exterior surface of the cabinet to the rear wall will be about 1.67 feet. Figure 2 is a family of acoustic power-output curves obtained as the system is moved gradually away from the side wall, with its center at distances varying from 1 to 6 feet. It is evident that as the distance to the side wall is increased, the peak in output centered at 20 Hz decreases. In fact, the 6-foot side-wall spacing causes an output variation from normal of only about ±3 or ±4 dB. None of the curves looks exactly like the system's anechoic curve, however, and in most domestic rooms it would not of course be feasible to locate a stereo speaker six feet or so from the nearest side wall.

If we take the speaker off the shelf and put it on a 1-foot base or stand with the woofer end of the cabinet at the bottom, the woofer's center will be roughly 20 inches or 1.67 feet above the floor. Its average path length to a rear wall remains 1.67 feet if the cabinet back is placed close to the wall. Adjusting the base location so as to vary the distance to the side wall, we obtain the family of curves shown in Figure 3. It is obvious that the bass peak here is greater than for the corresponding shelf positions. Also, the fact that the woofer remains at the same distance from two of the boundaries tends to "pull" the acoustic power dip toward a common frequency (200 Hz) for all the curves and to make its average severity greater than would be the case for unequal distances. It is rarely a good idea, therefore, to stand a speaker system on a short base.

The curves in Figure 4 are similar to those in Figure 3, except that the woofer end of the cabinet now rests on the floor. As a result, the 1.67-foot woofer-center distance of Figure 3 becomes 0.67 feet (8 inches), with a resulting improvement in overall smoothness. The suck-out at 200 Hz is now gone. A study of the three sets of curves shown so far does, in fact, suggest a useful rule of thumb for the installation of conventional speaker systems: the more different the distances from the woofer to the three nearest room boundaries, the smoother the acoustic power-response curve will be. That rule is verified in general by the set of curves shown in Figure 5. We have left the woofer end of the cabinet sitting on the floor but have moved the system forward so that the woofer is about three feet from the rear wall. Again, curves are shown for four different distances up to 6 feet from a side wall. The most irregular curves (aside from the 50- to 60-Hz bass peak) are those for which two dimensions coincide, or are quite close.

Figure 6 shows the result of positioning the system on a pedestal somewhat away from the rear wall. The woofer is assumed to be 3 feet above the floor and 2 feet from the back wall, and the speaker is again moved varying distances away from a side wall. Some of the power curves are relatively smooth, particularly those at greater distances from the side wall. When two dimensions coincide, however, as at the 3-foot distance, there are larger variations. (It should be made clear that the same results would be obtained if we kept the woofer's center 2 feet above the floor—or 2 feet below the ceiling—and 3 feet from the rear wall. It is the combination of distances that matters.)

Next, if we install this standard speaker diagonally across a wall intersection, the distance from the center of the woofer to each wall will be about 1/2 feet. Power response in this case is very uneven no matter how far the system is raised above the floor, as Figure 7 shows. A corner is therefore not a good place to install any system not specifically designed for it.

**Listener Location**

In most domestic listening rooms there are fewer practical choices for locating the listener than for locating the speaker. For example, few audiophiles, however dedicated, would be comfortable sitting on a midwall shelf. Also, the height dimension is virtually constant since a seated listener's ears will hardly ever be less than 36 inches and never more than 42 inches above the floor. For our purposes, it is safe to assume a standard height of 1 meter.
Sofas and chairs are usually placed close to or against one wall, and a seated listener's ears will therefore usually be 1.1 feet (13 or 14 inches) away from a wall. Figure 8 shows the calculated effect of the room boundaries on the sound pressure for listeners on a chair or sofa against one wall and at distances from 2 to 6 feet from an intersecting wall. The worst response is displayed, as expected, by the curve for the 3-foot side wall distance since it is nearly the same as the height dimension. Also as expected, the shape of the bass peak depends on the distance to the side wall.

Another common sofa arrangement is L-shaped, with the listener seated several feet away from the room wall. Figure 3. The standard system placed on a base or low table about 1 foot high with the woofer end of the cabinet down, the back near the rear wall, and the distance to the side wall increasing in 1-foot increments.

Figure 4. Response in a real room for the standard system with the woofer end of the cabinet on the floor, back close to the rear wall, and at 1-foot increments of distance from a side wall.

Figure 5. Real-room response of the standard system. Here the woofer end of the cabinet is on the floor and the distance to the rear wall is 3 feet. Response changes radically as the distance to a side wall is increased incrementally from 1 to 6 feet.

If a chair is placed well into the corner, a seated listener's head will be about 1½ feet from each wall, with the result shown by the upper curve in Figure 10. Bad enough. But if a corner chair is used as part of a seating arrangement with a sofa along a wall, it will usually be situated well out from the corner. Then the unfortunate occupant of the chair may find that his head is about 3 feet distant from each wall. The distance to the floor is almost the same, and when all three dimensions nearly coincide, the result is awful, as can be seen from the middle curve in Figure 10. Minor adjustments in the chair's corner position can be of some help. The lower curve in Figure 10 is for a listener located 4 feet from one wall and 2½ feet from the other. It
can nevertheless be said that corner positions are no more desirable for listeners than they are for conventional box speakers.

Combining Positions

If the sound field were perfectly diffuse at low frequencies in your particular listening room (it isn’t), and if the room’s sound-absorption properties were the same at all frequencies, you could simply add the acoustic power-output curve of your ideal speaker in a given room position to whichever listening-position curve you select, and you would have a precise overall speaker/room/listener response curve. Naturally you would try to find complementary curves, so that the hills in the speaker-output curve would be canceled by valleys in the listening-position curve, and vice versa.

There are indeed a few combinations for which this works quite well. Figure 11, for example, shows a curve obtained by simple arithmetical addition of the values from the 4-foot speaker spacing curve, Figure 2, and the 7-foot listener-spacing curve, Figure 9. Note that these positions may or may not be practicable in your living room. The amount of bass rise shown is no cause for alarm; it may be about right to balance the bass that gets lost through normal flexing of the room walls.

Another fairly smooth combination, though with considerably more extreme bass, is that shown in Figure 12. This combines the 5-foot speaker-spacing curve of Figure 3 with the 6-foot listener-spacing curve of Figure 8. Combinations as smooth as these are rare, but they are worth looking for. A combination that might be established by room-decor considerations could produce a curve as bad as that shown in Figure 13, and there are many even worse combinations possible, as inspection of the other curves will prove.

As mentioned, much of the bass rise shown in these curves is not actually heard in most rooms (which is all to the good) because the room boundaries are not sufficiently stiff at low frequencies to retain it all. And, also as noted before, rooms of home-listening-room...
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size do not provide diffuse sound fields at low frequencies. Since all loudspeakers are not as inherently flat as our reference standard, does this mean that the curves are useless or unreliable? Not at all. It means that if you use this information to establish the speaker and seating locations you will be able to reduce the unknown variables significantly and thereby improve your odds. Even if you ignore the listener-position curves and simply put your speakers where the curves show the room will treat them kindly, you can expect audible improvement.

As is evident, the worst aberrations occur well within the operating ranges of most woofers. Such peaks and dips cannot be removed by a speaker’s balance adjustments or level controls, but only by changes in the speaker’s position. True, some compensation by means of narrow-band equalizers is possible once we know how much boost and cut is needed and precisely where in the frequency range to apply it. But equalizers can also increase amplifier power requirements and speaker distortion. And, in any case, it certainly makes sense to optimize the acoustical situation physically before resorting to electronic correction.

It should be noted that each speaker system’s performance in a stereo setup is determined individually by its position with respect to nearby room surfaces. To the extent that a pair of stereo speakers are producing the same material within the affected frequency range (this is most likely to be true in the bass region), it may be possible to achieve partial compensation of power-response aberrations by choosing appropriate differences in position for the two speaker systems. It can certainly be said that the most uniform power output will not be obtained from a pair of conventional stereo speaker systems if they are placed symmetrically in a room, for in such a situation each system will have the same aberrations.

What all these investigations make clear, of course, is that we need speaker systems whose woofers will be uniformly loaded by a room throughout their assigned frequency range without being unduly influenced by their position in the room. It is perfectly feasible to design systems of that kind—some, in fact, are now being made. But until there are more of them available, we can help the standard speaker boxes provide better sound simply by being careful where we put them—and our listening selves.

Figure 11. In some cases, a conventional speaker system can be so located that its power-output curve is complementary to the boundary augmentation at a given listener position. This room/listener curve is obtained by adding the power output of the standard box in position 3.3, 1.67, 4 (Figure 2) to the listener-position curve 3.3, 1.1, 6 (Figure 9). Bass rise shown would probably be beneficial (see text).

Figure 12. Another room/listener curve, relatively smooth but with strong bass. Speaker-output curve 1.67, 1.67, 5 of Figure 3 was added to listener-position curve 3.3, 1.1, 6 of Figure 8.

Figure 13. A room/listener curve that might be obtained by addition of random but typical speaker and listener-position curves. There are many worse combinations.
Stories about the remarkable career of the Captain and Tennille usually contain the terms "fairy tale" and "fantasy come true." In its outline, their story indeed is that. Consider: in the fall of 1973 the Captain (Daryl Dragon) and his fiancée (now wife) Toni Tennille were earning their living playing small club dates around Los Angeles. They went into a studio to cut a demonstration record of a song Toni had written, The Way That I Want to Touch You.

When they couldn't interest any record company in their work, they decided to spend $500 to press copies themselves and send them to local disc jockeys. It was an unusual but hardly unique solution to a situation faced by other groups with local followings. The result was an L.A. Top Ten hit, and it generated enough interest to get them a record contract with A&M. The single they made for their new company, Love Will Keep Us Together (also the title of their debut album), blasted its way to number one song in the country, was certified Gold by the RIAA (sales in excess of one million copies), and won a Grammy Award from the National Academy of Recording Arts and Sciences as Record of the Year. That single was the start of a solid, bright, new musical career.

But even in fairy stories, the hero (or heroine) doesn't spring out of nowhere and reach the happy ending without doing some hard preparatory work. The Captain and Tennille have impeccable musical credentials, and their experience and background are so impressive that the real surprise is that they couldn't find a record company to sign them in the first place. Daryl, son of the conductor Carmen Dragon, had been an arranger and keyboard player for the Beach Boys for seven years. (It was the Beach Boys who gave him his nickname, Captain Keyboards, in hon-
to do the show. So Toni, who describes herself as “naive at the time,” signed with a producer in San Francisco—only to discover she had also signed away artistic control. “When he insisted on inserting unacceptable material, I left the show.”

Now Toni reflects that her experience helped her to learn not to be so trusting in business. More important, Mother Earth was her introduction to Daryl Dragon. Or, as Daryl put it when asked if they had met on tour with the Beach Boys, “It wasn’t an on-stage romance. It was an on-tape romance. I was approached to do arrangements for Mother Earth and asked to hear the music first. I sent a tape of Toni singing the score and just followed that voice to San Francisco.” Toni added, “It was really special that he liked my music. Daryl won’t work unless he likes the music.”

But would seem that when the couple left the Beach Boys in early 1973 to form their own group (the two of them plus Chris Augustine on drums), there should have been some record-company interest in their music. But even without records they quickly worked up an impressive following in their club dates, a fact of which they are quite proud, since they both believe it is a direct outcome of their approach to performing.

Toni, who does most of the talking on stage and in interviews, explains: “It is our philosophy that every night we would do the best we could, no matter how many people were in the audience. That way, if anyone liked us and told his friends, they could be sure of seeing a good show, even if we were only playing to six people. We just took a chance on building our act that way. We started at the bottom in the San Fernando Valley, where we did four sets a night, six nights a week, and developed an audience. We had people sign cards if they were interested in knowing where we were playing next, and we ended with a list of two thousand fans who followed us!”

So why couldn’t they get a record contract? Toni recalled: “It was the fall of 1973, and, if you remember, there was a vinyl shortage and companies just weren’t signing new acts. We did send the record around, but we had no manager and just couldn’t walk into offices with our demo.” Even the Beach Boys, who had their own label, were unwilling to take a chance. “Daryl took the single to Carl Wilson, but they were going through some hard times with Flame, the only group they had signed, and the whole label seemed to be in trouble. Carl told us to come back to them if we ever got some action on the record on our own. Dennis [Wilson] really liked it, and now he’s one of our biggest fans. But at the time they weren’t interested. I don’t blame them. It was business.”

In any case, the lack of interest in 1973 disappeared in 1974, along with the vinyl shortage, and they went to A&M, probably the ideal company for them and their music. Herb Alpert and Jerry Moss may well have been fascinated by the parallels between the couple’s career approach and their own start in the music business. (Alpert couldn’t get his band a recording deal either, so he and Moss pressed and distributed their own records, then took it one step further by starting their own label.) More important, the Captain and Tennille make A&M’s kind of music—an up-tempo hybrid of rock and pop that is melodic enough to be middle-of-the-road but at the same time has enough emphasis on the beat to attract younger listeners.

In performance the Captain and Tennille display some really dazzling musicianship, together playing a total of eight keyboard instruments. Toni uses a grand piano, an electric piano, and a mini-Moog synthesizer on which she works bass lines, singing all the while. Daryl has chosen to stay in the background, playing clavinet, organ, vibes, ARP and Moog synthesizers and leaving most of the spotlight, the talking, and all of the singing to his wife.

They seem to know how to heighten the innate differences between them to help the show. Toni is naturally voluble, filled with energy and Southern charm (she’s a native of Montgomery, Alabama). In contrast to her effervescence, Daryl is dour and deadpan and says little. But he can still let loose with his own funny one-liners when he has the chance, most notably when he moves to the piano to give a demonstration of his great musical love, boogie-woogie in the Fats Domino tradition. Events sometimes conspire to make him more silent than he would like: “People always ask me why I don’t talk more, and I would, but they keep forgetting to turn on my voice mike.”

In live performance, the Dragons do a wider range of material than they have yet recorded, moving from country to pop to rock. Although their melodies are generally simple—both their own and the numbers they do by other composers—their arrangements are intricate enough to keep the interest level high. It’s an approach they may well have developed in their work with the Beach Boys.

Another trait they display on record also reflects the ideals of their old group—keeping the music in the family. Their first album lists Louisa, Melissa, and Jane Tennille (Toni’s sisters) as singing background harmonies. The four girls sang together as children and, as Toni says, “It’s lucky we all have different vocal ranges so we can sing four-part harmonies.” Then there is Daryl’s brother Dennis, who engineered and mixed the album and who also played drums on one song. He didn’t join them on the road, they said, “because Dennis gets a little excited drumming and it’s hard to hold him down when he’s playing with us.”

Success has brought a few changes for the Captain and Tennille. They have already released a new album, “Song of Joy” (reviewed on page 00), and have a manager at last. He has booked them on major tours, opening for such disparate attractions as Mac Davis, Freddie Prinze, and the Beach Boys (which may give Daryl his chance to play Help Me, Rhonda once again). The venues are huge halls and arenas, which necessitated expanding their group: they added Melissa and Louisa Tennille as back-up singers, Melissa’s husband Andy on percussion, and Gary Sims as guitarist and bass player. Daryl expressed some regret about abandoning their tightly knit trio, but observes that “When you play huge halls, you need extra people. Especially when you’re playing with the Beach Boys, you have to be as good as you can get.”

Beyond that, Toni is trying to encourage Daryl to join her more in the spotlight and perhaps make his stage singing debut. “Daryl wrote an answer to The Way That I Want to Touch You, called She Wrote This Song for Me. When he sang it for his parents, they just sat there and cried, it was so beautiful.” The sentiments may be sentimental, but they are real.

The Captain and Tennille seem to have hit on a formula that can please audiences and themselves as well. Daryl sums it up simply: “People want to hear happy music these days.” It looks like the combination of “happy” and a high degree of professional polish will take them where they want to go.
Now that there are dozens of recordings of every Beethoven and Brahms symphony and practically every Ravel suite and Puccini opera in the catalog, it's not surprising that new recordings of such rarities as Massenet's La Navarraise, Halévy's La Juive, Schmitt's La Tragédie de Salomé, Lalo's Symphony in G Minor and Rapsodie, and an album of Rossini ballet music get special attention from reviewers and record collectors. Recent releases of each of these rarities have had one thing in common: all were conducted by Antonio de Almeida (he pronounces it dal-may-dah). At a time when most conductors seem determined to establish their reputations by recording complete sets of Beethoven, Mahler, or Tchaikovsky, De Almeida has been content to specialize in performing the unusual, the less familiar, and what he calls "the unfairly neglected."

I discussed this with him recently when the tall, handsome, silver-maned French conductor of Portuguese ancestry passed through New York with his family. "There are so many composers who've been totally eclipsed just because they're not commercial," he said. "It's a shame." Could he be specific? Without hesitation he started reeling off names: "Lalo, D'Indy, Chabrier, Dukas, Massenet, Martinu, Franz Schmidt. And in America, Howard Hanson, Samuel Barber, Roy Harris. There are many more."

De Almeida, forty-eight, has always been the sort of conductor willing to take chances where others won't, especially to explore the unknown and different. As one record-company executive put it to me: "The Bernsteins, Karajans, and other 'big names' are so busy jetting here, there, and everywhere that they don't have the time it takes to research neglected works, to supervise getting the parts in shape for performance, and all that. A conductor like De Almeida is not only willing to put in the time required, he loves doing it. And that is what makes him so special today."

The French government also feels he is someone special. This spring it awarded him the Legion of Honor for his contributions to French music. And in May he was named music director of both the Nice Opera and the Orchestre Philharmonique de Nice.

De Almeida first became interested in music when he was a teenager newly arrived in New York from France shortly after the outbreak of World War II. "When the Germans came into France, we managed to get out though the family was separated for about a year," he recounted. "My father was offered a job in Buenos Aires while my brothers and I were left in New York to go to school." That one year in New York had quite an influence on De Almeida. "I discovered jazz and started to teach myself to play the clarinet by listening to Benny Goodman and Artie Shaw records. Then I took up the saxophone and oboe. I had begun studying the piano earlier, when I was ten or eleven back in Paris, but I never played it terribly well. I still don't."

By the time De Almeida rejoined his family in Buenos Aires to finish his high school education there, he knew he loved music more than anything else. But neither he nor his family then had the means to consider it a future career for him. So, from the Argentine, he applied to the Massachusetts Institute of Technology for a chemistry scholarship—and won it. At M.I.T. he soon began spending far more time pursuing extracurricular musical activities than his studies. He became a vice-president of the glee club and a clarinetist in the M.I.T. band. He also moonlighted as an oboist with the nearby Wellesley orchestra and as a horn player with the Tufts orchestra.

"One day," he said, "the other vice-president of the glee club and I got talking about the fact that Harvard and other universities in the area had both a symphony orchestra and a jazz band as well as a glee club. We decided M.I.T. needed the same and that it was up to us to organize them. We tossed a coin, and I got the job of organizing the symphony. I was disappointed at the time not to get the jazz band, but I plunged ahead. Looking back, I honestly think I would have moved very soon into symphonic music anyway, but this flip of the coin put me smack into it."

"By my sophomore year the orchestra was giving regular concerts, and I was convinced the scientific life was not for me. I transferred to Yale to major in musicology. I knew by then that I wanted to be a conductor, and I chose Yale because it didn't have a conducting course. I knew that if I went to a school with other conductors, I'd never get to conduct much," he says. "On the other hand, if I went to a school without a conducting course, I'd be the only conductor."

And that's exactly what happened. De Almeida formed the Yale Pocket Symphony and conducted it for two years. "It was a small chamber orchestra. We played works by Corelli and Mozart and did Handel's Julius Caesar. And we commissioned new works from young composers studying in Paul Hindemith's classes at Yale. We'd play in prep schools around Connecticut and New York if they'd pay our transportation and give us dinner, and they loved having an orchestra come and play for them."

"I learned more from Hindemith than from anyone else," De Almeida says warmly. "I studied with him every Saturday for four hours. I told him I didn't want to be a composer, that I had no talent at all for composition. He just smiled and said, 'That's all right, most of my regular students don't either.'"

With his Yale degree, plus two summers' training at Tanglewood, De Almeida set out to conquer the world's podiums. "But in those days youth was not 'in' as it is today," he said. "It's like saying you want to be the general of the army and nothing less, but who's going to give you their army to lead until you've won a battle or two? So I packed my suitcases and went back to Europe. I figured I'd just go around and
knock on everyone's door until someone gave me a chance to show what I could do."

The first one to give him that chance was Pedro de Freitas-Branco in Lisbon. "He was Ravel's favorite conductor," De Almeida said fondly. "But he didn't have any strong ambitions to conduct outside Portugal, so he never became very well-known internationally, except for a few Ravel recordings he made for Westminster in the early 1950's."

De Almeida's first Lisbon concerts got good reviews. Armed with those, plus a scratchy 78-rpm transcription of one of his concerts, he took off for Germany to try to land some more engagements. "Very slowly they came," he says. "I started in the small towns. In fact, in Bad-Hamburg when we rehearsed, the streets were virtually deserted because everyone was in the orchestra."

A major boost to De Almeida's career came from Sir Thomas Beecham.

(Continued overleaf)
who invited him to make his London debut conducting the Royal Philharmonic (he has since conducted it often). "Also at about this time, the Portuguese radio wanted another major orchestra besides the one in Lisbon. I was asked to organize an orchestra in Oporto, in the north of Portugal. I did so, and conducted it for three years [1957-1960]. Beecham came to conduct it, and I acted as his interpreter. After the first rehearsal I asked him what he thought of the orchestra. 'Oh, absolutely delightful,' he said. 'Of course, it's fortunate I'm still totally deaf from yesterday's plane ride.'"

De Almeida's recording of the Lalo symphony, released this year by Philips, is not only its first in stereo but also the first rehearsal I asked him what he thought of the orchestra. 'Oh, absolutely delightful,' he said. 'Of course, it's fortunate I'm still totally deaf from yesterday's plane ride.'"

De Almeida's recording of the Lalo symphony, released this year by Philips, is not only its first in stereo but also the first since Beecham's mono version in the 1950's. While admitting that Beecham's recording is one of his favorites, De Almeida insists, "Mine is not a copy of his. I think it's silly that people say you should never listen to recordings because they'll influence you so that you wind up copying them. That's not so. You can listen to a Toscanini recording of a Beethoven symphony a hundred times and then go out and conduct it your own way. Unless you have no personality at all, it's impossible just to copy what some other conductor has done."

In 1960, following an engagement at the Stuttgart Opera in Germany, De Almeida was invited to become the principal conductor of the Stuttgart Philharmonic, a post he held for four seasons. "Despite its name, it's not a city orchestra," he pointed out. "It belongs to the whole state, so we played in many other cities besides Stuttgart. That gave me strength in the basic repertoire that I don't think many young conductors get today. We would play fine work with all kinds of interesting contrasts. Then there are all of Gounod's neglected works—we know only Faust and perhaps Mireille, but he wrote quite a few others—and Lalo's Le Roi d'Ys, which no one but the Paris Opera seems to perform. Chabrier's Le Roi Malgre Lui is an absolute masterpiece, and I mean the whole opera, not just the overture and Fete Polonaize that we hear occasionally on concert programs. Chausson also wrote an absolutely beautiful opera, Le Roi Arthus, which is filled with juicy French music no one ever gets to hear today. The Saint-Saens operas are well written musically, but because of their librettos they don't stage well. But they would record well, and I'm sure people would enjoy listening to them at home."

In the 1960's De Almeida put in a lot of work and study preparing himself to record all the Haydn symphonies in H. C. Robbins Landon's "critical" edition approved by the Haydn Society, of which De Almeida became artistic director in 1968. "We began to record the series in 1969," he said, "with Robbins Landon himself as producer. We put together an orchestra of the finest solo players we could get, such as the great Roman flutist Gazzelloni, and we had a marvelous time during the sessions. I can honestly say we all played with a great deal of love for the music. But the Haydn Foundation couldn't get commercial backing for the project, and we ran out of money after completing only the Esterhazy and London symphonies—twenty-three in all."

A few years later, London Records signed Antal Dorati to record all the Haydn symphonies. That series was completed in 1974 and has won several international prizes. I asked De Almeida if he was miffed that his pioneering work was upstaged by the Dorati releases. "I don't have time to feel miffed," he replied. "I have other things to keep me busy and to look forward to. Naturally, I'm disappointed we couldn't complete the series, but I'm proud of those we recorded."

Philips Records has released two of the symphonies (Nos. 94 and 96) on a single disc as a sort of test to see how well it will go in this country, but a Philips spokesman was frank in saying it seems unlikely that the twenty-one other recorded symphonies would be released here, partly because of present import costs.

One other De Almeida project is also in limbo at present. "I've written the Offenbach 'Koechel'—a thematic catalog of all of Offenbach's works. But it hasn't been published. Frankly, it would be too expensive to do it the way I believe it should be done. I started it as a hobby. Wherever I was performing, I'd ask in the conservatory if they had any Offenbach manuscripts, and quite a few turned up. In Linz, for example, I discovered a piece for viola no one knew about outside Russia." From the gleam in De Almeida's eye, it was obvious that this lost viola piece means more to him than another fancy set of all the Beethoven or even the Haydn symphonies.
The Bel Canto Revival Flourishes: Donizetti's Operatic Tragedy Maria Stuarda Receives Its Second Recorded Realization

The Queen of Naples did not like operas on certain subjects, and that may be why the censors in the city in 1834 forbade the presentation of Gaetano Donizetti's Maria Stuarda, in which a queen (an ancestress of the Neapolitan sovereign) is beheaded. The opera was ultimately performed, but, like most of Donizetti's works and those of other bel canto composers, it rested in oblivion for close to a century. Since its revival in Bergamo in 1958, however, it has become almost a repertoire staple in Italy, England, and the United States. Its current vigor is attested to by its representation on records in two excellent performances ABC's 1972 release (ATS 20010/13) with Beverly Sills in the title role and now the new London set (OSA 13117) with Joan Sutherland.

Maria (Mary Stuart, Queen of Scots) does not appear in the musically uneventful first act of the opera, but from the moment she is first heard in the skilfully drawn scene at Fotheringay Park (Act II) she is a compelling central figure to the end. The role calls for dramatic projection of a wide range of emotions, with special emphasis on haughty royal anger (Act II) and noble pathos (Act III). There are dramatic nuances in Beverly Sills' interpretation not to be found in Joan Sutherland's because of the latter's well-known difficulty in articulating words. On the other hand, Sills' fragile and occasionally impure tones cannot always carry the burden of her dramatic insights, while Sutherland's warm, rich, and well-focused tones themselves add expressiveness to her modest dramatic gifts. Oddly enough, this opera provides opportunities for display of the best qualities of both divas, so both fans and detractors can have a field day arguing over them. For myself I am pleased to have both on records in this rewarding role.

The Elizabeth of the set, Huguette Tourangeau, is to me rather a strange singer. She has evident intelligence, a good technique, and a gift for bel canto phrasing, but there are also a disturbingly inward, veiled vocal production and a disconcerting gap separating her high and low registers. I do not find her an imperious enough queen here, but
the London set that are of any substance, none of them too meaningful. They occur in the opening chorus, in the conclusion of the Leicester-Talbot duet (Act I, Scene 4), and in the conclusion of the Maria-Talbot scene (Act III, Scene 5).

London’s engineering is a bit over-reverberant for my taste, and one could wish at times for more orchestral presence. I prefer the brighter sonics of the ABC set but can live very happily with the sound—and the singing—of the London also.  

George Jellinek

DONIZETTI: Maria Stuarda. Joan Sutherland (soprano), Maria Stuarda; Luciano Pavarotti (tenor), Leicester; Huguette Tourangeau (mezzo-soprano), Elisabetta; James Morris (bass), Cecil; Roger Soyer (bass), Talbot; Margreta Elkins (mezzo-soprano), Anna. Chorus and Orchestra of the Teatro Comunale, Bologna, Richard Bonynge cond.  

LONDON OSA 13117 three discs $20.94.

Britain’s Fitzwilliam Quartet Shines in Valedictory Works Of Shostakovitch

One of the happiest developments of the last few years is the appearance of new chamber-music ensembles made up of very young and very gifted performers. To name three striking examples, we have in this country the Tokyo Quartet, distinguishing itself in the Viennese classics, the Cleveland Quartet, identified most closely with the Romantic literature, and the Concord Quartet, giving incandescent performances of new and recent music. The heartening phenomenon is similarly evident in Scandinavia and in Britain, where the Fitzwilliam Quartet, all of whose members are still in their twenties, has not only become a fine ensemble since its founding in 1969 but has achieved an altogether extraordinary authority in the string quartets of Shostakovitch, perhaps still the most neglected single source of important works in this medium. The Fitzwilliam’s debut disc for L’Oiseau-Lyre, comprising Shostakovich’s Quartets Nos. 7, 13, and 14, is something absolutely not to be missed, even by collectors who may have the pressing exemplary, and Nos. 7 and 13 together on a single thirty-two-minute side constitute a bonus beyond what can be reckoned in minutes per dollar. I now look forward impatiently to the forthcoming Fitzwilliam disc of Nos. 8 and 15, and I hope that No. 12 also will in time materialize from the same source.  

Richard Freed


L’OISEAU-LYRE DSLO-9 $6.98.
Another Visit to Steve Goodman’s Wonderful Musical Department Store

"Creativity" is one of the more sadly corrupted words just now, for which we can blame, among others, (1) businessmen who think it is just another label they can buy and put on themselves, and (2) very young or very naive persons who find the word a handy tool with which to rationalize away their lack of discipline. Steve Goodman, it seems to me, is really trucking these days with what we used to mean by the word, using tools and materials he has bothered to learn the workings of, using hands and mind to make something that did not exist before.

Goodman’s new “Words We Can Dance To” (Asylum 7E-1061) for Asylum is in some ways a more satisfying album than the excellent “Jessie’s Jig” that preceded it. Again, you feel as if you’ve been set down in a department store of musical styles, and again you just know this is not one of your run-of-the-strip low-overhead marts. Producing himself (with a little help from guitarist Steve Burgh), Goodman takes a style—country swing, Caribbean, whatever—and does it right, does it with jaunty clarity. He has a sure feel for which musicians to rely upon for what, and he seems to follow no known rules for this: would you have thought, for instance, of hiring Raun MacKinnon to sing back-up on a schlocky old rocker like “Tossin’ and Turnin’”? I wouldn’t even have thought of playing it in the first place.

Goodman has done more writing for this album than he did for the last; the results are clear and economical, and they seem to represent his funny brand of skepticism pretty well. I thought “Roving Cowboy” (another song delivered unto Goodman from Mike Smith) and Goodman’s own “Unemployed” were especially good on side one, and that everything after the first (merely all right) tune on side two was just super. The ending finds him creating furiously with his head, hands, guitar, and an old song called “The Story of Love.” Steve Goodman, artistically at least, is on a winning streak.

Noel Coppage

STEVE GOODMAN: Words We Can Dance To. Steve Goodman (vocals, guitar); Steve Burgh (guitar); Steve Mosley (drums); Saul Brody (harmonica); Jeff Gutchioe (piano); other musicians. “Roving Cowboy; Tossin’ and Turnin’; Unemployed; Between the Lines; Old Fashioned; Can’t Go Back; Banana Republics; Death of a Salesman; That’s What Friends Are For; The Story of Love.” Asylum 7E-1061 $6.98, © ET8-1061 $7.98, © TC5-1061 $7.98.

Warren Zevon: New Contender in the Cracked Sensibility Sweepstakes

I’ve got something to get off my chest. As much as I respect and admire professional oddballs like Randy Newman and Loudon Wainwright, I’ve never been able to get much pleasure out of listening to them, probably because of their attitudes toward music. Both seem to view it as a basically functional message carrier: Loudon, the old folkie, has never progressed beyond a kind of talking-blues primitivism, while Randy, as splendidly crafted as his stuff is, is just cerebral enough to be fatally cold. Since as writers they’re primarily in it for the big (verbal) yocks, neither sees his music, be it kindergarten-simple or conservatory-complex, as having to do much beyond keeping out of the way. Which is fine for their purposes, I suppose, but it doesn’t do much to advance the art of songwriting.

So now we have the debut of an L.A. weirdo named Warren Zevon, a similarly cracked sensibility who has surrounded himself with a slew of Famous Names I have been on record for some time as not caring for—and I have to confess I am totally bonkers about it. Why? Because despite his style (deadpan humor) and his subject matter (pithy dissections of the-seamy underbelly of California-America), he has made a rock-and-roll album that is as musically rich as anything I’ve heard in geological epochs. What does he sound like? Oh, nothing special—just a grittier Jackson Browne (Jackson produced, by the way), the Eagles without the cloying sentimentality, Newman if he had been weaned on the Beatles rather than Hollywood film music, and Wainwright if he had been born into the lower middle class, just to scratch the surface. The sheer song-to-song variety of style and substance Zevon presents is amazing enough, but he also manages somehow to give it all a believable cohesiveness.

This album has gotten me so excited
that I'm tempted to go out on a limb here and announce that Zevon is the most interesting artist to come out of pop music since Bruce Springsteen, or something equally hyperbolic. But I'm going to restrain myself, if only because I'm not sure that L.A. lowlife is the kind of subject matter that can sustain him (to say nothing of Dory Previn) for more than an album or two. Still, some of the best tracks, Frank and Jesse James or Mama Couldn't Be Persuaded, treat situations more abstract and fictional than his Hollywood songs (my favorite: Desperados Under the Eaves, a wryly pessimistic number with a wonderful Dvořákian string ar-

Sylvia Sym's 
A Smile to Light Up The World, a Voice To Break Your Heart

Who is Sylvia? They call her the "singer's singer." Judy Garland once had her sing On Second Thought, a very sad song by Cy Coleman and Carolyn Leigh, sixteen times in succession at a New Year's Eve party. Benny Carter wrote Lonely Woman for her. Paul Anka wrote The Long Lonely Season for her, and he coaxed her out of the audience in the middle of a Las Vegas appearance to introduce it. Whitney Balliett, in a long New Yorker article in 1974, called her "indomitable and masterly," observing that students of the American popular song regard her as "the premiere female singer" and the "counterpart of Frank Sinatra and Tony Bennett."

Sylvia Sym's has a round and shining face, a smile to light up the world, and a voice to break your heart. She has been covering the night-club circuit for some thirty years. She turned up on Broadway in Diamond Lil with Mac West, played Bloody Mary in South Pacific, was one of the long succession of road-company leads in Hello, Dolly. But ill luck has pursued this woman with the haunting throb in her voice, and except for a hit album she recorded for Decca in 1956, she entered a long eclipse. Ill-fated love affairs, an operation, an automobile accident kept her out of view. Recently, however, sightings of Sylvia have been reported at the Newport Jazz Festival, at a fund-raising concert in the Palace Theatre, and at Barney Josephson's Cookery in Greenwich Village, where the food is indifferent but the jazz first-rate. And now she has come back to Atlantic, where she made her first album many years ago, to record after a hiatus of two decades.

The results are delicious, causing Rex Reed to compare her, in his shamelessly adorational liner notes, to vanilla ice cream, another of his passions. "I'd marry her," he concludes, "but she doesn't do windows." Most of the time Sylvia, who comes on slow and easy and is most at home with an old-fashioned torch song, seems out to break the listener's heart, and she is expert at it, especially in the tearful ballads written for her—On Second Thought and The Long Lonely Season. She dives into the dustbin of forgotten tunes to retrieve James Shelton's I'm the Girl (from a 1949 revue) to project a moving portrait of a female doomed to serve as second choice and midnight comforter for a man who's in love with somebody else.

When she applies the same sleepy tempos to such usually hurried upbeat numbers as I Get a Kick Out of You, Honeysuckle Rose, and Mountain Greenery, the results are enchanting. She also has a few surprise arrows in her quiver—Pink Taffeta Sample Size 10, for example, a Cy Coleman item jettisoned from the score of Sweet Charity during a Philadelphia tryout (it shouldn't have been). The way Sylvia puts over this tragicomic ballad about the daughter of a traveling dress salesman who sends her the dress of her dreams for her birthday, it sounds like a piece that could have stopped the show rather than hold it up.

Now that she's back among us, it is to be hoped that Sylvia Sym's will stay awhile. She claims to have coveted a singer's career from the days when she was a Las Vegas appearance to introduce it. Whitney Balliett, in a long New Yorker article in 1974, called her "indomitable and masterly," observing that students of the American popular song regard her as "the premiere female singer" and the "counterpart of Frank Sinatra and Tony Bennett."

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AMERICA: Hideaway. America (vocals and instrumentalists); David Dickey (bass); Willie Leacox (drums); George Martin (piano); Lovely Night; Amber Cascades; Don't Let It Get You Down; Watership Down; She's Beside You; She's a Liar; Letter, and five others. WARNER BROS. BS 2932 $6.98, ® MB-2932 $7.98, @ M5-2932 $7.98.

Performance: Good
Recording: Very good

America the group, unlike America the country, seems to have outlasted its critics. Partly it's the problem of what to say after you've said, "Why bother?" I don't think the group has improved all that much; it's just been accepted in some kind of default situation. It's there, like television. It has hooked up with George Martin, who does a nice job on the production, but it still seems to me Martin's basic gentleness would bounce better off a group with some grit in it, as the Beatles had. What America does, of course, is fashion hit and find that the title of one of the songs, "An Old Greyhound" is one of those road songs about a driver's love for his bus. It's all extremely well done, facile, and entertaining—though it's also more than a bit too programmed and contrived. Thebummer here, however, is Axton's stumbling run-through of Dylan's "Lay, Lady, Lay." He's way over his head, and the muted feeling, deep but only half articulated in the lyric, ferments into sour-mash self-pity in his performance. But when he stays safely in his own slick groove Hoyt Axton is pretty good. P.R.

JIM CAPALDI: Short Cut Draw Blood. Jim Capaldi (vocals, percussion); instrumental accompaniment. Goodbye Love; It's All Up to You; Love Hurts; Johnny Too Bad; Short Cut Draw Blood; Living on a Marble; and three others. ISLAND ILPS 9336 $6.98.

Performance: Feeble
Recording: Good

A few years ago I reviewed a Traffic record which was as uneventful as today's, and the band's attempt to get things going now and then, but Capaldi's vocals are so tepid and his approach so wobbly that you get the impression that (a) he is bored; (b) he is suffering from a glacial defect; (c) this is the first time he's heard the songs—which is really weird, since he wrote most of them; (d) he doesn't know what he's doing; and (e) he wouldn't make any changes even if he did know. To cite only one instance: the Boudleaux Bryant song Love Hurts is taken at a semi-perky tempo which is totally inappropriate to the intent of the tune—it is a tearjerker. But Capaldi sings it so lamely that you are likely to say, "If that's all it hurts, I'll make a special point out of falling in love with the wrong person and bright and early tomorrow morning." J.V.

RECORDING OF SPECIAL MERIT

CAPTAIN & TENNILLE: Song of Joy. Daryl Dragon and Toni Tennille (instrumentals and vocals); orchestra. Shop Around; Maskrat Love; 1954 Boogie Blues; Mind Your Love; Butterscotch Castle; and six others. A&M SP-4570 $6.98.

Performance: Good
Recording: Very good

This is a good act getting slicker and better all the time. The Captain (Daryl Dragon) is a veritable whiz at a variety of keyboards, and Toni Tennille hangs right in there with a vital, earthy vocal style. But she's perhaps a little too earthy this time out; she seems to have been listening to too many Bessie Smith records, with the result that she sounds a bit forced and melodramatic. The duo's best effort here is the Neil Sedaka Lonely Night, a right-on commercial number given a right-on commercial performance, and 1954 Boogie Blues is another glossy piece that they serve with wit and style. It's obvious that they are both people of taste and elegance—otherwise, they would not own such gorgeous bulldogs as Elizabeth and Broderick, pictured in all their rotund glory on the back cover. P.R.

JOHNNY CASE: Strawberry Cake. Johnny Cash and the Carter Family (vocals); instrumental accompaniment. Doin' My Time; I Still Miss Someone; I Got Stripes; Church in the Wildwood; Lonesome Valley; and five others. COLUMBIA KC-34088 $6.98, © CA-34088 $6.98, © CT-34088 $6.98.

Performance: Creditable
Recording: Excellent

Johnny Cash can be an overbearing bore and a mawkish purveyor of homilies that are the
philosophical equivalent of junk food, but he’s neither boring nor mawkish on this record put together from the tapes of a London appearance at the Palladium. Here, with his wife June and members of her caroling family, he keeps the audience entertained with jaunty patter and a series of lively ballads lustily sung. There are wistful items like I Still Miss Someone; a prisoner’s song, I Got Stripes; songs with a folk character delivered pure and straight to a lively beat—the railroad song Rock Island Line, for example—and a homage to American Indians called Navajo.

Especially rousing is the title song, a generous portion of wish fulfillment inspired by a bum Cash encountered outside the Plaza Hotel in New York where a wagon of de luxe desserts was on display. A ballad created specifically for the London show, Victoria Station, turns out to be a fairly dog-eared piece of merchandise, and some of the intros are a little on the sticky side, but, in all, Johnny Cash comes across as a vital and expert supplier of populist sentiments and serenades.

P.K.

DAVID CASSIDY: Home Is Where the Heart Is. David Cassidy (vocals); orchestra. On Fire; January; A Fool in Love; Run and Hide; Bedtime; and five others. RCA APL1-1309 $6.98, © APS1-1309 $7.98, © APK1-1309 $7.98.

Performance: Promising
Recording: Good

Ex-teenybopper sex-symbol superstar David Cassidy is back in a very well-produced (by Cassidy and Bruce Johnston) album that probably would never have made it to release if he hadn’t been who he used to be. Neither his writing nor his performing skill has yet jelled to the point where he seems more than promising here—with one bright exception, the totally engaging and professional Take This Heart, which is a really good job on all counts. But promising he definitely is. No matter how much production gloss has been applied here, it is still all varnish on what is an as-yet-to-be-developed adult talent. His performances are secure and controlled, but they wander aimlessly. So do his songs; Breakin’ Down Again starts off strongly but then winds down to a meander, and Damned If This Ain’t Love has the kernel of a good idea that goes precisely nowhere. Still, this album should convince almost anyone that Cassidy does precisely nowhere. Still, this album should convince almost anyone that Cassidy does.

True, much of his work is trite—the music can be banal (Cardboard California) and the lyrics (#1 with a Heartache) can sound as refried as an S. J. Perelman parody of himself. But the fact remains that when all is right, as it so often is (such really good pop songs as Here We Are Falling in Love Again, Summer Nights, and Steppin’ Out), he’s impressive in a way that perhaps no one else but Anka currently is. The threat to me, of course, is that in twenty years I’ll be writing this kind of piece about (ugh!) Tony Orlando and Dawn or (say it isn’t so!) the Osmonds. But of course I won’t, because they are mere entertainers and Sedaka is a creator. There may be a little quibbling on that last point as to just what the level of creativity is, but I’ll leave that to the pop musicologists. I just thought you’d like to know for now that “Steppin’ Out” is well worth listening to, and I’m sure most people will be greatly entertained. Beyond that, it’s up to you to decide What It All Means. ’Yknow? —Peter Reilly

“Steppin’ Out” With Neil Sedaka

As a friend of mine said, as Neil Sedaka’s new Rocket release “Steppin’ Out” was playing, “’Y’know, I like Sedaka. He’s like mellow, ’y’know, and his music doesn’t like threaten me like, ’y’know, James Taylor’s does.” (From the number of “likes” and “’y’knows” I guess ’y’know that this friend is in his early twenties and that Sedaka’s work during the Fifties is mostly unknown to him.)

Well, I have to confess that Sedaka does threaten me as a reviewer. Up until this last year or so, he represented to me the nadir of cynical, exploitative pop music ground out by the yard for the very young or the very dull-witted. But of late I’ve moved beyond that automatic response and I’m beginning to appreciate just what a complete pro he is in the fine art of mass communication. Along with his contemporary and peer Paul Anka, he has the seemingly natural ability to seize upon whatever is the popular mood of the moment and then expand or define it in a very slick but often surprisingly graceful and apt way.

Neil Sedaka: Steppin’ Out. Neil Sedaka (vocals, piano); other musicians. Sing Me; You Gotta Make Your Own Sunshine; #1 with a Heartache; Steppin’ Out; Love in the Shadows; Cardboard California; Here We Are Falling in Love Again; I Let You Walk Away; Good Times, Good Music, Good Friends; Perfect Strangers; Bad and Beautiful; Summer Nights. ROCKET PIG-2195 $6.98, © PIGT-2195 $7.98, © PIGC-2195 $7.98.

August 1976
tive, he is not as good as Dinah, he is better than Merv, and he is a sensation compared to Carson—which is to say that actually he is a passably professional meat-grinder singer, long on the eye-winking "charm" that devastates the moms and grannies and woefully short on the ability to differentiate one lyric and its message from another. He glides through this very plausibly produced album, containing such bits of cuteness as Smile, Smile, Smile and the lumpily halvah of My Mother's Eyes, with all the executive elan of a rich man playing golf: unspent caddies plus golf cart, portable, and selected minions carefully holding back their best shots so that there won't be any post-game embarrassment about who wins. Every once in a while he does have a distressing tendency to sound like good old Fabian, particularly in Paul Williams' Loneliness, but since his fans probably haven't caught up with Fabian yet, I can't hear any reason why they won't love it. P.R.

THE EAGLES: Their Greatest Hits, 1971-1975. The Eagles (vocals and instrumentals). Take It Easy; Witchy Woman; Lyin' Eyes; Already Gone; Desperado; and five others. ASYLUM 7E-1052 $6.98, @ TP-1052 $7.98, © CS-1052 $7.98.

Performance: Standard procedures illuminated
Recording: Mostly very good

This seems to demonstrate that, at their most commercial, the Eagles exercise a conservative, formula-following streak. They do make music occasionally that isn't this homogenized and predigested, but that's on "normal" albums, not on juke boxes or in places like this. Here there are competent treatments of mostly pleasant-sounding songs that you don't have to follow very closely; you get the idea very early that the main thing is you won't be offended—the Eagles, in making hits, don't simultaneously make enemies the way some people do by being arch about one thing or another. A few other bands would have breathed more excitement into the better songs (say Take It Easy), but then a lot of other bands would have sunk miserably with such mundane ones as Best of My Love. Matter of fact, the Eagles almost managed to offend me with that one. But not quite. There's too much pop-string softening for my taste through the arrangements, and there are these little left-hand way things that just sort of pinch the audience. Mr. Doodles, for example, would be a pretty effective treatment of absence making the heart grow fonder if it were not pinned to that oafish and oft-repeated nickname. Attempted cuteness ought to be a misdemeanor in certain circles. She keeps that sort of thing down, though, in this outing, and she keeps her own spirit from seeming so disgustingly up all the time, so it's listenable, pardonable, it's listenable.

J. GEILS BAND: Blow Your Face Out. J. Geils Band (vocals and instrumentals). Southside Shuffle; Back to Get Ya; Shoot Your Shot; Musta Got Lost; Where Did Our Love Go; Wait; and twelve others. ATLANTIC SD 2-507 two discs $7.98, @ TP2-507 $9.98, © CS2-507 $9.98.

Performance: Rerun
Recording: Variable

I am all the more disappointed in the J. Geils Band now because I used to think they were artists; now I realize they're not artists but entertainers. Good entertainers, yes. A creative band, no. This double-disc live set, recorded on the group's home ground in Boston, displays charm and chug—but a live album in almost any case is something released when the performer or the label doesn't know what else to do. J. Geils' last few studio albums have shown that they've already done just about everything they can do. For what was once a very exciting band this is a sad state of affairs.

GENESIS: A Trick of the Tail. Genesis (vocals and instrumentals). Dance on a Volcano; Bridge of Sighs; Biko; Capital; Supper's Ready; Trespass; and twelve others. ATLANTIC SD 2-507 two discs $7.98, @ TP2-507 $9.98, © CS2-507 $9.98.

Performance: Rerun
Recording: Variable

This seems to demonstrate that, at their other side, specifically of what Will Rogers said about Cal Coolidge: "He wasn't a bad President. He didn't do nothin'"—but that was what we wanted done.

THE STEVE GIBBONS BAND: Any Road Up. The Steve Gibbons Band (vocals and instrumentals). Take Me Home; Johnny Cool; Rollin'; Spark of Love; Speed Kills; and four others. MCA MCA-2187 $6.98, © MCAT-2187 $7.98.

Performance: Refreshingly predictable
Recording: Clean

Steve Gibbons and his gang are from Birmingham, about which Gibbons says, "It’s like the Detroit of Britain . . . all speed and machinery." So is the music of the Steve Gibbons Band. It is cold-blooded but has a certain integrity: it just will not resort to cheap tricks. (Melody Maker calls them "embracing the image, say, of someone dancing on the lava flowing out of a volcano is somehow supposed to enlighten you, but neither the language nor the music ever comes to grips with that's so enlightening about it. Still, some extremes have been lopped off, and this does have thoughtful moments. It's just that I keep thinking about the other side of the subject, specifically of what Steve Gibbons says about the Steve Gibbons Band. It is cold-blooded but has a certain integrity: it just will not resort to cheap tricks. (Melody Maker calls them "embracing the image, say, of someone dancing on the lava flowing out of a volcano is somehow supposed to enlighten you, but neither the language nor the music ever comes to grips with that's so enlightening about it. Still, some extremes have been lopped off, and this does have thoughtful moments. It's just that I keep thinking about the other side of the subject, specifically of what Will Rogers said about Cal Coolidge: "He wasn’t a bad President. He didn’t do nothin’"—but that was what we wanted done.

STEVE GIBBONS

Good, solid, rock-band vocals

DONNA FARGO: On the Move. Donna Fargo (vocals); Pig Robbins (piano); David Briggs (electric keyboards, harmonica); Grady Martin (guitar); Ken Buttry (drums); other musicians. Mr. Doodles; Song with No Music; Southern Lady; Patches; Country Girl; One of God's Children; and four others. WARNER BROS. BS 2926 $6.98, @ M8-2926 $7.98, © M5-2926 $7.98.

Performance: Getting there
Recording: Very good

Donna Fargo seems to have put some verve into this first effort on a new label, and it is one of her better albums. It is dramatic and sentimental; she uses the ringing chorus that hallelujah ending, to good effect, and she shifts her songwriting viewpoint around more effectively than she's been doing lately. The woman behind these songs seems more nearly three-dimensional than the happiest girl in the whole U.S.A. I have a couple of small complaints, though. There's a curious lack of intensity in the way she sings Sing for My Supper, a good Fargo song that Marty Brown recorded first and now seems to own. And there's too much pop-string softening for my taste through the arrangements, and there are these little left-hand way things that just sort of pinch the audience. Mr. Doodles, for example, would be a pretty effective treatment of absence making the heart grow fonder if it were not pinned to that oafish and oft-repeated nickname. Attempted cuteness ought to be a misdemeanor in certain circles. She keeps that sort of thing down, though, in this outing, and she keeps her own spirit from seeming so disgustingly up all the time, so it's listenable, pardonable, it's listenable.

GOLDEN EARRING: To the Hilt. Golden Earring (vocals and instrumentals). Why Me?; Facedancer; To the Hilt; Nomad; Sleep Walkin'; Latin Lightning; Violins. MCA-2183
(Continued on page 76)
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Performance: Pompous
Recording: Good

If you hear a group playing blues-rock patterns and moaning overblown lyrics, you can safely assume they are trying to be Significant; you can further assume, with the utmost safety, that they are not. If you hear, in your professional capacity as a reviewer for the best of all possible music magazines, fifty to sixty albums of this type during the year, you are liable to mutter into a long glass filled with comforting liquids: "Maybe, with training, I could become a tractor-trailer driver." Some day—and this is wishful thinking—so might the members of Golden Earring. J.V.

STEVE GOODMAN: Words We Can Dance To (see Best of the Month, page 69)

LINDA HOPKINS: Me and Bessie. Linda Hopkins (vocals); instrumental accompaniment. Romance in the Dark; Fare Thee Well; Trouble; and ten others. COLUMBIA PC 34032 $6.98. © PCA 34032 $7.98.

Performance: Mockery
Recording: Very good

Side one of this record has hardly gone a revolution before Miss Hopkins states "I ain't Bessie," which has to be the superfluous remark of the year. Actually, when she first got on the Bessie Smith bandwagon a couple of years ago, Miss Hopkins was going around saying that she believed she was Bessie, and it is clear that her gratuitous denial has been designed by her puppeteers to evoke an "oh but you really are" response. The truth of the matter is that Linda Hopkins is a second-rate gospel singer who can't hold a candle to any number of women whose voices rise soulfully in black churches around the country.

The album takes its title and music from Miss Hopkins' current Broadway show, which purports to be some sort of musical biography of the late Bessie Smith, but actually comes no closer to Bessie than Diana Ross did to Billie Holiday. As one who has written a biography of Bessie, and being the writer originally approached to script Miss Hopkins' show (I turned it down), I felt I had to be particularly careful lest my personal involvement should prejudice my opinion. Accordingly, I listened to this record about ten times, becoming more and more convinced that my opinion would have been the same had my only association with Bessie Smith been the experience of listening to her on records.

Bessie was without a doubt the greatest blues singer who ever lived, and any singer who thinks he or she can even approximate Bessie Smith's mastery of the blues has to be suffering delusions of grandeur. Even Dinah Washington, who (unlike Miss Hopkins) was herself a blues singer, never pretended to be a reincarnation of Bessie when she recorded an album of songs associated with her. Linda Hopkins has gone as far as claiming that Bessie Smith materialized before her on a San Francisco stage, lent her that famous voice and smiled. If Bessie ever really heard what Miss Hopkins is doing, the final curtain would promptly ring down on Me and Bessie.

Accompanied by the most horrendous band and with atrocious arrangements by John Allen, Linda Hopkins spews out the lyrics to such songs as Preachin' the Blues and Put It Right Here, totally failing to grasp their humor, and with timing so bad that one begins to wonder if she ever really listened to Bessie's records. Her gospel version of Nobody Knows When You're Down and Out is passable, but she turns the wonderful Gimme a Pigfoot into a pleaser for the Disneyland straw-hat-and-striped-jacket crowd. And After You've Gone—which Bessie turned into a majestic personal statement—will simply make you cringe. Forget this artless bit of exploitation and listen to Bessie Smith's own records. They are, in a word, ermine to Miss Hopkins' alleycat.

C.A.

BETTINA JONIC: The Bitter Mirror—Songs by Dylan and Brecht. Bettina Jonic (vocals), instrumental accompaniment. The Black-hats' Fight Song; Train A-Travelin'; The Death of Emmett Till; The Jews-Whore of Marie Saunders; It's Alright Ma; and seventeen others. XTRA (D) 1157 two discs $15.96 (from HNH Distributors, P.O. Box 222, Evanston, Ill. 60204).

Performance: Too bitter
Recording: Excellent

Bettina Jonic is a Yugoslavia-born, Los Angeles-raised opera singer who performs "The Bitter Mirror" as a one-woman recital of twenty-two songs by Bertolt Brecht and Bob Dylan. Dylan and Brecht? Well, why not? They share a point of view, the mirror they both hold up to life is a terrifying one, they both use the lyrics of their songs as weapons of social protest. And the prospect of hearing Dylan's songs separated from his familiar nasal snarl would seem intriguing. As the album goes its gloomy way, however, one begins to have second thoughts.

Jonic's is a strong soprano, but her relentlessly mannered way of interrupting her own rhythm time and again, like a powerful car held up by a traffic light, is increasingly wearing. There is passion in her treatments of Dylan's denunciations of war, his melancholy North Country Blues, his laments over rootless and downtrodden and exploited people. Blowin' in the Wind, as Jonic sings it, even when drenched in a heavy orchestral sauce, stands up as an authentic angry ballad likely to endure. But adding Brecht finally lays the listener low. How many misfortunes, horror tales, and hard-luck stories is it possible to absorb in a single concert? Moreover, a Brecht song with music by Kurt Weill is an emotional experience; a Brecht song with an anemic setting by Hans Eisler is simply depressing. Too much, too somber, too slow. Too bad. P.K.

BEN. E. KING: I Had a Love. Ben E. King (vocals); orchestra. I Betcha Didn't Know That; Everybody Plays the Fool, No Danger Ahead; We Got Love; and five others. ATLANTIC SD 18169 $6.98. © TP-18169 $7.98. © CS-18169 $7.98.

Performance: Good
Recording: Good

This is lightweight, effortless performing by Ben E. King in a collection of one-beat, one-idea blues. Everybody Plays the Fool, for example, runs on for well over five minutes, and after it's over the feeling is that of having been on a syncopated treadmill. I did have a fine time, nonetheless, with I Betcha Didn't Know That—a song that somehow benefits from the sameness of projection and performance. The rest of the album, however, left me rather aimlessly finger-snapping into very thin air.

KINGFISH: Bob Weir (vocals, guitar); Dave Torbert (vocals, bass); Matthew Kelly (vocals, guitar, harmonica); Chris Herold (drums); Robby Hoddinott (lead guitar) Lazy Lightning; Supplication; Wild Northland; Asia Minor; Home to Dixie; Jump for Joy; Good-bye Yer Honor; and four others. UNIT-ED ARTISTS/ROUND RX-LA564-G $6.98. © RX-EA564-H $7.98.

Performance: Dull but fidgety
Recording: Good

This reminded me of the old tuning-up joke about the trouble with cutting records on the (Continued on page 78)
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BOB MARLEY & THE WAILERS: Rastaman Vibration. Bob Marley and the Wailers (vocals and instrumentals). Positive Vibration; Roots, Rock, Reggae; Johnny Was; Cry to Me, Want More; Crazy Baldhead; and four others. ISLAND ILPS 9383 $6.98, ® Y 81-9383 $7.98, ® ZC I-9383 $7.98.

Performance: Good
Recording: Good

Bob Marley
The epilogue of reggae

I want to say a word, Mon, about the loneliness of the long-distance critic. I feel a definite pressure to fake liking reggae, of which Bob Marley and the Wailers are just about the epitome, more than I really do. It looks as if it would be comforting, being of a mind about this with the people who say they like reggae so much, for they include many bright, attractive ones. There may have been a time when I could have faked it pretty well, but times change and they apparently change us, and I just don't think I could bring it off now. What really happens is I find reggae diverting for a few minutes and then I find it boring for the remaining minutes. In effect, I guess, I like it the way it comes from the Yankees who went down to Jamaica and—well, as they say, ripped it off. I like it done one song per album, that is; I really don't see much fun in all this hopping up and down and needle-moving I always wind up doing when I have to deal with a whole album of it.

Marley and his group, in particular, have charm—anyone can see that (although the Mighty Sparrow was slyer with the lyrics)—but let me put it this way: in a movie about a related kind of folk-hero in the U.S., how many times do you really need to see the hayseed-who-comes-out-on-top shuffle his feet and say "Shucks"? I mean, there really isn't much here to take with more than a grain of salt except the beat, when you come down to it, and I don't think some of us bright attractive ones are that simple, however much at times we wish we were. So I see this infatuation with reggae as at best lackadaisical and short-term and at worst unreal, so that's how I call it. Man—er, Mon, you don't know what lonesome is, etc.

N.C.
WILLIE NELSON: The Sound in Your Mind. Willie Nelson (vocals, guitar); Bobbie Nelson (piano); Paul English (drums); Jody Payne (guitar); Bee Spears (bass); Mickey Raphael (harmonica); other musicians. That Lucky Old Sun; If You’ve Got the Money I’ve Got the Time; A Penny for Your Thoughts; Thanks Again; Amazing Grace; Funny How Time Slips Away; Crazy; Night Life; and four others. COLUMBIA KC 34092 $5.98, © CA -34092 $5.98.© CA -34092 $6.98, © CT-34092 $6.98. 

Performance: Cruising speed
Recording: Lackadaisical

The singer and the band do a lot that’s worth hearing here, but it’s a time-marking album for Willie Nelson, with no new pronouncements to speak of. Where dredging up the old and familiar Blue Eyes Crying in the Rain worked spectacularly in "Red Headed Stranger"—he actually got people to listen to it in spite of how well they already knew it—the excavation of Lucky Old Sun doesn’t quite make it. Nor does If You’ve Got the Money etc., which has been done to death. The program does pick up from there, though, and the new versions of some of Nelson’s old songs are worth a listen. Bobbie Nelson (now who could that be?) at the piano has some nice-sized holes to fill and does some tasty filling, and Paul English conducts a clinic on how to play drums behind a country singer—at least behind a gentle, somewhat unadventurous, country-jazz Texas redneck-hippie who seems to be in some mellow and admirable forties. The production is distracting, though, having a slightly hard sound and positioning what I’d like in the middle over toward the right. Nelson is a good buddy of Texas football coach Darrell Royal, so maybe this is supposed to sound like a single wing formation.

OLIVIA NEWTON-JOHN: Come On Over. Olivia Newton-John (vocals); orchestra. John; Pony Ride; It’ll Be Me; Greensleeves; Smile For Me; Come On Over; and six others. MCA MCA-2186 $6.98, ® MCAT-2186 $7.98, © MCAC-2186 $7.98. 

Performance: “Well, hello there . . .”
Recording: Good

Olivia Newton-John looks improbably lovely and chaste in the cover photo on her newest album. On the record itself she still sounds as demure as she looks. Even when she does such things as her own version of Greensleeves or the steamier Wrap Me in Your Arms, it is with all of the sylvan innocence of a maiden skinny-dipping in a mountain waterfall. Well, you go be Young Werther if you like; all this album really does is bring out the Dirty Old Man in me. Miss Newton-John turns me on. Unfortunately, though, her recordings have nothing to do with it.

CARROLL O’CONNOR: For Old P.F.A.R.T.S. Carroll O’Connor (vocals); instrumental accompaniment. I Love to Dance; Dream a Little Dream of Me; Glad to Be Unhappy; Hold My Hand; Bei Mir Bist Du Schoen; and six others. AUDIO FIDELITY AFSD 6276 $6.98. 

Performance: Won’t bring back the dip
Recording: Very good

When last heard from on record, Carroll O’Connor was teaming up with Edit’ for a nostalgic evening of songs da way dey used to be. The album showed that both O’Connor and Jean Stapleton have better singing voices than we had been led to believe from the prologue to their TV series, but not much else. O’Connor is back alone this time, playing a nostalgic slob longing for the love songs and dance tunes of the good old days. (The acronym in the tasteless title is explained as standing for "People Favoring a Return to Sentiment.") He still sings well, but maybe not well enough. The program starts off amusingly, with the dance-tune-happy O’Connor murmuring into his partner’s ear remarks like “C’mon Zeld—while we’re waitin’ for the pressed duck” and “I may just dip here”—expounding fervidly on what a dip was and why the discontinuation of dipping dealt a mortal blow to ballroom dancing. His meat-handed way with lovely period pieces like Dream a Little Dream of Me and Glad to Be Unhappy, however, whether intended or not, wreck the songs and set the program adrift in a limbo where the listener can no longer be sure when O’Connor is kidding and when he’s just not equal to the singing assignment. There are a few bright moments, as when the portrayer of the anti-Semitic Archie sings Bei Mir Bist Du Schoen in Yiddish, and when he offers a medley of tangos which he says must be danced “when you’re miffed wit one anudder.” But by the time the record is over you begin to wish they’d bring the check already and let you drop off this visiting bore from whatever town at his hotel.

(Continued on page 81)

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AUGUST 1976
Steely Dan: “Royal Scam”

Steely Dan is the most anti-romantic rock band in the land. Remarkably, in a field in which formula cynicism usually counts for little unless it enters astride some memorably outrageous gimmick, the only outrageous thing about the group is its name. From William Burroughs’ novel Naked Lunch, in which a couple christens the family dildo Steely Dan). The music they make is cool, almost middle-of-the-road jazz-pop, and their lyrics are mostly wisecracks that occasionally slip from the cryptic into the arcane.

Where a group like the Eagles regularly promotes the Los Angeles Lifestyle with a devoted Chamber of Commerce slickness, Steely Dan invariably deicates that image in songs filled with ennui and tinged with vague menace. Their lyrical techniques are couched in the language of what used to be called the Hipster, which is no accident: their name connects them to Burroughs’ sexual nihilism and their repetitive, stylized, pop-jazz sound connects them to his obsession with heroin. The apocalypse Steely Dan continually conjures up is therefore not the dramatic purging into health so many L.A. writers dream about, but simply an extension of the joyless banality they see in the present, junk music for a junk culture.

The band’s architects, Donald Fagen and Walter Becker, are New Yorkers transplanted to Los Angeles, and that may account for the bebop-in-the-smog ambiance of their songs. Fagen and Becker write almost all the group’s material, and Fagen handles the lead vocals. Their concert career aborted because of persistent personnel changes, they are now primarily a recording band; it is safe to say that Fagen and Becker are Steely Dan, for the only other recurring character in their little saga is producer Gary Katz.

From the beginning, the musical turf they staked out has been rather narrow—almost all of Becker and Fagen’s tunes revolve around a single modal idea—and they have worked it over so intensively during the course of five albums that the strain is beginning to show. Their melodies are slinky, sarcastic, accusatory, and underpinned by Latin rhythms whose somewhat sleazy nature is not always balanced by a saving sophistication. Understated as they are, however, Steely Dan have still managed to make infectiously commercial sounds. Their first hit, Do It Again, was so hypnotically listenable that almost everyone managed to overlook its horribly bleak lyric, and their second, Reelin’ In the Years, revealed in sheer spitefulness beneath a surface of embattled joviality.

With “Royal Scam,” their new album, Steely Dan’s ironical stance seems to have become self-conscious, their musical formula in clear need of some kind of overhaul. No tune has the throbbing hook of Do It Again; no lyrical trips as skillfully between innocence and devilishness as their biggest hit, Rikki Don’t Lose That Number; and certainly nothing is as relentlessly agonized as Dirty Work, perhaps the finest song from their debut album. The most successful pieces on “Scam” are harsh, ruthless vignettes about criminal and sexual deceit, Kid Charlemagne, the best of the lot, is the story of a legendary San Francisco drug chemist who is on the run, unable to adjust to a nonpsychedelic environment. Its lyric has the marvelous slangy looseness that characterizes Becker and Fagen at their best: “Clean this mess up/Or we’ll all end up in jail/Those test-tubes and the scale/Just get them all out of here/Is there gas in the car/I think the people down the hall know who you are.”

While Charlemagne, Sign In Stranger, and the less memorable Don’t Take Me Alive all concern themselves with crime, sexual duplicity is the theme of the album’s other first-rate songs, Haitian Divorce and Everything You Did. Divorce sneers at the jet-set history of “Babs and Clean Willy,” a couple who separate after a lovers’ spat. The wife goes to Haiti, has an affair, and, after a “tearful reunion” in the States, has a “semi-mojo” baby. Everything You Did, which is set to an almost jaunty tune, puts us down in the middle of a domestic battle occasioned by the wife’s flagrant infidelity. In the course of the husband’s furious interrogation, he orders her to “Turn up the Eagles! The neighbors are listening,” a pointedly witty (because far from accidental) Steely Dan interjection.

But nothing on the rest of the album approaches that level of incisiveness. The album’s title song is modest aural exotica. The Caves of Altamira is a striving, almost-successful song about art, but its stark desperation just isn’t sharp enough to permit it to wound. The album’s title song also works too hard. In this strange fable about immigrants to the United States stuck at the bottom of the heap but still writing home about being “paid in gold just to babble,” the band’s signature cynicism reveals its affectation most clearly.

It seems to me that, while their writing is never less than intelligent and craftsmanlike, Fagen and Becker are out of their depth when they attempt anything large-scale; they are persuasive only when their eye for detail and nuance supplies them with pins to prick small but pretentious balloons. And that, of course, is no negligible talent.

—Stephen Holden
LEON AND MARY RUSSELL: Wedding Album. Leon and Mary Russell (vocals); instrumental accompaniment. Rainbow in Your Eyes; Like a Dream Come True; Fantasy; Satisfy You; You Are on My Mind; Lavender Blue (Dilly Dilly); and four others. PARADISE PA 2943 $6.98, © M8-2943 $7.98, © M5-2943 $7.98.

Performance: Poor
Recording: Very good

I'm always suspicious of people who make their weddings too public, especially in the entertainment business. And, predictably, Leon Russell's collection of songs about how sweet it is to be in love (what else is new?) with his new bride shows his talent to be working at half-power. I wish Russell and Mary all the best, but, felicitations out of the way, the songs in this album are boneless, Russell's singing makes too much use of his Oklahoma accent, the lady does not sing as much as she caterwauls, and they both ought to be embarrassed about their Boston Pops treatment of Lavender Blue (Dilly Dilly), a dumb song if there ever was one. People in love should sometimes keep their hearts open and their mouths shut.

RECORDING OF SPECIAL MERIT

SEALS & CROFTS: Get Closer. Jim Seals (vocals, guitar); Dash Crofts (vocals, mandolin); David Paitch (keyboards); Louie Shelton (guitar); other musicians. Sweet Green Fields; Get Closer; Red Long Ago; Goodbye Old Buddies; and four others. WARNER BROS. RECORDING OF SPECIAL MERIT

Recording: Very good

Seals and Crofts—well, I think we keep them around like pets; it has to do with their being perceived as not dangerous and as having created for themselves a style that stands out and yet is something a person could live with. Among the pets, take your dogs: dogs in general don't have much style, but one's own pet dog in particular always seems to, and it's a fine and necessary thing, and a great thing as long as it doesn't get on your nerves. Seals and Crofts don't seem to get on too many people's nerves—not even on mine much when they do their AM radio-hit number, the patiently annoying title song. They write like kindly, absent-minded small-town preachers, not too long on vocabulary, but there's no question about the dedication. Maybe it's not terribly relevant, maybe it's even a bit fog-brained, but still it is pleasant and nobody else does it quite that way. And of course the way they sound is similarly unique and compatible. This latest album, while it is a little looser and considerably less puffed up about spirituality than most, does come right on over and lick your hand. The old sound is right there, the old vague areas are still right where they should be in the songs, the mandolin comes in just so, the harmonies grate on each other just so—and you're going to enjoy it. Anyway we radio kids used to enjoy waiting to hear Jack Benny say "Well!" What more useful goal, really, could there have been, time and place considered, for this album?

SYLVIA SYMS: Sylvia Syms, Lovingly (see Best of the Month, page 70)

RICHARD AND LINDA THOMPSON: Pour Down Like Silver. Richard Thompson (vocals, guitar); Linda Thompson (vocals); Pat Donaldson (bass); Dave Mattacks (drums); other musicians. Night Comes In; Jet Plane in a Rocking Chair; Hard Luck Stories; For Shame of Doing Wrong; and three others. ISLAND ILPS 9348 $6.98.

Performance: Good
Recording: Very good

This impresses me less than the other Richard and Linda Thompson album I have. (A third and earlier one, reportedly very good, was released only in England.) One of the difficulties here is the impression it makes of being stuck, melodically, in a rather tight area; tunes keep turning the same tricks, taking off on the same tack, and at least one sounds very much like something Sandy Denny, a former associate of Richard's, would write. Another problem with the material is that it seldom takes advantage of Linda's vocal specialties. For
Shame of Doing Wrong, for example, is a pleasant tune, but the construction of the melody, or something, has her spending most of her time with it near the bottom of her range, which isn’t where she’s strongest. The Thompsón’s penchant for tinkering with sound leads them this time to a recurring button-accordion/concertina backup. It’s a nice enough sound, played well by John Kirkpatrick, but a little of it goes a long way. Aside from that, the performances are more than a caliber—the ensemble sound jells beautifully in Jet Plane in a Rocking Chair (a typical Richard Thompson title), the most impressive selection. All the songs are good enough to be in albums—it’s just that I question the judgment involved in putting them all in the same album.

N.C.

WING AND A PRAYER: Babyface. Wing and a Prayer Fife and Drum Corps (vocals and instrumental). Eleanor Rigby; Charleston; Those Were the Days; I Hear a Symphony; and three others. Wing & A Prayer HS 3025 $6.98. © TP 3025 $7.98. © CS 3025 $7.98.

Performance: Unbelievable

Recording: Good

It is such disastors as this that make record reviewing a hazardous occupation for those of us with nervous conditions. A miscellaneous collection of instrumentalists and singers meet head-on here to perform a series of “hits” in a manner that sounds like Muzak gone berserk. Before I bit the dust I think I heard them run through a “Medley” of such traffic stoppers as Toot Toot Tootsie!, Swannee, and Blue Skies; it felt like being trapped in some demonic elevator in the World Trade Center—riding up and down, up and down. It is enough to give you the willies, and I got them. Brrt.

P.R.

JESSIE COLIN YOUNG: On the Road. Jessie Colin Young (vocals, guitar); vocal and instrumental accompaniment. Sunlight; Walkin’ Off the Blues; Peace Song; Miss Hesitation; Have You Seen My Baby; Corinna; and three others. WARNER BROS. BS 2913 $6.98.

Performance: Good, but

Recording: Excellent

Things start off well on this “live” album. The first two tracks are very satisfying: Sunshine is a pretty song about a woman who backs up her man, and Walkin’ Off the Blues features scintillating Dixie jazz clarinet by reedman Jim Rothermel. Alas, things go downhill after that. Peace Song is one of those dreary paens to the obvious. “We’ve got to stop killing each other,” Young sings. Sure. what else is new?

Miss Hesitation—which uses the chorus from W. C. Handy’s Hesitation Blues without crediting Handy as composer—is an excuse for a grab-bag of rhymes; Young has shly introduced the song as dealing with what would happen if all his sexual fantasies came true. Rather mild fantasies, had I been, well, no matter. As for the rest, Cab Calloway’s 1931 version of the old blues Corinna is better than Young’s, and Ringo Starr’s 1974 version of Randy Newman’s Have You Seen My Baby is likewise superior to this one.

The problem is that Young has a fine, high tenor voice that is perfect for ditties like Sunshine and for mild blues. But when he tries to get funky he sounds like a kid imitating King Kong. Can’t someone advise him about types of material to stay away from? Some time in the very early Sixties I heard Young’s “The Soul of a City Boy” album. It contains his wonderful version of Black-Eyed Susie. I quickly learned it on the guitar and still play it today. But Susie was the only standout on that album. This has been true of every Young set I’ve heard since then: one gem, maybe two, and the rest paste.

WARREN ZEVON (see Best of the Month, page 69)

COLLECTIONS


Performance: Shuffling

Recording: Erratic mix

There’s a big enough body of talent here to go bear hunting with a willow switch, but this sampler doesn’t satisfy the way it should; it is rushed, I think, and a little slapdash. Waylon Jennings sort of dominates it, which would be fine with me except that the songs he chooses to do are all pretty much alike, and the band backing him sounds like it’s sealed up inside a barrel, except for the bass, which is outside with Jennings and plenty loud. The sound behind Willie Nelson is considerably clearer, and the songs he chooses complement each other better and relax with the album’s themes. But then there is Tompall Glaser, a fine singer, a natural, who seems to have given song selection even less of a lick and more of a promise than Waylon did, and to have managed to sound slightly distracted singing. Jessi could keep her tunes, I guess, although I do wish female c-w singers with such nice voices didn’t have such a narrow range of songs to choose from.

If there is one central problem with the album, I suppose it is that the evocation of the theme got a little too self-conscious; people got to playing outlaw a little too much like the way Kirk Douglas would play it. These four are honorable outlaws, Robin Hoods of the country-and-the-west, in real life; or at least they—particularly Jennings and Glaser—were, their crime being rubbing the Nashville Sound hierarchy the wrong way. But now they stand exonerated in the eyes of enlightened people everywhere, even within the Nashville establishment, and if their record sales still aren’t what they deserve to be, they are exerting considerable and far-reaching influence on the new musicians coming along.

Nelson is the real head of the whole Austin thing, and Jennings’ cult is even bigger, more broadly based, and more fanatical. They are a source of vitality to country and to pop in general. Here they seem distracted by the trapings of the role of the outlaw, and, for some reason, in a hurry to boot, and so they lay it on a little thick. Still, of course, this is a place to hear four fine—and four still basically build-dog-honest—voices at work.

N.C.

(Continued overleaf)
RECORDING OF SPECIAL MERIT
TOSHIKO AKIYOSHI/LEW TABACKIN
BIG BAND: Long Yellow Road. Toshiko Akiyoshi (piano); Lew Tabackin (flute, piccolo, tenor saxophone); orchestra. Children in the Temple Ground; Since Perry/Yet Another Tear; Opus Number Zero; and three others. RCA JPL 1-1350 $6.98.

Performance: Superb
Recording: Excellent

Very few big bands impress me these days, but the Toshiko Akiyoshi/Lew Tabackin Big Band is so fine that some of the bands that have impressed me must now take a back seat. Ms. Akiyoshi (now Mrs. Tabackin, formerly Mrs. Charlie Mariano) is responsible for all the arrangements and most of the compositions, and mere words cannot describe the splendor of it all. Born in Manchuria forty-seven years ago, Toshiko studied classical piano before moving to Japan with her family in 1946. She became involved with jazz the following year and was recognized as Japan's leading jazz pianist by the mid-Fifties, when she enrolled at the Berklee School of Music. During her twenty years in this country, Toshiko has made numerous recordings, but none as outstanding as this album, which surely must establish her as one of our leading arrangers.

This album also deserves top honors for performance. Toshiko's arrangements are not always easy to play, but the band has caught her considerable spirit, and the music flows effortlessly. There are superb solos, most notably by trumpeter Don Rader and Lew Tabackin himself. Tabackin has a steady job, buried in the Doc Severinsen orchestra on the Tonight Show, but his talent is considerably greater than that of his boss. Just listen to his tenor on Since Perry/Yet Another Tear, a medley of two of his own compositions that ends this album on notes so mellow they conjure up memories of Hawkins, Webster, and Byas. More! More!

COUNT BASIE/ZOOT SIMS: Basie and Zoot.
Zoot Sims (tenor saxophone); Count Basie (piano, organ); John Heard (bass); Louis Bellson (drums). Hardav; Honeysuckle Rose; I Surrender, Dear; Captain Bligh; and four others. Pablo 2310-745 $7.98, @ $10-745 $7.98.

Performance: Lightly swinging
Recording: Very good

To say that Count Basie and Zoot Sims are capable of generating tremendous swing is to...
understate a well-known fact, and to say that this collection of three blues and five standards does not add proof would be to make an absurd statement. It's a beautiful, tasteful, jazzful album throughout.

C.A.

PAUL BLEY, BILL CONNORS, AND JIMMY GIUFFRE: Quiet Song. Jimmy Giuffre (reeds); Paul Bley (keyboards); Bill Connors (guitar). Solo; Duet; Play Blue; Goodbye; and six others. IMPROVISING ARTISTS 373839 $6.98.

Performance Keenly sensitive

Recording: Excellent

This is a collection of ten pieces that range in time from fifty-two seconds to close to ten minutes. Except for Gordon Jenkins' Goodbye, the pieces are original compositions by Giuffre, Bley, and Connors, three highly sensitive improvisational artists who share a common wavelength. Jimmy Giuffre and Paul Bley have been associated with jazz for many years now, but the music they are now playing transcends what originally brought them to our attention; like their recent individual albums, this one is richly melodic and so intense in the moods it conjures up that the listener might easily feel guilty of invasion of privacy. But go ahead—eavesdrop. C.A.

TED CURSON: Tears for Dolphy. Ted Curson (trumpet, piccolo trumpet); Bill Barron (clarinet, tenor saxophone); Herb Bushier (bass); Dick Berk (drums). Kassim; 7/4 Fanny Time; Reva's Waltz; and three others. ARISTA FREEDOM AL 1021 $6.98.

Performance Beautiful

Recording: Very good

If Philadelphia-born trumpeter Ted Curson is unknown to today's younger generation of jazz listeners, and I suspect he is, blame it on an attitude toward black improvisational music that forces some of our finest players to seek abroad the recognition they deserve at home. And if you are among those who have hitherto missed the sound of Curson's horns, I think of no better way to rectify that situation than to listen to this superb 1964 album. Ted Curson has worked under the leadership of such men as Max Roach, Cecil Taylor, and Charles Mingus, and his own groups—on and off records—have included such heavyweights as Booker Erwin, Roy Haynes, Danny Richmond, and Eric Dolphy. Yet I have seen him having personally to rent the Village Vanguard in order to be heard in his own country. For more than ten years, most of Curson's musical activity has taken place in Europe, but, unlike many of his colleagues, he has maintained his residence here, popping in and out of the country, hoping to find enough work to keep him here, but having to return to Europe each time. A couple of years ago, Atlantic recorded a Curson album, but it remains unreleased.

This album took twelve years to reach the American market. It was recorded in Paris and released on the European Fontana label by producer Alan Bates, whose leasing agreement to return to Europe each time. A couple of years ago, Atlantic recorded a Curson album, but it remains unreleased. This album took twelve years to reach the American market. It was recorded in Paris and released on the European Fontana label by producer Alan Bates, whose leasing agreement to return to Europe each time. A couple of years ago, Atlantic recorded a Curson album, but it remains unreleased. This album took twelve years to reach the American market. It was recorded in Paris and released on the European Fontana label by producer Alan Bates, whose leasing agreement to return to Europe each time. A couple of years ago, Atlantic recorded a Curson album, but it remains unreleased.
strongly advise you to grab “Tears for Doly” before there is any chance of its disappearing from the catalog. C.A.

RECORDING OF SPECIAL MERIT

GIL EVANS: There Comes a Time. Gil Evans (keyboards); orchestra and soloists, including Marvin Peterson (trumpet, vocals), Dave Sanborn (alto saxophone), Billy Harper and George Adams (tenor saxophones), Ryo Kawasaki (guitar), and Herb Bushler (bass). King Porter Stomp; The Meaning of the Blues; Makes Her Move; Anita's Dance; and three others. RCA APL1-1057 $6.98, © APS1-1057 $7.98, © APK1-1057 $7.98.

Performance: Exciting
Recording: Excellent

Gil Evans' importance as an arranger was first widely recognized as the Forties came to an end, and he ushered in the cool through a classic series of Capitol sessions under the leadership of Miles Davis. His subsequent collaborations with Davis—in the late Fifties—crowned his earlier achievements, but possibly did more to further the career of Miles Davis than his own; such is often the arranger’s lot, a particularly sad example being Benny Goodman's overshadowing of Fletcher Henderson. Nevertheless, Evans has continued to thrive, creating exciting, innovative sounds that make most big-band arrangers’ works sound like New Year's Eve at the Waldorf Astoria.

As I have said before, when Gil Evans borrows from the past, it is from his own past. He does just that with King Porter Stomp, which begins this album. Evans originally recorded the famous Jelly Roll Morton tune for the World Pacific label in 1958, a performance that featured the late Cannonball Adderley as soloist. That version has recently been reissued on Blue Note, and it is as interesting today as it was then. Here we are treated to basically the same arrangement with Dave Sanborn playing the alto solo; it, too, is exciting—though slightly hampered by heavy reverb—and would appear to have been included as an opener to remind us of the Evans of old, because everything that follows reflects more recent trends.

The principal soloists, besides Sanborn, are trumpeter Marvin Peterson (who also injects a couple of less pleasing, though not obnoxious, vocals), tenor men Billy Harper and George Adams, guitarist Ryo Kawasaki, and bassist Herb Bushler. Their individual work is uniformly meritorious and skillfully enhanced by Evans' characteristically rich, dramatic arrangements that often have the orchestra lurking menacingly but beautifully in the background. This is another wonderful excursion into your head by a man who doesn't know the meaning of the word cliché. C.A.

HAMPION HAWES: Live at the Montmartre. Hampton Hawes (piano); Henry Franklin (bass); Michael Carvin (drums). South Hampton; The Camel; Little Miss Laurie; and two others. ARISTA/FREEDOM AL 1020 $6.98.

Performance: Curiously refreshing
Recording: Good

Pianist Hampton Hawes sounded very interesting to me back in the Fifties when he was recording for the Contemporary label on the West Coast, but his life story—published in a 1972 biography—was more interesting by far. (Continued on page 89)
At the time they were first released, the 1928 performances of Louis Armstrong and Earl Hines had a pole-axe effect on musicians because of the harmonic and rhythmic ideas they illustrated. That was the year Armstrong abandoned his sentimental loyalty to New Orleans jazz (based on his love and respect for Joe "King" Oliver, whom Louis always regarded as a father and teacher) and finally accepted the sweet and scary responsibility for his gargantuan talent and technique. A new Smithsonian double-disc package collects all the Armstrong-Hines collaborations of 1928, after which time Hines spent eleven years in distinguished limbo as the leader of the Grand Terrace Band in Chicago while Armstrong went on to national, international, and immortal fame.

One selection in the Smithsonian collection, Chicago Breakdown, is from May 1927; the month before that, Armstrong and Hines were on a pick-up date with Johnny Dodds-Black Bottom Stompers (Dodds was the original clarinetist in Armstrong's original Hot Five) at which four sides were done. Those earlier sides are not included, though, since this set draws exclusively from the Columbia archives while the Dodds dates belong to MCA (née Decca-Vocalion-Brunswick) and are not very distinguished anyway.

Armstrong's grandeur and bravura are everywhere evident in the collection, though on certain tunes he doesn't seem quite as comfortable as he became comfortable with them in short order. Hines, by contrast, seems entirely at ease. Perhaps Armstrong had trouble settling in because he realized that he had no reference or precedent for what he was doing, for his talent or for his style, except himself. In some of the performances you can hear him falling back on sheer lung power, playing harder than he had to, as if to convince himself that everything was going to turn out all right a hundred years from then. He may also have been bothered by his acquaintance with Bix Beiderbecke. Louis and Bix had a sartorial and adoration and respect for each other, but each seemed to sense that jazz was going to split into two roads based on what the two of them were doing. Louis was able to handle the pressures of genius and Bix wasn't.

Whatever jazz trumpet is now, or may remain, is owing to Louis and Bix. Jazz piano is greatly in the debt of Earl Hines. His "trumpet-style" playing is legendary as to its origins. Because of his friendship with Armstrong, it is most often assumed that Hines got his attack and solo ideas from Louis. But, as Stanley Dance pointed out in his profile of Hines in the January 1974 issue of this magazine, Hines' unique concept of piano playing came from the cornet of Joe Smith, whose style was tender and intimate, as well as from Hines' own early and frustrated career as a trumpet before he met Louis.

Hines was the first jazz pianist who released his left hand from time-keeping guard duty; his artistic motto might be, "I know where the rhythm is—don't worry about it." He thus freed his left hand to join his right in explorations that found whole new voices for the piano. Throughout his career, when he has played in a combo or a band he has been content to let somebody else worry about the immediate responsibilities of rhythm and beat, as most of these sides with the wonderful Zutty Singleton on drums show.

Hines' "trumpet-style"—giving obvious rhythmic considerations low priority while employing both hands to make autonomous solo statements—is actually a compliment to the listener, and a deliberate one. He has always respected his audience, and he believes that, since his listeners always know where things are supposed to be, a departure won't throw them. It's also interesting to note, when speaking of Hines' style, that he was at one time an amateur boxer, and that his jabbing, probing right hand on piano is like that of a sparring fighter. His approach to the rhythm in a tune can be compared to a boxer who moves well in the ring. It wouldn't be inappropriate, therefore, to call him the Jack Johnson or the Muhammad Ali of the piano.

Although nearly everything in the Smithsonian set has been reissued before, the performances are brought together in chronological order for the first time. The mono reprocessing is absolutely first-rate, and the annotations are extensive if a bit ponderous; one has to dig for the information. Overall, the set is a treasure, and the civilized person will simply have to own a copy.

—Joel Vance

The 1928 Collaborations of Louis Armstrong and Earl Hines

Louis Armstrong and Earl Hines, 1928. Louis Armstrong (trumpet, vocals); Earl Hines (piano); other vocalists and instrumentalists. Louis Armstrong and His Hot Seven: Chicago Breakdown. Lillie Delk Christian with Louis Armstrong and His Hot Four: Baby; I Must Have That Man; Sweethearts on Parade; Too Busy; You're a Real Sweetheart; Last Night I Dreamed You Kissed Me. Louis Armstrong and His Hot Five: Fireworks; Steep the Gutter; A Monday Date; Don't Jive Me; West End Blues; Sugar Foot Stomp; Two Deces; Squeeze Me; Knee Drops; Carroll Dickerson's Savoyagers: Symphonic Touches: Savoyager's Stomp. Louis Armstrong and His Orchestra: No (No, Papa, No); Basin Street Blues; Muggles. Louis Armstrong (with Earl Hines, piano): Weather Bird. Earl Hines: Caution Blues; I Ain't Got Nobody; Fifty-Seven Varieties; A Monday Date. Louis Armstrong and His Savoy Ballroom Five: No One Else but You; Beau Koo Jack; Save It, Pretty Mama; Hear Me Talkin' to Ya; St. James' Infirmary; Tonight Like This. Smithsonian Collection ® R 002 $9.00, $8.00 to Smithsonian Associates (from Smithsonian Museum Shops or by mail from the Smithsonian Collection, P.O. Box 5734, Terre Haute, Ind. 47802).
than any of his more recent recordings. Bitten by the electric bug, Hawes is drowning in the stagnant waters that also engulf Herbie Hancock, but this album, recorded in 1971 at Copenhagen's Montmartre Jazzhus, captures Hampton Hawes just before he plugged in. The drummer, Michael Carvin, is a bit overpowering, but I am willing to put up with that because this is the closest Hawes has come to fulfilling the promises I thought he was making on the old Contemporary records. Not much thought went into the technical aspect of this recording, however. C.A.

WOODY HERMAN: King Cobra. Woody Herman and the Thundering Herd (vocals and instruments). King Cobra; Jazzman; Come Rain or Come Shine; Lake Taco; and three others. FANTASY F-9499 $6.98.

Performance: Good Recording: Very Good

I don't think Woody Herman—now sixty-three—ever again will have a Herd that thinkers like the one that stomped out Apple Honey and Northwest Passage some thirty years ago, but as long as he continues to employ fine soloists such as trombonist Jim Pugh and flugelhornist Dennis Dotson. Despite its better economically shaky days and for giving us something of interest to offer. I still fail to hear anything that might characterize this as a Herman band, but the veteran bandleader deserves credit for having a band at all in these economically shaky days and for giving us such soloists as trombonist Jim Pugh and flugelhornist Dennis Dotson. Despite its better moments, though, this album and others like it are beginning to suggest that big-band jazz really went out with Ellington.

RECORDING OF SPECIAL MERIT

HELEN HUMES: The Incomparable Helen Humes. Helen Humes (vocals); instrumental accompaniment. Contact Me Poppa; I Can't Give You Anything but Love; Let the Good Times Roll; and five others. JAZZOLOGY J-55 $5.98.

Performance: Lives up to its title Recording: Very good

Helen Humes is one of those old-fashioned blues singers whose wicked way with a bent note and a double-entendre used to make listeners glad they had ears. Brought back out of retirement in Kentucky for this assignment in the Jazzology crusade to resurrect "authentic" jazz, she sounds like a wholesome version of Billie Holiday, whom, as a matter of fact, she replaced in the old Count Basie Band. Whether she is singing about the virtues of fidelity in Old-Fashioned Love, exhorting her man to drive her like a car in Contact Me Poppa, or evoking the poignancy of yesteryear's sweetest ballads in I Cover the Waterfront, Helen Humes comes over as a belter in the best tradition. Even her own slightly shapeless song, Million Dollar Secret, containing specific instructions on how to get the most out of a very old man or a very young one, sounds inspired the way she puts the way she puts it over, and her St. Louis Blues compares favorably with anyone's. Worth getting. P.K.

RECORDING OF SPECIAL MERIT

KENNY WHEELER: Gnu High. Kenny Wheeler (flugel horn); Keith Jarrett (piano); Dave Holland (bass); Jack DeJohnette (drums). Heyoke; 'Smatter; Gnu Suite. ECM ECM-1069 $6.98, ® 8F-1069 $7.98, ® CF-1069 $7.98.

Performance: Quintessential quartet Recording: Excellent

Canadian-born Kenny Wheeler has lived in England since 1952 and has become one of that country's leading exponents of what we soon are going to have to stop referring to as "the new music." Except for an obscure 1971 album on the Incus label, this is his first record as a leader, but Americans have had the opportunity to make his acquaintance through his most recent ECM recordings, and for part of the beauty of this album is the technical sound. It isn't often that one comes across an album as nearly perfect from cover to end as this one is. C.A.
Choosing Sides

By Irving Kolodin

THE SINGULAR FRENCH SYMPHONY

In a nineteenth-century world apparently filled with Russian, Czech, German, and eventually even English, Finnish, and Danish symphonists, the French tended to produce composers who wrote only a "symphony among their many other works. Only three French composers (Saint-Saëns with three, Gounod and D'Indy with two each) persevered beyond the publication of a Symphony No. 1. Even Lalo, who wrote three, published only one. 

This line of thought is induced by the recent recorded appearance of four such "singular" works: Bizet's C Major (Keilwerth K 546), Lalo's G Minor (Philips 6500 927), Chausson's B-flat Major (London STS 15294), and Dukas' C Major (London CS 6995). Each has qualities that suggest a second, third, or fourth from the same hand might have added much of value to the symphonic repertoire, but, for a variety of reasons, the composers were attracted to other matters, and each left only a single symphony, souvenirs of a flirtation with the form rather than tokens of a lasting attraction.

In the case of Bizet, his C Major Symphony (written in 1855, when he was a student of seventeen) was quite literally shelved because it was considered too close a copy of Gounod's D Major, a work with which the young man was well acquainted. The C Major might still be lying untouched on a shelf in the library of the Paris Conservatoire had not D. C. Parker, the first English biographer of Bizet, come upon it and recommended it to Felix Weingartner, who had become director of the Basel Conservatory in the late Twenties. Weingartner performed it in Basel, for the first time ever, in 1935—eighty years after it was written. Unfortunately, Weingartner did not also make the first recording—it would have been a piquant pleasure to have the long-deferred delight of the Bizet One from the baton of the man who made the first recording of the Beethoven Nine.

The honor went instead, a few years later, to Walter Goehr, whose spirited effort (RCA Victor set 721, issued in January 1941) made friends for the work wherever it was heard. Goehr's recording was the first of many (the number is now approaching twenty), of which the latest, by the City of Birmingham Symphony under Louis Frémaux (not to be confused with Louis de Froment) is one of the best. The success of the Bizet C Major has prompted some to the belief that the long-forgotten Gounod work it "imitated" should be even better. Logical, but untrue. The Gounod symphony lacks the kind of animation that makes the Bizet work so successful and which prompted George Balanchine to produce the briskly beautiful choreography in his 1947 treatment of the work for the Paris Opéra Ballet.

Had his contemporaries been more perceptive would there be more Bizet symphonies? Probably not. It was Bizet's own judgment that he was "not built for the symphony," and his later work titled Roma (it is coupled with the C Major on the Frémaux disc) tends to support this self-analysis. An episodic envoi de Rome first performed as a Fantaisie Symphonique in 1869, Roma was extensively revised but not published in Bizet's lifetime. When it was, posthumously, the publisher gave it the designation of Suite de Concert No. 3 instead of "Symphony" (perhaps thinking of it as a successor to the L'Arlesienne and La Jolie Fille de Périgord suites). Whatever pangs Roma represented to Bizet, it offers to the listener not much more than cuddlesome tunes and attractive instrumentation—in themselves, of course, worthy of acquaintance. At one point in the piece Bizet seems to have encountered the same brigands Berlioz met up with in his Harold en Italie. But, after all, isn't that what one goes to Italy for, to learn history? Frémaux discourses both works in a way evocative of both his own personality and that of Bizet.

The best of the lesser-known French symphonies is, for my taste, Edward Lalo's in G Minor. It is all but unknown in this country, but for those not previously acquainted with it, suffice it to say that what enduring imprint it enjoys was accorded by Sir Thomas Beecham, who chose it as a disc-mate for his Bartók C Major (now on Erato 61092), apparently not at all bothered by the fact that Lalo had the "misfortune" to have written the perennially popular and much overplayed violin concerto called Symphonie Espagnole. According to Kate Hevner Mueller's Twenty-Seven Major American Symphonies, which documents the programs those orchestras performed over nearly a century and a half (1842-1969), the only performances of the Lalo G Minor ever given in this country were by the New York Philharmonic in 1932. The enterprising culprit in each case was, of course, Sir Thomas.

The general impression among other conductors is—or appears to be—that all of Lalo must be like the facile, appealing, well-written, but finally superficial work for which he is best known. The G Minor Symphony also is several of these things, but it is emphatically not superficial, as Antonio de Almeida too makes thoroughly apparent in his recording with the National Opera Orchestra of Monte Carlo. The best of its movements is, unquestionably, the soulfully singing Adagio, which would, I am sure, be welcomed by American symphony orchestra audiences regularly exposed to works by contemporaries not half the equal of Lalo in talent. Almeida's steadily ripening gifts are also applied here to a pair of other orchestral works by Lalo: the pleasingly Griegish pastiche Norvégienne (originally the Fantaisie Norvégienne for violin and orchestra) and the overture to Le Roi d'Ys.

The other two symphonies in this "singular" selection have a curious connection in time and circumstance. Both are in three movements, and both were written in the aftermath of one of the major happenings in the history of the French symphony: the first performance of the Franck Symphony in D Mi-

Bizet himself judged that he was "not built for the symphony."
or (also in three movements) on February 18, 1889. Chausson, who would have come by the inclination naturally (he was a favorite student of Franck), tried to resist the temptation to compose in the same mold. Dukas, who had no connection with the man sometimes called the "Belgian Bach" (Franck was born in Liège, but he came to Paris in his early teens), did not.

The perpetual but incompletely fulfilled promise of Chausson, who died in 1899 at the age of forty-four from something as innocuous as an accident while cycling, is one of the tragedies of French music. Certainly a composer who could write such fine and distinguished music as the Concerto in D Major for Violin, Piano, and String Quartet or the marvelous Poème de l'Amour et de la Mer (of which Victoria de los Angeles has made the most recent and best recording, Angel 36897) was capable of adding magnificence to the catalog of French symphonic music.

Unquestionably, Chausson had such talent. Perhaps, though, he was not "built for the symphony" either, but for something akin to such a musical sport as d'Indy's Symphony on a French Mountain Air, a combination piano concerto/symphony. Chausson agonized about how he should proceed with his symphony following the surging first movement and the melodically motivated Adagio. Should he try to evolve a scherzo which would defer the dilemma of "beginning that terrible finale"? In the end, he decided simply to eliminate the scherzo without resolving the dilemma. The superb performance by the late Ernest Ansermet and L'Orchestre de la Suisse Romande (reissued in London's Stereo Treasury Series, STS-15294) gives Chausson every bit of the conviction to which he is entitled, but the overside version of Franck's Eolides tends to point the finger of resemblance more than poignancy ought to permit.

The Dukas C Major, in a powerfully compelling performance by Walter Weller (with whose conducting work I have no previous acquaintance) and the London Philharmonic, is so much the product of a man with a predisposition to orchestral writing that the sum of its parts should add up to more than they do. It was Debussy, writing to novelist Pierre Louÿs on February 9, 1897, who reported that "The symphony of Dukas...was disappointing. It shrank to nothing and was like a mixture of Beethoven and Charpentier." As in the Chausson, the Franckian three movements of motto theme, cyclical recurrence, and eventual affirmation act less as a means of access to individuality than as an invitation to a new kind of conformity.

But who is to say that the energy with which Dukas cultivated his garden did not bear fruit? What form the fruit took was noth-...
RECORDING OF SPECIAL MERIT


Performance: Superb

While a set of all six Bach cello suites may be a convenient way to acquire the music, we are not likely to hear more than one of them in a given recital program, and the coupling offered here makes beautiful sense. Beautiful is the word for Helmerson’s playing, too: offered here makes beautiful sense. Beautiful given

While a set of all six Bach cello suites may be

flawless as Helmerson’s playing.

on records now, and the pressing itself is as

which there is not amore persuasive account

of these very different

serious shortcoming, and it is noticeable, I

think, only because of the excessive reverberation that tends to make the cello sound a bit larger than life now and then; neither Bach nor Kodály nor Helmerson needs this, but some listeners will find it less obtrusive than others. It is less conspicuous in the Kodály, of which there is not a more persuasive account on records now, and the pressing itself is as flawless as Helmerson’s playing. R.F.

BIZET: Symphony in C Major (see Choosing Sides, page 90)


Performance: Peaks and valleys

Recording: Excellent

Pollini’s performance of the G Major Prelude (No. 3) is sheer magic, and there are more than a few such realizations in his sequence. The level is not as consistent, however, as in his account of the Chopin Études on an earlier DG disc (2530 291); in the Preludes Pollini seems to respond far more sympathetically to the brighter, more energetic pieces than to those with a brooding or legato character. The playing itself is never less than superb, and DG’s engineer, Klaus Hiemann, has captured the piano sound outstandingly well, but one is left with the feeling that there is more to these pieces—or, at least, to many of them—than Pollini suggests. I still feel that Claudio Arrau finds more of their poetic substance than any other pianist currently represented by a recording of them. R.F.

CHOPIN: Waltzes (see The Basic Repertoire, page 44)

CROFT: A Hymn on Divine Musick; By Purling Streams; Harpsichord Suites in C Minor, E Flat Major, and C Minor; Violin Sonatas in G Minor and B Minor. Honor Sheppard (soprano); Marjorie Lavers (violin); Michael Dobson (oboe); Jane Ryan (viola da gamba); Robert Elliott (harpsichord). ONYX 1730 $6.98.

Performance: Good

Recording: Good

This interesting disc should dispel the misbelief that there was no English music between the death of Purcell and the arrival of Handel. While William Croft cannot be considered a major composer, he is representative of many fine “little masters” who were writing in England at the turn of the eighteenth century, and his music, if not inspired, is serious, well crafted, and certainly worthy of revival today.

The performances are all good and reveal
the composer’s intentions very well. Especially fine is Miss Lavers’ reading of the excellent violin sonatas. Like her colleagues, however, she could enhance the music with more ornamentation. Mr. Elliott’s solo harp playing is rather square and occasionally muddy because of thick registration, but his continuo playing is strong and his realizations marvelously imaginative. Despite the quibbles, we must thank these artists for sharing their devotion to William Croft with us. He is well worth it. S.L.

DONIZETTI: Maria Stuarda (see Best of the Month, page 67)

DUKAS: Symphony in C Major (see Choosing Sides, page 90)


Performance: Sumptuous Recording: Likewise

Rudolf Firkusny has done more than anyone else to keep this work in the repertoire, but Justus Frantz has also made two recordings of it (his earlier one was released here less than two years ago by the Musical Heritage Society). Frantz plays Dvořák’s original version in both recordings, and he plays it with a great deal of understanding and conviction as well as skill; as one would expect, the orchestral sound is more sumptuous, the phrasing more exquisitely molded, in the newer one with Bernstein. The slow movement is perhaps a little over-romanticized (a very slow Andante here), but it is so gorgeous—the solo horn in particular—that I cannot really object to it. If pressed to make a choice, though, I would stay with the recent Vox recording by Firkusny and Walter Susskind (in □ QSVBX-5135, with all of Dvořák’s concerted works). But that New York horn is something! R.F.

RECORDING OF SPECIAL MERIT


Performance: Impassioned Recording: Very good

The Israeli players of the Yuval Trio light into these masterworks of the Czech chamber literature with tremendous zest, but they do not in any way slight the poetic tenderness of the slow writing that furnishes the high points of both Smetana’s youthful piece (composed after the death of his four-year-old daughter) and Dvořák’s glowering mature six-movement work based on the Slavonic ballad form of the dumka. By no means the least outstanding feature of this disc is the excellence of DG’s recording—a flawlessly amalgam of brilliance, body, and warm acoustic ambience. I recommend this disc for both knowledgeable chamber-music enthusiasts and those just getting into the medium.

D.H.


Performance: Tepid Recording: Dullish

Ozawa’s approach to both of these well-loved works is unexpectedly sedate. His pacing is fine, but there is an element of restraint throughout both performances, as if the excitement in the scores were a provocation to be resisted at all cost. There is some beautiful playing, especially from the strings in the very sober reading of the symphony’s slow movement, but the brasses are quite undistinguished in their rapid passages in the finale, and the overall effect, tepid at best, is not helped by the close-up but dullish sound. The first-movement repeat is taken by Ozawa, as it is in three or four other recordings of the New World, among them Kertész’s London Symphony remake (London CS-6527 or Vox SVBX-5139), which is still my choice. R.F.


Performance: Lovingly detailed Recording: Good


Performance: Tepid Recording: Dullish

Ozawa’s approach to both of these well-loved works is unexpectedly sedate. His pacing is fine, but there is an element of restraint throughout both performances, as if the excitement in the scores were a provocation to be resisted at all cost. There is some beautiful playing, especially from the strings in the very sober reading of the symphony’s slow movement, but the brasses are quite undistinguished in their rapid passages in the finale, and the overall effect, tepid at best, is not helped by the close-up but dullish sound. The first-movement repeat is taken by Ozawa, as it is in three or four other recordings of the New World, among them Kertész’s London Symphony remake (London CS-6527 or Vox SVBX-5139), which is still my choice. R.F.


The Bicentennial Corner

When it comes to two-piano teams, there are few in the business who can compete with the immaculate keyboard work of Arthur Whittemore and Jack Lowe, and they are at their most engaging in a new album from Personal Touch Productions called “American Sampler”—some of it familiar, some not so familiar, and all of it perfectly timed for the you-know-what.

Here is Charles Ives’ deceptively easy-sounding Variations on “America” (originally for organ), with its intricate innovations and rhythmic surprises. Here also, in the purity of its original piano setting, is American impressionism in the guise of Charles T. Griffes’ exquisite The White Peacock. Louis Moreau Gottschalk is represented at his witty best with The Banjo in a marvelous two-piano arrangement by the duo. A Scott Joplin perennial and attractive excerpts from two of Morton Gould’s most popular concert works follow, along with a period-evoking Party Rag Gould composed recently for a TV movie about F. Scott Fitzgerald’s Hollywood days. All these roll forth effortlessly and at just the right tempo from the two keyboards.

More of a challenge are the passages from Copland’s Billy the Kid—which, it seems, was presented with a two-piano accompaniment when the cowboy ballet was introduced in 1938. The pacing here is perhaps a bit slow, and I miss the outdoorsy ring of the Copland orchestra, but the strengths of Billy remain manifest. A dreamy pas de deux from Barber’s melodic ballet Souvenirs follows; after that, the attempts to be inclusive rather mar the program, although they don’t spoil it. Adding Richard Rodgers’ Lover, the country-music piece Honey, a spiritual, a sentimental Civil War ballad, and the whole of The Stars and Stripes Forever brings matters down to a rather pedestrian level at the close. Still, the crisp playing rescues even Lorena, despite interpolations of phrases out of D竹e and the Battle Hymn of the Republic, from turning into shameless slop. And I guess you could always turn the thing off after Souvenirs.

—Paul Kresh
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CIRCLE NO. 32 ON READER SERVICE CARD

Orchestra, Andrew Davis cond. LYRITA SRCS 77 $7.98.

Performance: Extravert Enigma, brilliant Falstaff

Recording: Excellent

Over the years, the Enigma Variations have faded singularly well in recorded performance, and that this highly individual and lovingly detailed reading by Jochum can reveal new dimensions and unsuspected detail speaks eloquently both for Jochum's sensitive musicianship and for the music itself. It is in the lyrical variations, Nos. 5, 6, 10, and 12, that Jochum is at his most revelatory. I would question, however, the almost static quality in his treatment of the celebrated Nimrod episode (Variation No. 9). The familiar Brahms variations are traversed with special attention to details of line and nuance, but here, as in the Enigma, my own taste favors more momentum throughout than we get here. The London Symphony players, solo desks especially, do their work gloriously and are accorded clean and bright sound.

Young Andrew Davis goes at the Enigma with superb spirit and urgency, but he lacks the more probing expressive touch of his elders. In Falstaff, however, and the New Philharmonia do themselves proud in a reading of wonderful bite and dramatic power backed by playing of flawless virtuosity. I have not heard the work come to life in this fashion since the 78-rpm recording by Elgar himself, which I grew up with. The Lyrita recording I find to be a superior job in every department, meeting its match only in the Haitink version of the Enigma, which remains musically and sonically the one I prefer. D.H.

RECORDING OF SPECIAL MERIT

FALLA: The Three-Cornered Hat. Jan DeGaetani (mezzo-soprano); chorus; New York Philharmonic, Pierre Boulez cond. Harpsichord Concerto. Igor Kipnis (harpischord); Paige Brook (flute); Harold Gomberg (oboe); Stanley Drucker (clarinet); Eliot Chap (violin); Lorne Munroe (cello); Pierre Boulez cond. COLUMBIA $33970 $7.98, M 33970 $6.98.

Performance: Penetrating

Recording: SQ sumptuous, two-channel dry

Boulez may be somewhat less successful with Falla's ballad afterwork than with those of Stravinsky and Ravel—he is, I think, less fluid and flexible in this music than Ansermet or Frühbeck—but his is an intriguing reading even so. It is one that makes a strong case for the "symphonic" status of the work, missing none of the subtlety in the score and little of the wit. The Philharmonic's playing is top-notch throughout, and Jan DeGaetani's contribution is characteristically excellent. The Harpsichord Concerto, moreover, is no mere filler, but reason in itself for acquiring this disc. This still neglected piece is also a genuine masterwork, and has never had so penetrating and communicative a performance on records as it receives at the hands of Igor Kipnis and the Philharmonic's splendid soloists under Boulez. The two-channel edition struck me as dryish, tending toward downright harshness in spots. The SQ disc is sumptuously open, projecting an altogether more appealing impression of the orchestral performance; it is worth the extra dollar, whether you play it back in four channels or in two.

RECORDING OF SPECIAL MERIT

HAYDN: La Fedelta Premiata. Lucia Valentin (contralto), Celia; Tony Landy (tenor), Fileno; Frederica von Stade (mezzo-soprano), Amaranta; Alan Titus (baritone), Conte Puccicchietto; Ilene Cotrubas (soprano), Nerina; Luigi Alva (tenor), Lindoro; Maurizio Mazzieri (baritone), Melibeo; Kari Lovaas (soprano), Diana. Chorus of the Radio
Perhaps one of the reasons Haydn's operas are virtually unknown is that they were written for such special local conditions and singers that even the composer during his lifetime discouraged their performance outside of Esterhaza. Certainly Haydn had one of the most musically sophisticated audiences that ever existed, and one look at the vocal writing instructs us that he had singers who commanded ranges a wide gamut of emotions. Thus the music overcomes the libretto in the hands of a master.

The performance is basically an excellent one. All of the singers have fine voices, good techniques, and a sense of musicianship that makes the ensembles a joy to hear. The cruelty of Haydn's wide range is especially noticeable in the parts of Celina and Fileno, taken by Lucia Valentini and Tonny Landy, respectively. The former does not have the high register and the latter lacks the low notes. Judicious rewriting, some of it by Haydn himself, has helped to alleviate this problem, but certain contours that give rise to difficulties are unavoidable. Alan Titus as Perrucchetto lacks "the boom needed by a true buffo, but his style is superb and he brings the part off very well indeed. Perhaps the finest singing in the album is offered by Frederica von Stade, whose warm voice easily reflects the wide emotional range of her part. If dazzling brilliance and passion are somewhat lacking in this performance, possibly because of the artificialities of the libretto and the difficulties of identifying with the characters, it is amply made up for by solvity and evenness of performance. Above all, Haydn has come off well. Let us hope that we may hear more of his operas in the future.

RECORDING OF SPECIAL MERIT

HAYDN: Symphony No. 6, in D Major ("Le Matin"); Symphony No. 7, in C Major ("Le Midi"); Symphony No. 8, in G Major ("Le Soir"). Prague Chamber Orchestra, Bernard Klee cond. DEUTSCHE GRAMMOPHON 2530 591 $7.98.

Performance: Elegant Recording: Excellent

Everything about these performances exudes an air of healthy elegance. They are fastidious, highly polished, by no means staid, but with a refined view. František Poštůva's playing of the violone merits special mention, and it matters little that cellist Bohumil Bayer announces most of his solo entries with a grunt. What is somewhat distressing is that turnover comes so quickly.

(Continued on page 97)
"No music delights the mind or the senses more than Mozart's."

It seems that Alicia de Larrocha has inherited the distinction previously enjoyed by Sergei Rachmaninoff—that of having the widest spectrum of admirers of any pianist currently active. On my own tours I hear the name of Rachmaninoff from the lips of people who are not at all regular concert-goers. At the same time it is well known that his greatest colleagues spoke of him only with awe and respect. Happily, we now have much the same situation with Alicia de Larrocha. There are those who ordinarily wouldn't attend a "classical" concert but feel drawn in a mysterious way to her performances nonetheless. And, at the other end of the scale, even her mightiest colleagues speak of her playing with a mixture of respect and love.

Her unique position might be called unusual only if one insists that the highest development of musical sensitivity is, or ought to be, separate from the basic impulses of song and dance. These are the natural sources of our musical heritage, and Alicia de Larrocha's artistry is so closely allied—or even elementarily tied—to them that it doesn't take a philosopher to figure out why her playing, with its non-neurotic vitality, is so deeply satisfying both to the novice and to the experienced musician.

Her repertoire seems to range as widely as her popularity. First, she was known for her definitive performances of the Spanish composers. Branching out from there, she surprised and delighted us with her interpretations of composers as disparate as Bach and Ravel. I believe she is probably the only pianist who has given in one New York season an all-Albeniz recital, an all-Beethoven recital, and one devoted to Bach and Mozart. This range of repertoire would not mean so much if it weren't for her ability not only to grasp but to personalize the essence of the differing styles without distortion. Needless to say, her impeccable and elegant pianism is no hindrance to her extraordinary communicative abilities.

Understandably, she has made a special niche for herself as a Mozart player. The perfect equilibrium of his music and its operatic wealth of characterization find a ready response in her infectious rhythmic sense and her multicolored tone. She suggests that difficult-to-achieve balance of vibrant serenity and slightly naughty humor—it is so easy to err on one side or the other—and she incorporates Mozart's tragic undertones without excessive underlining. No music delights the mind or the senses more, and the same can be said of this pianist.

But, surprisingly, in her newest London recording, "Mostly Mozart, Volume Two," released on the tenth anniversary of the Mostly Mozart Festival at Lincoln Center, the single greatest delight for me is not one of the Mozart pieces but the Haydn F Minor Variations. Miss De Larrocha's superb technique allows her to orchestrate the work so that each voice emerges as if with a mind of its own—and all of them conversing in the most lucid possible discourse. The fourth comes realized with an unforced tragic weight, which is all the more effective after the almost giddy F Major sections preceding it. Sometimes one wants to giggle—that irrepressible humor again—but a dark, steadily deepening intensification of the musical subject comes as a reminder that the work as a whole is aimed in a different direction altogether.

In the Mozart Fantasy, the poised elegance of De Larrocha's phrasing emphasizes the poignancy of a dark-hued and somber piece. Throughout this record I find myself delighted time and again by the beautifully balanced phrasing, the careful but unemphatic voicing, and always the most wonderful rhythmic sense. It is perhaps this last that gives me the greatest joy in her playing. It is a constant, revitalizing force which enables me, for one, to listen with untiring interest. This is no less true in Miss De Larrocha's playing of the two Mozart sonatas. These also boast a great variety of very effective staccato touches, which are not only wonderful in themselves but serve to set off the sensuous beauty of the cantabile melodies to great effect. And how is it that De Larrocha can consistently taper her phrases dynamically and rhythmically without ever becoming mannered and without chopping a whole movement into sections in the process?

On the test pressing I received for review the quality of the piano sound was especially good in the Haydn Variations and the Mozart Fantasy. The sonatas sounded, to my ears, somewhat less distinct in ambiance, as if they stemmed from a different set of recording sessions. And one more thing: dare I suggest to London's a-&-r department that Alicia de Larrocha be signed immediately to record at least a half-dozen Mozart concertos?

—Garrick Ohlsson


STEREO REVIEW
between the recitativo and the adagio proper which constitute the slow movement of No. 7. In Antal Dorati’s six-disc set of Symphonies Nos. 1-19 it is No. 6 that split for turnover. That set, I think, is really indispensable: Dorati’s performances, as beautifully played and recorded as Kleef’s, are a bit longer on charm and, incidentally, allow the harpsichord to be heard. But in its own right the new DG is a distinguished release, and anyone interested in a single disc of this trilogy could hardly do better.

KODÁLY: Sonata for Unaccompanied Cello, Op. 8 (see BACH)

LAHO: Symphony in G Minor (see Choosing Sides, page 90)

MAHLER: Symphony No. 2, in C Minor (“Resurrection”), Ileana Cotrubas (soprano); Christa Ludwig (mezzo-soprano); Vienna Philharmonic Orchestra, Zubin Mehta cond.

LONDON CSA 2242 two discs $13.96.

Performance: Good to superb
Recording: Very good

If it weren’t for what I consider an erratic treatment of the heroic-tragic opening movement, I would rate Zubin Mehta’s exceptionally well-recorded realization of Mahler’s vast symphonic fresco very near the top of the ten recorded versions currently listed in Schwann-1. Mehta really holds my interest throughout the lifting Ländler movement—which is too often sloughed off as a kind of make-weight intermezzo—by paying minute attention to details of line, balance, and nuance without being over-fussy and losing the pulse. The scherzo comes across with a splendidly sinister urgency, and the enormous finale has all the sweep and grandeur one could ask for, being surpassed only by Leonard Bernstein’s incredible Ely Cathedral recording for Columbia (which has other drawbacks). Likewise, Christa Ludwig’s singing of the rapt Urlicht movement is surpassed for me only by that of Janet Baker in the Bernstein album.

The first movement is the problematic one here, and a comparison with Leopold Stokowski’s version is instructive. In contrast to Mehta, Stokowski keeps the basic pulse unwaveringly through its twenty-three-minute course without sacrificing—or exaggerating—for that matter—one iota of the music’s dramatic impact.

On the other hand, the sound in this recording is one of the London engineering staff’s very best achievements in Vienna’s Sofiensaal. Compared with the Solti recording of a decade ago, there is less emphasis, in terms of microphone placement, on minute detailing of each instrumental voice and choir, and more attention to the total tapestry of sound in both its linear and vertical aspects. The result is a most convincing sense of spatial depth and breadth with no loss whatever of essential musical detail. The handling of acoustic perspective of choir relative to orchestra in the finale is one of the high points of this recording. I’m not going to discard this one, but I’m afraid I will have to turn to one of the other available recordings for a reasonably satisfying opening movement.

FIGARO (K. 492); OVERTURE, THE MAGIC FLUTE (K. 620); OVERTURE, DON GIOVANNI (K. 228). Mostly Mozart Festival Orchestra, Antonia Brico cond.

COLUMBIA M 33888 $6.98.

Performance: Just right
Recording: Excellent

Somewhere, in the best of all possible worlds, there is that place where achievement and success are measured by ability and accomplishment alone. There are people who think that the world of classical music must be such a place; that, being “purer” than commercial music, its standards must be based more strictly on merit. Of course, this is a romantic idea. Take the case of Antonia Brico, one of the first American conductors to obtain a substantial European reputation. In the 1930’s no one doubted that she had a great career ahead of her. But World War II cut off European musical life, and the United States, hardly ready to accept any native conductorial talent, let alone a woman, was simply not interested. Dr. Brico became a respected and loved music teacher in Denver, Colorado.

The story would have ended right there but for the efforts of one of Dr. Brico’s pupils, a certain Judy Collins. With Jill Godmilow, Ms. Collins made a much-acclaimed film about the teacher and, quite literally, brought about the rediscovery of Antonia Brico. The musical turning point was an engagement at the 1975 Mostly Mozart Festival, a regular summer fixture at Lincoln Center in New York. This popular event, which features some of the best New York musicians,
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Antonia Brico: no pseudo-eighteenth-century tip-toeing through the tulips here


Recording of Special Merit

Performances: Berman electric
Gilels contemplative
Recordings: Both good

The Prokofiev Eighth Sonata was written between 1939 and 1944—that is, during World War II—and it was premiered in 1944 in Moscow by Emil Gilels. It belies the image of late Prokofiev as a populist knuckling under to the Stalinist requirement to make Soviet music ultra-accessible to the people. The style of this music is basically simple, but, far from being the popular romanticism that is often associated with late Prokofiev, the Eighth Sonata proves to be an excellent showcase for Dr. Brico's talents, and other engagements as well as this recording followed in short order.

Make no mistake, this story is no media hype around a celebrated pop name. Judy Collins, who has always taken musical matters with the seriousness of any classical musician, acted out of the deepest affection and respect for an artist who has obviously suffered in her career for being a woman. And certainly one cannot imagine a worthier candidate for this kind of attention than Antonia Brico. I think the recorded evidence stands on its own. This is, to put it simply, excellent Mozart—incisive, crystalline, architectural. The orchestra—drawn from the top New York free-lance players—could constitute the nucleus of another New York Philharmonic. Players of this quality can often devastate a duffer or lead a lesser talent around by the nose. Not here. Dr. Brico's style and strong leadership are everywhere in evidence. No pseudo-eighteenth-century tip-toeing through the tulips here; this is good strong stuff and highly recommended strictly on its musical merits.

E.S.


Performance: Dazzling
Recording: Very Good

Ashkenazy's third go-around at recording this most formidable and complex of Rachmaninoff concertos is his most successful yet. It holds a decided edge over his very fine 1972 realization with Andre Previn and the London Symphony and takes the full measure of the somewhat more flamboyant and brilliantly recorded Melodiya/Angel issue with Yevgeny Mogilevsky and Kiril Kondrashin.

The decisive factor here is superior record-
ing and superior orchestral accompaniment. Ashkenazy's solo work has always been dazzling and beguiling, but in RCA's new recording you can hear ever so much more nicely of detail, not only from Ashkenazy but from the orchestra. Where the orchestra in the London album sounds a mite distant, here everything is in close focus and beautifully integrated balance—and the closely textured writing that Rachmaninoff incorporated into his end movements demands close-up microphonic treatment in order to make proper aural impact. It is not the big splashy climaxes that make this piece, but rather the cunning tonal weave, which must be revealed in all its intricate detail—as it is here.

I would not dispense with my earlier Ashkenazy recording of this music, nor with the Mogilevsky either, but as a means of getting deeper yet into Rachmaninoff's accomplishment I would certainly add this new one to my collection.

D.H.

RACHMANINOFF: Six Moments Musicaux, Op. 16 (see PROKOFIEV)

RECORDING OF SPECIAL MERIT


Performance: Sparkling
Recording: Bright and clear

These lightweight, melodious early works from the witty pen of Rossini make delightful listening if your mind requires elegant diversion. Even if it doesn't, they still make a charming effect. The performance sparkles and the string playing is truly virtuoso, especially the naghty double-bass solos that the impish composer had a way of throwing in. The jacket notes are also excellent—I wrote them myself.

S.L.

SHOSTAKOVICH: String Quartets Nos. 7, 13, and 14 (see Best of the Month, page 68)

SMETANA: Piano Trio in G Minor, Op. 15 (see DVÖRÁK)

R. STRAUSS: Thus Spake Zarathustra, Op. 30; Till Eulenspiegel, Op. 28; Don Juan, Op. 20. Chicago Symphony Orchestra, Sir Georg Solti cond. LONDON CS 6978 $6.98, @ 8-6978 $7.98, @ 5-6978 $7.98.

Performance: Super-virtuoso
Recording: Excellent

There is really no reason for a work performed in thirty to thirty-four minutes to be spread over two full sides, as is the case with every other stereo version of Zarathustra listed in the current Schwann catalog, but this is the first recording of this work fully contained on a single side since the old Rodzinski mono disc made with the Chicago Symphony twenty-eight years ago. If the sound quality suffers in London's presentation, it is undetectable to the naked ear; the Chicago strings luxuriate here in a warm, rich sonic frame. A bigger surprise than the generous format, perhaps, is Solti's approach in this work: it is not petu- not the big splashy climaxes that make this piece, but rather the cunning tonal weave, which must be revealed in all its intricate detail—as it is here.

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"all the virtues—and the defects—of a do-good organization..."

Has the Avant-garde Become the Establishment?

As the better-known record companies—Bicentennial or no—quietly cut back on or simply cut out American music (with a few notable and honorable exceptions such as Elektra’s Nonesuch and Atlantic’s Finlandia lines), Composers Recordings, Inc., more familiarly known as CRI, has taken an increasingly important position in making American music available on records and keeping it that way.

CRI has all the virtues—and the defects—of an established, institutionalized do-good organization. It is, surprisingly, not a non-profit organization, and its means of support have always been a little mysterious. But it is, in effect, a semi-public type of company with an idealistic commitment. Most of its recordings are foundation-subsidized; one way or another, its decisions are panel or board decisions, and panels and boards are, by definition, long, hard, and made of wood. Decision by committee may be a fine principle, but in artistic matters it can be the quick way to middle-of-the-roadiness, mediocrity, and lack of imagination. These have, in fact, been CRI’s besetting problems. Endless outpourings of all sorts of new music (much of it run-of-the-mill) arranged in omnibus albums of three and four composers with varying qualities of performances and recordings and unimaginative production may represent some higher social good, but in practice it has been confusing, boring, and slow to sell. CRI’s mission should be equivalent to that of a good contemporary museum like New York’s Whitney or Buffalo’s Albright-Knox or Minneapolis’ Walker. In fact, recordings of the omnibus sort seem to be made largely for the back files of college music libraries.

Recently, however, CRI has been slowly but surely changing its tune. Once a bastion of conservativism, it has moved strongly into the avant-garde (of course, ironically and amusingly, one could point out that the avant-garde is now the new-music Establishment and that CRI’s new policies prove it). And it has tended to limit the focus of each recording, giving individual composers—including younger talents—clearer exposure.

Some of the trends—in American music and in CRI’s success in showing it off—can be gleaned from a selection of the company’s recent releases ranging from the reissue of the old New Music Quartet’s Columbia recording of Wallingford Riegger’s excellent Second Quartet (matched with effective string-and-keyboard pieces by Donald Harris and Lawrence Moss) to a pack of keyboard works by younger composers, the odd “synthesized speech music” of Charles Dodge, and the instrumental-and-tape music of Richard Felciano. Felciano, born in 1930, is a composer respected inside the music community but not too well known outside. The cross-influences of electronics, Eastern music, new European music, and a fluid American instrumental technique produce a kind of “gestural” approach which amalgamates diverse sources effectively in his work.

The Charles Dodge album is more unusual. The “music” consists entirely of computer-synthesized speech sounds built on poems of Mark Strand. The computer does not compose but, on a set of instructions, puts pseudo-human sounds directly down on tape. The result is to speak as Red Dye No. 2 is to food. Remember HAL’s computer rendition of Daisy, Daisy in 2001? This was no Kubrick fantasy but an actual early attempt at computer voice synthesis recorded on disc years ago by RCA. Well, the words may be better and the tunes more original, but in the matter of expressive quality this medium does not seem to have advanced much beyond the pioneering efforts of HAL.

Robert Morris (born in England in 1943 but brought up and educated here) and Curtis O. B. Curtis-Smith (b. 1941) are among the younger composers represented here. Curtis-Smith has come up with something rather original and striking: the use of bows to play on the piano strings. In his Inventions, these bows are used (along with a wine bottle, a guitar pick, and hard rubber mutes) to match up the piano sounds—which sound nothing like a piano usually sounds—with a violin. In one invention, a violin with a flat bridge is used so that all four strings can be sounded at once by the violinist while the pianist gets up from the keyboard to turn the pegs of the violin, thus producing all manner of sliding effects. Sonically ingenious.

The Bridgeforms of Robert Pollack (b. 1946) is, like Robert Morris’ Phrases, serialistic piano music of the dry sort. And, like Morris, Alfred Nieman, whose sonata is paired with the Pollack work, was born in England. There the similarity ends; Nieman has remained in England working in relative obscurity, and his sonata is a big, long, original, introverted work in a neo-expressionistic vein. It is ironic that Nieman’s first appearance on records should be on an American composers’ label.

Miriam Gideon and Hugo Weisgall are two older composers noted for their work with the human voice. Their fluent, autumnal, elegaic settings—beautifully done but rather depressing—are distinguished by outstanding performances by four of the finest vocalists who work in new as well as old music. These recent CRI recordings are almost all characterized by outstanding performing talent and (with the exception of the English tape of the Nieman) by recording that is much better than most new music gets.

Of the two two-composers-to-a-side omnibus records, more interest attaches to the disc of new vocal music written by the four Naumburg winners. The other disc contains instrumental music; Erb’s brass-and-piano work is an amusing bit of sonic wit, but the remaining pieces are the work of three very serious composers of the type that used to be called long-hair. The vocal music attracts not just because of the use of texts, and not just because the singers (particularly Bethany Beardsee in J. K. Randall’s delicate, Weberesque setting of e. e. cummings) are the very best, but because the music itself is closer to home. The instrumental abstraction of the other music is too far away from essentials. The human voice is an essential.

But alas, we find that—with some exceptions, instrumental music holds sway today even to the point of influencing vocal music. There is much of value in the instrumental and the vocal music recorded here, but most of it seems peripheral, far away—not at all espoused, but part of an elite dream of culture, born in another time and place, and now preserved by universities and foundations. The
new CRI is doing everything right, and continuing to do good, but, contrary to the conventional view, doing good is not always doing well.

—Eric Salzman

WALLINGFORD RIEGGER: String Quartet No. 2. New Music Quartet. DONALD HARRIS: Fantasy for Violin and Piano. Paul Zukofsky (violin); Gilbert Kalish (piano). LAWRENCE MOSS: Elegy. Paul Zukofsky, Romuald Teco (violins); Jean Dupouy (viola); Timepiece. Paul Zukofsky (violin); Gilbert Kalish (piano); Raymond Des Roches (percussion). CRI SD 307 $6.95.


MIRIAM GIDEON: Questions on Nature. Jan DeGaetani (mezzo-soprano); Philip West (oboe); Samuel Lipman (piano); Barry Zukofsky (percussion). The Condemned Playground. Phyllis Bryn-Julson (mezzo-soprano); Constantine Cassolos (tenor); Felix Galimir, Jack Shapiro (violins); Michael Tolomeo (viola); Fortunato Arico (cello); Paul Dunkel (flute); Alexander Heller (bassoon); Fritz Jahoda cond. HUGO WEISGALL: End of Summer. Charles Bressler (tenor); New York Chamber Soloists. CRI SD 343 $6.95.

ROBERT ERICKSON: End of the Mime. New Music Choral Ensemble, Kenneth Gaburo cond. JOHN FERRITTO: Oggi. Neva Pilgrim (mezzo-soprano); Allen Blustine (clarinet); Ursula Oppens (piano). J. K. RANDALL: Improvisation. Bethany Beardsee (soprano); Allen Blustine (clarinet); Ronald Anderson (trumpet); Thomas James (piano); Albert Regni (saxophone); Stanley Silverman (guitar); David Gilbert cond. JEAN EICHELBERGER IVEY: Hera, Hung from the Sky. Elaine Bionazi (mezzo-soprano); Notes from the Underground, andrew thomas cond. CRI SD 235 $6.95.


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players and the pyrotechnics of Salvatore Accardo’s fiddling, and you are in for a Baroque thriller. Beware! The discs are recorded at a very high volume level, so start with a soft setting of that dial. And if you are dogged enough to listen to all twelve sonatas at one sitting, be prepared to spend an hour recuperating from the utter exhaustion your system will suffer.

S.L.

WALDTEUFEL: The Skaters’ Waltz; Mon Rêve; Toujours ou Jamais; The Grenadiers; España; Dolores; Pomone. National Philharmonic Orchestra, Douglas Gamley cond. LONDON CS 6899 $6.98.

Performance: Hard on the ankles
Recording: Spectacular

Charles Emile Waldteufel, whose real name was Levy and who was born in Strasbourg in 1837, published his first waltzes at his own expense, and they were so successful that he went on to write hundreds of them. Unlike the waltzes of the Strauss family, which conjure up pictures of couples twirling in sumptuous nineteenth-century ballrooms, the works of Waldteufel tend to suggest images of a Parisian skating rink. Not only The Skater’s Waltz, Les Patineurs (not the Les Patineurs of the Ashton ballet, which is based on pieces by Meyerbeer), but practically everything Waldteufel put down on paper has that round-the-rink quality. Sometimes the flavor is military, as in The Grenadiers, or French-accented Spanish, as in the waltz adaptation of Chabrier’s España, but the inevitable association is with ladies in long cloaks and muffls, the blades of their skates gliding over the ice—sometimes, musically speaking, rather thin ice. The seven waltzes heard here are all attractive compositions, performed with a reliable, if relentless, oompah beat and brilliantly recorded, with deep bass tones and crisp highs. If I owned a skating rink, I would certainly not want to be without it. P.K.

DAME JANET

JANET BAKER

A paragon of triumphant technique

to the liner notes of Ronald Kinloch Anderson, Napier was rescued from insolvency as a result of Haydn’s generosity and the success of this collection. The five Beethoven arrangements come from the collections published by George Thomson of Edinburgh, a folk-song enthusiast who also published Haydn arrangements. Dame Janet can do no wrong. She invests the simple songs with the virtually limitless range of her artistry without compromising their charm and spontaneity. To cite but one example, in the tender “O can ye sew cushions?” she is a paragon of triumphant technique, performing miraculously yet hiding all traces of effort from the listener. Through all kinds of dynamic shadings, sustained pianissimos, and exquisite trills and grace notes, the music flows with the naturalness of breathing. The Haydn arrangements are very simple, requiring little from the instrumentalists. The Beethoven pieces are more elaborately laid out, but they too keep the vocal line pretty much exposed and unencumbered. The Messrs. Menhin and Malcolm perform their self-effacing tasks faultlessly. This is unpretentious music elegantly played and easy to enjoy. My only criticism relates to the excessive surface noise on my review copy. G.J.

COLLECTIONS

JANET BAKER: Scottish Folk Songs Arranged by Haydn and Beethoven. Haydn (arr.): The Brisk Young Lad; O Bonny Lass; The White Cockade; John Anderson; The Ploughman; Duncan Gray; My Boy Tammy; and ten others. Beethoven (arr.): Polly Stewart; The Sweetest Lad Was James; Faithful’ Johnnie; Cease Your Funning; Bonny Laddie. Highland Laddie. Janet Baker (mezzo-soprano); Yehudi Menuhin (violin); George Malcolm (harpsichord, piano); Ross Pope (cello). ANGEL □ S-37172 $6.98.

Performance: Excellent
Recording: Very good

The seventeen Haydn arrangements on this disc come from a collection published by Londoner William Napier in 1792. According to the liner notes of Ronald Kinloch Anderson, Napier was rescued from insolvency as a result of Haydn’s generosity and the success of this collection. The five Beethoven arrangements come from the collections published by George Thomson of Edinburgh, a folk-song enthusiast who also published Haydn arrangements. Dame Janet can do no wrong. She invests the simple songs with the virtually limitless range of her artistry without compromising their charm and spontaneity. To cite but one example, in the tender “O can ye sew cushions?” she is a paragon of triumphant technique, performing miraculously yet hiding all traces of effort from the listener. Through all kinds of dynamic shadings, sustained pianissimos, and exquisite trills and grace notes, the music flows with the naturalness of breathing. The Haydn arrangements are very simple, requiring little from the instrumentalists. The Beethoven pieces are more elaborately laid out, but they too keep the vocal line pretty much exposed and unencumbered. The Messrs. Menhin and Malcolm perform their self-effacing tasks faultlessly. This is unpretentious music elegantly played and easy to enjoy. My only criticism relates to the excessive surface noise on my review copy. G.J.

(Continued on page 106)
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Teresa Kubiak: a fine vocalist with an effective top range

Performance: Aristocratic
Recording: Clear and bright

Although a figured bass may be realized by any instrument capable of playing chords, most Baroque performances make use of harpsichord and cello. It is therefore a pleasant change to hear a lute fill this important role. When coupled with the dulcet sounds of the viola da gamba, the sonorities are indeed darkly evocative. We enter here into that rare world of duo, and it receives a beautiful performance. This recording, then, is very special. It is intimate to an extreme and offers perhaps a unique glimpse of what early musicians cherished their souls with in private. S.L.

ELENA OBRAZSOVA: Operatic Recital (Continued on page 108)

TERESA WOJTAZEK KUBIAK: Opera Arias

Performance: Fine artist not quite at her best
Recording: Average

Elena Obrazsova did indeed have a tempestuous success with the Bolshoi in New York, as Robert Jacobson relates in his informative annotations, but this debut recital is not representative of her most impressive achievements. For one thing, the recordings are not new—this sequence has been in the Russian Melodiya catalog for several years. They attest to many of the mezzo's fine qualities: her creamy and sensuous voice, impressionistic phrasing and considerable dramatic qualities. Her vibrato, however, is too prominent too often, and there are pitch uncertainties. In none of the eight selections does she turn in an inferior performance, but, except for the darkly evocative scene from the unfamiliar Kaschie, the Deathless, nowhere does she attain true distinction, either. The orchestral backgrounds are effective, but the recorded sound is unexciting. G.J.
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RENATA SCOTTO: Songs by Rossini, Bellini, Donizetti, Verdi. Donizetti: Ne ornerà la bruna chioma; Una lagrima; La mère et l’enfant; La corrispondenza amorosa. Bellini: Dolente immagine di fille mia; Per pieta, bell’idol mio; Vaga tuna, the inargenti; Malinconia, ninfa gentile. Verdi: Lo spazzacamino; Brindisi; Stornello. Rossini: Giovanna d’Arco (Cantata); La Danza. Renata Scotto (soprano); Walter Baracchi (piano). RCA AGL1-1341 $4.98.

Performance: Imperfect, but stimulating
Recording: Good

There are several treasures to be discovered here beneath the deceptive familiarity of the surface. Rossini’s lengthy Giovanna d’Arco is a complex dramatic scene composed in 1832, during his “retirement” in Paris. The similarly constructed though shorter Ne ornerà la bruna chioma was written by Donizetti nine years later, also in Paris. The same composer’s equally unfamiliar Una lagrima, a prayer with a Verdiian dramatic sweep, dates from the same time. Even the better-known short pieces on this record (originally released by RCA Italiana some five years ago) are elusive enough to be welcomed on this occasion.

The emotional compass of such a repertoire is considerable, but Renata Scotto deals with the challenge intelligently and with the alert and discriminating response that has characterized her recent work. Vocally she is sometimes uneven: there are some acidulous high notes and minor lapses of intonation. On the other hand, her phrasing is always expert, the inflections are telling, and the emotional input for each song seems unerringly right.

The piano accompaniments are acceptable or better, and the sound is good. Robert Jacobson’s annotations help in placing this unusual repertoire in its historical context.

G.J.
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Introducing the Staff...

When a personal opinion, particularly a publicly expressed one, grates on our nerves, one of the commoner responses is to ask, either under or at the top of our voices, just who that so-and-so thinks he or she is. The question is asked of Stereo Review with respect to our regular contributors and staff many times each month, and in this column we endeavor to supply the answers.

—Ed.

Art Director

Borys Patchowsky

A double-windowed office at Stereo Review, overgrown with a minor jungle, is inhabited by my husband, Borys Patchowsky. No, he is not the resident horticulturist, just someone who can't say no to an orphaned plant. In the daylight filtering through this jungle, Borys designs covers, lays out pages, chooses type faces, and confers with photographers and illustrators. He is the art director, you see, and responsible for the way the magazine looks.

This quiet, reasonable professional who never seems to raise his voice does not at all resemble the man I met one black night several years ago at the end of a pier. While awaiting some friends, I noticed a sailboat heading toward me. I couldn't decide whether to attempt to "make fast" or run for safety. I did not run, and though I would not have believed it then, I eventually married that brazen bellower.

Sailing is only one of Borys' many interests. He skis with the gusto of one who learned before he can remember, and behaves like a misplaced musketeer. Sports, however, have been only a minor distraction. Since he is the son of a Ukrainian poet and the brother of an artist and a musician, he has been more preoccupied with the arts. According to his family, Borys has been painting and drawing since early childhood, but it was not until he went to school that he discovered his aptitude for commercial art (he found that with a little retouching a dormitory food ration ticket could be used again).

Migrating from country to country in Europe during World War II must have suited Borys' gypsy nature, for he managed not only to piece together his primary and secondary education but also to acquire several languages as well. Can you imagine reading The Adventures of Huckleberry Finn in Ukrainian?

After the war he came to the United States, and attending college here was made more interesting by having to learn English. It was difficult, but he made headway by reading "escape fiction." He entered college with the lowest admissible scores because the only questions on the entrance exams he could unscramble were the mathematical ones. Equipped with equal amounts of intellect and stubbornness, he eventually acquired a degree in art from City College of New York, his sixth language, and a Phi Beta Kappa key. His diverse European-American education has given him a double-barreled view of life, and consequently discussions with him on any subject are never dull.

I find his powers of concentration as an artist both beautiful and exasperating. With Mozart for accompaniment and a woodcut or etching to make, Borys requires neither food, drink, nor sleep for a phenomenal length of time. One of the few things that can distract him from his own creative work is collecting that of others. Although the prints, paintings, and drawings seem to be of primary interest to him, it's the books that take up the major part of our living space. He has promised not to bring any more home, but why, where there used to be two, do there now seem to be four? Can books propagate?

In his travels Borys may have missed a few tourist sites, but very few bookstores or print galleries from here to Istanbul have escaped his scrutiny. Like hunters who seldom look at their trophies, he seems more interested in tracking down something than in the ultimate acquisition. In the course of collecting he has developed an enviable skill in restoring damaged prints, and this has brought him gradually back to doing his own work as a printmaker. He insists that I have him wrapped around my finger—something I find impossible to believe. And he seems quite determined not to let me find out whether one it is.

—Joan E. Patchowsky

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"Marantz offers—in one speaker—both air suspension and ported design. It's the ultimate in flexibility—and quality."

February, 1976: Marantz engineers invited audio experts to comment on the new Marantz High Definition Speaker Systems. The following remarks were taken from that taped discussion:

"It's one thing to design an acoustic air suspension system that will have low distortion. And it's another to design a ported system for high efficiency. But here, in one unit, Marantz offers the audiophile the best of both worlds."

"It's incredible. Marantz calls it Vari-Q*. Pull out the high density acoustic foam plug and the system becomes a tuned port reflex. Push it back in and the port is absolutely sealed and the speaker becomes air suspension."

"It doesn't matter what kind of music the listener is into, either. Air suspension with the plug in is great for full orchestra, because it damps better and doesn't peak the lower frequencies. But when you listen to rock, pull the plug and you increase the low end efficiency. It pumps up the lows at about 75 Hz and really delivers that low end oomph."

*Patent Pending. **Manufacturer's suggested list price. Actual selling price at dealer's discretion. (The enclosures for the HD-88, HD-77 and HD-66 are constructed of particle board, finished in genuine walnut veneer. The enclosures for the HD-88 and HD-44 are finished in walnut grain vinyl.)
It takes less power to do the same job. And they’re practically indestructible. And higher efficiency means greater distortion-free accuracy in reproducing high-frequency transients."

We call them High Definition Speaker Systems. You’ll call them the ultimate in flexibility and listening excitement. Five models in all (three with Vari-Q) ranging from the bookshelf-sized HD-44 with frequency response from 45 Hz to 18 kHz (±3 dB – all controls set flat) and power handling capacity of 60 Watts – to the super-powerful HD-88 with frequency response from 25 Hz to 25 kHz (±3 dB – all controls set flat) and power handling capacity of 300 Watts. Marantz High Definition Speaker Systems start as low as $89.95** Experience the professionals’ choice today at your Marantz dealer. He’s in the Yellow Pages.