THE PHONO CARTRIDGE: the bumblebee that couldn't fly

JANIE FRICKE: the real live singer behind those singing commercials

EQUIPMENT TEST REPORTS: ADC Sound Shaper Two Mk 1 Equalizer
Avid Model 230 Speaker System • Signet TK7E Phono Cartridge
Threshold CAS 1 Stereo Power Amplifier • Toshiba PC-5460 Stereo Cassette Deck

BEVERLY SILLS: What do you do after you've done it all?

TO FULLY APPRECIATE PIONEER'S NEW DIRECT-DRIVE TURN'TABLE, YOU HAVE TO TAKE APART THE COMPETITION.
All turntables are pretty much the same on the outside. But if you look carefully inside, you'll see the things that separate Pioneer's new PL-518 from others.

Things that add up to a turntable that can reproduce music perfectly, free of audible distortion, acoustic feedback and rumble.

**A REMARKABLE DRIVE SYSTEM.**

Obviously, all direct-drive turntables have an extremely accurate drive system.

Each offers an immunity to fluctuations in line voltage, pitch control, and a built-in strobe unit to help you regulate the speed of the platter.

But we believe the drive system of the PL-518 is the most accurate found on any turntable selling for under $175. Because the 16-pole, 24-slot brushless DC Servo motor is much the same as those found in turntables selling for $250 or more.

Equally important is the fact that this motor is anchored to a metal bottom plate, instead of suspended from the base, where vibration can affect your music.

In fact, nothing vibrates on the tone arm with the exception of the stylus. So nothing comes through the tone arm but music.

**A SOLID ARGUMENT FOR THE 2-PLY PARTICLE BOARD BASE.**

The base on many turntables is nothing more than a hollow plastic shell. Or worse, sheet metal neatly hidden beneath imitation wood veneer.

Both seem harmless enough, but they tend to vibrate and cause acoustic feedback, when the volume is turned up.

The base on the PL-518, however, is made of two solid blocks of compressed wood, each 20 millimeters thick. When the two are joined it not only gives the base greater density, the glue between the pieces acts to damp vibration. So when you're listening to a record, you won't hear the turntable.

**FEATURES YOU MIGHT OTHERWISE OVERLOOK.**

Besides the big things, the PL-518 has other less obvious advantages.

Our platter mat, for example, is concave to keep your records perfectly centered.

Even something like our spindle is special. It's .8 microns larger than others, so that the record is always perfectly centered.

Unlike the hollow plastic base, our solid 2-ply particle board base is far less susceptible to vibration.

**THINKING ON OUR FEET.**

Instead of skinny screw-on plastic legs, Pioneer uses large shock mounted rubber feet that not only support the weight of the turntable, but absorb vibration and reduce acoustic feedback.

**Somthing you rarely see in a tone arm: Thinking.**

To give you further insight into the virtues of our PL-518 you only have to look at the way some tone arms are mounted. On piano wire. Or cheap plastic casings. Instead, ours is gimballed on steel pivot bearings. So it can't vibrate.

A great deal of thought also went into developing an auto-return mechanism with fewer moving parts. It imposes less load on the motor and is more reliable than the auto-return on most turntables.

Then there are two separate ball bearing assemblies used in the tone arm for greater stability as it passes over the record.

A plastic headshell is good enough for most tone arms. It's nowhere near good enough for the PL-518. Tests show plastic tends to resonate at frequencies between 75 and 300 hertz. By using a glass fiber shell, resonance above 75 hertz is all but eliminated.

In fact, nothing vibrates on the tone arm with the exception of the stylus. So nothing comes through the tone arm but music.

FLIMSY PLASTIC HEADSHELLS CAN DISTORT MUSIC, SO PIONEER'S IS MADE OF GLASS FIBER, WHICH ELIMINATES ALL RESONANCE ABOVE 75 HERTZ.

**WHEN YOU PUT IT ALL TOGETHER, YOU CAN'T BUY A BETTER TURNTABLE FOR UNDER $175.**

CIRCLE NO. 1 ON READER SERVICE CARD
THE PL-518.
INTRODUCING THE EMPIRE EDR.9 PHONO CARTRIDGE.
IT SOUNDS AS GOOD ON A RECORD AS IT DOES ON PAPER.

It was inevitable...

With all the rapid developments being made in today’s high fidelity technology, the tremendous advance in audible performance in Empire’s new EDR.9 phono cartridge was bound to happen. And bound to come from Empire, as we have been designing and manufacturing the finest phono cartridges for over 18 years.

Until now, all phono cartridges were designed in the lab to achieve certain engineering characteristics and requirements. These lab characteristics and requirements took priority over actual listening tests because it was considered more important that the cartridges “measure right” or “test right”—so almost everyone was satisfied.

Empire’s EDR.9 (for Extended Dynamic Response) has broken with this tradition, and is the first phono cartridge that not only meets the highest technological and design specifications—but also our demanding listening tests—on an equal basis. In effect, it bridges the gap between the ideal blueprint and the actual sound.

The EDR.9 utilizes an L. A. C. (Large Area Contact) 0.9 stylus based upon—and named after—E. I. A. Standard RS-238B. This new design, resulting in a smaller radius and larger contact area, has a pressure index of 0.9, an improvement of almost six times the typical elliptical stylus and four times over the newest designs recently introduced by several other cartridge manufacturers. The result is that less pressure is applied to the vulnerable record groove. at the same time extending the bandwidth—including the important overtones and harmonic details.

In addition, Empire’s exclusive, patented 3-Element Double Damped stylus assembly acts as an equalizer. This eliminates the high “Q” mechanical resonances typical of other stylus assemblies, producing a flatter response, and lessening wear and tear on the record groove.

We could go into more technical detail, describing pole rods that are laminated, rather than just one piece, so as to reduce losses in the magnetic structure, resulting in flatter high frequency response with less distortion. Or how the EDR.9 weighs one gram less than previous Empire phono cartridges, making it a perfect match for today’s advanced low mass tonearms.

But more important, as the EDR.9 cartridge represents a new approach to cartridge design, we ask that you consider it in a slightly different way as well. Send for our free technical brochure on the EDR.9, and then visit your audio dealer and listen. Don’t go by specs alone.

That’s because the new Empire EDR.9 is the first phono cartridge that not only meets the highest technological and design specifications—but also our demanding listening tests.

Empire Scientific Corp., Garden City, N.Y. 11530
NEW PRODUCTS
Roundup of the latest audio equipment and accessories

AUDIO NEWS
The New Recorders Technology

AUDIO QUESTIONS AND ANSWERS
Record Cleaning, FCC Regulations, Speaker Impedance

AUDIO BASICS
Working Out the Angles

TAPE TALK
Microphone Selection—1

TECHNICAL TALK
Amplifier Dynamic Headroom

EQUIPMENT TEST REPORTS
Hirsch-Houck Laboratory test results on the Toshiba PC-5460 stereo cassette deck, Avid Model 230 speaker system, Signet TK7E phono cartridge, ADC Sound Shaper Mk 1 equalizer, and Threshold CAS I stereo power amplifier

THE PHONO CARTRIDGE
A piece of technological wizardry we perhaps take too much for granted

THE Music

JANIE FRICKE
A talent simply too good to waste on singing commercials

RECORD OF THE YEAR AWARDS—1978
Stereo Review's critics and editors select the industry's top artistic achievements

BEVERLY SILLS
A superstar who has still not run out of challenges

BEST RECORDINGS OF THE MONTH
Beethoven's Fidelio
A Revelatory Mahler First
Donna Summer's "Live and More"
Thomas' Mignon

POPULAR DISCS AND TAPES
Al Jarreau: "All Fly Home"
Creme & Godley
Video Review: "Earthia"

CLASSICAL DISCS AND TAPES
Sills & Milnes: "Up in Central Park"
Pollini's Beethoven Sonatas
Phantasmagoria Musica—I

THE Regulators

BULLETIN
SPEAKING OF MUSIC
LETTERS TO THE EDITOR
THE POP BEAT
GOING ON RECORD
ADVERTISERS' INDEX

COVER: Caricature of Beverly Sills by Al Hirschfeld
Better Than Any Pusher

No matter how fine the fibers or how soft the "plush"—everything other than the Discwasher system is a pusher.

Pushers only line up dirt and microdust into an even line of contamination. Run your pusher off the record at a tangent—and you spread these particles into a tangent line. And microdust becomes permanently welded into vinyl by a tracking stylus.

Only the Discwasher system has the patented micro-tipped fibers which are directional—slanted—to pick up, hold and thus remove particles from your discs. These same directional fibers also remove fluid and solubilized contaminants by capillary action.

The superior record cleaner—better than any pusher.

discwasher, inc.
1407 N. PROVIDENCE RD.
COLUMBIA, MISSOURI 65201

Now Available with DC-1 Pad Cleaner at no extra charge.
THE COMMERCIAL RELEASE OF THE MAGNAVISION VIDEODISC system, announced by Magnavox in mid-December, may well be the first shot in a long-awaited "battle of titans" between several giant firms and consortiums backing (mostly) incompatible videodisc systems. MCA has assembled a catalog of about two hundred feature programs, most with prices in the $6 to $15 range, for use with the Magnavision player, which sells for about $700. At least three other major electronics companies, including RCA, also have working, production-ready videodisc systems waiting in the wings.

THIS YEAR'S GRAMMY AWARDS SHOW will be telecast from Los Angeles by CBS-TV on February 15. According to the National Academy of Recording Arts and Sciences, the show's theme will be a salute to San Francisco. John Denver is the host.

THE FIRST MICROCASSETTE WITH HI-FI SPECS has been introduced to the Japanese market by Sony. The new matchbox-size microcassette, which uses a metal-particle tape formulation and has a total playing time of three hours, is compatible for playback with a number of miniature recorders already on the market. Since the performance specifications of the new microcassette are comparable to those of a conventional cassette of high quality, this introduction demonstrates for the first time the potential of the micro format for hi-fi use. The new microcassette is expected on the U.S. market later this year.

ELVIS COSTELLO AND HIS PRODUCER NICK LOWE are, as everybody knows, bosom buddies. And everybody knows that Elvis likes to wear funny disguises. But not everybody knows that he has impersonated Lowe on records. The B-side of Lowe's new single is actually performed by Elvis and his band. A remake of the Brinsley Schwarz tune (What's So Funny 'Bout) Peace, Love, and Understanding?, it will be included on Costello's forthcoming Columbia "Armed Forces."

DU PONT'S FIRST ENTRY INTO THE CONSUMER TAPE FIELD will occur shortly with their introduction of blank videocassette tape in the Betamax format. Du Pont is a major manufacturer of industrial videotape, as well as the major producer of the basic powder formulation used in the manufacture of chromium-dioxide audio and video tapes. Trial marketing of the Betamax cassettes will take place the first quarter of this year in New York City. Additional consumer tape products in the form of VHS videocassettes are also expected from Du Pont later in 1979.

OUTSTANDING MUSICAL TELECASTS this month on the Public Broadcasting Service include a February 7 program of Bruckner's Seventh Symphony played by the Chicago Symphony Orchestra conducted by Sir Georg Solti at the Royal Albert Hall in London. A Vienna State Opera performance of Beethoven's Fidelio will be shown on February 21. Leonard Bernstein conducts, and the cast includes Gundula Janowitz, Lucia Popp, René Kollo, Hans Sotin, and Manfred Jungwirth—the same artists featured in the recording of Fidelio reviewed in this issue's "Best of the Month" section. Check local listings for time of the telecast.

February 1979
ALLEGEDLY ANTICOMPETITIVE PRACTICES IN THE AUTOSOUND INDUSTRY will be investigated later this year in hearings to be conducted by the Senate Antitrust and Monopoly Subcommittee, chaired by Sen. Edward Kennedy (D-Mass). The Senate hearings will examine two types of tactics said to be used by auto makers to assure that most consumers buy factory-installed radios and tape systems: coercion of auto dealers by the auto makers to sell only factory-supplied automotive sound systems, and "tied-in" sales of sound equipment that force consumers to accept automobiles with equipment already installed or else suffer long waiting periods and other sanctions.

COLUMBIA RECORDS has received Grand Prix du Disque awards for Andrew Davis' recording of the Durufle Requiem, for Leonard Bernstein's of the Poulenc Gloria, and for Pierre Boulez's first volume of the complete works of Webern. The French Académie Nationale du Disque Lyrique selected Columbia's new Mignon as the best 1978 recording of a French opera and the Durufle Requiem as the best choral release. Renata Scotto received an award from the Académie for her role in Columbia's Madame Butterfly. Can it be coincidence that, with the exception of Scotto's, all of these awards were to recordings of French works or performances by French artists?

TOGETHER AGAIN! Pioneer Electronics has begun its second nationwide fund-raising program to aid the Metropolitan Opera. Donations made to the Metropolitan Opera/Pioneer Fund will be matched by Pioneer and matched again by a special grant from the National Endowment for the Arts, giving triple value to contributions from the public. Collection boxes will be placed in Pioneer's four thousand dealer outlets, and ads in newspapers and magazines will solicit contributions. Pioneer's 1977 campaign raised more than $275,000 for the Metropolitan. The goal this year is $500,000.

IN THE FBI'S RAIDS ON EAST-COAST RECORD PIRATES last December, agents seized an estimated $100 million worth of albums and duplicating, printing, and pressing equipment that had been used in producing counterfeit copies of such popular discs as "Saturday Night Fever" and "Grease." Estimates of the annual volume of sales of counterfeit records in this country range from $200 million to $350 million. The December raids were the result of the Justice Department's biggest investigation into record piracy, and it is thought that they wiped out 50 per cent of the country's illicit recording industry. One of the raided plants in New Jersey was called Super Dupers. Indeed.

CALLING COLONEL PARKER: Robert Gordon, America's leading under-thirty exponent of rockabilly, has realized a long-time dream: signing with RCA. His first set for the House That Elvis Built, tentatively titled "Rockabilly Boogie," has both session-legend Chris Spedding and Henry (Shannon) Gross filling in for the now departed Link Wray. It should be available shortly, and RCA will also reissue Gordon's two earlier Private Stock albums.

February 1979
FISHER INTRODUCES
THE RECEIVERS
THAT LISTEN TO YOU.

Ever since 1937, when Fisher introduced the world to the first high fidelity system, we've been constantly looking for ways to make sound even better.

One of our biggest improvements came in 1959 with the world's first stereo receiver — the famous Fisher 500.

Now, we proudly announce our latest major advance: the all-new RS2000 Studio Standard series — the receivers that listen to you.

Sound the way you like it.

With the RS2000 series, you're not limited to only simple bass and treble controls like other receivers. Instead, you tell the receiver exactly how you want the sound tailored by setting its built-in graphic equalizer's slide controls. By boosting or cutting each of the five equalizer controls, you can transform ho-hum sound into the most exciting you've ever heard. You get sound that exactly matches your taste, your moods, and your environment.

Say you want to really feel the drums on a disco record. Just push up the 50 Hz (low bass) slider, and you get just the effect you want — without disturbing the tonal color of voices and other instruments. Want to really bring a vocalist "up front"? Add a little 1 kHz (midrange) boost. And so on. In a few seconds, you can make such a dramatic improvement in the sound of all your records, tapes, and FM broadcasts that you won't want a receiver without this fabulous built-in feature.

There's logic to our front panel. Most sophisticated receivers keep you guessing when it comes to operating the controls. Not the Fisher RS2000 series. We've engineered a unique "Panel Logic" system with an illuminated, computer-like display that tells you at a glance what the receiver is set up to do.

The RS2010, below, has great performance specs like superb 1.7 µV (9.8 dBf) FM sensitivity, and plenty of power (100 watts min. RMS per channel, into 8 ohms, 20-20,000 Hz, with no more than 0.09% total harmonic distortion). Other models are available from 30 to 150 watts per channel.

Listen to the Fisher RS2000 series receivers. Once you do, you'll never be satisfied with the sound of a receiver without an equalizer.

The RS2010 is about $700* at selected audio dealers or the audio department of your favorite department store.

For a copy of the new Fisher guide to high fidelity, send your name and address and $2 to: Fisher Corporation, Dept. H, 21314 Lassen St., Chatsworth, CA 91311.

Manufacturer's suggested retail value. Actual selling price is determined solely by the individual Fisher dealer.

© 1978 Studio Standard and The first name in high fidelity are registered trademarks.
SUPPORT YOUR LOCAL CIVILIZATION

"STRIKE a blow for civilization!" was the broadcast exhortation, effectively underlined by an encouraging burst of Verdi-chorus background voices, as the Metropolitan Opera went about its ticket-selling and fund-raising campaign last season. The campaign was a success, but one can’t help wondering whether striking a blow is precisely what we ought to be doing in the service of civilization. "Re-elect Civilization!"; "Vote Civilization!"; and even "Support Your Local Civilization" seem, under the circumstances, to strike (there we go again) an appropriately nonviolent note, but then they also sound more like mere bumper-sticker, T-shirt, or lapel-button sloganeering than anything one might consider an imperative summons to serious action.

Nonetheless, there seems to be something about opera itself that engages our immediate, sober attention whenever the subject comes up. Example: New York City Democrats decided last month that it was time to get serious about some $250,000 in 1977 campaign debts still hanging over the head of former mayor Abe Beame, so they threw a $2,500-a-couple shindig for two hundred big spenders at the Met (smoked salmon, roast sirloin, Big Apple sherbet, and Aida as a kind of second dessert), invited President Jimmy Carter, and got the kind of TV coverage politicians dream of. I do not doubt that the affair worked—in economic, social, political, artistic, and publicity terms—because it was opera and therefore serious; there would be no point even in sending out invitations if the same price tag were tied to, say, a Broadway show, a disco, a football game, or a movie premiere. The only surprising thing about it is the fact that it was the first time a sitting President ever visited the Met. About time.

The arts would have a much easier time of it in this American civilization if more politicians—and, indeed, the general public—grasped their importance as clearly as Beverly Sills does in an interview appearing in this issue: "The arts are a vital part of our civilization and should be represented by someone in a cabinet-level position who would have as much voice in government as the Secretary of Commerce or the Secretary of the Air Force."

I would like to harp on that word "civilization" a bit because it is the only effective net my mind has been able to throw around the awful events of last November. We customarily speak of the "veneer" of civilization, but it would perhaps be more accurate to call it a membrane. It is stretched with terrifying thinness over the void, and its maintenance ought to be the unifying business of every rational mind. The rational mind was nowhere in evidence in Guyana, and the resulting rupture of the membrane of social order gave us all a glimpse of chaos from which we are still recoiling. The mind tries to find someone, something to blame—the Left; The Right; poor, long-suffering California—but comes to rest finally at the universal human predicament: we are inherently needy—God help us—periodic, horrifying reminders that the dark is kept at bay only by an alert, ever-questioning scepticism, an independence so skilled in how to think that it neither desires nor can be told what to think.

THIS is not. I hasten to add, to exalt unilaterally the life of the mind; Apollo has no more claim on us than Dionysus—it's just that he can always use a little more help. The goal is to create and sustain a balance between the two, a delicate, difficult, civilized skill that the artists themselves are particularly adept at inculcating. We ought to create and sustain a balance between the kind of TV coverage politicians dream of and the kind of TV coverage politicians dream of.

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ZIFF CORPORATION
37x47
Bose presents
the most exciting bookshelf speaker
since the Model 301.

The new Model 301. With an improved tweeter that took three years to perfect. An innovative Dual Frequency Crossover™ network that delivers smoother midrange response. A tweeter protection circuit that virtually eliminates tweeter burnout. And a subtle exterior modification that makes the Model 301 more elegant than ever.

But even with changes, the Model 301 retains its conventional personality. It is, after all, a Bose Direct/Reflecting® loudspeaker system. Which means it utilizes a carefully produced balance of reflected and direct sound to give you the spatial realism of a live performance. From nearly every occasion in your listening room, you hear accurate stereo balance. Accurate location of each instrument, each note. Clearly, precisely. And with a fullness and richness you may have thought impossible from such a compact enclosure.

As a matter of fact, the Model 301 delivers a level of performance which simply astounds first-time listeners.

It could happen to you. Ask your Bose dealer to demonstrate the Model 301 against any bookshelf speaker, regardless of price. Then ask him to demonstrate the Model 301 against even much larger speakers. In each case, you will hear an open, spacious sound that expands the confines of your listening room. Suddenly, you are in a larger, more open space, listening to music as if you were hearing it for the first time.

No other bookshelf speaker even approaches the spatial realism of the new Model 301. See your Bose dealer for a demonstration and hear what we mean.

The new Model 301.

For complete technical information on the new Model 301 speaker system, write Bose, Dept. T, The MountaIn Framingham, MA 01701

Covered by patent rights issued and pending.
Yamaha goes its separates performance,

We've never done things the conventional way. Witness our legendary B-1 and C-1 separates. These components, utilizing Yamaha-developed Vertical-FET technology, brought into being a new level of natural, accurate sound, advanced features and dramatic styling. Our new C-4 and M-4 separates follow in this tradition, while doing some precedent setting of their own.

**C-4**

We were determined that the performance of the C-4 should put you in touch with the outermost limits of the audio art. So it has the most advanced circuitry imaginable to give you sound so real and true, you'll swear it's live. State-of-the-art DC circuitry in the phono preamp section reduces distortion to a miniscule 0.0035% at 2V output. Signal-to-noise ratio has been tamed to the virtually inaudible level of 97dB at 10mV. Plus we've added an exclusive Current Noise Reduction Circuit to maintain this high S/N ratio regardless of varying impedances caused by using different cartridges. But the sound of the C-4 goes beyond super specs and state-of-the-art circuitry. You have to hear the sound to believe such pure, musical tonality could pass through a piece of electronics.

The C-4's features put you in total command of its superb sound. Unheard-of tone control is yours with the exclusive, continuously variable turnover frequencies for the bass and treble controls. No need to hook up an expensive outboard parametric or graphic equalizer to make meaningful tone adjustments. The C-4 gives you the best of both at the twist of a finger. And with the C-4, you don't have to settle for anything less than the absolute optimum performance from your choice of phono cartridge. Select from five ranges for both capacitance and resistance to perfectly match the amp's load resistance to your cartridges' characteristics. You also have the luxury of indulging in the beautifully transparent highs available from a moving coil cartridge, because we've outfitted the C-4 with its own head amp. It provides the boost necessary for a moving coil cartridge, saving you the expense of buying a separate head amp or transformer. Completely independent Input and Output selectors give you the freedom of listening to a signal from one source while recording a signal from another. Features like these make the C-4 a super-sophisticated device whose possibilities and applications are limited only by your imagination.

With graceful, yet bold styling, executed with ease-of-operation in mind, the C-4 is a marvel of modern technology leaving nothing to be desired but its ownership.
Our passion for pure tonality reaches toward perfection in the M-4. To deliver the cleanest, most musical sound possible, we built it with DC circuitry in a dual mono amp configuration, each with its own signal path from input to output. The input section consists of dual-FET's in a differential configuration with a cascode bootstrapping circuit. So you get the unbeatable advantages of DC circuitry—minimal low frequency phase shift and maximum low frequency accuracy and musicality—while beating the inherent instability of DC circuitry.

The M-4's specs are nothing short of spectacular. THD takes a bow at an incredibly low 0.005% at rated output of 120W per channel into 8 ohms, 20Hz to 20kHz. Signal-to-noise ratio is, (please hold the applause) an utterly silent 116dB.

Again though, specs can't do the sound of the M-4 justice. When it comes to doing justice to amplifying a signal from a preamp (especially the C-4) we feel the M-4 deserves a standing ovation. If you love musically accurate sound coming from your speakers, you will be equally enthralled with the sound of the M-4.

And with its functional features. Visually arresting LEDs monitor your amp's power output, while overload indicators allow you to see when you're pushing it beyond its intended limits. The M-4 is a musical experience you participate in. Drive two sets of speakers independently or simultaneously with the simple push of a computer-grade switch, as well as select the DC or AC operating mode with the back panel switch.

And while you are driving your M-4, its drilled metal-mesh top allows the amp to "breathe." It's just one example of the unique design philosophy of form-follows-function in styling, features and performance.

And that's what our new separates are all about. Unprecedented performance, features and styling. And price? Well, you can benefit from what we learned with our cost-no-object B-1, C-1. Without paying the price. Audition our new, rack-mountable (with optional kit), super separates, the C-4 and M-4, for yourself. It's an ear-opening experience you won't want to miss. For the name of your Yamaha Audio Specialty Dealer, check your Yellow Pages or write us.

From Yamaha, naturally.

YAMAHA
Audio Division, P.O. Box 6600, Buena Park, CA 90622
LETTERS TO THE EDITOR

Pseudo Time Delay

Ralph Hodges replies: Personally, I see no harm in experimenting with salmon roe to learn whether you can acquire a taste for expensive imported caviar.

Leon Redbone

Thanks to Phyl Garland for her fine December review of Leon Redbone’s “Champagne Charlie.” In this time of “New Wave” noise and the generally mindless cacophony of disco, Leon Redbone is a welcome denizen of the world of “soulful blues.” His real name, by the way, is Dickran Gobalian. He was born on August 26, 1949, of Turkish-Armenian stock, and his first public performance was in the summer of 1971 at the Mariposa Folk Festival in Canada.

DAVID SECORD JR.
Port Edwards, Wis.

Public Defender

Is there any truth to the rumor that Steve Simels is going to defend Sid Vicious?

Tom Hutson
St. Louis, Mo.

No, but he is going to go four rounds against Gentle Ben.

Someone to Believe In?

I felt as if I myself had written Paulette Weiss’ December column, “All I Want for Christmas.” She has hit the nail squarely on the proverbial head. I am sure she would have included George Thorogood and the Delaware Destroyers in the same category as the rockers she admires. However, considering all that Harry Chapin has given of himself to end world hunger, it is difficult to see how he could be placed in the “Do Not Believe” column no matter what one may feel about his musical talent.

Robert N. Morris
Coeur d’Alene, Idaho

Popular Music Editor Weiss replies: Chapin’s charitable activities are certainly admirable, but they earn him no points in the musical integrity department. Although his efforts may help feed thousands, his music offers only empty calories. But I agree that Thorogood is thoroughly good.

Hirsch Sense

Hats off to Julian D. Hirsch for his realistic, down-to-earth approach to electronic equipment design (“Technical Talk,” December). His thoughts on the matter really make sense!

R. M. Havourd
Chatham, N.J.

The Reviewers

I’m not going to get into the dispute over what a record review should be or which of the Stereo Review critics is best or worst. Just let me say that the reviews are highly entertaining—at least as much so as the latest “platinum” pop release. I don’t care what anyone says about the reviewers; with all that wit, why change them?

Douglas Penwell
APO San Francisco, Calif.

Crossover?

As a lifetime resident of Nashville, I found Noel Coppage’s “Is Country Going to the Dogs?” (November) very interesting and in most cases right on target. What he says about the influence of TV and of other forms of popular music on country is obviously true.

(Continued on page 14)
The world's fastest power amplifier

Wave Form Comparison of Bipolar Transistor vs. Power MOS FET

Conventional bipolar power transistor

Distorted sine wave form

Hitachi's new Power MOS FET

Maximum speed linearity

Graphic Illustration: Simulated oscilloscope data from Hitachi Toyokawa Laboratory

Hitachi Power MOS FET

Hitachi's HMA-6500 Stereo Power Amplifier with the incredible Power MOS FET offers ultra-high switching speed to dramatically reduce output and frequency distortion. At 50 watts output from 20 Hz to 20 kHz, there's no more than 0.02% total harmonic distortion. And the HMA-6500 has such wide linearity that it refuses to distort even when confronted with the most intense dynamic peaks. Frequency response is ruler flat from DC to 100 kHz, with no crossover distortion.

Add the performance-matched HCA-6500 Stereo Control Amplifier and the FT-8000 Digital Synthesizer Tuner. Both are sleek and stylish performers. The HCA-6500 gives you total control without adding any audible noise or distortion. The FT-8000 is nothing short of an electronic miracle, with digital frequency readout, all-electronic front end, clock function and six station memory.

The HMA-6500, HCA-6500 and FT-8000— the fastest and the finest from Hitachi.

HITACHI
A sound investment

Audio Component Division, Hitachi Sales Corp. of America, 401 West Artesia Boulevard, Compton, CA 90220, (213) 537-8583, Extension 228

CIRCLE NO. 25 ON READER SERVICE CARD
The exodus of Nashville’s country superstars to management firms in New York or Los Angeles is dramatic proof of TV’s influence; that’s why it’s being done, for more TV exposure. But Nashville has one big asset, and that is its roots. As long as there are producers, artists, and fans who respect those roots (and there are, more than a lot of people think), country and Nashville won’t be swallowed up. Oh, sure, the exploiters, the phonies, the big-bucks-at-any-cost types will always be there, but we’ll survive. There are always “sunshine patriots,” but when the chips are down the true of heart stick it out and prevail.

What I dislike is the dishonesty and deception, like when a certain blonde singer goes before an Opryland audience and says, “It’s good to be home,” then flies down to her ranch and rich oilman husband in Louisiana after the show. Friends like this Nashville doesn’t need, and neither does a music that professes to be truthful and straightforward.

JAMES R. MACINTYRE
Nashville, Tenn.

Noel Coppage’s “Is Country Going to the Dogs?” raised some interesting points. I can’t really blame the Nashville “hard country” people for being angry with pop singers getting their start with country music. However, the so-called “crossover” goes both ways. One example would be Buck Owens’ singing Nights Are Forever, a pop tune written by Parker McGee and made popular by England Dan and John Ford Coley. As I write this letter, Owens’ cover of Nights Are Forever is on the country charts. Another example is the pop tune Bluer than Blue by Randy Goodrum. Michael Johnson made it popular, but Beverly Heckle put it on the country charts. Dolly Parton, Linda Ronstadt, and Crystal Gayle all get lots of air play on pop/rock as well as country stations, but Emmylou Harris (one of my favorite singers), although called a pop singer by critics, gets no air play on pop/rock stations but does on country stations. As a pop/rock fan getting into country music, I am thoroughly confused. Is it possible to define the difference between pop and country?

KEVIN R. JONES
Springfield, Ill.

Sure: pop is what pop fans like, and country is what country fans like!

Marriner’s Cottages

As much as I enjoyed Clair W. Van Ausdall’s November article on Neville Marriner, I was surprised by the statement that the Marriners have “two cottages, one in Dorset, the other in Lyme Regis.” A quick reference to an atlas shows that Lyme Regis is (unless it has recently seceded) itself located in Dorset.

P A T R I C K D. W R I G H T
Winnipeg, Manitoba

Mr. Van Ausdall replies: Sorry for the mix-up. Mrs. Marriner explains that the residence in Lyme Regis (which is, of course, in Dorset, formerly Dorsetshire) is actually a house, while their “real cottage” is in Devonshire, the heart of the cider country, where the men still spend Sunday and Monday in jail.

Whatever Happened to?

In the November issue I read with particular interest Paulette Weiss’ “Whatever Happened to ...?” and then Steve Simels’ “Requiem for the Who” (about the tragic death of Keith Moon). The combination prompted me to wonder whatever happened to Ginger Baker. He was certainly one of the top drummers to come out of rock. He went from Graham Bond’s band to Cream, then to Blind Faith, then to Air Force, and then to ... what? I don’t believe that I have seen a record with him on it released for seven or eight years. Does anyone have any notion what became of him?

C H A R L E S S. P O P P L E
Overland Park, Kan.

After I read Paulette Weiss’ “Whatever Happened to ...?” I was checking through my Lp collection and came across three albums by Gayle McCormick, formerly of the group called Smith. I have not seen any new material from her in over two years. Does anyone know what she’s doing now and where she lives?

B R U C E A N D E R S O N
Toronto, Ontario

Hurray for Paulette Weiss! I really enjoyed her “Whatever Happened to ...?” Even though I don’t know (and don’t really care) what happened to Lena Zavaroni, I was... (Continued on page 16)
The turntable evolution comes full swing with the introduction of the new Quartz turntable series. We introduced the first quartz-controlled turntable in 1974, and we've been improving our designs ever since. Including:

**Super Servo Frequency Generator**
To detect minute variations in platter speed, and send corrective information to the electronic circuit controlling turntable rotation, it provides near-perfect speed accuracy. And, our Super Servo is factory-set for years of accurate, dependable use.

**Direct Drive DC Servomotor**
For quick-start/stop and high-torque operation. Our powerful motor drive system and its companion speed-monitoring circuits reduce wow-and-flutter and speed drift nearly to the vanishing point.

**Gimbal Support and TH Tone Arm**
Our exclusive unipivot gimbal support holds the tone arm firmly, yet is practically friction-free. We also developed a new Tracing Hold (TH) tone arm to provide stability and tracing accuracy needed for a cartridge to follow even the most complex record grooves without error. These, plus features like digital readout, electronic switching mechanisms and solidly-constructed bases, are just some of the reasons to consider the precision of JVC's Quartz-Lock series for your music system.

And you can choose from manual, semi-automatic or totally-automatic models—JVC's most comprehensive turntable line ever.

See them at your JVC dealer soon.

glad to hear about Emitt Rhodes. His album "Emitt Rhodes" (Dunhill DS 50089) was one of the best of the early Seventies. I was surprised to read that many people thought he was a "wimp" because he sounded like Paul McCartney. Back then (but not now) McCartney was great, and if Rhodes resembled him in any way it was only because he was performing good material. But what really made Rhodes’ album spectacular was that it was a one-man project, a "Todd Rundgren" so to speak.

D. SCHRIMPF
Jefferson City, Mo.

Saintly Nonsense

I have been making my living as a full-time dealer in deleted classical LP records for nearly six years, and the nonsense about Menotti’s "The Saint of Bleecker Street" going for $600 a copy (repeated in a September review by Paul Kresh and in the November "Letters") is beginning to get my goat. Of course, it is possible that somewhere, sometime, some crooked dealer managed to convince some rich sucker to shell out $600 for that set, just as some people have managed to sell the Brooklyn Bridge. However, I feel that bandying such figures about does nothing but disservice to collectors. Many deleted classical albums command premium prices, otherwise I (and my few colleagues) would not still be in business. But those of us who deal primarily with serious collectors (as opposed to the shops in large cities that prey on tourists) maintain far more moderate price levels than the $600 tag would indicate. I’ve never heard of "The Saint of Bleecker Street" selling for $100 or so, and the last copy I obtained went for $60.

LESLEY GERBER
Paranassus Records
Saugerties, N.Y.

Picture Discs

The November "Bulletin" item about the picture-disc/color-disc fad brought back childhood memories of 78- and 45-rpm discs pressed in yellow and red; I think there were some picture discs then as well. We seem to have come "full circle."

RUTH BLOCK
New York, N.Y.

“Disposable” Music

I’ve just finished reading Peter Reilly’s review of the new Shaun Cassidy and Cheryl Ladd albums in the November issue. I was astounded to find writing of this quality in a record review, and I knew within the first few sentences that it was going to be the best review I had ever read. Lately it seems I meet more and more listeners who are conscious of production techniques, instrumentation, the "sound" of an album and how "well done" it is, but who apparently care nothing for the content, the credibility, or the depth of the concept behind the work. Disposable music is being presented as something to be taken seriously, and I fear its eventual acceptance as representative of this country’s popular art. It is nice to know that when all this gets me down, I have Mr. Reilly’s article to reread.

JOHN BOLLES
Ambler, Pa.

Buddy Holly

After reading Steve Simels’ review of "The Buddy Holly Story" (September), seeing the movie, and listening to Holly and the Crickets’ "Twenty Golden Greats" until my turntable protests exhaustion, I am wondering whether my enthusiasm should be chalked up to nostalgia for my early teens or something more substantial. Holly has a distinctive voice and a clean, uncomplicated sound (I’ll bet his studio sessions were short). His songs were almost exclusively bent toward the true-love message, but I’m sure they will be taken seriously, even though they’re twenty years old, by people too young to remember them.

RON CAMPBELL
Teslin, Yukon

Wrong Hog

December’s "Pop Rotogravure" shows Meat Loaf posing on what the caption identifies as “a Harley-Davidson hog.” Hogwash! It’s a Triumph Trident.

GLENN WOODS
Palisades Park, N.J.

The Watts Parastat

In 15 seconds your records are clean, dry, and ready to play.

With some systems you pour liquid on your records (and rub it into the grooves), while with others you brush the dirt around (and rub it into the grooves). The Watts Parastat is neither of these.

By placing a plush velvet pad on either side of a soft nylon brush and adding a drop or two of Parastatik® fluid, a remarkably efficient system is created.

The brush bristles lift the rubbish to the surface. The pads collect and remove it. And the Parastatik® fluid supplies just the right degree of humidity to relax dust collecting static without leaving any kind of film or deposit behind.

No other system does so much for your records in so little time.

So when you want the best, ask for the original. The Parastat, by Cecil Watts.

Watts products are distributed exclusively in the U.S. by: Empire Scientific Corp., Garden City, NY 11530
You can now own every record or tape that you may ever want...at tremendous savings and with no continuing purchase obligations. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

Look at these benefits:

**TREMENDOUS SAVINGS** on every record and tape in print—no "agree-to-purchase" obligations of any kind.

**DISCOUNTS OF 43% TO 73%** off mfg. suggested list...special catalog features hundreds of titles and artists.

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**SCHWANN CATALOG** lists thousands of titles; classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country.

**DISCOUNT DIVIDEND CERTIFICATES.** Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

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**100% IRON-CLAD GUARANTEES** on all products and services. Everything is guaranteed factory fresh and free of defects or damages of any sort. Your total satisfaction is unconditionally guaranteed.

Discount Music Club is a no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want...when you want...or not at all if you choose. These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon for immediate information.
Audio-Technica's ATH-1 "Gram Cracker" is a lightweight (4 3/4 ounces without cord) open-backed headphone of the "supra-aural" (non-sealing earcup) type. It employs an unusual drive element that has a flat aluminum voice coil bonded to a plastic-film diaphragm that is in turn suspended between two perforated-disc magnets. Frequency response is 30 to 20,000 Hz, harmonic distortion at normal listening levels is below 0.8 per cent, and sensitivity at 1,000 Hz is 93 dB for a 1-milliwatt input. Nominal impedance is 4 to 16 ohms, and cord length is 8 1/4 feet. Price: $29.95.

The Technics RS-M85 is a front-loading low-silhouette cassette deck with a two-motor, logic-controlled transport mechanism. Cassettes are inserted and played spine upward. A direct-drive motor with speed governed by a quartz-crystal oscillator and a phase-locked loop drives the capstan, and a second motor turns the cassette hubs. The transport has a weighted wow-and-flutter specification of 0.035 per cent or less; fast-winding speed is approximately 80 seconds for a C-60 cassette. A Sendust-alloy head is used for record and playback functions. Frequency response of the deck is 30 to 16,000 Hz ± 3 dB with ferrichrome or chromium-dioxide tape and 30 to 14,000 Hz ± 3 dB with conventional ferric tape. Signal-to-noise ratio with CrO₂ tape and the Dolby circuits operating is 69 dB. The RS-M85 uses a fluorescent bar-graph level-metering system comprised of two rows of small squares that are illuminated to indicate relative levels. Two types of meter response, VU and faster-responding peak-reading, are selectable with a front-panel switch, as are two degrees of display brightness. Additional front-panel controls include a three-position tape selector, a fine-tuning bias-adjustment knob, and a memory-rewind function switch. A diagram on the top panel explains the signal path and details the frequency response. Dimensions are 19 x 3 7/8 x 15 5/8 inches. Price: $700. A remote-control unit, the RP-9690-P, is available as an option for $100.

The Kenwood KD-750 turntable utilizes a direct-drive, quartz-controlled motor with a very high starting torque. This motor, in combination with an unusually large, heavy platter (13-inch diameter, 5.7 pounds), yields a wow-and-flutter specification of 0.02 per cent (weighted rms) and a rumble figure of –74 dB (DIN weighted). The rubber platter mat has a thick cross section designed to reduce resonance and vibration of the record itself. The tone arm incorporates a "stand-off" decoupling system that isolates the arm from the rest of the turntable. Effective mass of the arm is kept at a minimum through the use of a magnesium-alloy head shell, and friction is said to be extremely low by virtue of a dual-bearing system for both horizontal and vertical pivots. Additional features include an illuminated strobe for speed monitoring, light-touch controls, and a composite resin-concrete and particle-board base designed to eliminate vibration and acoustic feedback. Dimensions with cover are 18 1/2 x 6 x 14 inches, and weight is 18.9 pounds. Price: $495.

The Panasonic BH-651E record cleaner uses a rotary brush to collect dust from a record surface, depositing the particles in an attached dustbox. The bristles of the brush are made of vinyl, and they are said to be fine enough (0.05 millimeter in diameter) to reach into individual grooves and soft enough to prevent damage to the record surface. The brush turns at 3,000 rpm and is powered by two AA-size batteries (not included). Price: $16.95.

The "Warp Out" is a spring-loaded cast-metal ring designed for friction-fit over the edges of most 12-inch turntable platters so as to flatten warped records temporarily for playing. The device requires a horizontal clearance of 1/4 inch beyond the record edge and a vertical clearance of 3/8 inch below the record's surface. The manufacturer also notes that a few turntables having the tone arm and platter assembly softly suspended from the unit's top plate are incapable of supporting an additional 400-gram weight and may therefore be subject to clearance problems. Price: $15. Available from Equilibrium Systems, P.O. Box 301SR, Newtonville, Mass. 02160.

Circle 120 on reader service card

Circle 121 on reader service card

Circle 122 on reader service card

Circle 123 on reader service card

Circle 124 on reader service card
While the others were catching up, TDK was moving ahead.

Shortly after it was introduced in 1975, TDK SA, the world's first non-chrome high bias cassette, was accepted by most quality deck manufacturers as their high bias reference standard. This advanced, new cassette enabled their decks to perform to the limit of their capabilities. And because the decks are set in the factory to sound their best with SA, music-loving consumers made SA the number one selling high bias cassette.

The other tape makers set out in pursuit of SA, hoping someday to equal the performance of its Super Avilyn particle formulation and the reliability of its super precision mechanism.

But making the world's most advanced cassette was nothing new for TDK's engineers. They pioneered the high fidelity cassette back in 1968 and for more than a decade they've led the way in cassette tape technology. Over the last three years, they've refined SA and made it clearly superior to the '75 version.*

That makes the music lovers happy; it means more music with less distortion. It makes the deck makers happy; they've been improving their decks and SA makes them sound better than ever. But for the competition, unfortunately, it means a whole new standard to catch up to.

So if you'd like to raise your own recording standards, step up to TDK SA, the high bias reference tape backed by high fidelity's original full lifetime warranty.** TDK Electronics Corporation, Garden City, New York 11530

*Today's SA has a maximum output level (MOL) more than 3dB better than that of '75 SA at the critical high frequencies, and improved sensitivity across the entire frequency range. **In the unlikely event that any TDK audio cassette ever fails to perform due to a defect in materials or workmanship, return it to your local dealer or to TDK for a free replacement. ©1975 TDK Electronics Corp.
The new Toyota SR-5 Long Bed. If you find yourself calling it your new car, don't be surprised. This new Toyota truck has an all-new interior that's so comfortable you'll swear you're in a car. New softer-riding torsion bar front suspension too. The new Toyota SR-5. It's the truck that doesn't ride like a truck.

**Car comfort.** More comfort, thanks to an interior that's more padded and upholstered than before. More sound-deadening insulation too. SR-5 Sport Trucks also include wall-to-wall carpeting, bucket seats, even an AM/FM radio as standard equipment.

**Car fun.** This new Toyota truck may be the most fun car you've ever owned. It's powered by a gutsy 2.2 liter overhead cam engine. Shifted by a sporty 5-speed overdrive transmission. Rides on steel belted radial tires. And has great new styling.

**Truck tough.** One thing that hasn't changed is the toughness. This new Toyota truck—one of six—is as reliable as ever. With fully transistorized ignition for surer starting. Power assisted front disc brakes for surer stopping. Extensive anti-corrosion protection. And a cargo bed seven feet long.

The new Toyota SR-5 Long Bed. It's more than your next truck.
**New Products**

**latest audio equipment and accessories**

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**Lafayette's Most Powerful Receiver**

- At 120 watts per channel into 8 ohms (20 to 20,000 Hz) with a maximum of 0.09 per cent total harmonic distortion, the Lafayette LR-120DB is that company's most powerful stereo receiver. Its amplifier section has a signal-to-noise ratio of 90 dB. The FM usable sensitivity is rated at 1.8 microvolts; 50-DB quieting sensitivity is 2.8 microvolts. The tuner's ultimate signal-to-noise ratio is 74 dB (mono) and 70 dB (stereo); built-in Dolby circuits improve the figures to 84 and 80 dB, respectively. It has a 1.3-dB capture ratio, 55-DB intermodulation distortion through the use of many esoteric components. According to Harman Kardon, the 340 and the other receivers in their new series eliminate transient intermodulation distortion through the use of power-amplifier sections having a very wide bandwidth. The 340 is rated at 20 watts per channel with total harmonic distortion of less than 0.1 per cent. Intermodulation distortion is rated at 0.09 per cent. The phono section can accept signals of up to 80 millivolts at 1,000 Hz before overload and has a signal-to-noise ratio of 85 dB. The FM usable sensitivity is 2.3 microvolts, 50-DB quieting in stereo is achieved with a signal strength of 39.5 microvolts, and ultimate signal-to-noise ratio of the tuner section is 65 dB. The 340 has FM distortion in stereo of 0.3 per cent or less, a capture ratio of 2 dB, and alternate-channel selectivity of 60 dB. The i.f. rejection is 90 dB, and AM suppression is 50 dB. Dimensions are 21 x 7 x 17 inches, and the unit weighs just under 42 pounds. Price: about $650.

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**New Tone Arm from Fidelity Research**

- The Fidelity Research FR-12 tone arm has been designed primarily for use with low-compliance moving-coil cartridges such as those that make up the company's FR-1 series. Its solid machined-aluminum head shell (effective shell mass is approximately 30 grams) attaches to the arm by means of a standard four-pin universal "bayonet" connector, and it may therefore be replaced by any standard low-mass head shell when a high-compliance cartridge is used.

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McIntosh C 32

"More Than a Preamplifier"

McIntosh has received peerless acclaim from prominent product testing laboratories and outstanding international recognition! You can learn why the "more than a preamplifier" C 32 has been selected for these unique honors.

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CIRCLE NO. 34 ON READER SERVICE CARD

New Products
latest audio equipment and accessories

Videocassette Storage Modules Can Interlock

Royal Sound has expanded its line of Add 'n Stac plastic tape-storage units to include modules for videocassettes in both the Betamax (shown) and VHS formats. The modules each accept six cassettes, and they can be interlocked via dovetail side and top moldings to form either vertical or horizontal groupings. The units are available in black, brown, white, orange, blue, red, and translucent smoke. Dimensions are approximately 7 x 7½ x 4 inches for the Betamax type and 8¾ x 7½ x 4¾ for the VHS type. Price: $7 each.

CIRCLE 128 ON READER SERVICE CARD

Improved Cassette Deck from Tandberg

Tandberg has introduced a three-motor, three-head cassette deck, the TCD-340A, utilizing the company's proprietary "Actilinear" recording system. The Actilinear system employs filters and additional active stages in the record section so as to increase the headroom of the recording amplifiers and minimize interference between the bias signal and the audio-signal circuits. Tandberg states that the 20 dB of additional headroom permitted by the Actilinear system will enable the deck to be adjusted for use with the higher-coercivity tape formulations, such as the pure-metal-particle tapes, now being developed by tape manufacturers. A modification kit for the 340A will be supplied to dealers later this year. At about the same time, Tandberg will introduce production models of the TCD-340AM, which is designed from the start to play and record metal-particle tapes.

The transport mechanism of the TCD-340A has dual capstans and fully logic-controlled functions with solenoid switching. It incorporates a synchronous motor for record and playback functions and two servo-controlled d.c. motors for fast-forward and rewind operations. Weighted wow and flutter are 0.12 per cent or less. Frequency response is 30 to 18,000 Hz ±3 dB. Signal-to-noise ratio with high-output ferric tapes and Dolby circuits on is 65 dB. The TCD-340A's monitor head and two sets of Dolby circuits permit off-the-tape monitoring in fully Dolby-decoded form; a front-panel switch also permits recording of Dolbyized FM broadcasts. Other front-panel features include equalized peak-reading meters, a memory-rewind switch, and a two-position tape-type selector to alter bias and equalization appropriately. Approximate dimensions of the TCD-340A (which will be the same in the 340AM version) are 16 x 41/8 x 9½ inches. Price: $1,140. (The TCD-340AM will cost $1,300.) An optional remote-control unit, the RC-9, is available for $99.50.

CIRCLE 129 ON READER SERVICE CARD

Record Cleaner Made From Goat Hair

A Danish experimenter has announced that a record brush made from the hair of angora goats will clean records thoroughly without scratching or generating static. According to Elpa Marketing, importer of the device, trials with bristles of hair from weasels, squirrels, goats, and other animals have indicated that goat hair is the ideal material for removing dust from record grooves. The brushes have now been introduced under the trade name "Clean-OL." Price: $5.49.

CIRCLE 130 ON READER SERVICE CARD

(Continued on page 24)
The secret to buying a loudspeaker is to keep your ears open and your eyes closed.

You're at any hi-fi dealer in Anycity USA. And you're staring at the lineup: Boxes. Big, little. Tall, short. Brown, black.

The salesman's telling you one thing. The fact sheets are telling you another. Your mind is going blank and your pocketbook is crying out for help.

Congratulations. You're buying a loudspeaker.

You can't play a spec sheet. Stop. Put down your engineering reports. Set aside your biases. (That big-name, big-price loudspeaker may very well be just the thing you're not looking for.)

Now find a quiet demonstration room with an "A/B board"; a selector panel that consists of a series of buttons that activate a series of loudspeakers.

Here you can compare the sound of one speaker to the sound of another. It's sound that really counts. And it's a matter of opinion: yours.

A/B and see. Ultralinear has a sound that's different than most. It's not shy. It's clear, clean and very strong. If there was ever a loudspeaker built for the vibrant, exciting flavor of today's music, it's got to be Ultralinear.

And we're happy to say that people seem to agree. We've found that when people close their eyes, open their ears, and really listen, they generally like The Ultralinear Sound best.

And when they open their eyes and discover a price that's often half the competition's, we're even happier.

Because we've made a sale.

Get The Ultralinear Sound.

© Ultralinear Loudspeakers, 3228 East 50th Street, Los Angeles, California 90058
CIRCLE NO. 64 ON READER SERVICE CARD
**New Products**

latest audio equipment and accessories

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**BASF Cassettes in “Studio Series” Are Improved**

- BASF has introduced an improved version of their “Studio Series” ferric-oxide cassettes. According to the manufacturer, the new Studio cassettes exhibit improved coercivity and bias characteristics due to a newly developed oxide formulation that also provides 1 to 2 dB greater output at higher frequencies. The cassette uses the “normal” bias and 120-microsecond equalization positions on conventional cassette decks. Packaging is in a standard Philips-style hinged box.

Prices: $2.99 for the C-60, $4.49 for the C-90.

Circle 131 on reader service card

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**RTR’s Subwoofer And Satellite**

- The RTR Model DAC/1 Rhombus subwoofer and Model PS/1 Pyramid satellite speaker have been designed to be used together as a three- or four-component full-range loudspeaker system, although either model may also be used with loudspeakers of other types. The manufacturer notes that a wide variety of connection configurations are practicable with the DAC/1-PS/1 combination; these range from the use of the speakers’ internal passive-crossover network and a single subwoofer enclosure to a dual-subwoofer and active-crossover arrangement. The DAC/1 employs one 12-inch woofer and two 15-inch passive radiators in a floor-standing walnut veneer enclosure. The built-in crossover network rolls off the speaker’s response above 120 Hz at the rate of 6 dB per octave. Frequency response of the system (without crossover) is 16 to 150 Hz ±2 dB, nominal impedance is 6 ohms, and recommended amplifier power is 40 watts minimum, 125 watts maximum. Approximate dimensions are 291/2 x 28 x 211/4 inches. Price: $550.

The PS/1 satellite is a three-way acoustic-suspension system in a truncated pyramid shape. It employs an 8-inch bass/mid-range driver with a 1/2-inch high-temperature voice coil, a 1/2-inch soft-dome mid-range with a carbon-fiber diaphragm, and a 1-inch soft-dome fabric tweeter. Crossover frequencies are 1,500 and 9,000 Hz; the crossover has a continuously variable (tweter-level control), a circuit breaker to limit input power, and a switchable circuit to roll off the system’s response below 120 Hz at 6 dB per octave when it is used with the DAC/1 subwoofer. Frequency response of the PS/1 is 40 to 20,000 Hz ±2 dB, sensitivity is 90 dB for a 1-watt input, and nominal impedance is 6 ohms. The enclosure is finished in walnut veneer and measures 12 1/2 x 5 x 21 1/4 inches. Price: $295.

Circle 132 on reader service card

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**Series 20 Tuner Has Touch-sensitive Automatic Tuning**

- Series 20, a Japanese brand of “esoteric” audio components, is introducing its F-26 FM stereo tuner, a low-silhouette unit featuring a touch-sensitive quartz-locked automatic tuning system. The system is actuated when the listener’s hand is withdrawn from the tuning knob, automatically fine-adjusting and then locking the station frequency precisely at channel center. Tuning meters are not used; rather, three front-panel LED’s indicate correct tuning (center LED) or the direction of a tuning error (right LED for high, left for low). The F-26 also incorporates a circuit that automatically selects either a wide or narrow i.f. bandwidth, depending on the amount of noise and interference present in the signal, as well as a 19-kHz pilot-tone suppression circuit using cancellation techniques rather than a low-pass filter to avoid high-frequency losses.

(Continued on page 26)
Phono Cartridges
A Buyer's Guide from Micro-Acoustics

The phonograph record is a mechanical replica of musical performance. The job of the phono cartridge is to convert complex undulations of the record groove into an electrical signal. Here's how the different kinds of phono cartridges compare in function, performance and manufacture. This chart has been prepared to help you make the appropriate choice for your budget and music system. The information encompasses the range of performance characteristics for each type of cartridge. Data is compiled from manufacturers' literature and the results obtained at Micro-Acoustics cartridge clinics held throughout the U.S.A.

<table>
<thead>
<tr>
<th>Performance Categories</th>
<th>Crystal, Ceramic</th>
<th>Moving Magnet</th>
<th>Moving Iron (Similar to Induced Magnet Type)</th>
<th>Moving Coil</th>
<th>Electret (Micro-Acoustics Direct-Coupled)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Principle</strong></td>
<td>Stylus bar moved by record groove under heavy tracking pressure (3-8 grams). Bar's motion bends crystal element causing output signal.</td>
<td>Stylus bar moved by record groove. Magnet armature vibrates between pole pieces, causing change in flux, and inducing signal in output coil.</td>
<td>Stylus bar moved by record groove. Iron armature vibrates between pole pieces, changing reluctance of magnetic path, and inducing signal in output coil.</td>
<td>Stylus bar moved by record groove. As coil vibrates through magnetic field, signal is induced in coil and fed to step-up transformer or pre-amp.</td>
<td>Stylus bar moved by record groove. Stylus bar vibrates electrets through resolver and pivots, producing signal which is fed to microcircuit.</td>
</tr>
<tr>
<td><strong>Tracking Ability</strong></td>
<td>Poor to Fair</td>
<td>Good to Excellent</td>
<td>Good to Excellent</td>
<td>Good to Very Good</td>
<td>Very Good to Excellent</td>
</tr>
<tr>
<td><strong>Transient Ability</strong></td>
<td>60 to 100</td>
<td>30 to 60</td>
<td>25 to 50</td>
<td>20 to 30</td>
<td>17 to 20</td>
</tr>
<tr>
<td><strong>Freq. Resp. Variation Due to Loading with Pre-Amp, Cables</strong></td>
<td>± 4dB below 1000Hz (plug directly into amp input)</td>
<td>-10dB to +6 above 3kHz</td>
<td>-12dB to +4 above 3kHz</td>
<td>± ½dB over entire range</td>
<td>± ½dB over entire range</td>
</tr>
<tr>
<td><strong>Ability to Perform In Variety of Tonearms</strong></td>
<td>Works in low-cost units only</td>
<td>Good to Very Good</td>
<td>Fair to Very Good</td>
<td>Fair to Very Good</td>
<td>Very Good to Excellent</td>
</tr>
<tr>
<td><strong>Ability to Track Warped Records</strong></td>
<td>Poor to Good</td>
<td>Fair to Good</td>
<td>Fair to Good</td>
<td>Fair to Good</td>
<td>Very Good to Excellent</td>
</tr>
<tr>
<td><strong>Cartridge Body Weight</strong></td>
<td>5 to 10 grams</td>
<td>6 to 8 grams</td>
<td>5.5 to 7 grams</td>
<td>7 to 11 grams</td>
<td>4 to 5.25 grams</td>
</tr>
<tr>
<td><strong>User Replaceable Stylus</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Usually Not</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Method of Manufacture</strong></td>
<td>Mass Production</td>
<td>Mass Production</td>
<td>Mass Production</td>
<td>Precision Handmade</td>
<td>Precision Handmade</td>
</tr>
<tr>
<td><strong>Cost Range</strong></td>
<td>Least Expensive to Moderate</td>
<td>Inexpensive to Moderate</td>
<td>Inexpensive to Moderate</td>
<td>Expensive to Very Expensive</td>
<td>Moderate to Expensive</td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>90 days (limited)</td>
<td>90 days to 1 year (limited)</td>
<td>90 days to 1 year (limited)</td>
<td>90 days to 1 year (limited)</td>
<td>2 years (full)</td>
</tr>
</tbody>
</table>

*All cartridges show single channel only.*

© 1977 Micro-Acoustics, Corp.
New Products
latest audio equipment and accessories

Usable sensitivity of the F-26 is 10.8 dB (1.9 microvolts); 50-dB quacking sensitivity is 35.7 dB (33.5 microvolts) in stereo. Ultimate signal-to-noise ratio in stereo is 84 dB. Capture ratio in the narrow i.f. bandwidth mode is 2 dB, alternate-channel selectivity is 80 dB or greater, and AM suppression is 65 dB. Distortion (at 1,000 Hz) in the wide i.f. bandwidth mode is 0.05 per cent or less, and with the narrow i.f. bandwidth it is 0.3 per cent or less. The tuning dial of the F-26 spans almost the full width of the front panel, which along with the tuning, i.f.-bandwidth, and stereo-broadcast indicator lights has only three controls: a power switch, the tuning knob, and an interstation-noise muting switch. A rear-panel knob permits adjustment of the muting threshold. Dimensions are approximately 16½ x 3½ x 14 inches. Price: $1,000.

Circle 134 on reader service card

Cue-and-review Is Feature of New Aiwa Cassette Deck

The Aiwa AD-6900U is a two-motor, three-head cassette deck utilizing touch-solenoid controls for its tape-transport functions. The servo-controlled capstan motor is speed-governed by a built-in oscillator; weighted rms wow and flutter are 0.04 per cent. The fast-wind motor is a d.c. servo design that winds a C-60 cassette in 65 seconds. Solenoid-operated controls include a cue-and-review button that permits the listener to hear the tape while it is in the fast-forward or re-wind modes so as to locate a particular musical or speech passage.

Record-playback frequency response of the AD-6900U is 25 to 18,000 Hz with ferric oxide tape, 25 to 17,000 Hz with chromium dioxide tape, and 25 to 14,000 Hz with conventional ferric tape. The signal-to-noise ratio with the Dolby circuits and ferrichrome tape is 68 dB. Both the record and playback heads are of the ferrite-faced type to provide extended head life. Front-panel controls include memory-rewind and timer functions, a bias-adjustment system that utilizes the level meters to fine-tune bias, and a three-position switch designed to vary the ballistics of the recording-level meters from standard VU to peak-reading characteristics. Three bias and equalization tape-selection controls are also on the front panel. A block diagram on the deck’s top surface explains the control functions. Dimensions are 14½ x 4½ x 12⅞ inches. Price: $800. An optional rack-mount adapter is available.

Circle 135 on reader service card

Notarized Document Certifies Sherwood Receiver Performance

To underline the specifications guarantee of their new Certified Performance series of components, Sherwood ships each of its S-7650 CP receivers with an individual specification sheet certified and sealed by a public notary.

Power output of the S-7650 CP is 45 watts per channel, and total harmonic and intermodulation distortion are both 0.2 per cent or less. Sherwood notes that all of the components in the Certified Performance series actually have considerably lower distortion figures. However, their studies indicate that 0.2 per cent is the limit of audibility of both harmonic and intermodulation distortion, and all Sherwood electronic components are therefore specified at this figure. Phono-section signal-to-noise ratio is rated at 80 dB (IHFA) and phono-overload level at 160 millivolts or greater. The phono section incorporates a filter to prevent subsonic overload and is said to have minimal interaction with phono cartridges.

The tuner section of the S-7650 CP, which utilizes a phase-locked-loop multiplex section, has a usable sensitivity of 1.7 microvolts, alternate-channel selectivity of 70 dB (IHF), and a total harmonic distortion rating of 0.25 per cent or less (stereo). Dimen-

Circle 136 on reader service card

Circle 137 on reader service card

Circle 138 on reader service card

CIRCLE NO. 47 ON READER SERVICE CARD
the Shure M95HE

an affordable, audible improvement

One of the critically acclaimed advances introduced in Shure’s incomparable V15 Type IV pickup is its revolutionary and unique distortion-reducing Hyperelliptical stylus. Now, you can enjoy this standard of sound purity in a new, ultra-flat frequency response, light tracking, high trackability cartridge that will not tax your budget: the new Shure Model M95HE.

the Hyperelliptical stylus tip

The Hyperelliptical nude diamond tip configuration represents a significant advance in tip design for stereo sound reproduction. As the figures show, its “footprint” (represented by black oval) is longer and narrower than the traditional Biradial (Elliptical) tip-groove contact area. Because the Hyperelliptical footprint geometry is narrower than both the Biradial and long-contact shapes such as the Hyperbolic, it is pre-eminent for reproduction of the stereo-cut groove.

upgrade your present M95
If you already have a Shure M95 Series Cartridge, you can improve its freedom from distortion right up to the standards of the new M95HE cartridge simply by equipping it with a Model N95HE stylus. The cost is extraordinarily low — yet the difference in sound will be immediately apparent. Takes only seconds to install — requires no tools whatsoever.

M95HE cartridge & N95HE stylus

Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204
In Canada: A. C. Simmonds & Sons Limited
Manufacturers of high fidelity components, microphones, sound systems and related circuitry.
ASK ANY AUDIOPHILE ABOUT PHILIPS' REVOLUTIONARY PROJECT 7 SERIES.

HE KNOWS.

<table>
<thead>
<tr>
<th>Model</th>
<th>Wow &amp; Flutter</th>
<th>Rumble</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF 877</td>
<td>0.03% (WRMS)</td>
<td>-70dB (DIN B)</td>
<td>Under $240**</td>
</tr>
<tr>
<td>AF 867</td>
<td>0.05% (WRMS)</td>
<td>-65dB (DIN B)</td>
<td>Under $200**</td>
</tr>
<tr>
<td>AF 777</td>
<td>0.05% (WRMS)</td>
<td>-65dB (DIN B)</td>
<td>Under $160**</td>
</tr>
</tbody>
</table>

**Suggested retail prices optional with dealers.
The World's First No-Compromise Turntables.

These are the turntables audiophiles have been waiting for. The world's first turntables to combine the specs and performance of direct drive with the proven advantages and value of belt drive. That's right — the Philips Project 7 Series turntables have wow & flutter and rumble specs as good as the most expensive direct drive systems. And the acoustic and mechanical isolation of a belt drive. Philips even designed two new tonearms to be perfectly compatible with the new drive system.

The Project 7 Series opens up a new era in turntable performance — the no-compromise era. Because Project 7 turntables compromise on nothing. And because of the incredible Project 7 prices, you won't have to compromise, either.

Did Philips Compromise on Performance? No!
The heart of the Project 7 revolution is a 160 pole tacho generator that electronically monitors and controls the speed of the platter at the driving disc. Actually putting the driving disc right into the electronic feedback loop. This unique electronic Direct Control system means that variations in line voltage and frequency, variations in pressure on the platter, variations in temperature, even belt slippage — all have virtually no effect on platter speed. All Project 7 turntables maintain constant, accurate speeds — automatically and electronically.

Did Philips Compromise on Specs? No!
The wow and flutter on the Philips AF 877, for example, is a remarkable 0.05% (DIN) and 0.03% (WRMS). With a rumble figure of better than -70dB. No compromise there.

Did Philips Compromise on Construction? No!
The aluminum platter and the specially designed straight, low-mass, tubular tonearm are mounted on a separate, shock-proof, free-floating sub-chassis — which is suspended from the main chassis by three nickel chromium leaf springs with butyl-rubber dampers. And that mouthful translates into superb acoustic and mechanical isolation, excellent tracking characteristics, and exceptional stylus and record protection.

Did Philips Compromise on Controls? No!
Project 7 Series turntables are all-electronic, all the way. On the Philips AF 877, for example, four reliable electronic touch controls provide quiet, convenient, vibration-free operation. There are separate touch controls for starting, stopping, reject and speed selection — all with LED indicators. One touch is all it takes. And when the record is completed, you don't have to touch anything at all. Because electronic (not mechanical) controls lift the tonearm and return it to its rest.

Nine LED indicators also monitor platter speed — and help you vary pitch — with pinpoint electronic accuracy. No more cumbersome checking of the strobe rings on the platter. And a convenient, built-in, accurate direct read-out stylus gauge makes stylus force adjustment as easy as turning the de-coupled adjustable weight on the tonearm. No extra gauges, gadgets, or paraphernalia needed.

Philips Won't Compromise. Neither Should You.
Four years ago Philips set out to build the best-performing, best-looking, best-priced turntables in the business. The Project 7 Series turntables more than meet all those goals. With no compromises.

And we don't want you to compromise, either. That's why we've prepared a new, fact-filled 36-page brochure "Ask Us About High Fidelity. We Know." It's filled with dozens of tough questions and honest answers about everything from turntables and tape decks to amps, preamps, tuners and speakers. And it's yours, free. Just call us, toll-free, at 800-243-5000* and we'll send you a copy. It can help you find the high fidelity equipment you're looking for. With no compromises.

EVERYONE WHO KNOWS, KNOWS

PHILIPS

High Fidelity Laboratories, Ltd.

CIRCLE NO. 41 ON READER SERVICE CARD
It sounds like music

An incredibly solid 30 Hz low end gives you bass response not found in any other speaker of this size. This is clean bass. It isn't phony. There is no "hump" around 80 Hz to give the impression of bass when there really isn't any. What's on your source material is what you're going to hear - accurately.

There is no sacrifice at the high end either. Both front and rear-firing tweeters give you the uniform total acoustic power output that takes you into a "live-music" environment.

When you buy your next pair of speakers, do yourself a favor - audition the Interface:B's. If your criteria is musical accuracy, the Interface:B's are what you'll buy.

THE NEW RECORDING TECHNOLOGY

For several days in early November, New York's Waldorf Astoria Hotel, which played host to the 61st Audio Engineering Convention, had something of the flavor of a university administration building during a temporary take-over by a gleeful student radical group. The roles of the disconcerted faculty were played by the sales forces of the various manufacturers of professional recording gear, and those of the radicals by the raffishly dressed recording-studio and sound-reinforcement professionals who make most of the buying decisions on the expensive machinery displayed. Any suggestion of "straight" appearance, even a slender tie, marked one as either a member of the press or a simple gawker, in neither case worthy of the tender solicitude reserved for the professional-sound elite.

Very little in the way of equipment likely to be used in the home was shown, but as past conventions have proved, the indirect impact of the technical developments on display is likely to be substantial for the record listener and audio buff. Unquestionably, the two most newsworthy technical introductions at the show related to the first generation of digital studio equipment. There was, for example, 3M's dazzingly sophisticated electronics editing system for digital multitrack tape which, among other things, displays a video-screen picture of the digital musical waveform at the precise edit point to help the recording engineer in achieving audibly undetectable electronic splices. The editing system, in conjunction with 3M's thirty-two-track digital tape recorder now in use in several American studios, will make it possible to produce in almost totally digital form the complex multilayered master tapes that are the mainstay of American recording technique. This means, quite simply, that digitally mastered records of direct-to-disc quality, many from major artists who are already clamoring at the doors of the digitally equipped studios, should be on record-store shelves within the next year (the first four recorders were delivered in December; the editing system will probably be in place by next fall). Commercial digital recording has clearly passed beyond the experimental and "special product" stage.

(Continued on page 32)

Sony Industries' president Michael Schulhof audits their professional digital-recording system: center, PCM processor above its editing console; left, videocassette recorder.
The specs are superb, but they can't say it all. The proof is in listening to the music.

Last November 17th
Peter Nero listened.
And bought
our Realistic 2100.

VERY HIGH POWER, VERY LOW DISTORTION.

Power Output: 120 watts per channel, min. RMS at 8 ohms, 20-20,000 Hz, at no more than 0.1% total harmonic distortion. Amplifier Response: 15-70,000 Hz ±2dB at 10 watts. Intermodulation Distortion: 0.05% at 85 watts. S/N Ratio: 65dB phono, 85dB aux. Phono Input Overload: 220mV. FM Sensitivity: 2.8µV for 50dB quieting. Capture Ratio: 1.3dB. FM Alternate Channel Rejection: 80dB. FM Channel Separation: 50dB at 1kHz. FM Stereo Total Harmonic Distortion: 0.1%. FM S/N Ratio: 70dB.

THE FINEST, MOST POWERFUL REALISTIC EVER.

We were elated when Pianist/Conductor Peter Nero told us he was buying our new STA-2100 receiver—which we build with loving care in one of our company-operated factories. What other audio store engineers and makes its own components? None that we know of. And nobody builds ‘em better. In a test in our Fort Worth QC labs, we operated an STA-2100 at full power, 24 hours a day for three weeks, and it didn’t fail in any way. Test-listen to it soon—perhaps the only hi-fi component of this power and quality with availability/service at over 6000 shops in the USA alone. About $600.
Where should you start in your search for better sound?

At the beginning. With a new Audio-Technica Dual Magnet™ stereo phono cartridge.

Our AT12XE, for instance. Tracking smoothly at 1 to 1-3/4 grams, depending on your record player. Delivers smooth, peak-free response from 15 Hz to 28,000 Hz (better than most speakers available). With a minimum 24 dB of honest stereo separation at important mid frequencies, and 18 dB minimum separation even at the standard high-frequency 10 kHz test point. At just $65 suggested list price, it’s an outstanding value in these days of inflated prices.

Audio-Technica cartridges have been widely-acclaimed for their great sound, and for good reason. Our unique, patented* Dual Magnet construction provides a separate magnetic system for each stereo channel. A concept that insures excellent stereo separation, while lowering magnet mass. And the AT12XE features a tiny 0.3 x 0.7-mil nude-mounted elliptical diamond stylus on a thin-wall cantilever to further reduce moving mass where it counts. Each cartridge is individually assembled and tested to meet or exceed our rigid performance standards. As a result, the AT12XE is one of the great bargains of modern technology ...and a significant head start toward more beautiful sound.

Listen carefully at your Audio-Technica dealer’s today.

Audio News . . .

Of equal significance to the consumer was Sony’s demonstration of a professional two-channel PCM processor designed to be used in conjunction with an industrial videotape cassette recorder such as their BVU-200A. When connected, these two units comprise a two-channel mastering recorder with technical specifications in the same range of excellence as the 3M system. Just as important, multiple recorders and processors can be connected and synchronized in daisy-chain fashion to permit digital recording of any number of channels. Tapes can be edited using a Sony videotape editing console (though it does not have the signal-displaying feature of the 3M unit). And since, like the 3M recorder, it is immediately available to the recording community, it is likely to be used in the mastering and mixing of commercial discs almost immediately—assuming professionals are not put off by the cassette format.

Both Pioneer and Sony again demonstrated digital audio-disc players, though most industry observers now concede that the next major step on the digital-disc front will probably be one of standardization rather than of further technical innovation.

In addition to all the new digital hardware, advances in conventional technology were still very much in evidence. As usual, new mixing consoles, sound-reinforcement equipment, and testing gear received a great deal of attention. Rugged professional versions of consumer products such as preamplifiers and power amplifiers, intended for upgrading of older amplifying stages in broadcast and recording situations, were on display from Sansei and SAE, among others. Neumann showed the first production version of their long-awaited VMS-80 cutting lathe, which uses an advanced on-board computer to determine groove spacing as well as a closed-circuit circuit television system for the operator to observe groove geometry.

And of course there were numerous technical papers presented dealing with all aspects of the audio art. Some discussed cautious, evolutionary advances, and others (such as a paper by Dr. Matti Otala which suggested that as little as 0.003 per cent transient intermodulation distortion could be heard by normal listeners) were the subject of much controversy.

It’s safe to say that the 61st AES convention presented a preview of the technology and thinking that will influence the sounds we will be listening to in our living rooms for decades to come.
New shapes of sound from RTR
The Rhombus Subwoofer...The Pyramid Satellite

Now your speaker system can reproduce true bass.
With the new RTR DAC/1 Rhombus Subwoofer, low frequency instruments and deep tones emerge with a degree of undistorted realism never before heard in a home system.

In Rhombus, RTR engineers have created the only enclosure which combines advantages of both vented and acoustic suspension systems—without their shortcomings. This is the Differential Area Coupler* system, the first all-new enclosure design in a quarter century.

Rhombus delivers flat frequency response from 16 Hz to 150 Hz. Below 16 Hz, the system cuts off rapidly to eliminate modulation distortion. Bass peaks and resonances are wiped out by impedance leveling circuits and the DAC* format.

Pyramidal design yields an advanced small speaker. The RTR PS/1 Pyramid Satellite loudspeaker solves most problems inherent in small speakers.

Geometrically, pyramid form follows function better than rectangular enclosures. Space for a major woofer in a minimal package facilitates lower frequency response and higher, undistorted output levels. Non-parallel sides smooth bass reproduction and curtail internal resonance.

Capitalizing on this format, the RTR Pyramid Satellite incorporates an array of RTR components in a dynamic 3-way speaker system. A new total-immersion-damped woofer cone reduces sonic coloration and eliminates breakup. Carbon fiber impregnated soft dome midrange and soft dome tweeter offer superlative response with wide dispersion. All told, these are live performance audiophile speakers in a package destined to become classic.

New shapes combine into a formidable system. Match Rhombus Subwoofers and Pyramid Satellites. Be rewarded with hauntingly realistic sound reproduction. Attack and dynamics of actual performance reproduce with smoothness, accuracy and superb detail. This system defines new standards of performance for all sonic parameters. Equally startling, the price is well below other state-of-the-art contenders. Audition it soon at your RTR dealer...and believe your ears.

RTR Industries, 8116 Deering Avenue
Canoga Park, CA 91304

*CIRLCE NO. 43 ON READER SERVICE CARD

Listen...you'll be hearing more from RTR.
Killer!

That's a Jensen car audio system.
That's the thrill of being there.

You've got to want the best. The max in music. The Killer. Then there's only one way to go.

The Jensen R430 car stereo receiver teamed with a Jensen Separates speaker system.


A separate, trunk-mounted Power Amp gives you up to 60 watts RMS when you need it. The Bi-amplification mode distributes that power perfectly for knock-out realism.

More? Lots more. But look what the R430 teams up with.

The Jensen Separates. The revolutionary car speaker system that gives a faultless interpretation of everything the R430 sends it.

Imagine individual woofers, tweeters, and midrange units custom positioned throughout your car...for unparalleled sound reproduction. Coupled with an under-dash control unit that lets you balance the music to your personal taste. That's the Separates.

Touch the "Bi-Amp" switch on the R430 Receiver and each individual woofer, tweeter and midrange gets the precise frequency range and power to put you right in the concert.

This system's a killer. That's the Jensen R430 Receiver and Separates.
That's the thrill of being there.

JENSEN
The thrill of being there.

For more information, write Jensen Sound Laboratories, 4136 N. United Parkway, Schiller Park, Ill. 60176

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CIRCLE NO. 29 ON READER SERVICE CARD
Record Cleaning

Q. For quite a while now, I've been cleaning my records using a dishwashing detergent and distilled water, and then air-drying them in a rubber-coated dish drainer. Several friends have recently commented that such washing is harmful to the plastic that records are made from. What is the "bottom line" on record cleaning with detergents?

A. There seem to be two opposite schools of thought on the subject of record cleaning. One group holds that fingerprints (which are actually oily deposits) and the dust and grit that normally find their way onto record surfaces can best be removed by fluids that emulsify or in some other way chemically break down oily substances. The primary agents used in the record-cleaning solutions supplied by these companies are wood alcohol and/or a variety of detergent solutions.

However, a second group of companies involved in record care view these same cleaning agents as highly hazardous to record health. They argue that both the polyvinyl chloride (the basic record material) and the other chemicals—plasticizers and stabilizers—added to the PVC to aid the molding and playing process are themselves petroleum-derived compounds and are therefore also subject to gradual breakdown by detergents and other cleaning agents. The ultimate effect of conventional cleaning compounds, in the view of this second group, is to leave the record-groove walls brittle and easily damaged. The record-cleaning solutions offered by this second group are therefore designed to remove dust and non-oily deposits simply by placing them in a liquid suspension with a trace of detergent which is then swept up or removed by some means. (The method is akin to removing floor dirt by damp mopping.)

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So, as far as the commercial disc cleaners are concerned, "you pay your money and takes your choice." But, in any case, stay away from grocery-store dishwashing detergents because they generally contain a number of compounds intended to add a "lotion-y" feel to hands and an artificial gloss to dishes. These compounds, once brought into contact with the record, can form a waxy second layer that is extremely difficult to remove. A third approach suggested by an adolescent of my acquaintance—the use of a facial cleaning pad such as Stridex to remove record "zits"—is also frowned on by experts, and for the same reasons.

FCC, Part 15

Q. Every FM receiver or tuner I've ever seen has a label of some sort on the back reading "Conforms to FCC Regulations, Part 15." What exactly are the FCC regulations governing stereo receivers?

A. The FCC regulation in question deals with a diversity of product types—including pocket radios, garage-door openers, and stereo receivers. In respect to FM receivers, the regulation establishes limits on the amount of spurious (unwanted) electromagnetic energy they are permitted to radiate. It may come as a surprise to many readers to learn that almost all receivers—AM or FM—are also capable of sending out (radiating) a signal. This comes about because a superheterodyne circuit is used in all AM and FM receivers, including both pocket portables and $2,000 tuners. Briefly, the "superhet" circuit has a "local oscillator" whose purpose is to interact (beat) with the incoming signal to provide an intermediate frequency of 10.7 MHz. I won't go into the technical reasons for such an approach; suffice it to say that it is in virtually universal use in receivers of all kinds.

In any case, it is this so-called "local oscillator" that brings FM sets under the purview of the FCC, since any oscillator operating at radio (as opposed to audio) frequencies is likely to radiate a signal far beyond its circuit components and chassis unless preventive steps are taken. The FCC has established the maximum allowable external radiation (so as to prevent the receiver from interfering with the operation of other nearby receivers). Therefore, in order to market a receiver in the United States, a manufacturer must provide measurements to the FCC proving that their product does not exceed the legal limit. These (Continued on page 38)
Again we turn the world around.

The world's first pure power DC receivers, the Sansui G-line, redefined the limits of musical fidelity. Sansui's capacitor-free DC amplifier design (patent pending) with super-high slew rate, ultra-fast rise time, and full transient response, makes music sound much more true-to-life.

Now Sansui does it again. With the new G-7500 and G-5500. Using the same exclusive DC circuitry all others are trying to imitate, these new models offer more watts per dollar than ever before.

The G-7500 delivers 90 watts per channel, min. RMS, both channels into 8 ohms from 20 to 20,000Hz with no more than 0.025% total harmonic distortion, at a suggested retail price of only $620.

The G-5500, at a suggested retail price of only $465, offers 60 watts per channel with no more than 0.03% THD under the same conditions.

From their macro-designed power supplies, for rich, full sound over the widest frequency range, to their micro-sensitive double speaker-protect circuitry, the G-7500 and G-5500 are unbeatable.

The FM sections further enhance Sansui's reputation for tuner excellence. Pinpoint selectivity and ultra-sensitivity to even the weakest signals guarantee pure and clean reception, always. And always with maximum stereo separation.

Let your franchised Sansui dealer demonstrate the comprehensive, human engineered features and controls. There's nothing in the world with quite the same feel as the Sansui click-stop attenuator and ultra-smooth tuning knob.

Now look carefully at the graceful styling, with elegant rosewood veneer cabinet. It is setting the trend for all other receivers.

For the best receiver values, the world is now turning to the newest DC by Sansui, the G-7500 and G-5500. Shouldn't you turn to Sansui, too?
Audio Q. and A.

measurements, by the way, are taken at the antenna terminals of the receiver and at the a.c. line cord, since it is possible for an unwanted signal to be transmitted from one receiver to another through the a.c. power line.

Installation of the Month

Q. I have noticed that Stereo Review occasionally runs an "Installation of the Month" feature showing equipment setups. What would you need from me in the way of photos and information in order to consider my installation?

A. To answer Mr. Roberts and others who have inquired: any clear snapshot (color, black and white, or Polaroid) will be sufficient for us to make a preliminary evaluation of your installation. If it is judged acceptable, you will then be asked to submit some well-photographed, glossy, 8 x 10 black-and-white prints (or negatives from which such can be made) showing: (1) the installation in its normal environment, and (2) close-up details of points of interest. As for accompanying information, any past "Installation of the Month" can serve as a guide. In particular, we need details on the construction and special features of the cabinets (or whatever you've used), a complete and accurate list of the component names and model numbers, and a few personal notes, such as your occupation, audio background, and interests—musical and other. We also need your address and a phone number where you can be reached during business hours (these will not be printed).

Although we all appreciate systems with well-chosen components, "Installation of the Month" focuses more on the special approach taken to house or install the equipment rather than on the equipment itself. Send entries (including a stamped, self-addressed return envelope) to Gary Stock, Stereo Review, One Park Avenue, New York, N.Y. 10016.

Speaker Impedance

Q. These days most manufacturers rate their speaker-system impedances at 4 or 8 ohms, but I remember when systems of 16 ohms and even higher were not uncommon. I've always been puzzled by the variety of speaker-impedance ratings. Can you provide some background on the matter?

A. Never having resolved the impedance matter to my own satisfaction, I submitted Mr. Weiss' question to a number of speaker manufacturers, and it provoked a surprising variety of responses. In their replies ADS and Wharfedale both took a historical approach. ADS stated that 16-ohm speakers were most suitable technically for tube amplifiers, that 4 ohms presented the most appropriate load for the early germanium output transistors (which could handle high currents but not high voltages), and that 8 ohms is a reasonable choice today since it enables the user to parallel two systems without risking overload of the amplifier. On the other hand, a 4-ohm speaker (compared with an 8-ohm unit) can theoretically "draw" up to 3 dB more output power from the amplifier before clipping.

JBL pointed out that 8 ohms seems a good "natural" impedance level, as evidenced by the fact that it has become the standard load with which manufacturers rate their amplifiers' voltage- and current-output capabilities. Wharfedale stated that 6 ohms would be a logical and neat compromise between the opposing dangers of running out of current (low impedance) or running out of volts (high impedance), but that many amplifiers trip their protection circuits when faced with a paralleled pair of 6-ohm speakers. Koss would like to be able to use 2- or 3-ohm voice coils since the result would be lower-Q drivers (which they find to have great advantages), but practical amplifier limitations prevent this. Advent, however, claimed that most modern amplifiers are able to handle a speaker load that, over a narrow range of frequencies, falls as low as 2.5 to 3 ohms.

AR, Bose, Burhoe, Jensen, and Mamsz made the additional point (which can have consequences in the showroom during A-B comparisons of speakers) that a 4-ohm impedance will not only provide greater output from an amplifier, but it will in addition cause the speaker to play louder at a given amplifier volume-control setting. But, as several manufacturers were, this fact can be taken advantage of only if the amplifier can handle a 4-ohm load without strain. It is for that reason that AR's lower-cost speakers, which will most probably be used with lower-cost amplifiers, are all designed for 8 ohms.

As a sidelight, both Bose and Electro-Voice made the point that the virtues of a flat impedance curve are highly overrated. According to Bose, the only advantage of a flat impedance curve is that the amplifier's damping factor and the resistance of the speaker leads will have less effect on frequency response. They find that impedance tends to vary more with frequency with an efficient speaker and therefore more attention should be paid to assuring that the driving amplifier has a high damping factor (which Bose defines as "40 or above") and that adequately heavy speaker wire is used. And E-V observes pithily that well-designed power amplifiers are nowhere near as excited about constant-impedance speaker loads as some advertising copywriters are.

Because the number of questions we receive each month is greater than we can reply to individually, only those letters selected for use in this column can be answered. Sorry!
WAREHOUSE SOUND CO.  7a.m. to 9p.m. PST  P.O. BOX 5, SAN LUIS OBISPO, CA 93405
We’d like to be very clear about what we have in mind. By “their” we mean everyone else’s. And, our lowest-priced turntable is the new CS1237.

The CS1237’s tonearm is mounted in a four-point gyroscopic gimbal—widely acknowledged as the finest suspension system available. The tonearm is centered, balanced and pivoted exactly where the vertical and horizontal axes intersect. (A)

From pivot to tonearm head, the shape is a straight line, the shortest distance between those two important points. (Curved tonearms may look sexier, but at the cost of extra mass, less rigidity and lateral imbalance—none of which is consistent with good engineering practice.)

Tracking force is applied by a flat-wound spring coiled around the vertical pivot (B), and this force is maintained equally on each groove wall whether or not the turntable is level. The tonearm’s perfect balance is maintained throughout play.

By contrast, tonearms which apply tracking force by shifting the counterweight forward are actually unbalanced during play and prone to mistracking. For example, on warped records the stylus tends to dig in on the uphill side of the warp and to lose contact on the way down.

Vertical-bearing friction in the CS1237 tonearm is astonishingly low—less than 8 milligrams. It can track as low as 0.25 gram—which means it will allow any cartridge to operate at its own optimum tracking force.

There’s still more. The counterweight is carefully damped to attenuate tonearm resonances. Anti-skating is separately calibrated for all stylus types. Cueing is damped in both directions to prevent bounce. And because the CS1237 can play up to six records in sequence, the stylus angle can be set for optimum vertical tracking in either single-play or multiple-play.

To find any other tonearm that seriously matches the CS1237’s, you have two choices.

You can consider one of the more exotic separates. But you’ll find they cost as much as the entire CS1237. (Price: less than $180, complete with base and cover.)

Or you might compare it with one of the higher-priced Dual turntables. You’ll find a few additional refinements, but no difference in design integrity or manufacturing quality. Which is why no other turntable quite matches a Dual.

Any Dual.
our lowest-priced turntable
highest-priced turntable.
Audio Basics

By Ralph Hodges

WORKING OUT THE ANGLES

Read over Bill Curtiss' feature article on phono cartridges in this issue (page 72) and you may appreciate how much successful record playing depends on good geometry. First there is a sort of "microgeometry"—having to do with how the stylus comes in contact with the groove wall. Modern high-fidelity styli such as the Shibata and some of the modified ellipticals have edges, rather than points, that make contact with the wall surface; such styli should therefore be oriented so that the edges are precisely parallel to the plane of modulation. The accuracy with which the stylus has been shaped and mounted by its manufacturer is an important factor in this.

There is also another geometry, a "macrometric" geometry if you will, that has to do with the orientation of cartridge, tone arm, and record relative to one another. If the details of this macrogeometry are correctly worked out, the cartridge will be held in a rather precisely defined angular relationship to the groove direction as it traverses the record side, a relationship that has been proved necessary for really accurate phono reproduction. If the macrogeometry is wrong, then distortion—measurable and sometimes even audible—increases. Furthermore, if the macrogeometry is wrong, microgeometry cannot be right except through the most freakish of circumstances: the accidental use of a phono cartridge manufactured with precisely complementary errors in alignment.

The importance of macrogeometry was not realized by the first designers of disc-record players. They often equipped their machines with perfectly straight tone arms, for example. It took a rather subtle mathematical study by Benjamin Bauer and his colleagues at CBS Labs (now CBS Technology Center) to demonstrate that a straight tone arm is all wrong for playing a spiral groove cut in the manner recording studios employ. Record cutting is done with a lathe mechanism; a carriage bearing the cutting instrument travels from the outside edge of the rotating master disc toward its exact center in a straight line. But almost every popular tone arm pivots so as to describe an arc across the record's surface. The long axis of the cutting mechanism is always at a right angle to a radius of the disc in the case of a record-cutting lathe, but this angular relationship is constantly changing for a playback device mounted on an arc-describing pivot, and in the world of record-playing microgeometry this change inevitably produces distortion.

Bauer and his fellow researchers saw that a simple pivoted tone arm could not be made to preserve the ideal angular relationship at all times, but that it could approximate it with adequate precision if it were redesigned with that object in mind. So the tone arm acquired a bend that canted the cartridge at an angle relative to the general direction in which the arm "pointed." Buyers of these new arms were instructed how the cartridge should be positioned and, in the case of an arm bought separately from the turntable, how far the tone-arm pivots should be from the center of the platter.

Then came stereo and the need to consider another angular relationship. A mono record is a one-dimensional medium; the groove wig-
A short course in shelf-improvement.

The quickest way to improve your shelf is with the new Series II from Altec Lansing. Each speaker in the Series II line combines the best of everything we've learned during the past 40 years of making professional speakers for studios, concerts and theaters.

As you can see, we've given the Series II a lot of features you'd expect only in Altec's most expensive speakers. Items like long-travel woofers with non-degaussing ceramic magnets; equalizing controls; molded port tubes; and real wood finishes.

What you can't see (but you can most assuredly hear) is the Series II's high-efficiency design delivering the fullest sound possible, even with a receiver or amp as small as 10 watts. Also, there's the confidence you'll have in knowing that we make every major component and cabinet ourselves. Then we back it all up with a full, 5-year warranty.

For the full course, send for our free, full-line catalog and the name of your nearest Altec Lansing dealer. Write: Altec Lansing International, 1515 S. Manchester Ave., Anaheim, CA 92803.
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Mirrors reflect highs.
Poorly placed speakers, poor sound.
Upholstery soaks up lows.

Your stereo probably doesn't have the sound you bought you bought. Because you first heard it in a sound room. Unfortunately, most stereos are set up in rooms designed for vimg. Not listening.

That's why you need a Sound Shaper One or Two. The frequency equalizers that re-shape music to fit your ears. And your living room.

Sound Shaper One has ten frequency controls, five for each stereo channel. And beautiful styling. But if your system is more sophisticated, you'll want Sound Shaper Two M61 with twenty-four frequency controls (twelve for each stereo channel). Plus, internal switching and monitoring. So highlight the vocal. Suppress the bass. Wipe out the flute entirely. And if you want the professional touch, get the new SLM-2 Sound Level Meter. With it, sound levels can be read directly on the Sound Shaper Two, so no longer will you have to run back and forth between the listening area and the equalizer.

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CIRCLE NO. 13 ON READER SERVICE CARD

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Audio Basics . . .

gles from side to side and (ideally) in no other direction. But a stereo groove is formed so as to vibrate the stylus from side to side, up and down, and in all intermediate directions. It is this complex motion that gives it the capability of properly assigning audio signals between two stereo channels—and that dictated a re-examination of the macrogeometry of stereo record playing.

The stylus assembly of a modern phono cartridge is itself a pivoted structure. Examine one closely and you'll note that it consists of a tiny jewel mounted (usually) on a thin tube of aluminum that is in turn supported within the cartridge by a block of rubber-like material that roughly defines the pivot point. Pretend for a moment that your elbow is this pivot, your forearm the aluminum tube, and your fist the stylus. Holding your forearm roughly horizontal, shake your fist up and down. It travels along an arc, of course, but its general direction of motion is in fact up and down, or vertical. Now incline your forearm downward to approximate the angle a typical stylus shaft forms with a cartridge body and repeat the shaking. This time the general direction of motion is at an angle to the vertical—the vertical tracking angle in phono-cartridge jargon. Since the record was cut with a similarly pivoted device (the cutting stylus), it has such an angle built into it for all vertical modulations. The trick is get the cartridge to conform to this angle.

The vertical angle at which a record is cut and the vertical tracking angle of a phono cartridge are both quantities that are somewhat difficult to determine. Certain vagaries of the disc-cutting process alter the angle from what it would appear to be from a study of the cutter geometry, and imprecise pivot locations in most phono cartridges also introduce variables under actual record-playing conditions. The instructions issued by most manufacturers advise that the cartridge and arm should be adjusted so that, when the stylus is resting on a record, the top of the cartridge is perfectly parallel to the record's surface when viewed from the side. But laboratory investigations have shown that this is at best a rough approximation of the optimum alignment. What is more, repeated listening tests have indicated that under properly controlled conditions very small changes in this vertical alignment can be heard quite readily.

Depending on your outlook, these technical uncertainties may come as discouraging news or as hopeful revelation. We know now that phono reproduction is rarely as good as it could be, and that the best possible reproduction is fairly difficult to achieve. But at the same time we are learning why our record players are falling short of the mark, and armed with that knowledge we can proceed in the direction of practical remedies. For the time being we can only observe scrupulously the alignment instructions given by cartridge and record-player manufacturers; certainly they will work out better than giving our attention to such adjustments at all. For the future, we can look forward to more sophisticated means of realizing the performance theoretically available with today's record-playing equipment.

CIRCLE NO. 13 ON READER SERVICE CARD

STEREO REVIEW
The A-800: A TEAC with features you can't live without at a price you can live with.

The TEAC A-800 gives you one of the best, most affordable combinations of precision, muscle and good looks around. It's a three head, two motor, dual capstan, solenoid-operated cassette deck that lists for less than $800.*

The A-800 transport has a computer heritage... heavy, rock-steady, reliable. The closed-loop dual capstan system isolates the tape between the capstans to provide optimum tape-to-head contact. Result: better frequency response, fewer dropouts. An ultra-stable motor drives the capstans while all transport functions are operated through leather-touch solenoid switching both on the deck and with the optional RC-90 Remote Control.

The A-800 uses a combined record/playback head in which both elements are incorporated into a single housing. What's more, the playback head is a unique "Delta" design which incorporates both magnetic and non-magnetic ferrite materials which assures minimum feedthrough from the record head and eliminates low frequency contour effects.

In addition to its built-in Dolby, the A-800 also accepts an optional dbx® Type II for wider dynamic range and up to 80 dB SN. This optional dbx interface—a TEAC exclusive—lets you improve the overall signal-to-noise performance by up to 30 dB. It's got to be heard to be believed!

First. Because they last.

TEAC Corporation of America
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Montebello, California 90640

CIRCLE NO. 67 ON READER SERVICE CARD

Wow & Flutter: 0.05%
Frequency Response: 30-18,000 Hz
± 3.5 dB Flat/Flat

*Manufacturer's suggested retail price.
### Specifications:

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### Features:

- Graphic Equalizer with LED Readout
- Relay Protection
- 32 Detent Volume Attenuator
- Wattage Meters
- Two-Step High and Low Filters
- Deviation Meter
- Multipath Meter
- LED Signal Strength Indicator
- AF Mute
- A JCPenney Warranty

### Comments:

(STEREO REVIEW JANUARY 1979)

- "The excellent performance of the power amplifier was maintained across the full audio band."
- "Its capture ratio was so remarkably good that we rechecked it several times..."
- "The graphic equalizer can do a most effective job of correcting for broad response characteristics of speakers, listening room, or program material."
- "The audio performance of the 3275 is excellent, and we could hardly fault it in any respect."
- "The IHF slew factor exceeded 2.5, which is our measurement limit."

### Price:

$599.95

*Within 5 years of purchase of speakers or 3 years of purchase of single or multiple play turntable, receiver, tuner, amplifier or tape deck of this Modular Component System, we will, at our option, repair or replace these items if defective in material or workmanship. Just return it to the nearest JCPenney facility.

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MICROPHONE SELECTION—1

Unless your recording interests extend no farther than dubbing from discs or FM, sooner or later you’re likely to be shopping for a pair of microphones. Unless you stick to the specific recommendations, if any, of your tape-deck manufacturer, you may find yourself confronted with a bewildering array of terms and specifications. Since a number of readers have written me about different aspects of mike selection, it seems a good idea to handle them all together in a continuous format instead of breaking them up into separate questions and answers.

The first decision you’ll probably want to make is whether you want a pair of omnidirectional (“omni”) microphones (see illustration below), which, as the name implies, are equally sensitive to sounds coming from all directions, or whether your recording needs would be better served by cardioid (“unidirectional”) mikes, which reject sounds coming from the rear. (There is a third classic microphone, and you can frequently get a very good popular choice (also the most easily available), but they generally cost $300 and up, and this is not likely to be a feasible option. Most microphones come with bare wires at the end of the cables supplied (so you can attach the particular type of connector your recorder or mixer input requires), but if you narrow your choice to a couple of models, you may find a dealer willing to rig a connection from one of each into your best recorder and demo system to permit a limited comparison. If so, here are two “quick and dirty” checks I found particularly useful.

First, take a male friend with a normal speaking voice with you to the showroom. (Never use your own voice, however good, because nobody sounds the same to himself as he does to others.) Set up microphone “A” on a stand, adjust the level of the recorder to obtain normal readings, and let your friend read a paragraph or two from the morning newspaper at a normal speaking distance of 1 to 2 feet. Then check microphone “B” at the same speaker setting, and try to get any trace of “chestiness” or nasality in your friend’s voice. (This check will also give you a good idea of the mikes’ relative outputs.

Second, take a group of house keys on a key-ring or chain and walk around each microphone at a fixed distance of about 4 feet, shaking them vigorously. This will check the high-frequency response of the two contenders (again, you know what the keys sounded like “live”) as well as give you an idea of their polar responses in comparison to each other. (Even omnidirectional mikes are not fully omnidirectional at high frequencies, and with cardioids you can determine approximately how wide an “acceptance angle” they have before the jangling keys change their tonal characteristics.) Again, the test is not which sounds “better” but which matches the live sound more closely. (I’m assuming all the other equipment is good enough and set up so as not to invalidate your judgments.)

There are other important considerations that go into selecting microphones, having to do with balanced vs. unbalanced cables, microphone impedance, and output levels, all of which concern the “interface” between the mike and the recorder you intend to use it with. These will be the subject of my column next month.
Technical Talk

By Julian D. Hirsch

Amplifier Dynamic Headroom

Shortly after the publication of our comprehensive report on twenty medium-price integrated amplifiers (Stereo Review, November 1978) I received a call from a manufacturer who took exception to the entire concept of the “dynamic headroom” rating as defined in the new IHF Amplifier Test Standard, IHF-A-202 (1978), and especially as it applied to his amplifier and those of some of his competitors. To understand his concern a little better, let us review the significance of the dynamic-headroom rating and how it came to be created.

In general, an amplifier can deliver more power for a short period of time (in the order of milliseconds) than on a continuous basis. To some extent this is related to the thermal dissipation ratings of the specific output transistors used in a specific amplifier: they might be damaged by extended operation beyond a certain power level, but they can still deliver short peaks beyond that point without problems. The main cause of this effect, however, is in the d.c. power supply for the output transistors. The regulation of a power supply is a measure of how much its output voltage changes as it delivers current to a load. In a perfectly regulated supply, the voltage remains constant for any load from zero to the maximum rating. An amplifier powered from such a supply will have the same maximum power capability with both transient and continuous signals.

Power supplies—those, at least, of the kind used in consumer audio amplifiers—are rarely perfectly regulated. With no load or a very light load (which is the normal operating condition in most home amplifiers), the power-supply output voltage is near its maximum and the filter capacitors (which serve as energy-storage elements) are fully charged to that voltage level. The amplifier is then ready to deliver all the wattage of which it is capable to its loads (the speakers).

As current is drawn from a charged capacitor, the voltage across the capacitor drops. In a power supply, the capacitors are being continuously recharged, but not necessarily at the same rate they are being discharged into the load. Whenever a capacitor is being discharged faster than its charge is being replaced, the voltage output of the supply drops, and so does the available power output from the amplifier. Since the power capability of an amplifier is proportional to the square of its supply voltage, a 30 per cent drop in voltage will reduce the maximum amplifier power by half, or 3 dB. A typical power supply delivering its maximum rated current continuously will have an output voltage about 10 to 20 per cent less than that which is available under no-load (or light-load) conditions.

As a rule, a regulated power supply, whose voltage changes little or not at all with rated load variations, is too expensive to be used in consumer products except where it is actually part of the circuit design. There is, in fact, some controversy among designers as to whether it is even desirable for an amplifier power supply to be well regulated.

The question of the desirability of regulation arises because of the nature of music, speech, and most other sounds that a high-fidelity amplifier is called upon to handle. Such sounds have a high ratio of peak to average power. This is why an amplifier’s power meters will read a few watts or less on average program levels, yet a peak indicator will show that it is delivering 100 or more watts on peaks. Since that is the case, it would seem that an economical amplifier design should have enough long-term output (continuous-power) capability to meet the needs of the program material, yet be able to deliver short-term signal peaks at a much higher level without clipping. The alternative is to design a heavy-duty, well-regulated supply whose voltage is always about the same as the no-load voltage of the loosely regulated supply. This would exact a heavy toll in cost, size, and weight. Most amplifiers fall between these two extremes.

At one time, not too many years ago, a clever ad man realized that the higher short-term output-capability of an amplifier would provide a larger wattage number and therefore be more impressive to prospective buyers. The result was that these “music-power” ratings were grossly abused, to the extent that all printed amplifier-power specifications became nearly meaningless. The FTC finally stepped in, and now the continuous-power output (with added qualifications) must be the dominant published power rating of an amplifier.

Nevertheless, the concept of a short-term power rating is still valid, and it has been incorporated in the new IHF amplifier standard in a way that—it was hoped—would prevent abuses such as had existed previously. To avoid the legal problems of “upstaging” the continuous-power rating, it is now expressed in decibels, denoting the ratio of the short-term power under standardized test conditions to the rated continuous power output of the amplifier. This figure is called the IHF Dynamic Headroom.

The key to the matter is in the use of the term “rated power,” which is in a sense a legal rather than a technical one, to establish the dynamic-headroom rating. Each manufacturer has the option of selecting any continuous-power rating (at a chosen distortion level and frequency range) for his product, subject only to the requirement that the products meet that rating when tested according to FTC requirements. Different manufacturers are, to various degrees, conservative in rating their amplifiers, but most are careful to meet the government regulations with a comfortable safety margin.

An advantage of using decibel ratings instead of actual wattages is that they show at a glance just how much real added headroom is available for peaks and how two amplifiers compare in this respect. For some reason, many people have difficulty appreciating how insignificant a difference of one decibel really is. For all practical purposes, it matters not a
whit whether two amplifiers with identical rated outputs have dynamic-headroom ratings of 1 or 2 dB. It is inconceivable that anyone would be able to distinguish between them in a listening comparison on the basis of that difference alone.

My "mistake" in the comprehensive amplifier report was in listing actual peak wattages as well as decibel figures. I did this to help bridge the conceptual gap between the two systems for many people. In doing so, I may have inadvertently negated much of the advantage of the new system. Even if a reader understands that differences of a decibel or so in any rating do not imply any real performance difference, it is hard for him to ignore the distinction between dynamic-power outputs of (say) 50 and 63 watts, for they seem to assume a greater importance in the mind than the equivalent (and virtually undetectable) 1-dB power ratio.

My caller was concerned lest a reader looking at the measured dynamic-power output as well as the decibel rating assume that two amplifiers delivering the same dynamic wattage are equivalent, even though their continuous (or clipping) output powers are different. The extent to which this is—or is not—true is illustrated by the following examples (the power figures are fictitious, and no specific amplifiers are implied).

Consider three amplifiers having identical dynamic-output powers of 70 watts. Amplifier A is a conservatively rated but relatively low-power unit with a loosely regulated power supply. Despite its modest FTC power rating of 40 watts, it can deliver 55 watts at the clipping point, and its loose power-supply regulation results in a dynamic-power output of 70 watts. Amplifier B has a 60-watt rating (continuous), and its fairly heavy power supply allows it to deliver 65 watts at the clipping point with a dynamic output of 70 watts. Amplifier C has a stiff, regulated supply with about the same margin of safety in its ratings as amplifier B. It is rated at 65 watts and can deliver 70 watts under both continuous and dynamic conditions.

Here we have three amplifiers with exactly the same dynamic-power output and enough steady-state "continuous" output capability that they are, in truth, completely equivalent in their ability to handle the dynamics of any program up to their full peak abilities. This is in spite of their very different power ratings.

The respective dynamic-headroom ratings of amplifiers A, B, and C are 2.43, 0.67, and 0.32 dB. If the manufacturer of B feels that A has an unfair advantage because of his higher dynamic-headroom rating, he is free to rate his amplifier at any lower power that he chooses; if he opts for 40 watts, he will have the same 2.43-dB dynamic-headroom rating as his competitor. In fact, if he chooses to call his product a "35-watt" amplifier, he can boast of a full 3-dB dynamic headroom and possibly lead the field!

No matter what rated power a manufacturer chooses for his amplifier, the true performance of the unit will always be revealed by its clipping-headroom and dynamic-headroom decibel ratings. In the cases cited, the clipping-headroom ratings of amplifiers A, B, and C are 1.38, 0.67, and 0.32 dB, respectively. If the manufacturer of B chooses to down-rate his amplifier to 40 watts to obtain what he considers to be the more competitive dynamic-headroom rating of 2.43 dB, his clipping-headroom rating will rise to 2.11 dB, a clear indication of the conservativeness of his rating. Keep in mind that a high clipping-headroom figure implies a conservative power rating, while a high dynamic-headroom rating means that the power-supply regulation is relatively loose. This is not necessarily an undesirable quality, nor does it reflect on the quality of the amplifier; it is more likely an expression of the manufacturer's design philosophy.

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**TOSHIBA PC-5460** Stereo Cassette Deck

The Toshiba PC-5460 is a front-loading cassette deck that features a laminated Sendust record/playback head and uses a single d.c. servomotor for its capstan and reel drives. A second motor, connected through a gear and multiple-cam arrangement, provides a power assist for the transport-mode control buttons so that only a light touch is required to activate their functions, which can be executed in any sequence. Even the record mode can be entered directly at any time, including from high-speed rewind or play.

---

**Dynamic Headroom Made Easy**

"When you have two amplifiers with the same continuous-power rating (and all other factors are equal), the one with the higher dynamic headroom is to be preferred. When you have two amplifiers with the same dynamic headroom, then the one with the higher continuous power is to be preferred." —Larry Klein
Another **meter lever switch** provides three different types of reading from the record-level meters. In one position of the switch the meters read average VU levels on a scale from +0 to +4 VU (Dolby level is indicated by a small dot at the +3-VU position). In the center position, the meters read peak signal levels from -40 to +10 dB. With the switch in its uppermost position, the meter needles hold the highest signal peak encountered so that you can, for example, audition a disc you intend to dub and determine its maximum level.

An **output control** adjusts the listening volume for both channels simultaneously at the front-panel headphone jack and at the rear-panel phono-jack outputs. We found the listening levels satisfactory with headphones in the 8- to 600-ohm range. Separate concentric left- and right-channel controls are provided for microphone and line-level inputs, which can be mixed. Recommended microphone impedances range from 600 to 10,000 ohms.

One rather unusual feature on the front panel is a spring-loaded **editor lever** which functions, in effect, as a master record-level control. As this lever is slowly pulled down (or released) during recording it fades the overall recording level down (or up), permitting gradual program transitions or the insertion of quiet passages between taped selections. The operation of the **editor feature** does not affect either the indications on the record-level meters or the volume at the headphone or output jacks, so you must judge the proper rate of fade-out and fade-in without visible or audible clues.

The rear panel of the PC-5460 contains the usual input and output jacks of the phono-jack type, together with left- and right-channel calibration controls used to match the sensitivity of the decks to the level of a broadcast Dolby-level FM tone. (In its Dolby-FM mode, the regular front-panel recording-level controls are inoperative, but, once calibrated, the Dolby FM level should be the same for all stations broadcasting such programs unless you change your tuner or receiver.) Also on the rear panel is an FM-multiplex switch that will eliminate any residual 19-kHz stereo subcarrier products that might interfere with the proper operation of the Dolby circuits (whether the program is Dolby-encoded or not) of the deck when you tape off the air. The Toshiba PC-5460 cassette deck measures 16½ x 5½ x 11 inches and weighs just under 14 pounds. Price: $369.96.
YOU’VE SEEN ALL THE CASSETTE
ADS... NOW GO HEAR THE PROOF.

The Proof is a pre-recorded demonstration
of sounds you’ve never heard. Sounds made
possible because of BASF Professional Series
cassettes.

The Proof is proof that BASF, the inventor of
magnetic tape, has once again gone one step
ahead in sound.

New, highly advanced, second generation
coatings make BASF Pro-Series the most
sensitive recording tapes.

Pro-I’s (normal bias) maximum output level
is unsurpassed among ferric cassettes.

Pro-II’s (chrome high bias) incredibly
advanced chrome formulation enables it to
perform up to reel-to-reel specifications.

Pro-III’s (ferrichrome) formulation gives
superb results on all recorders, especially car
stereo cassette players.

And all BASF Pro-Series cassettes have a
patented Security Mechanism™ for jam-proof
performance.

Sensitivity is impossible to prove on paper. But
easy to prove by simply going to your audio dealer
and asking for The Proof. Or, you can send for it.
Either way, once you hear it we’re sure you’ll
believe it.

TO HEAR IT IS TO BELIEVE IT.

GIVE ME THE PROOF.
Send $3.50 with this coupon to: The Proof, Box 18367,
Boston, MA 02120. We'll send you The Proof (Professional II C-90, $4.99 value). Or, for a free demonstration
of The Proof, bring this coupon to your audio dealer.

Name ____________________________
Address ____________________________
City ___________________ State _______ Zip ________

BASF
THE INVENTOR OF MAGNETIC TAPE.
functions) was flatter over a much greater range with all tapes tested, we suspect that the head in our sample of the PC-5460 may have had a very small azimuth error.

From the line-level inputs, a signal level of 75 mV was required to obtain a 0-dB indication on the recording-level meters. A microphone input of 0.25 mV produced the same indication, and the overload point was 27 mV, making the inputs suitable for all but very high-output microphones.

Distortion at a 0-dB record level was only 0.46 per cent with the Maxell UD-XL1 tape, a figure matched by the somewhat overbiased TDK SA. The BASF ferrichrome and chromium-dioxide tapes produced 1.15 and 1.3 per cent third-harmonic distortion, respectively, at this recording level. To reach the usual 3 per cent third-harmonic distortion level on playback, the four tapes required inputs of +7.5, +6, +4.2, and +3.1 dB. Referred to the playback outputs at the 3 per cent reference point, A-weighted signal-to-noise ratios without Dolby noise reduction were 59.4, 60.5, 61, and 58.5 dB, respectively. With the Dolby circuitry switched in and using the CCIR/ARM weighting curve, the signal-to-noise figures improved to 66.4, 68.5, 69.2, and 66.6 dB, respectively.

In their "average-responding" mode, the meters of the PC-5460—like those of most audiophile tape decks—do not conform to the ballistic characteristics of genuine VU meters. Tested with standard 0.3-second bursts, they under-read by 1.5 dB, and with 0.5-second tone bursts they overshot by nearly as much. What is likely to be of more interest to the home recordist, however, is the fact that in their peak-reading mode the meters not only hit the signal peaks exactly, but displayed a very slow return action that made them easier to read. And the peak-hold function held as long as our patience in waiting for it to recede.

Wow and flutter of the PC-5460 registered 0.062 per cent on a weighted rms basis and 0.12 per cent on a DIN-B weighted measurement when using the TDK AC-341 test tape. These figures increased, respectively, to only 0.075 and 0.14 per cent when recording and playing back from a blank cassette. Fast-forward and rewind times were a bit on the slow side, however; it took 105 seconds to go from one end of a C-60 cassette to the other.

**Comment.** Once you become accustomed to the slight whirring noise produced by the motor-driven cams when you press the transport-mode buttons, the Toshiba PC-5460 is a delight to use. Its three-digit counter, though lacking a "memory rewind" feature, proved exceptionally accurate throughout the course of our measurements. The record and output controls have the silken feel of those found in the finest amplifiers and receivers, and, while obviously designed for rough rather than highly precise editing, the EDITOR function proved surprisingly easy to use and become accustomed to.

Our ears confirmed the measurements of frequency response, Dolby accuracy, and fine signal-to-noise ratios. For FM and disc dubbing using "normal" tapes, the PC-5460 is virtually flawless. For copying a direct-to-disc LP or master tapes you might (or might not) detect the improved high-frequency response provided by a CrO₂ or ferrichrome cassette. It is clear that the Toshiba PC-5460 is a fine machine that represents an excellent value within its price range.

**Circle 136 on reader service card**

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**Avid Model 230 Speaker System**

The Avid Model 230 is a three-way speaker system featuring "minimum-diffraction" design. The drivers are mounted on the front surface of the cabinet with their rims extending about 1/8 inch in front of the cabinet's speaker board. The removable grille is made of ¼-inch-thick particle board, routed out to let the speaker rims come flush with its front surface and contacting the cabinet front everywhere else. It is covered with brown cloth and has rounded edges that make a smooth transition to the cabinet edges. The purpose of this design is to minimize the fraction of sound waves from the edges of the speaker cutouts and their rims and from the cabinet edges.

The Avid Model 230 is meant to be mounted upright, either on the floor or on a stand, with the high-frequency drivers approximately at ear level. It can also be installed horizontally. It is a three-way system, with a 10-inch acoustic-suspension woofer crossing over at 475 Hz to a mid-range with a 4½-inch cone. At 4,000 Hz, there is a second crossover to a 1-inch fabric-dome tweeter. On a small panel to the left of the drivers are two three-position balance switches that vary the outputs of the mid-range and high-frequency drivers over a nominal ±2-dB range and a fuse that protects them against excessive drive levels. The spring-loaded binding-post input connectors are recessed into the rear of the cabinet, which is handsomely veneered in genuine walnut (coated with a protective vinyl) on the four sides and the front. The grille unsnaps readily for access to the balance switches or the fuse, or simply to expose the speakers and finished mounting board. The cabinet is 25 x 15 x 10 inches deep and the system weighs approximately 40 pounds. There is a five-year full warranty on all current Avid systems. Price: $215.

**Laboratory Measurements.** The frequency response in the reverberant field of our listening room was measured between 100 and 20,000 Hz with the balance switches set both to their mid positions and to their full-up settings. The bass response was measured separately with a closely spaced microphone. After we adjusted the high-frequency response against the curve of our calibrated room, we spliced the two curves to form a single composite frequency response. The frequency-response curve was changed only slightly at the extreme settings of the mid-range and tweeter-level switches, although their effect was much more audible than measurable. We used the center positions for our overall response plot.

The overall frequency response of the Avid Model 230 system was flat within ±3 dB from 50 to 20,000 Hz, and over much of that range.
The New ADS L620.
Unbelievable Performance, Very Believable Price.

Deep bass, full bandwidth, definition, clarity, dynamic range, musicality, efficiency, power handling...
These are the declared goals of good speaker design. A few designs come close -- and they cost dearly.
At last, there is an inexpensive solution: The new ADS L620.
It achieves these goals more precisely than any other loudspeaker under $200, and better than many speakers costing twice as much. It represents a new state of the art, a new LOW in cost for HIGH Performance.

Rolling Stone reports in its 1978 Fall Audio Supplement, "The ADS L620...exhibits the smooth midrange and crisp well-dispersed treble for which ADS speakers are noted...when a well-recorded organ pedal or electronic synthesizer comes along, the L620 reveals...extraordinary deep and low distortion bass response."

There should be a selected ADS dealer near you. Listen to the remarkable L620 and compare. Notice the absolute clarity, the deep, clean bass, and the powerful dynamic range.

For the smaller budget, the new ADS L420 and L520. Not quite as powerful, but also less costly.

Affordable performance has finally become a reality.

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For more information on the new ADS L620, send this coupon to:
ADS, Analog & Digital Systems, Inc., One Progress Way, Wilmington, MA 01887
The tone-burst response of the Avid Model 230 is illustrated at (left to right) 100, 1,000, and 10,000 Hz. The upper trace is the input signal.

it was unusually smooth and free of the irregularities that one expects to find in a "live-room" measurement. There was a "bump and dip" in the measured mid-range response, between 200 and 1,000 Hz, that may have been related to the fact that we supported the speakers on low stands to place their tweeters closer to ear level. However, there was no doubt about their enhanced high-frequency response, which reached its maximum at 14,000 Hz, or the woofer peak at 75 Hz. Both were of moderate amplitude (3 to 4 dB) but were clearly and repeatably measurable as well as being audible. The dispersion of the tweeters was excellent up to about 12,000 Hz, with identical response curves being obtained from an on-axis measurement and one about 30 degrees off axis. Above 12,000 Hz, the two curves diverged, with a typical level difference of 8 to 9 dB from there to 20,000 Hz. The woofer response fell at the rate of 12 dB per octave below about 70 Hz, and the bass rise of 4 dB at 75 Hz affected the output up to about 150 Hz. The speakers were tested 3 to 4 feet from the side walls, a foot from the back wall, and about 7 inches off the floor.

The impedance curve of the Avid Model 230 was notable for two things: it was remarkably flat, and it never fell below 15 ohms. There were broad maxima of 25 to 28 ohms at 50, 520, and 2,700 Hz, but elsewhere the impedance was 15 to 16 ohms. However, we used the manufacturer’s rating of 8 ohms as a basis for our sensitivity and distortion measurements. The sensitivity of the Model 230 was exactly as rated. Driven by 2.83 volts (1 watt into 8 ohms) of random noise in an octave centered at 1,000 Hz, it produced a sound-pressure level of 88 dB at a distance of 1 meter in front of the grille. The woofer distortion was measured at inputs of 1 watt and 10 watts (again, based on an 8-ohm impedance) and we found very little difference between the two measurements. The distortion was extremely low (under 0.5 per cent) down to 60 Hz at 1 watt, increasing to 5 per cent at 35 Hz and 7.1 per cent at 30 Hz. A 10-dB power increase changed the distortion to a maximum of 0.8 per cent down to 60 Hz, 5.5 per cent at 35 Hz, and 9.5 per cent at 30 Hz. Even if allowance is made for the fact that the actual drive power was half of these levels, this is, considering the true impedance of the system, an excellent bass-distortion characteristic. Practically, this means that amplifier bass boost can be applied in judicious amounts when desired without risking excessive low-frequency distortion.

The tone bursts from the Model 230 were neither better nor worse than we have observed from most other comparable speaker systems. There were no frequencies at which severe ringing occurred, but neither were there many where the burst had a near-ideal shape.

**Comment.** Our initial listening impression of the sound of the Avid 230 was of a bright, slightly thin character, particularly in comparison to our regular system, which has a relatively warm sound and extended low-bass response. Although the output in the lowest octave (30 to 60 Hz) was somewhat down, the Avid's relatively high woofer resonance provided the impression of a reasonably good bass response. The high-end output, though strong and extended, was emphasized by a small peak that contributed crispness and a bit of "sheen" to the sound. Our subsequent measurements confirmed both opinions.

The portion of the measured response that was most difficult to correlate with what we heard was the mid-range irregularity. At times we could hear a "forward" character in the sound, but the measured effects were well below the usual "presence range" of frequencies. Since we could not listen to the speakers in a number of different environments, we could not definitely separate the effects of the room and the speaker placement from the intrinsic speaker response, and we will therefore withhold judgment on that point.

By and large, the Avid Model 230 is a flat and neutral-sounding system on most program material. Its high-frequency peak gives it a definite tendency toward crispness, but not to an objectionable degree (and in a heavily damped room this might not even be noticeable). The absence of low-bass distortion makes it possible to boost the response below 60 Hz with a graphic equalizer or equivalent and convert the speaker into a fairly formidable bass performer. And it should be possible to parallel two or even three pairs of these speakers without endangering the performance or life of almost any amplifier. We found the Avid Model 230 to be a very capable and certainly very listenable speaker in its price class.

**Circle 137 on reader service card**

---

The hand-assembled Signet phono cartridges feature a moving-magnet design with a dual-magnet construction that is claimed to have a lower effective moving mass than a conventional single-magnet system that provides the same output. The two small magnets are mounted on the cantilever, at right angles to each other and as close as possible to the pivot.

The higher efficiency of the dual-magnet system makes it possible to use fewer turns of wire in the fixed coils of the cartridge, and the resulting lower inductance and resistance make the frequency response of the Signet cartridges less sensitive to changes in load capacitance and resistance. The stylus of the Model TK7E cartridge that we tested has an elliptical shape, with radii of 0.2 and 0.7 mils.

A novel feature of the Signet cartridge line is the variety of accessory or replacement stylus assemblies available for it. Three different stylus shapes are available (0.5-mil spherical).

(Continued on page 58)
Our 120's do something unusual. They work.

Anyone who uses 120 minute cassettes knows the tape is not only a lot thinner than the tape in a 60 minute cassette, it's also more susceptible to stretching, buckling, and tearing.

Yet few people realize the fault lies not in the tape itself, but in poorly constructed cassette housings. At Maxell, we build our cassettes to higher standards than the industry calls for. We use heavy-duty styrene in our cassette housing, Delrin guide rollers with precision steel pins and Teflon slip sheets. All of which help eliminate sticking and jamming.

So if you're looking for a 120, why look for trouble.

Try Maxell. The two hour cassette that's guaranteed to work. Forever.
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 (see text), which indicates resonances and overall frequency response. At right is the cartridge's response to the intermodulation-distortion (IM) and 10.8-kHz tone-burst test bands of the TTR-102 and TTR-103 test records. These high velocities provide a severe test of a phono cartridge's performance. The intermodulation distortion (IM) readings for any given cartridge can vary widely, depending on the particular IM test record used. The actual distortion figure measured is not as important as the maximum velocity the cartridge is able to track before a sudden and radical increase in distortion takes place. There are very few commercial phonograph discs that embody musical audio signals with average velocities much higher than about 15 cm/sec.

0.2 x 0.7-mil elliptical, and Shibata), and each of these can be had in a cantilever formed of carbon fiber, heryllium, or titanium. Each of these materials has some presumed special qualities in addition to high rigidity and low mass, so that the audiophile who can hear the sonic subtleties provided by exotic cantilever materials has the option of exercising his preference to a degree not available in any other cartridge line we know of. There is also an accessory stylus with a 0.5-mil spherical tip in a special low-mass aluminum cantilever, as well as a heavier aluminum cantilever with a 2.5-mil diamond for playing 78-rpm discs.

The Signet TK7E is rated to track at forces between 0.75 and 1.75 grams, with a rated frequency response of 5 to 30,000 Hz (no tolerance or test record specified). Price: $150.

Laboratory Measurements. Although the cartridge's instructions do not list a specific recommended load capacitance, they do suggest keeping the capacitance to a minimum. We installed the TK7E in the tone arm of a Dual 701 record player, loading each channel with 280 picofarads (pF) and 47,000 ohms. We then made frequency-response measurements with different load capacitances and resistances, varying each parameter while holding the other constant, and determined that the flattest overall response was obtained with the selected values. They were not at all critical, however, and good results can be expected with capacitances from under 200 pF to over 300 pF and with any resistance in the vicinity of 47,000 ohms. We operated the cartridge at 1.25 grams, in the center of its rated stylus-force range.

Measured over the 40- to 20,000-Hz range of a CBS STR 100 test record, the frequency response of the Signet TK7E was flat within ±1 dB. The only deviation from flat response appeared as a broad, very shallow dip in output in the upper mid-range. It should be noted that these results apply only when the STR 100 record is used; other test records will give a different frequency response with this or any other cartridge. The channel separation, averaged for the right and left channels, was about 25 dB in the mid-range, 19 dB at 10,000 Hz, and 12 dB at 20,000 Hz. These separation figures are even more dependent on the specific test record used than the frequency response, and so do not necessarily conflict with the Signet's rated separation of 30 dB at 1,000 Hz and 22 dB at 10,000 Hz.

The cartridge output at a velocity of 3.54 centimeters per second (cm/sec) was 3.65 millivolts—about average for a good-quality magnetic cartridge—and the channel balance of 0.2 dB was excellent. The vertical stylus angle is rated at 20 degrees (the current IEC standard) and was measured as 22 degrees. The compliance of the stylus system resonated with the moderately high mass of the Dual tone arm at 7 Hz with an amplitude of about 8 dB.

The tracking ability of the Signet TK7E was outstanding at all audio frequencies. At the 1.25-gram test force, the cartridge tracked the 90-micron level of the 300-Hz tones on the German Hi-Fi Institute's record, and at the rated maximum of 1.75 grams it played the record's maximum level of 100 microns. With our other high-velocity test records, a force of 0.7 to 0.9 gram was usually sufficient.

The tracking distortion of the TK7E was measured with the Shure TTR-102 and TTR-103 records. The former has 400- and 4,000-Hz tones at velocities from 7 to 27 cm/sec and is used with an intermodulation analyzer to measure the IM distortion in the cartridge output. We measured the IM as the approximate residual level of the record (0.8 to 0.9 per cent) up to 15 cm/sec, and it increased smoothly to 2 per cent at 23 cm/sec and 3.5 per cent at 27 cm/sec. There was no obvious mistracking at any level when playing this record.

The shaped 10.8-kHz tone bursts of the TTR-103 record measure high-frequency tracking ability, using special filters to separate the 270-Hz repetition rate of the bursts from their carrier frequency. The "distor-

(Continued on page 60)
PHASE LINEAR SETS THE STANDARD FOR HIGH POWER.

Current loudspeaker design theory takes for granted the availability of a high power reserve. An idea once considered frivolous by many. Today it is considered essential for the best possible reproduction of recorded material.

To reproduce a musical peak, a loudspeaker requires up to 10 times the average power being delivered. If the amplifier lacks a sufficient power reserve, it will clip, producing distortion and audibly destroying sonic quality.

The Phase Linear D-500 Series Two Power Amplifier is capable of delivering 505 watts per channel from 20Hz-20kHz into 8 ohms, with no more than 0.09% Total Harmonic Distortion. That's unsurpassed power for unsurpassed realism.

The D-500 utilizes an advanced design in output devices to overcome the problems associated with amplifier clipping at realistic listening levels. As a result, the power handling capability is greatly improved. In fact, the power semiconductor complement of the D-500 features the highest power handling capability in the audio industry.

A massive rear mounted extruded aluminum heat sink assembly protects the 36 output devices against overheating and includes a self-contained, thermally activated forced air cooling system. You don't have to worry about over-heating under normal operating conditions.

Instantaneous indication of output activity is easily maintained with an exclusive 32-segment LED display, while a special 4-segment clipping indicator warns of hazardous overloads. High/Low Impedance Operation modes are automatically, or manually activated for increased amplifier efficiency when using low impedance speakers.

HEARING IS BELIEVING.
See your local Phase Linear dealer for the most powerful argument for the D-500: a demonstration.

SPECIFICATIONS.
- OUTPUT POWER: 505 WATTS MINIMUM RMS PER CHANNEL 20Hz-20,000Hz INTO 8 OHMS, WITH NO MORE THAN 0.09% TOTAL HARMONIC DISTORTION.
- CONTINUOUS POWER 1000Hz per channel, with less than 0.09% Total Harmonic Distortion:
  - 8 ohms - 600 watts
  - 4 ohms - 800 watts
- INTERMODULATION DISTORTION 0.09% Max (60Hz: 7kHz = 4:1)
- DAMPING FACTOR: 1000:1 Min
- RESIDUAL NOISE: 120uV (IHF "A")
- SIGNAL TO NOISE RATIO: 110dB (IHF "A")
- WEIGHT: 65 lbs. (32 kgs.)
- DIMENSIONS: 19" X 7" X 15"
  (48.3cm X 17.8cm X 38.1cm)
- Optionally available in EIA standard rack mount configuration
- Optional accessories: Solid Oak or Walnut side panels.

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Lynnwood, Washington
98036

THE POWERFUL DIFFERENCE

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MADE IN U.S.A. DISTRIBUTED IN CANADA BY H. ROY GRAY LTD. AND IN AUSTRALIA BY MEGASOUND PTY. LTD.
CIRCLE NO. 48 ON READER SERVICE CARD
The ADC Sound Shaper Two Mk 1 is a twelve-band stereo graphic equalizer which can be interconnected with an inexpensive sound-level meter (the ADC SLM-2) for equalizing room response or used in the conventional manner as a highly flexible program equalizer.

The frequency bands of the Sound Shaper Two are spaced slightly closer than one octave apart (just ten controls with a one-octave spacing would suffice for the audio band). Their center frequencies are 30, 50, 90, 160, 300, 500, 900, 1,600, 3,000, 5,000, 9,000, and 16,000 Hz. The level in each band can be adjusted over a ±12-dB range by a vertical slider control which is detented at its center (unity-gain) position. The positions of the slider knobs (twelve per channel, or twenty-four in all) indicate the approximate frequency response of the system; hence the term “graphic equalizer.”

The ADC Sound Shaper Two Mk 1 (which we will abbreviate to “SS-2” for convenience) is a fairly large unit, measuring 16¾ x 6½ inches high, and it weighs about 12 pounds. It is finished in black, with white panel markings and brightly finished handles. An optional rack-mount adapter kit and a walnut-grain wooden cabinet are available from ADC.

Below the twenty-four sliders are pushbutton switches that can connect the equalizing circuits into the tape-output signal path or supply an unequalized signal to the recorder, connect either the line input or the tape-playback signal to the equalizer input (tape-monitor function), bypass the equalizer entirely, activate meter circuits, and control the primary power. In the lower center of the panel are two vertically oriented meters calibrated over a ±12-dB range about a 0-dB center reading. Next to each meter is a small LEVEL knob that adjusts its sensitivity (the controls have no effect on the signal levels in the equalizer circuits). The meters monitor the output levels of the two channels. There is also a phone jack, marked SLM, which accepts an input signal from the optional sound-level meter for display on the right-channel meter of the SS-2.

The ADC SS-2, like most equalizers, is designed to be connected in the tape-monitoring path of an amplifier or receiver. The tape-monitoring and recording functions are not lost since these jacks are duplicated in the rear of the SS-2, where there are also the main inputs and outputs and a single unswitched a.c. convenience outlet. The SS-2 can also be connected between the preamplifier and power amplifier.

(Continued on page 62)
Introducing the Technics SA-1000. With more power and less distortion than any other receiver we've made: 330 watts per channel minimum RMS into eight ohms from 20 Hz - 20 kHz with no more than 0.03% total harmonic distortion.

But that's only one reason to buy the SA-1000. Dynamic range is another. To capture the volume, clarity and sheer dynamics of a live symphony, you need an equally dynamic amplifier section. Like 72,000 μF worth of high-capacitance filtering, separate DC rectifiers, current-mirror loading and direct coupling. The results are impressive: tremendous reserve power, negligible transient crosstalk distortion and excellent stability.

And just for the record, the SA-1000's phono equalizer gives you everything from a super-high S/N ratio of 97 dB (10 mV, IHF A). To a phono input that can handle a 300 mV signal at 1 kHz.

On FM you'll get outstanding specs plus two RF stages with low-noise, 4-pole, dual-gate MOS FETs, Technics-developed flat group delay filters and a Phase Locked Loop IC in the MPX section.

IHF Sensitivity

<table>
<thead>
<tr>
<th>FM Sensitivity</th>
<th>FM Selectivity</th>
<th>Stereo Separation at 1 kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHF 58</td>
<td>36.2 dBF</td>
<td>85 dB</td>
</tr>
<tr>
<td>2.9 μV</td>
<td></td>
<td>50 dB</td>
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IHF '75 standard.

As good as all that sounds, Technics Acoustic Control makes it sound even better, because it adds low and high range boost and filter switches which vary the way each tone control performs at a particular setting. There's also a midrange control with a variable center frequency. And 24 LED peak-power indicators that let you keep an eye on what your ears will hear.

The Technics SA-1000. In the world of receivers, it bats 1000.

A few receivers give you 0.03% THD. Only Technics gives it to you with 330 watts per channel.
Stereo Review

62

Threshold CAS 1 Stereo Power Amplifier

Threshold Corporation's "high-end" audio amplifiers are familiar to serious audiophiles, although limited distribution and high prices have kept them from becoming well known among the general hi-fi public. From a technical standpoint, they are characterized by innovative circuit design and the use of premium-quality parts and construction. This, in combination with state-of-the-art performance, helps to explain their substantial selling prices. The subject of this report is the Threshold CAS 1, which is the least powerful and least expensive of the Threshold basic power amplifiers.

The CAS 1, as its nomenclature might suggest, uses cascode amplifier stages throughout, and it is claimed to be the first power amplifier to do so. The cascode circuit is not new, having been used for many years in low-noise r.f. and audio amplifiers. It employs two active devices (in this case transistors) connected so that one serves as the load for the other. This configuration results in maximum gain, reduced distortion, and wide bandwidth compared with the operation of a conventional amplifier.

Threshold supplies a fairly complete technical explanation for their use of the cascode circuit in brochures accompanying the CAS 1 amplifier. However, they freely admit that the CAS 1's "standard" performance specifications are not materially better than those of some conventional amplifiers that use large amounts of negative feedback to achieve their low distortion levels. Apparently relatively little feedback is used in the CAS 1. This, combined with the great bandwidth of its circuits, reduces slew-related distortions, such as "TIM," to very low levels. The result is said to be an exceptionally effortless "open" sound.

The Threshold CAS 1 is not tremendously powerful as amplifiers go today; it is rated to deliver 75 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.05 per cent harmonic or intermodulation (IM) distortion, and the distortion decreases with reduced power output. Harmonic distortion is claimed to be negligible above the third harmonic. The slew-rate specification is 40 volts per microsecond, and the low-level bandwidth is rated 0.3 dB from 1 to 100,000 Hz. The CAS 1 is a compact, unadorned amplifier on whose black front panel is installed only a rocker-type power switch and a small LED pilot light. The panel, which is slotted for rack mounting, measures 19 x 4 1/4 inches. The chassis is about 10 inches deep, and the amplifier weighs approximately 25 pounds. Price: $740.

(Continued on page 64)
Music sounds best in a space very unlike the usual listening room at home—a good-sized space where there is room for sound to expand and reverberate, and where the right proportions and right combination of sound-reflection and sound-absorption produce rich, warm and clear acoustics.

Advent's SoundSpace™ control, a new electronic product that uses the most sophisticated technology ever developed for home audio equipment, brings home the acoustic experience of good public listening spaces. It lets you hear music much as you would in good-sounding concert halls, cathedrals, night clubs, theaters, and auditoriums.

The SoundSpace control is a 32,000-bit computer — using the equivalent of more than 43,000 transistors. (In the days of vacuum tubes, its hardware would have filled an auditorium — and required enough power to light up a city block.) It digitally processes signals from a preamp, integrated amplifier or receiver, and adds time delays that are multiply mixed and recirculated to model the ways in which sound is delayed, reflected and absorbed in good public listening spaces. The delayed sounds it creates—from standard stereo recordings and broadcasts—are meant to be fed to a second amplifier (which needs no controls) and heard over a second set of two or more speakers placed at the sides and/or rear of a home listening room.

With two simple basic controls, the SoundSpace control lets you choose how big a listening space you want to create and how reverberant you want it to be. (A digital “Size Index” display lets you see as well as hear how big a space you are creating.) As you make your choices, the SoundSpace control automatically puts you in the theoretical “best seat” of any space you create, and chooses a “stage depth” appropriate for the size of the space.

The effectiveness, simplicity, and sound quality of the SoundSpace control are far beyond those of any previous time-delay or other device for creating listening space. With very low noise and distortion (less than 0.1%), 80 dB of dynamic range, and tremendous flexibility, it does what's really needed to create not just acoustic space but a whole series of good-sounding spaces in your living room.

Advent's SoundSpace control makes a far greater and more realistic difference in the way music sounds at home than anything you can experience by changing or improving conventional stereo components. It provides a three-dimensional “presence” that can't be achieved with tone controls, equalizers, reflective speakers or added amplifier power.

It enlivens the sound of all music — including the many rock and other recordings where the only original listening space is the one in the heads of the musicians, producer, and engineers.

The suggested price of the SoundSpace control is $595.* For more information and a list of dealers, please send us the coupon.

Thank you.
Laboratory Measurements. The Threshold CAS 1 proved to be an exceptional power amplifier on the test bench. The FTC-mandated preconditioning period left it only moderately warm, and its output clipped at almost exactly 100 watts per channel with both channels driven into 8-ohm loads at 1,000 Hz, which works out to an IHF clipping-headroom rating of 1.22 dB. The IHF dynamic headroom was 1.67 dB. Since the CAS 1 has completely separate power supplies for the two channels, the power ratings would be the same even if only one channel were driven. However, we drove both channels to produce maximum heating effect.

An input of 0.13 volt was required to drive the amplifier to a standard 1-watt output, and the noise level (unweighted) was better than 90 dB below 1 watt (actually too low for us to measure). The harmonic distortion at 1,000 Hz was about 0.008 per cent at all power levels up to about 50 watts, where it reached 0.01 per cent. It remained at 0.014 per cent from 75 to 95 watts, just before clipping occurred. As claimed, only the second and third harmonics could be detected (and usually only the second). The IM distortion was between 0.003 and 0.008 per cent from under 100 milliwatts to more than 10 watts output, reaching 0.027 per cent at 50 watts, 0.045 per cent at 75 watts, and 0.08 per cent at 95 watts.

The distortion was between 0.014 and about 0.02 per cent from 100 to 20,000 Hz at full power. At lower frequencies, the amplifier distortion was less than the residual level of our signal generator, which gave us total readings in the range of 0.02 to 0.03 per cent. At reduced power levels, the distortion was consistently lower than at higher power outputs.

We did not measure slew rate as such, but the IHF slew factor was 8, an exceptionally high figure. The amplifier was quite stable with high capacitive loads (one of its claimed points of superiority is the ability to drive a variety of complex load impedances without distortion or damage).

Comment. As Threshold points out, the CAS 1 is in every way a "state-of-the-art" power amplifier. We had no doubt about that, both from our overall impression of the amplifier's construction (which is outstanding) and the obvious technical skill and dedication of its designers.

A basic question, it seems to us, is whether it sounds "better" than other amplifiers, or at least different from others, when driving conventional loads. We have made no secret of the fact that in our experience there are no audibly significant differences between power amplifiers having comparable measured performance qualities and operating within their power ratings. We recognize that there are certain load conditions presented by some esoteric speaker systems that will distress some amplifiers far more than others. However, we do not make a policy of testing amplifiers only with specially selected program sources and speakers that will show them off to their best or worst advantage. Instead, we are more concerned with a piece of equipment's general suitability for use in typical situations. (For the record, however, Threshold states that the CAS 1 will drive a purely capacitive load without loss of performance, and we have no reason to doubt their claim. This would make it ideal for use with some of the current "difficult-to-drive" electrostatic speaker designs).

All of which is to introduce our not-so-surprising finding that the Threshold CAS 1 sounds, in our listening room with our equipment, exactly like any other fine power amplifier. This is not to denigrate it, but merely to point out that other distortions far greater than its own, which are present in every part of a high-fidelity music-reproduction chain (from recording microphone to playback loudspeaker), are more than likely, in our view, to prevent it from revealing its own uniqueness.

Many people will disagree (some vehemently) with this view. For someone who hears something special and desirable about this (or any other) amplifier, the choice is obvious, and we would be the last to argue with such a decision. In truth, the CAS 1 is built like a pocket battleship, and its performance within its power rating could hardly be surpassed. But we would expect nothing less from an amplifier with the credentials—and the price tag—of this one.

"That's really a coincidence, Gerald. Picking up a stereo amplifier and getting a double hernia."
The most important piece of audio equipment you'll ever own.

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The RIAA’s Henry Brief explains to Pop Music Editor Weiss what it takes for a record to be certified gold.

**GOING GOLD**

A hand-printed sign on a large apothecary jar I saw the other day read: “There were 1,428 jellybeans in this jar.” Although the empty jar stood in the window of a “sweets emporium” whose elegant atmosphere was a far cry from the corner two-for-a-penny candy store that kept me encased in baby fat until I was ten, it was obvious that some things have not changed: the jellybean guessing game for one, and our fascination with numbers for another.

The recording industry is conspicuously interested in numbers. It is constantly measuring sales in dollars, airplay in minutes, and perhaps reviews in inches. Hot discs earn not only megabucks and their time and place in the sun, but also the ultimate symbols of industry approval, gold and platinum awards.

Like many other behind-the-scenes functions of the music business, the presentation of gold and platinum records is rapidly becoming a public affair. This is hardly surprising in view of a 1977 survey taken by the Recording Industry Association of America (RIAA), which concluded that “recordings are now an ingrained part of the culture” and that “today’s youth [as they age] will continue to buy records because their relationship with music is different from that of any other generation.” But although the general public has become more aware of the awarding of gold and platinum records, it is still fuzzy about who presents them and on what basis.

To defuzz any readers whose interest has been aroused, I consulted an expert on the subject, Henry Brief, executive director of the RIAA. He gave me a concise history and explanation of both the awards and the RIAA, which concluded that “recordings are now an ingrained part of the culture” and that “today’s youth [as they age] will continue to buy records because their relationship with music is different from that of any other generation.” But although the general public has become more aware of the awarding of gold and platinum records, it is still fuzzy about who presents them and on what basis.

The RIAA’s Henry Brief explains to Pop Music Editor Weiss what it takes for a record to be certified gold.

In the late Sixties, tape sales became a complicating factor. A tape was obviously an additional unit, but its list price was considerably higher than that of the equivalent disc.

Instead of raising the bridge [making a million and a half dollars the qualifying figure], Brief said, “the RIAA lowered the water. A million dollars had a magical ring to it . . . .” So it remained a million, but in 1968 it was decided that it would be based on one-third the list price of combined record and tape sales.

The criteria continued to evolve. In 1974, in response to a spiraling inflation rate, the gold-album standard changed to units, as it is today. A disc now “goes gold” with sales of half a million albums. At the same time, platinum records appeared, and they were given out by record companies as indiscriminately as gold ones once had been.

“A platinum record obviously was better than a gold one, but nobody knew what the heck it was supposed to represent,” Brief admitted. Starting with glittery awards in 1966, the RIAA inaugurated its platinum award for records with sales double the requirement for gold: one million units for albums, two million for singles.

If the advance orders for a new record are large enough that its first shipments to dealers qualify it for a gold-record award, it is said to “ship gold.” Brief said, “We check the actual shipments at the factory level. If record stores later return so many unsold copies that the net sales fall below the qualification mark, we can’t exactly strip off the record company’s epaulettes and break its sword. However, if a company overships in order to qualify for a gold record, that company won’t be in business very long. Returns are rarely sufficient to disqualify the record. R.S.O.’s ‘Sgt. Pepper,’ for example, supposedly shipped four million upon release. Even if 75 percent came back, it would still be platinum.”

The RIAA’s standards apply only to the United States, but there are organizations in other countries that function similarly, altering the criteria to fit their own markets. For example, because of Canada’s smaller population, the Canadian Recording Industry Association has set 100,000 units as the requirement for a gold album in that country.

The expenses of RIAA certification, including the cost of the audit and the award plaques, are paid by the record companies. The companies conform to RIAA standards on a voluntary basis, and the organization has no policing arm. “If anyone claims a gold record without certification,” Brief says, “there is nothing we can do about it. But the awards have acquired credibility and prestige, and artists themselves insist on validation, knowing that any unsubstantiated claim would be suspect.” In 1958, the first year of RIAA certification, there were five gold album awards. In 1977 there were two hundred gold and seventy platinum awards, and when the RIAA tallies final figures for 1978, they will be much higher.

The certification process is the most visible activity of the RIAA, which was originally formed in 1952 to provide a unified voice for the scattered record industry and to help set engineering standards. (Back then it determined uniform sizes for 78-, 33⅓-, and 45-rpm discs.) Just as it recently adjusted its criteria to embrace the twelve-inch single, one day soon the association will be called on to create standards for the next big development: commercially produced video recordings. The simple days of the record business, like that of the corner candy store, are certainly gone, but jellybeans and music, whatever the forms they may evolve into, go on forever.

68
1,247 times a second this motor checks itself for perfect speed...

**How it works:**
Built into the RD5350 motor is a 68 pole tacho generator that produces a series of pulses proportional to the motor speed. In the Phase Locked Loop integrated circuit, these pulses are compared with the signal from the precision reference oscillator (1246.7 Hz). If even a single pulse is found to be slightly out of phase, power to the motor is adjusted by a second integrated circuit to restore synchronization. This process takes place independent of fluctuations in load or AC line voltage.

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You also get advanced features like 3 peak-indicating LED's (0, +3, and +6 VU), separate input and output level controls, a Record Mute button for erasing short sections of tape, and a timer standby feature for taping programs when you’re not around.

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CIRCLE NO. 45 ON READER SERVICE CARD
Going on Record

By James Goodfriend

CENTEN- AND OTHER -ARIES

I usually become aware of centenaries just as they are ending: 1978 was the tricentenary of Antonio Vivaldi, and, though I count myself an admirer of Vivaldi, the anniversary quite escaped my notice until November. Centenaries are both important and unimportant. They are unimportant in the case of great composers whose genius is with us continuously and whose anniversaries become merely excuses for rehearsing known masterpieces. They are important in the case of small and neglected composers, for they offer an excuse (and an excuse seems to be needed) for reacquaintance and re-evaluation, a chance to decide what really was this man’s contribution and what scrambled the message from him to posterity. At any rate, I have done my homework early this year and can pronounce on at least some of the anniversaries of 1979.

This year is the known, round-numbered anniversary of the birth of no great composer at all. Anniversaries of deaths I am not concerned with (for reasons made clear in another column), and most early composers are hated never to have anniversary celebrations, for they were born “circa,” or were not even born but merely “flourished.” 1979 is, however, the centenary of five interesting lesser composers: Frank Bridge (1879-1941), Joseph Canteloube (1879-1957), John Ireland (1879-1962), Ottorino Respighi (1879-1936), and Cyril Scott (1879-1970). Although three of them are Englishmen, there is virtually nothing except the numbers that ties these men together, but that, perhaps, makes it even more interesting to look at them separately.

Frank Bridge is best known as the man who supplied the theme for Benjamin Britten’s Variations on a Theme of ... Less well known is the fact that he was Britten’s teacher. Still less well known is his music. My limited acquaintance with it leads me to the supposition that it falls into two distinct styles: the conservative folk and fairy-tale music that one might well expect of a student of Stanford, and a far more complex and “modern” music that still does not quite fit into any of the main currents of the century. The first style can be found in his Sir Roger de Coverley (conducted by Benjamin Britten) on London 6618; the second, at its most effective, in the String Quartets Nos. 3 and 4 (once available on Argo ZRG 714, now deleted).

What is particularly fascinating to hear in this later music (for Bridge’s style changed at the time of, perhaps in response to, the First World War) is the open door to Viennese expressionism—a very new model for British music—and the mingling of those currents with ideas that still sound today specifically English. Such sounds are worth the hearing, and Bridge is certainly an unfairly neglected composer.

Joseph Canteloube is another matter altogether, for I, at least, have never heard a note of his original music. I know his magnificent Chants d’Auvergne and I know others of his folk-song settings, but of his symphonic works, his operas, nothing. His work is not much spoken of in the standard references beyond his folk-song researches, but he apparently had some success in his lifetime with performances at the Opéra and at the Concerts Colonne. Like so many of the lesser French figures, his music seems ripe for investigation today.

John Ireland continues to be venerated in Britain and all but ignored elsewhere, though, thanks to the British Lyrica company (and others) and the American HNH and MHS licensees, a fair amount of his music has come to be available here on records. It doesn’t stay very long in the catalogs, however. In contrast to British opinion (Grove’s Dictionary gives Ireland ten pages, Berg four, Copland under two), I have usually found Ireland a flawed composer, his music intriguing in places, beautiful in places, moving in places, and elsewhere rather dull. His vaunted literary taste I would not deny, but as a musical setting of literary texts he ranks, I think, far behind his countryman Peter Warlock and our countryman Samuel Barber. Still, his music is an imported product we get only in canned form. It might be revealing to hear it fresh.

Ottorino Respighi has been one of my pet musical peeves since I first heard his Fountains of Rome and wondered how any man could make such a fortissimo fuss over no substance at all. I haven’t turned away from that opinion, but I do find Respighi’s Ancient Airs and Birds and such pleasant enough, and I confess to a lurking impulse to hear again, after many years, that Roman trilogy—Fountains, Pines, and Festivals—just to make a point of listening to Scheherazade once every two or three years to confirm my previously held opinion. I cannot count his birthday as one of the great centenaries, but if it gets me to listen to some of his works again, perhaps that is of some value.

Cyril Scott, the composer of the immortal (well, twenty or thirty years ago it was immortal) Lotus Land, was to me a salon composer, in the lowest sense, until I had the startling experience of hearing his piano concertos. Perhaps their orientalisms and general exotica still carry more than a hint of salon preciousity, but it is salon music grown large and complex and fecund beyond previous imagining. Rarely, I think, have I so quickly changed my estimation of a composer as I did with Scott. The concertos are in the catalog as HNH 4025 and 4051.

So much for centenaries. This year 1979 is the bicentenary of no one I can find, but it is the sesquicentennial of Louis Moreau Gottschalk and of Anton Rubinstein, two of the most flaming of the Romantics and, from the telling, two of the greatest keyboard virtuosos. Neither, it seems to me, is in any danger of suffering any neglect. This year is also the tricentennial of Jan Dismas Zelenka, a composer totally unknown only a few years ago, who is about to receive quite the nicest birthday present ever in the form of a recording of his (apparently) complete orchestral works, DG Archiv 2710 026. And it is the two-hundred-fiftieth anniversary (bi-sesquicentenary?) of the birth of Padre Antonio Soler, he of the famous Pandango. If you don’t know the work, the record number is Columbia M3X 31521, and you will thank me for almost everything else in the three-disc set as well. Igor Kipnis is the harpsichordist.

Finally, a brief bow to our own times: a very happy fiftieth birthday (semicentenary) to George Crumb, Toshiro Mayuzumi, André Previn, Yehudi Wyner, and all those others I have unfortunately missed. A long and productive life to you.
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CIRCLE NO. 37 ON READER SERVICE CARD
These simulations of record-groove stress patterns show a conventional elliptical stylus (above) making contact in two fairly small areas, producing narrow, extended stress patterns.

THE PHONO CARTRIDGE
To understand its operating principles is to appreciate the level of technological wizardry that produced it

By William Curtiss

A Shibata stylus (below) has an elongated contact area, which theoretically distributes the stylus force over more of the groove wall, reducing the pressure, as the broadened patterns show.
Among the more persistent popular myths is the one stating that, according to scientific theory, the bumblebee cannot fly. But, unaware of the aerodynamic theories involved, the insect, in its ignorance, manages to buzz about his business quite well. By the same token, the phonograph record can be seen, on the face of it, to be such a practical impossibility that if it hadn't yet been invented, it probably wouldn't be. A superficial analysis of the engineering problems involved would likely find it impossible (1) to convert sound waves into microscopic undulations in soft plastic material or (2) to subsequently "read" these undulations with an equally microscopic stylus so as to reproduce the original sound wave. The question would inevitably arise as to whether there weren't an easier way to store and reproduce sound, and it is more than a little likely that the phonograph record would be dismissed as a Rube Goldberg device of interest only to technical ignoramuses such as Thomas Edison and Emile Berliner.

Fortunately for us, these seat-of-the-pants inventors made the impractical practical simply by going ahead and doing it rather than worrying about whether it could be done. And it is rather heartwarming to remember that Edison himself was astonished when his crude tin-foil-coated cylinder device worked the very first time he tried it.

Early phonograph cylinders and discs were hardly "high fidelity," despite the enthusiastic testimonials in advertisements of the time that their sound couldn't be distinguished from the original. Yet, they did bring music reproduction to the homes of the day, and it was certainly better than nothing. As we all know, the phonograph shortly became immensely popular and the arduous job of refining the concept and improving the quality began; it continues to this day.

The Stylus

If you know anything about the task that confronts a phono stylus, you might agree with the theoreticians that it lies somewhere between the impractical and the impossible. In order to follow the undulations of the record groove, especially toward the center of the disc where wavelengths become microscopic (the groove-wall modulation produced by a 15,000-Hz tone is about half a thousandth of an inch), the stylus tip doing the tracing must be tiny. The task is complicated by the difference between the shape of the original cutting stylus and that of the playback stylus. To cut the master disc cleanly and quietly, the cutting stylus must have a knife-like edge: it is shaped somewhat like a triangular chisel with facets on the edges to burnish the groove as it goes along. The playback stylus, however, must be rounded at the edges or it will "cut" the disc. Unfortunately, rounded surfaces cannot follow precisely a path chiseled out by a triangular-shaped cutting instrument. The resultant inaccuracy is called tracing distortion, and it worsens as signal wavelengths get shorter.

The first experimental step toward reducing tracing distortion was the use of a smaller tip on the playback stylus. Unfortunately, as the stylus gets smaller, the pressure (force per unit area) exerted on the groove walls by its tracking force increases, and record wear becomes a real risk. The smallest practical diameter for a ball-type ("spherical") stylus tip is about 0.0005 inch—which is approximately the same dimension as the wavelength of a 15,000-Hz tone in the inner grooves of a record. Such a stylus will have difficulty playing phononic discs was made possible by the development of styli capable of tracing the extremely short wavelength of a 40-kHz signal. The "Shibata" stylus had a new and more complex geometry, and it engendered numerous offspring—the "Quadrahedron," "Stereohedron," "Hyperbolic," "Pramanik," and others. They are all similar to the extent that they are ground with yet a third radius: the curvature running from the very point of the tip and up along the stylus' sides to its top. This curvature defines the vertical length over which the sides of the stylus contact the groove walls. A longer vertical contact need not impair the effective "sharpness" of the stylus for tracing groove detail, but it will increase the overall contact area, thus reducing stylus pressure and consequent record wear. In fact, according to the Shibata theory, you can make the edge of the stylus even sharper than it is in the elliptical configuration—and still incur no penalty in stylus pressure if the vertical contact is made long enough. Although these complex (and still expensive) styli are certainly not required for adequate reproduction with ordinary stereo records, they can noticeably improve tracing.

While stylus geometry plays the major role in establishing the short-wavelength tracing ability of a cartridge, stylus mass ultimately establishes the high-frequency response of the system. The faster the stylus must reverse direction—that is, the higher the recorded frequency—the greater the force required to accelerate its mass. If this acceleration is to be accomplished without tearing up the vinyl, the effective stylus mass must be extremely small. And stylus mass has a further effect on high-frequency response. Vinyl has a certain amount of springiness; it is compliant, deforming and then springing back under the force exerted on it by the stylus. This compliance resonates with the effective mass of the stylus at some (usually high) frequency, just as any weight-and-spring system resonates. The resonant frequency of vibration of the stylus/vinyl-groove combination essentially determines the highest frequency to which the stylus can mechanically respond with accuracy. This can vary from perhaps 12,000 Hz in an inexpensive high-mass stylus assembly to more than double or triple that frequency with a quality stereo or CD-4 cartridge. And the vinyl material's compliance, which will vary from record to record, also has its influence.

Several factors combine to determine the effective tip mass of the stylus: the mass of the diamond itself (and...
"Not all cartridges receive the electrical loading for which they're designed, and performance may consequently vary as much as 7 or 8 dB . . . ."

The gauge requires an external d.c. power. High-fidelity stereo review results in a cartridge, called a "crystal" or "element"-a substance such as barium beryllium, and some have used telecoated shanks. Some have used extremely thin-walled aluminum with miniature internal reinforcing rods of beryllium, and some have used telescoped shanks.

**Transduction System**

Once the vibrations from the groove have been conveyed into the cartridge body via the stylus and cantilever, they must be converted or transduced into electrical signals. A variety of means can be used to accomplish this, although some form of magnetic transduction is by far the most common.

To consider other means first, the stylus can be coupled to a piezoelectric element—a substance such as barium titanate that generates a voltage across itself when twisted or strained. The resulting cartridge, called a "crystal" or "ceramic" type, produces a relatively high output voltage but is not likely to be of high-fidelity quality. However, miniature strain-gauge and electret elements have been used successfully as high-fidelity transducers. The strain gauge requires an external d.c. power supply, the current flow from which is modulated by imbalances in the strain-gauge bridge that are caused by the stylus motion. The electret cartridges are roughly similar in operating principle to an electret microphone, and they require a passive or active internal circuit to buffer and otherwise process their output signals before they can be routed to the preamplifier.

Magnetic cartridges come in three basic configurations: moving-magnet, moving-iron, and moving-coil. Explained as simply as possible, both the moving-magnet and moving-iron types employ fixed coils of wire within the cartridge body and a voltage is generated within the coils whenever the magnetic flux passing through them varies. In a moving-magnet cartridge, the magnetic field is supplied by a tiny magnet attached to the rear of the stylus shank. As the stylus shank vibrates, the magnetic field impinging on the coils varies and an electrical signal is induced. In a moving-iron (sometimes called a variable-reluctance) cartridge, a small piece of iron alloy is attached to the stylus shank. It is not a magnet itself, but it varies or modulates the field (supplied by a fixed internal magnet) that impinges on the coils. These modulations generate the voltage in the coil. A variation on this theme is the induced-magnet cartridge, in which the magnetic flux of a fixed magnet is induced in an iron sleeve on the cantilever. The sleeve then operates as a moving magnet. There are numerous other variations on these principles employing several fixed and/or moving magnets and different coil arrangements. Almost all have user-replaceable styli.

Most of these "fixed-coil" types generate a comparatively high level of audio electrical signal—typically 3 to 5 millivolts at 1,000 Hz for a laterally recorded level of 5 centimeters per second. However, the cartridge's output voltage varies with frequency and thus must be equalized—a job competently taken care of by the RIAA circuits in the phono-input section of your amplifier or receiver. Both types have relatively high output impedances and require proper "loading" from the phono-preamplifier section of your amplifier or receiver to function at their best. This is of sufficient importance to warrant an explanation.

As mentioned previously, the stylus assembly physically resonates with the vinyl groove walls at some relatively high frequency (beyond that frequency the output of the cartridge diminishes rapidly). At the resonance frequency there is likely to be a peak in the frequency-response curve. The amplitude of the peak, and the frequency range over which it occurs, is determined by the mechanical damping of the stylus. This damping is provided mostly by the carefully controlled characteristics of the elastomeric bearing (the pivot) that supports the stylus assembly. No doubt it would be possible to design a stylus so that it would be critically damped inherently, and there would then be no peak in the output of the cartridge at resonance. However, to do so would require a substantial amount of internal damping, and the resultant friction would impede stylus motion and require additional tracking force. A less problematic approach—used in virtually all fixed-coil cartridge designs—is to make use of an electrical resonant circuit to compensate for the mechanical resonance and thus flatten out the response curve. This electrical circuit involves both (1) the inductance and resistance of the coils within the cartridge and (2) the load resistance and capacitance to which the cartridge is connected. The load resistance is determined by the input circuit of the preamplifier; the capacitance is that of the tone-arm wiring, the connecting cable to the preamplifier, and the preamp's own input capacitance.

It is pretty much standard practice to design magnetic cartridges of this type for termination with a 47,000-ohm resistive load, and preamplifiers are designed to supply it. (CD cartridges are designed for a 100,000-ohm load, a value provided by the CD-4 demodulator to which they are connected.) But the optimum load capacitance is not standardized, and cartridges range in their requirements from 150 to 450 picofarads. Furthermore, not all preamplifiers are designed in such a way that their input circuitry provides a pure resistance and capacitance, which means that the load they present to the cartridge can be somewhat in doubt. Not all cartridges receive the electrical loading for which they're designed, and their mid- and high-frequency performance may consequently vary as much as 7 or 8 dB flat response.

As a word of practical advice, if you know the recommended load capacitance for the cartridge (it's generally given in the owner's manual) and the input capacitance of the preamplifier (it will be appearing more frequently in specification sheets), the difference between the two can be made up with the capacitance of the tone-arm wiring and that of the interconnecting cables. Alternatively, a fixed capacitor purchased from an electronics store can be wired across the phono input to achieve the total recommended value. Recordplayer manufacturers are beginning to print data on the capacitance contributed by their products. If not provided in
### Phonograph Cartridges: A Representative Sampling

| Manufacturer | Model | Cartridge Type | Standard output (millivolts) | Tracking force (grams) | Recommended load resistance (ohms) | Recommended signal sensitivity (microvolts per cm) | Stylus shape | Use-capacitance (farads) | Length (inches) | Price
<table>
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<tr>
<td>AKG</td>
<td>P8E</td>
<td>Moving iron</td>
<td>3.75 4/5 to 1/4</td>
<td>47k</td>
<td>470 E</td>
<td>yes</td>
<td>$135</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>P8E</td>
<td>Moving iron</td>
<td>4    4/5 to 1/4</td>
<td>47k</td>
<td>470 E</td>
<td>yes</td>
<td>$100</td>
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<td></td>
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<td>Acutex</td>
<td>M3200I-STR</td>
<td>Moving iron</td>
<td>4 0.8 to 1.8</td>
<td>30k to 100k</td>
<td>50 to 500 Q</td>
<td>yes</td>
<td>$175</td>
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<tr>
<td></td>
<td>M3100E</td>
<td>Moving iron</td>
<td>4 1.5 to 2.9</td>
<td>30k to 100k</td>
<td>50 to 500 E</td>
<td>yes</td>
<td>$75</td>
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<td>ADC</td>
<td>ZLM</td>
<td>Induced magnet</td>
<td>5.5 5/16 to 1 5/16</td>
<td>47k</td>
<td>275 Alpith</td>
<td>yes</td>
<td>$80</td>
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<td>LXM MKIII</td>
<td>Induced magnet</td>
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<td>275 E</td>
<td>yes</td>
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<td>AT20SS</td>
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<td>2.7 2 1/4</td>
<td>47k</td>
<td>100 to 200 Shibata+</td>
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<td>AT15XE</td>
<td>Moving magnet</td>
<td>2.7 2 1/4</td>
<td>47k</td>
<td>100 to 200 E</td>
<td>yes</td>
<td>$175</td>
<td></td>
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<td>Bang &amp; Olufsen</td>
<td>MMC-6000</td>
<td>Moving iron</td>
<td>4.25 1</td>
<td>47k</td>
<td>100 Q</td>
<td>no</td>
<td>$145</td>
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<td></td>
<td>MMC-4000</td>
<td>Moving iron</td>
<td>4.25 1</td>
<td>47k</td>
<td>200 E</td>
<td>no</td>
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<td>Decca</td>
<td>Mk VI Gold</td>
<td>Moving iron</td>
<td>5 1.5</td>
<td>50k</td>
<td>250 to 300 E</td>
<td>no</td>
<td>$150</td>
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<td></td>
<td>Mk VI Plum</td>
<td>Moving iron</td>
<td>7.5 2</td>
<td>50k</td>
<td>250 to 300 S</td>
<td>no</td>
<td>$140</td>
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<tr>
<td>Denon</td>
<td>DL-10CD</td>
<td>Moving coil</td>
<td>0.25 1.5</td>
<td>100 N.C.</td>
<td>E</td>
<td>no</td>
<td>$267</td>
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<td>DL-10SS</td>
<td>Moving coil</td>
<td>0.3 1.5</td>
<td>100 N.C.</td>
<td>E</td>
<td>no</td>
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<td>Dynavector</td>
<td>20C</td>
<td>Moving coil</td>
<td>0.18 1.2</td>
<td>47k</td>
<td>270 Q</td>
<td>no</td>
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<td></td>
<td>10A</td>
<td>Moving coil</td>
<td>2 2.3 to 2.7</td>
<td>47k</td>
<td>270 S</td>
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<td>Empire</td>
<td>4000DIII</td>
<td>Moving armature</td>
<td>4.24 1/4 to 1/4</td>
<td>47k to 100k</td>
<td>100 E</td>
<td>no</td>
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<td>2000Z</td>
<td>Moving armature</td>
<td>4.24 1/4 to 1/4</td>
<td>47k</td>
<td>300 E</td>
<td>yes</td>
<td>$125</td>
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<td>Grace</td>
<td>SF-90</td>
<td>Moving magnet</td>
<td>5.5 1 to 2</td>
<td>47k</td>
<td>250 E</td>
<td>yes</td>
<td>$250</td>
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<td></td>
<td>P9-F</td>
<td>Moving magnet</td>
<td>3.5 1 to 2</td>
<td>100k</td>
<td>80 Q</td>
<td>yes</td>
<td>$175</td>
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<td>Grado</td>
<td>B-1</td>
<td>Moving iron</td>
<td>3 1 to 1.5</td>
<td>N.C.</td>
<td>N.C. &quot;Grado type&quot;</td>
<td>yes</td>
<td>$150</td>
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<td></td>
<td>F-1</td>
<td>Moving iron</td>
<td>3 1 to 1.5</td>
<td>N.C.</td>
<td>N.C. &quot;Grado type&quot;</td>
<td>yes</td>
<td>$75</td>
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<tr>
<td>Great American Sound</td>
<td>Sleeping Beauty</td>
<td>Moving coil</td>
<td>0.27 1.8 to 2.1</td>
<td>50 to 1k N.C.</td>
<td>E</td>
<td>no</td>
<td>$240</td>
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<td>Great American Sound</td>
<td>Sleeping Beauty Super-Elliptical</td>
<td>Moving coil</td>
<td>0.27 1.8 to 2.1</td>
<td>50 to 1k N.C.</td>
<td>E</td>
<td>no</td>
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<td>Micro-Acoustics</td>
<td>530-mp</td>
<td>Electret</td>
<td>3.5 0.7 to 1.4</td>
<td>N.C.</td>
<td>N.C. Micro-point</td>
<td>yes</td>
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<td>Electret</td>
<td>3.5 0.7 to 1.4</td>
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<td>N.C. E</td>
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<td>Nagatronics</td>
<td>HV-9100</td>
<td>Moving ribbon</td>
<td>0.04 1.6 to 2</td>
<td>10 to 30 N.C.</td>
<td>E</td>
<td>no</td>
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<td>3600C EX</td>
<td>Induced magnet</td>
<td>4 1.7</td>
<td>50k</td>
<td>350 E</td>
<td>yes</td>
<td>$125</td>
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<td>Nakamichi</td>
<td>MG-1000</td>
<td>Moving coil</td>
<td>0.2 1.5 to 2.1</td>
<td>200 N.C.</td>
<td>Q</td>
<td>no</td>
<td>$305</td>
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<td>MG-500</td>
<td>Moving coil</td>
<td>0.9 1.9 to 2.5</td>
<td>50k N.C.</td>
<td>E</td>
<td>no</td>
<td>$135</td>
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<td>Ortofon</td>
<td>MC 70</td>
<td>Moving coil</td>
<td>0.07 1/2 to 2</td>
<td>47k</td>
<td>N.C.</td>
<td>no</td>
<td>$185</td>
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<td>OST</td>
<td>MBC-1</td>
<td>Moving coil</td>
<td>0.5 1/2 to 2</td>
<td>47k</td>
<td>N.C.</td>
<td>no</td>
<td>$160</td>
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<td>Osaka</td>
<td>300MP</td>
<td>Moving coil</td>
<td>4 1/2 to 2</td>
<td>47k</td>
<td>N.S.</td>
<td>yes</td>
<td>$100</td>
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<td>Pickering</td>
<td>XUV4500Q</td>
<td>Moving coil</td>
<td>4 1/2 to 2</td>
<td>47k</td>
<td>N.S.</td>
<td>yes</td>
<td>$165</td>
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<td>Satin</td>
<td>M-188X</td>
<td>Moving coil</td>
<td>2.5 1/2 to 2</td>
<td>30 N.C.</td>
<td>Q</td>
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<td>$190</td>
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<td>M-18E</td>
<td>Moving coil</td>
<td>2.5 1/2 to 2</td>
<td>30 N.C.</td>
<td>E</td>
<td>no</td>
<td>$195</td>
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<td>Shure</td>
<td>V-15 Type IV</td>
<td>Moving coil</td>
<td>4 1/4 to 1/4</td>
<td>47k</td>
<td>250 Hyperelectrical</td>
<td>yes</td>
<td>$160</td>
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<td>M24H</td>
<td>Moving coil</td>
<td>3 1 to 1/2</td>
<td>100k</td>
<td>Q</td>
<td>yes</td>
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<td>Signet</td>
<td>MX-11</td>
<td>Moving coil</td>
<td>0.4 1 to 2.0</td>
<td>N.C.</td>
<td>N.C.</td>
<td>yes</td>
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<td>Sonic Research</td>
<td>Sonus Gold-Blue</td>
<td>Moving coil</td>
<td>2.7 0.70 to 1.75</td>
<td>47k</td>
<td>100 to 200 Shibata</td>
<td>yes</td>
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<td></td>
<td>Sonus Gold-Red</td>
<td>Moving coil</td>
<td>4 1/4 to 1/4</td>
<td>47k</td>
<td>400 E</td>
<td>yes</td>
<td>$140</td>
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<tr>
<td>Stanton</td>
<td>881S</td>
<td>Moving coil</td>
<td>3 1/2 to 2</td>
<td>47k</td>
<td>275 Stereophonic</td>
<td>yes</td>
<td>$150</td>
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<td></td>
<td>780/4DQ</td>
<td>Moving coil</td>
<td>3 1/2 to 2</td>
<td>100k</td>
<td>Q</td>
<td>yes</td>
<td>$125</td>
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<td>Stax</td>
<td>CP-V/ECP-1</td>
<td>Electret condenser</td>
<td>240 0.9 to 1.6</td>
<td>20k</td>
<td>500 E</td>
<td>yes</td>
<td>$580 (with equalizer-amp)</td>
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<td>SupeX</td>
<td>SD-900E --Super</td>
<td>Moving coil</td>
<td>0.2 1.2 to 1.7</td>
<td>N.C.</td>
<td>N.C.</td>
<td>E</td>
<td>no</td>
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<td></td>
<td>SD-301E + Super</td>
<td>Moving coil</td>
<td>2.0 1.2 to 1.7</td>
<td>47k</td>
<td>N.C.</td>
<td>E</td>
<td>no</td>
<td>$175</td>
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**Cartridge Specifications**

The chart lists several models at or near the top of the list of the major cartridge manufacturers, together with some of their more important specifications. Information on frequency response and channel separation has been omitted because the use of different test records by different manufacturers invalidates comparisons.

Of the specifications indicated, standard output is referred to a recorded lateral velocity of 5 centimeters per second at 1,000 Hz. Tracking-force range will give a rough idea of the tracking abilities of the various cartridges, although it is by no means an absolute indication of merit. The importance of load resistance and capacitance is explained in the text. The symbols "S" represents a spherical stylus, "E" an elliptical stylus, and "Q" a stylus that is specially shaped for CD-4 four-channel reproduction but will also serve well in conventional use. When a certain stylus shape clearly does not fit into any of these categories, the manufacturer's nomenclature is used. N.C. == not critical; N.S. == not supplied.

The "Cartridge type" column indicates the intended electromechanical format of the cartridge; however, because of design and nomenclature variations the designations should not be viewed as anything other than approximate descriptions of operating principles, nor as any indication of quality or design superiority.
PHONO CARTRIDGE

"Specifications are useful only in a comparative sense, and then only when the cartridges in question have been tested under identical conditions."

the player's instruction manual, this vital piece of information can be obtained at the cost of a letter or phone call to the manufacturer.

The other type of magnetic cartridge, the moving-coil, has a reputation for high-frequency definition and clarity superior to that of the fixed-coil cartridges—a reputation that persists although scientific support for it has yet to emerge. In a moving-coil cartridge the stylus is attached to miniature coils of wire that are immersed in a fixed magnetic field within the cartridge. The signal voltage is generated by the movement of the coils through the field. Obviously, only a very few turns of wire can be used in the coils if the effective mass at the stylus is not to become excessive. Accordingly, the signal-voltage output of these cartridges is very low, and an accessory transformer or a pre-preamplifier (frequently called a "head amp") is usually required between the cartridge and the phono-input circuit. However, without the electrical resonance circuit to tame the high-frequency resonance, the cartridge designer must accomplish all of the "resonance compensation" within the cartridge itself. And so, when measured under laboratory conditions, moving-coil cartridges generally show a trace of a high-frequency resonant peak.

Specifications

In an ideal world, specifications would tell you how a phono cartridge—or any other component—sounds. Unfortunately, the world isn't ideal; specifications are useful only in a comparative sense, and then only when the cartridges in question have been tested under identical conditions.

Phono cartridges are measured using test records that themselves have questionable accuracy. Test records can be "calibrated" with a cartridge, of course, but that leads directly to the chicken-and-egg dilemma. The final fact of the matter is that the same cartridge will yield different results if a different test record is used, and, inevitably, different manufacturers use different records. For example, a cartridge that exhibits a flat frequency response measured with a JVC test record will frequently show a rise of 2 to 4 dB at 20,000 Hz when measured with a CBS test record. Which is correct? Is the difference really cut into the disc, or does it arise from variations in vinyl formulations and their effect on stylus/groove resonance? It's exceedingly difficult (but not impossible) to tell.

A similar situation exists in the measurement of crosstalk or, more properly, separation between channels. Different test records yield different results. Research suggests a tentative explanation having to do with the way the various test records were cut. But whatever the explanation, the implication is the same: a cartridge measurement is only as good as the test record, and the "goodness" of the record is not easily ascertained.

One of the most important cartridge specifications—if not the most important—is also one of the most difficult to pin down with numbers. This is tracking ability—a measure of how well the stylus maintains contact with the groove walls during their spectacularly tortuous undulations. Needless to say, if the stylus loses contact with the groove walls, the resulting sound will be at least somewhat distorted.

Tracking ability can generally be enhanced by selecting a tracking force toward the high end of the cartridge manufacturer's suggested range. In fact, for best results, any cartridge should probably be used at close to its max.

(Continued on page 78)
The New #1 in Professional Applications...

Stanton’s Calibrated 881S Cartridge

No wonder this cartridge has achieved such dominance so swiftly. It has design, engineering and quality features that no other cartridge has. Stanton’s new Professional Calibration Standard 881S cartridge is designed for maximum record protection. This requires a brand new tip shape, the Stereohedron™, which was developed for not only better sound characteristics but also the gentlest possible treatment of the record groove. This cartridge also possesses a revolutionary new magnet. It is made of an exotic rare earth compound which, because of its enormous power, is far smaller than ordinary magnets.

Stanton guarantees each 881S to meet its specifications within exacting limits. The most meaningful warranty possible, individual calibration test results come packed with each unit.

Whether your usage involves recording, broadcasting or home entertainment, your choice should be the choice of the professionals...the STANTON 881S.

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The choice of the professionals™

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CIRCLE NO. 44 ON READER SERVICE CARD
PHONO CARTRIDGE

"If the stylus mistracks, the groove-wall destruction will be much worse than that produced by a little additional tracking force."

imum recommended stylus force. This is not to say that a cartridge will not track some records at its minimum recommended force. But records are being cut at higher and higher levels, and chances are that in playing a significant part of your collection the cartridge will require all the help it can get, and a higher tracking force will provide that help. (Some records can’t be tracked perfectly by any available cartridge, no matter what the force applied!)

Obviously, the lower the tracking force, the less will be the wear on the record and stylus. But if the stylus mistracks, the groove-wall destruction will be much worse than that produced by a little additional tracking force. Notwithstanding this readily apparent fact, test laboratories still have a problem establishing the point at which mistracking occurs. Is it a matter of measured distortion exceeding some arbitrary percentage? Is it the onset of the gross "shattering" sound that accompanies the stylus' complete loss of contact with the groove wall? We can’t say, for no standard exists.

Neither does any standard exist for optimum stylus compliance. Compliance is a measure of the "give" of a stylus assembly. A large amount of compliance is good for the tracking of low frequencies (provided the stylus assembly doesn’t collapse altogether), and for years cartridge manufacturers vied to publish the most spectacular figures they could. Recently they’ve turned away from this sort of compliance race, and for good reason.

First, compliance is usually measured under static conditions: push on the stylus with a calibrated force and measure the amount of movement resulting. But the movements imposed by record grooves are anything but "static." At frequencies higher than very deep bass, the stylus needn’t move very far, but the movements it does make must be very rapid. As the frequency goes up, the stylus’ activity is controlled more and more by the frictional damping within the stylus assembly and, finally, by the effective mass of the stylus itself. Few good cartridges have difficulty reproducing organ-pedal notes. But they run into trouble at higher frequencies where simple static compliance measurements tell us nothing at all about tracking ability.

Compliance can also harm as well as help, as when it unfavorably affects the tone-arm/cartridge resonance of the system. The tone arm has, of course, an effective mass of its own, and the stylus is essentially extensions as far as the arm is concerned. Thus the stylus compliance resonates with the tone-arm mass at a certain easily calculated frequency. This is not a happy situation. At that (usually infrasonic—somewhere below 15 Hz) frequency the stylus will undergo exaggerated motion that will be translated into low-frequency signals that tax amplifiers and speakers and generally muddy the sound with modulation effects. It will also tend to mistrack when so stimulated. Therefore, although this resonance may occur at a frequency too low to be perceived directly, its effects can easily communicate themselves up into the audio range.

This resonance cannot be entirely eliminated, but it can be controlled. For example, it can be purposely fixed around 10 Hz or so—a good place for the arm-cartridge resonance, because that is below the frequency of any recorded music and yet above the frequencies at which record warps and other perturbations usually occur. The way to adjust the resonance frequency of the arm-cartridge system is by "tuning" it—juggling the effective mass of the system and the compliance of the stylus assembly: the lower the mass, the higher the resonance; the greater the compliance, the lower the resonance. For each model of tone arm there is an optimum range of cartridge compliance; neither more nor less is desirable.

This brings up the matter of matching the cartridge to the tone arm. A cartridge with very high compliance calls for an arm with very low effective mass, or the resonance will occur at a frequency within or very close to the major warp region (4 to 6 Hz or so). A low-compliance cartridge is therefore best served by an arm with greater mass, which prevents the resonance from occurring in the music region. But how can you determine the effective mass of a tone arm? In general, you can’t, so avoid being taken in by appearances. Some arms look massy but have all their weight concentrated near the pivots where it doesn’t affect matters. Other arms, though frail in general appearance, are overweight at the cartridge end of things.

With all these problems, it would be no surprise at all if some theoretician in the far-off future, never having heard of the phonograph, should gasp in astonishment at the idea of sound being stored in the form of physical undulations in a plastic groove. Indeed, even today, those who are best qualified to appreciate the electrophysical problems posed—and solved—by the concept remain somewhat amazed by the wonder of it all.
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The Janie Fricke Saga may be the most interesting public thing going on in Nashville right now. It has such verve that you have to beware of losing track of the context of it all, you get so caught up in the nice turns of the narrative. So let’s pin that much down right away: the context is that a new voice has arrived and it is a considerable one.

Janie Fricke has one album out—one, that is, featuring herself—"Singer of Songs," and from it three singles have made the country charts, the highest (Please Help Me I’m Falling) a so-so #12. Yet hers is one of the most frequently uttered names along Music Row these days, simply because she has knocked the pins out from under some of the toughest pros in a tough music business. The people at CBS/Nashville are jumping up and down like it’s the end of the rainbow. She was nominated this year for best female vocalist (in the company of such as Crystal Gayle, Dolly Parton, and Emmylou Harris) and, with Johnny Duncan, for best duet in the Country Music Association’s nationally televised awards show. She didn’t win, but she was nominated (and sort of aghast about it) and she was a Presenter. High visibility, from proverbial coast to proverbial coast.

A lot of people out there had already found out she was the one who made the United We Fly jingle soar, along with an Undo It one, a Me and My R.C. one (the one about the woman softball pitcher), a Coors one, and countless other jingles. And many are aware that Johnny Duncan came out of left field to make three straight number-one country singles when Janie started singing with him, first doing step-out lines from the back-up and then moving to full-fledged duets. In the last two years she has backed a string of country and pop stars, up to and including some dubbing—just before and just after his death—on Elvis Presley’s last live-concert album. And she has been discovered by People magazine. And so forth.

In short, she is, as crossover-happy Nashville is saying, too much for country or any other single category to hold—even as she tells me “Now, when a lot of people who’ve been hard country for years are looking for crossover songs, I’d just like to find some good, straight country songs to record.” Even if she does, she’s still going to be too big for one category. Bruce Lundvall, president of CBS Records Division, said after Fricke had drawn three standing ovations from the CBS Records Convention that she is “the artist who is going to break down all categories in the year ahead.” And she only came to town in the first place to be a back-up singer.

She still is one, too. She’s having to work seven days a week to do it, touring now on weekends with the likes of Duncan, Vern Gosdin, and Charlie Pride, and she’s staying attached to the studios partly because she has “stardom” and “career” doped out as not necessarily the same thing. Hard work is nothing new to her, nor is the attitude that must be behind her seeming so down-to-earth and peaceful at a time when her career is being eyed from all angles as something like a lit fuse. Her attitudes go back to the farm where she grew up near South Whitley, Indiana, thirty miles from Fort Wayne.

Now she seems peaceful but not passive. Sitting, she is fidgety. She tells me
We've borrowed the office of producer Billy Sherrill, one of the tough pros who is sold on her) that she has always been active, a doer rather than a spectator. "I don't read much," she says, "don't read newspapers or listen to the news, don't even watch TV shows. I've been on enough film sets to know exactly how they do it, and all I can do at a movie is sit there and watch the background moving and know it's a roll of paper along the wall. And I don't go to clubs. I'm not a very sociable person. I just live in my own little world, it seems like. We do so much music and we're involved with so many people all day long that when I get through all I want to do is go home to my quiet house and sweep the floor or sew or cook or just work on some little artsy-craftsy project."

A studio musician's life, she says, is a lot more normal than a road musician's life is, "and I want to live a normal life."

That's partly why she stands out; she's such a normal person in a field that's basically weird. She not only sounds like the quintessential farm girl, but she looks the part—one of the long-legged, pretty ones, five-foot-nine, a real blonde, and rosy-cheeked healthy-looking in the midst of the general palor of musicians. Looking, in other words, like the milkmaid of a farm boy's dream after the boy grew up somewhat. She has that mixture of innocence and levelheadedness such dreams demand.

She is also, says a friend at CBS, straight—"in the old sense of the term. A square dealer. Utterly reliable, and you don't know how rare that is in this business. If she says she'll be somewhere at 2:30, she'll be there on the dot. I walked into somebody's office at twenty minutes to three one afternoon and Janie was sitting there, poised over the telephone, staring at her watch. I asked her what she was doing and she said she had to call a disc jockey in Texas to do a telephone interview at 2:45. She wouldn't call five minutes earlier because the man said 2:45."

JANIE describes herself as an organizer, a planner: "I make lists, lots and lots of lists. What does that mean, I wonder. I like to get things done and I like to do a lot of things... I never sit still for very long." She's a planner but she says she is not goal-oriented. In fact, Janie says, "I don't even like to answer the question when people ask me what my goals are. I didn't plan what my goals were five years ago or ten years ago or one year ago, so why should I sit down now and say a year from today I want this and this and this?"

She sang first for fun, then to help pay her way through college (a bachelor's degree in elementary education after two hitches at Indiana University), then for a jingle company in Memphis (at first singing the call letters for radio stations), actually punching a time clock at 8:30 every morning (and eventually earning $300 a week) "because it was a fun job and an experience." Then she sang as a back-up singer in Nashville (mostly with the Lea Jane Singers) because producers were already after her to do that, and finally she began singing as a solo performer because such people as Billy Sherrill were after her to do that.

There was one stretch of sixteen months when she tried to be goal-oriented and when people didn't come to
"I remember I'd never sing hymns the straight way. I'd always kinda jazz them up or sing them in a folk style...."

her. After college, which she managed to sandwich around some jingle work, she went to Los Angeles "to try to get in with the clique of studio singers out there, to be a back-up singer... I never could get in with them. I was struggling the whole time, waiting for the phone to ring, substitute teaching, hoping. I only got to sing on a session every two weeks."

By and large, though, the Janie Fricke Saga has involved one thing leading to another, hard work and steadily increasing recognition adding up to one of those rare true-life adventures in which virtue actually seems to be rewarded and the system actually seems to work. But first, of course, there was the talent, and, like all real talent, where it came from is essentially mysterious. Janie Fricke's background doesn't satisfactorily explain it. She says her first semiprofessional interest was in folk music, but by that she means the pop-folk of the Sixties, at least one remove from the roots. She didn't listen to records or the radio much as a child either ("We were outdoors most of the time"), but her mother taught her to play the piano and read music and her father taught her the basics of the guitar. "I started out doing the Joan Baez ballads," she says, "Judy Collins, Ian and Sylvia type stuff. I didn't buy very many records, but when I started doing folk music in college I would do the songs that were current. I'd also do Neil Diamond songs and Rita Coolidge songs, when she was starting out."

She was steeping herself in secondary influences, that is (Rita Coolidge was clearly one of her heroines). She was not bating her soul in our vaunted elemental folk musics, white or black, but was listening to folk "hits" and occasionally to top-40 stuff from WLS, Chicago, and playing such stuff as Misty from the sheet music her mother brought home. Yet, when she sings something soulful (Please Help Me will do nicely as an example, although anything approaching gospel is even better), she seems tapped into something beyond all this, something basic and organic. The sound isn't just pretty notes; it has body to it, character, red Georgia clay and Delta backwater. It's almost as if she got certain influences with little or no direct exposure to them.

But there was one place...."I was raised singing hymns in church," Janie says. The Frickes were Lutherans, but the nearest Lutheran church was thirty miles away so they went to a nearby Church of Christ. "My mother was always pushing me out to sing and then out farther to take solos. I remember I'd never sing hymns the straight way. I'd always kinda jazz them up or sing them in a folk style.... put a little style into them. I think the folk music and the hymns blend into the country music I'm doing now."

She was singing solos in front of an audience so long ago that she can no longer remember exactly what stage fright feels like. She remembers a clue: "When I was eight years or younger, my sister and her friends would want me to sing for them and I didn't want to do it in front of them, so I'd go into the closet and close the door and just sing my heart out."

Probably there is a connection between how early she got rid of self-consciousness about singing and how long she has been able to retain a certain innocence, a childlike freedom from inhibitions about playing with a certain imagination, a childlike freedom from inhibitions about playing with a song, as in "jazzing it up." The mystery behind the richness of her voice, I'm convinced, is tied in with this quality of innocence.

And now, of course, there is an overlay of solid professionalism. Singing is connected with feelings, and a back-up singer, always having to play a role, portray a prescribed mood, has to approach the music from an overlay of solid professionalism. Singing is connected with feelings, and a back-up singer, always having to play a role, portray a prescribed mood, has to approach the music from an overlay of solid professionalism. "It can be very hard to do when you're in a bad mood," Janie says. "You have to program yourself. You just have to make yourself smile. Lots of times we draw little happy faces on our papers so we'll remember to smile and sound happy. When I did commercials and had to sound energetic first thing in the morning, I'd have to get my hands moving around, make myself feel up."

The dubbings on the Elvis album, she says, took all the professionalism she could muster.

"It was just awful," she says. "A week before he died we were called to the studio and did voices over what he had done on that live show in Rapid City, his last concert, when he was real overweight, that TV special. We did voices over what they had done to enhance the tracks for the album. We didn't finish the session, and I kept thinking he's going to come walking into the studio, I just know he is. Then we heard he had died, and they called us back to finish the project. We had to go out and sing and put earphones on and we heard his voice and we were all just really, really sad. His producer was there, Felton Jarvis, and Felton was really upset. It was just a terrible feeling, just awful."

But she did it. She always does her job. And the movers and shakers and prognosticators around Nashville see this professionalism, this straightforwardness in the old sense of the term, and they see the talent, the innocence, the levelheadedness, the modesty, the healthy look—who can blame them for going out and ringing bells? The most important thing about it all may turn out to be this: that if ever anyone were equipped to keep those bell ringers and the people and things beyond them from eating her alive, Janie Fricke is.
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Stereo Review's Record of the Year Awards for 1978

in recognition of significant contributions to the arts of music and recording during the 1978 publishing year

This issue marks the twelfth year of Stereo Review's annual awards for outstanding records of the year, and it seems virtually impossible to find anything new to say about them. But, as each year brings us new readers (our circulation now is in excess of 525,000; twelve years ago it was 150,000), it seems necessary to reiterate the basic premises.

The awards are given strictly for musical and technical excellence to records we consider to be real contributions to the recorded literature. That a record may not sell well has no influence on the voting. Nor do we fall the other way (all too common in this business) of equating a commercial success with artistic accomplishment. We call them as we hear them, not as we read their positions in the charts. The voting is done by the critics and editors of Stereo Review, and they are free to vote for any record that pleased them during the year, subject only to the conditions that the record was reviewed some time between January 1978 and January 1979 or that it wasn't but temporally could have been. This limits the eligible records to those issued during our publishing year, and though that may not correspond to the chronological year or to the record companies' release year, it is the only rational procedure under the circumstances.

Those records released too late in 1978 to be included will have their chance in the voting the next time around.

Most of our reviewers are specialists of sorts, and they will naturally tend to hear more records within their area of specialization than outside it. Nevertheless, the really outstanding discs seem to attract votes from all over, and when they are tabulated there is rarely a shortage of clear-cut choices. But we do, as mentioned in previous years, tend to lean (especially in the piano area) toward younger, less established performers. The award is a boost for a developing career, and it pleases us to be able to offer that boost at the time it is needed, rather than waiting until the artist has already made it. Anyway the quality is there to be heard at the beginning; it is only the success that takes time.

Some readers may be surprised to see that not all the year's winners were accorded a "Best of the Month" when they first came out and that, correspondingly, not all the BOM's during the year receive awards or honorable mentions. Obviously, this is partly due to chance; some months had more and better records than others. But it is also due to the inevitable ripening of opinion after the fact.

There are some records that simply stand up better over the months and some others that, while they continue to impress, seem not to attract as they did at first. So the awards are a form of second thoughts, though not necessarily final thoughts.

The lesson buried here is only that no award and no review, however favorable, should be taken on an exclusionary basis. These are fine records—there is no doubt about that—but there are many others that are also fine, and, for those who love music, the time to discover them is when they are available, not after they have become impossible-to-find collectors' items. A word to the wise, so to speak.

—James Goodfriend, Music Editor
Record of the Year
Awards for 1978

SELECTED BY THE EDITORIAL STAFF
AND CRITICS FOR THE READERS
OF STEREO REVIEW

Certificate of Merit
awarded to
Beverly Sills
for her outstanding contributions
to the quality of American musical life

Honorable Mentions

EEETHOVEN: Piano Sonata No. 18.
SCHUMANN: Fantasiestücke. (Arthur
BEETHOVEN: Nine Symphonies (Berlin
Philharmonic Orchestra, Herbert von
Karajan cond.). Deutsche
Grammophon 2740 172.
BRAHMS: Violin Concerto (Itzhak
Perlman, violin; Chicago Symphony
Orchestra, Carlo Maria Giulini cond.).
Angel SQ-37286.
CARLENE CARTER. WARNER BROS.
BSK 3204.
RAY CHARLES: True to Life. ATLANTIC
SD 19142.
RY COODER: Jazz. WARNER BROS.
BSK 3197.
ELVIS COSTELLO: This Year’s Model.
COLUMBIA JC 35331.
EARTH, WIND & FIRE: All ‘n All.
COLUMBIA JC 34905.
EGHERTO GISMONTE: Sol Do Meio
Dia. ECM 1-1116.

HAYDN: Piano Sonatas Nos. 31-33
(Charles Rosen, piano). VANGUARD/
CARDINAL VCS 10131.
BILLY Joel: The Stranger. COLUMBIA
JC 34987.
ALICIA DE LARROCHA: Mostly
Mozart, Vol. III (Alicia de Larrocha,
piano). LONDON CS 7085.
LECOQ: La Fille de Madame Angot
(Mady Mesplé; Opéra-Comique, Jean
Dousset cond.). CONNOISSEUR SOCIETY
CS2-2135.
NATI MISTRAL Y LOS GEMELOS.
ALHAMBRA CPS 9553.
FRANZ LUDWIG: Piano Sonatas Nos.
4 and 12 (Fitzwilliam Quartet).
L’OISEAU-LYRE DSLO 23.
PATTI SMITH: Easter. ARIEMA A4171.
BRUCE SPRINGSTEEN: Darkness on
the Edge of Town. COLUMBIA JC 35318.
DONNA SUMMER: Once Upon a
Time. CASABLANCA NBLP 7078-2.
WARREN ZEVON: Excitable Boy.
Asylum 66-118.

PUCCINI: Madama Butterfly (Renata
 Scotto, Placido Domingo;
Philharmonia Orchestra, Lorin Maazel
cond.). COLUMBIA M3 35181.
SCHUBERT: String Quartet No. 15
(Quartetto Italiano). PHILIPS 9500 409.
SCHUBERT: String Quintet in C Major
(Melos Quartet, Stuttgart; Matislav
Rostropovich, cello). DEUTSCHE
GRAMMOPHON 2530 980.
SHOSTAKOVICH: String Quartets Nos.
4 and 12 (Fitzwilliam Quartet).
L’OISEAU-LYRE DSLO 23.
FRANCESCA ADRIANI: L’Ode a la
Vie (Cappella Musicale, Riccardo
Tattoni). DECCA 2C 73844.
NIELSEN: Maskarade (Danish Radio
Symphony Orchestra and Chorus,
John Frandsen cond.). UNICORN
UN3-75006.
MARIO ABRAHAM: String Quartet No. 3.
BRAHMS: String Quintet in E minor.
(Dedicated to the 250th Anniver-
sary of the death of Johannes
Bach). COLUMBIA M3 35181.
DONNA SUMMER: Once Upon a
Time. CASABLANCA NBLP 7078-2.
WARREN ZEVON: Excitable Boy.
Asylum 66-118.

PROKOFIEV: Piano Concerto No. 3.
RAFAL: Piano Concerto in G Major.
(Fitzwilliam Quartet). COLUMBIA
M3 35181.
DONNA SUMMER: Once Upon a
Time. CASABLANCA NBLP 7078-2.
WARREN ZEVON: Excitable Boy.
Asylum 66-118.
NYIREGYHAZI PLAYS LISZT (Ervin Nyiregyhazi, piano). INTERNATIONAL PIANO ARCHIVES/DESMAR IPA 111.

AIN'T MISBEHAVIN' (Fats Waller-Luther Henderson). Original Broadway Cast. RCA CBL2-2965.

DEXTER GORDON: Sophisticated Giant. COLUMBIA JC 34989.

PETER ALLEN: It Is Time for Peter Allen. A & M SP-3706.

HAYDN: Orlando Paladino (George Shirley, Elly Ameling; Lausanne Chamber Orchestra, Antal Dorati cond.). PHILIPS 6707 029.


ILÉA: Adriana Lecouveur (Renata Scotto, Philharmonia Orchestra, James Levine cond.). COLUMBIA M3 34588.

MAHLER: Symphony No. 4 (Vienna Philharmonic Orchestra, Claudio Abbado cond.). DEUTSCHE GRAMMOPHON 2530 966.

VIVALDI: Gloria, Magnificat (New Philharmonia Chorus and Orchestra, Riccardo Muti cond.). ASCAP 5-37415.


RANDY NEWMAN: Little Criminals. WARNER BROS. BSK 3079.
The sidewalks of the main streets of Hollywood are of pink and gray terrazzo and have large brass stars embedded in them to honor great personalities in the performing arts. Since the Sidewalk of Stars is in Hollywood, it is understandable that the most conspicuous names are those of movie actors and actresses, but on North Vine Street in front of the Capitol Tower, where Angel Records has its headquarters, there is a star that bears the name of opera singer Beverly Sills.

Returning from lunch one day, the president of Angel Records, Raúl Mon-taño, was startled to see an attractive young girl sitting on the sidewalk and working away at something. "What are you doing?" he asked. She turned around, held up a cloth and a can of brass cleaner, and said, "I am polishing this star." Since then she has returned regularly, and she sometimes brings a friend to help.

Such devotion is not unusual among the many thousands of Sills fans, but in actuality Beverly Sills' star shines with such brightness in the American firmament that it hardly needs any polishing. Having reached the absolute top of her profession, she has become the nation's leading spokesperson for the arts, a tireless worker for government and private support of cultural institutions, and an ardent champion of the American singer.

She is also an intelligent, articulate woman. Famous for her humor as well as her beauty—her coppery hair, her pretty face, her narrow waist, and her belle poitrine—she has become a favorite on television talk shows. Last October when she was the guest host on the Johnny Carson show, a rerun of her performance in Rossini's The Turk in Italy was being broadcast simultaneously in Exxon's Live from Lincoln Center series on the Public Broadcasting Service, and this was not the only public prominence is not just the result of good looks, a gift for gab, and an engaging personality. Miss Sills' fame rests primarily on solid professional achievements in opera houses, concert halls, and recording studios around the world. Like every important singer, she has had her detractors, but she has had more than her share of music critics among her supporters. In his book Divas (Coward, McCann & Geoghegan, 1973), Winthrop Sargeant, who was for years the distinguished critic of the New Yorker magazine, examined the careers of Joan Sutherland, Marilyn Horne, Birgit Nilsson, Leontyne Price, Eileen Farrell, and Beverly Sills. After extravagant praise for the beauty of Miss Sills' lyric coloratura voice, the security of her technique, and the breadth of her repertoire, Sargeant went on to say, "Miss Sills is, in my opinion, the greatest actress currently on the operatic stage; in fact, I would go further and say that she is a greater actress than even the fabled Maria Callas."

Born in Brooklyn as Belle Silverman, the daughter of Jewish immigrants from Europe, Miss Sills enjoys a very special relationship with the city of New York. She is the home-town girl who made good, and New Yorkers are very proud of her. Many of them may not understand what her art is all about, but they lavish on her the kind of esteem and affection usually reserved for winning baseball teams. It sometimes appears, indeed, that as a symbol of her native city she rivals the Statue of Liberty.

Throughout the country she has come to represent what is finest in the performing arts in America. When the Queen of England was a guest at the White House, a state dinner for her was televised. Julia Child was on hand to talk about the food that was served. A light entertainment was put on for the guests, and when that was over and the dancing began, the TV commentator turned to Miss Child and exclaimed, "Wasn't that a wonderful show, Julia?" With disarmingly candid Miss Child said, "Well, no, I didn't think so. I didn't think it was up to the occasion. We should have had one of our opera stars, like Beverly Sills."

The United States has produced many great singers. A number of them, such as Lillian Nordica, Emma Eames, and Geraldine Farrar, had important international careers. Some of them, such as Minnie Hauk and Rosa Ponselle, were, like Sills, American-trained as well as American-born. But since the death of Enrico Caruso, no singer of any nationality—not even Maria Callas—has brought opera more to the consciousness of the general American public than Beverly Sills. And no one has ever done as much as she has to make the public understand that opera, an imported art form, can flourish in our soil in precisely the same way that the greater part of the American people, whose ancestors were also imported, have flourished in this country.

This year Miss Sills is receiving Stereo Review's Certificate of Merit for Outstanding Contributions to the Quality of American Musical Life. The previous recipients of this award have been artists in their seventies or eighties—Mabel Mercer, Jascha Heifetz, Arthur Fiedler, and Richard Rodgers—recognized for a lifetime of achievement. Beverly Sills is still only in her forties. Opera singers, like athletes and ballet dancers, depend on their bodies as their instruments, and they have to make their greatest achievements before middle age takes its physical toll. Miss Sills, having reached in her profession the equivalent of climbing Mount Everest, has announced that she will become director of the New York City Opera Company in July 1979 and will retire from the stage as a singer in 1980.

I called on her recently to talk with her about her plans for the next few years and wondered whether at the age of thirty-eight she was considering retirement. "Not at all," she replied. "I am absolutely in love with opera. I would never retire if I could help it. The only thing that would make me go is to have a family. But I don't think I will ever want one. I love being a woman and a professional. It is the only thing I have ever done that I have loved, and I want to go on doing it as long as I can."

By William Livingstone
“You have regrets only if you say to yourself, ‘If only I could have ... if only I would have ...’”

all done in two years, the New York Times was nice enough to put it on the front page, and that’s the end of it.

“Now when I sing somewhere for the last time—and I’m going to a lot of places for the last time—nobody gives any kind of awful, maudlin farewell party. When I sang Manon in Philadelphia in October, they were my last Manons and the last performances I will ever sing in Philadelphia. Because I had announced my retirement, Eugene Ormandy asked me to sing with the Philadelphia Orchestra one more time, and I was asked to open or close Robin Hood Dell again. That pricked me to tell the right thing. They’re not saying, ‘It’s a good thing she’s retiring. Now we’re rid of her.’ They’re saying, ‘Please come back and sing more.’

“And the audience in Philadelphia, sure, they threw the flowers, but it was a very ‘up’ occasion. There was nothing sad or tragic about it. I threw them a kiss goodbye, took my bouquet, and went off to a party. That’s the way I want to finish.”

Her curtain calls at the end of a performance have never been the carefully choreographed and rehearsed deep bows that are a part of the repertoire of most sopranos. She has always come out, smiled at the audience, bobbed her head a few times, and gone off again. Apparently, that’s all she intends to do now. When I asked, however, if there was not a moment of sadness in singing her last Manon, an opera so closely associated with her, she answered with professional pride, not sentimentality.

“No, there wasn’t. The first Manon in Philadelphia was almost like the ones I sang seven years ago. I was excited that I could still pull off a Manon like that, and it pleased me a lot. The second one was almost as good—not quite—but there was no sadness. You have regrets only if you say to yourself, ‘If only I could have ... if only I would have ...’ But I don’t have that. Everything I set out to do in my career, I have done.”

The story of Beverly Sills’ career has been made familiar to the American public through countless articles and broadcast interviews. She has written a volume of memoirs, using her nickname as the title (Bubbles, Bobbs-Merrill, 1976). There is something very appealing about the story of the child prodigy who grew up to have phenomenal success on the stages of the world’s greatest opera houses—the Vienna State Opera, Covent Garden in London, La Scala in Milan, the Teatro Colón in Buenos Aires, and both the New York City Opera and the Metropolitan in her own home town.

She joined City Opera in 1955 and worked in repertory there and as a guest with other American companies from coast to coast until she came to international attention as Cleopatra in City Opera’s 1966 production of Handel’s Julius Caesar with Norman Treigle. It was a turning point in her career, and another one came in 1969 when she made her La Scala debut in Rossini’s The Siege of Corinith, replacing Renata Scotto.

Miss Sills has sung more than fifty operas of varied styles and periods and has been particularly active in the bel canto revival. Works especially associated with her include, in addition to Massenet’s Manon, Verdi’s La Traviata, Donizetti’s Lucia di Lammermoor and The Daughter of the Regiment, and Offenbach’s The Tales of Hoffmann. Among her greatest triumphs have been her portrayals of the three Tudor queens in Donizetti’s Anna Bolena, Maria Stuarda, and Roberto Devereux, which were mounted for her by her home company, to which she has remained intensely loyal.

After she had been singing regularly in New York for twenty years, Miss Sills finally made her Metropolitan Opera debut in April of 1975. Her vehicle was the same as for her Scala debut, Rossini’s The Siege of Corinith, mounted for the first time at the Met and this time mounted specifically for Sills. Overwhelmed by the publicity given to that event, I commented in Stereo Review that there had been a feature story about Sills in every publication edited in New York except the telephone book. A California reader promptly sent me the cover of the San Diego directory, which showed her in performance with the local opera company, as well as the story that was inside.

The afternoon I talked with her, Miss Sills was too involved with what she is doing now and her plans for the future to dwell much on the past. “I can’t remember my performances well enough to say this one was a ‘goodie’ or that one was a ‘baddie.’ There are only two I can remember totally from beginning to end. One was my first Cleopatra in Julius Caesar. After I sang my first
EVEN without ancient Chinese, Japanese, or Indian examples, we have sufficient evidence in our later Western culture to make a good case, if not perhaps actually to prove, that the idea of the musical play—a story told in, or accompanied by, song—as a form of entertainment is apparently firmly rooted in some basic impulsive of human psychology. Opera is certainly a prime exhibit; whatever and wherever it may have begun as a popular art, and it continues to coexist almost four hundred years later with its still-proliferating offspring—operettas of the Viennese (Lehár, Fall, Straus, and others), Spanish (zarzuela), English (G & S), and American (Herbert, Romberg) varieties, Broadway musicals, movie musicals, right down to the latest revival of Hair, J. C. Superstar, and Evita.

Our American musicals, whether of the Broadway or Hollywood stripe, were for a time (they may still be) the envy of the world, though it must be admitted that the operettas of Victor Herbert and Sigmund Romberg that inspired them were based on European—specifically Viennese—models. Naughty Marietta, The Desert Song, and the like are seldom mounted these days, but it would be a mistake to imagine that they are forgotten by a host of passionate partisans. I am proud to count myself among them, prouder still that we tireless enthusiasts and demon proselytizers for a senselessly neglected repertoire can hold such champions in its behalf as Beverly Sills and Sherrill Milnes. Miss Sills first made her voice heard in this campaign back in 1975 with her phenomenally and deservedly successful “Music of Victor Herbert” album (Angel SFO-37160), and she is back now (assisted by Mr. Milnes) with “Up in Central Park,” a program that covers a lot (but far from all) of the ground between Oscar Strauss’ Chocolate Soldier (1910) and Leonard Bernstein’s Wonderful Town (1955).

I grew up with most of this music (sheet-music versions of the hit songs in the family piano bench, Jeanette and Nelson on the silver screen) and make bold to say that I have never heard it sung better. Though MacDonald and Eddy still occupy a secure niche in the pantheon of my musical affections, and it should be cause for public lamentation that this art has been allowed to disappear utterly from our popular music, one cannot find a decent match between words and music anywhere these days, even (especially?) in singing commercials, the American ear seems to have detuned itself so that it no longer knows the difference, and the operetta repertoire’s beautiful, indisputable evidence that English is too a musical tongue never gets to court.

These wonderful operettas were once a vital part of this country’s popular music, and audiences insisted that they be quality productions. Many of them have now been “promoted” into the classical column; the softening effects of time and the fact that most of the music (the later Up in Central Park and Wonderful Town here excepted) must be sung with a “legit” voice in order to work have something to do with this, but I believe that the telling ingredient is simply art, that this is music as finely, as professionally crafted as I know, that it will repay study even now by reminding us of important musical values we have thoughtlessly thrown away.

George Jean Nathan, who flourished as a drama critic (for another publication, the New Yorker) during American operetta’s heyday, was snobbishly contemptuous of the apparent ease with which operetta composers in general and Romberg in particular could transport audiences with the “mechanical contrivances” of their sentimental songs. It was apparently a sin even then to please the public, but Mr. Nathan could discover no punishment other than to observe snidely that by doing so “Mr. Romberg has become a rich man, able to play pinochle with Rudolf Friml.” I can only add that for this delightful album Beverly Sills and Sherrill Milnes deserve to do the same in equivalent company.

MISS SILLS’ voice may not have the soaring power it once had (and she ought to eschew such ballads as It’s Love and Close as Pages in a Book), but right now it is so perfectly, so rasingly suited to the operetta repertoire that she must give us more; Mr. Milnes is, as usual, the very definition of musicianly machismo; and the two voices blend like watercolors. Conductor Julius Rudel and the New York City Opera Orchestra lend support of the kind few singers deserve, and the whole rests elegantly on the stylish arrangements of Eric Knight, who merits some kind of medal for harmonic invention (check the duet on Thine Alone and I think you’ll hear what I mean).

—William Anderson


FEBRUARY 1979
BEVERLY SILLS

"...this whole profession is based on whether you can perform a somersault in midair...."

...aria, the house came down, and I thought, 'Well!' And I became totally aware of everything. The other was the opening night of Roberto Devereux. After the second act, the whole audience just rose. They seemed to feel a need to breathe. That had never happened to me before. At the end of an opera, yes, but not in the middle like that.

"I'm coming to that conclusion that this whole profession is based on whether you can perform a somersault in midair without a net underneath you. I think my Cleopatra attracted so much attention because I was taking so many chances. All the ornamentation. With the exception of Philine [in Thomas' Mignon] or perhaps The Tales of Hoffmann, this was the first time I was doing somersaults without a net. But in a Handel opera there's very little to fall back on other than sheer vocal technique. Either you get the audience excited with what you're doing vocally or that's the end of the story.

"After the first Cleopatra, I went home very elated, happy with the way I had sung, but I wasn't aware that anything special was going to happen. In those days we were the kind of repertory company in which the repertory was chosen first and the company's artists were fitted into it. Before Cleopatra, I had never asked for a role at the City Opera. When Julius Rudel offered me all three parts in Hoffmann, I did all the parts.

"But when I learned from Norman Treigle that Julius Caesar was going to be in the repertoire and that a singer who had left the company and gone to the Met was being brought back to sing Cleopatra, I hit the ceiling. To bring somebody back implied that nobody now in the company could sing it. I don't think I got involved in as many somersaults as a matter of principle, and besides I really wanted that part. I threatened to quit and actually sent a letter of resignation to the company. I had a lot of clout because of the number of performances I was scheduled for. If I walked out, with me went Donna Anna, Queen of the Night, Constanze, and the three roles in Hoffmann."

SHE got her way, needless to say, and her success as Cleopatra changed her relationship with the company. "After Cleopatra, Julius called me in and said, 'Okay, what would you like to do next?' And I said, 'Manon.' From that point on, our relationship was one of 'What would you like to do next?'

"These days Miss Sills feels that she no longer has to perform somersaults in midair without a net or construct more mountains for herself to climb. Her husband once gave her a gold ring inscribed "I Did That Already" to remind her that she can put some things behind her, and she has done so. She is currently singing Donizetti's Don Pasquale at the Met and says that it is easy for her. "Except for the forthcoming world premiere of Menotti's Juana La Loca, all the things I'm involved with now are things that are easy for me and that I enjoy. I'm having a lot of fun. There's no more Queen Elizabeth in my life, no more Anna Bolena. Perhaps in Juana La Loca Menotti has a few surprises for me, but I'm willing to do that. As for the repertoire I sang for a long time, I did that already."

She was scheduled to sing Rigolotto at the Met in the season of 1979-1980, but she has canceled. "I decided the Pasquale should be my last Met production. It's a new one—light and gay—and it's better for me to go out that way. Laughing. I don't want to stay around right up until the last minute doing everything. That's why I'm pulling out of places earlier. I'll probably be finished singing at the City Opera this year, before I return as an administrator."

The new Menotti opera was written specifically for Miss Sills, and at the City Opera she was scheduled to create the title role in Dominick Argento's Miss Havisham's Fire, also written for her, but she has withdrawn from it. "When Argento and I agreed to collaborate on this, I thought my voice would get heavier and darker when I grew older, but it hasn't. I'm still most comfortable in light coloratura singing and quite uncomfortable in dark heavy music. I don't have the physical stamina I had ten years ago or even five years ago, and I certainly don't have the vocal stamina I had five years ago. Argento's work is a tour de force, a superb work, a really sensational opera, and I don't want it to be presented under any but the best circumstances—and I didn't want to present impossible challenges for myself. I'm not trying to prove that I can still do what I did five years ago because I can't, nor do I want to. I did that already."

"The Menotti work is constructed differently, and I was able to talk with him before he finished it so that he could keep it light for me. It comes in June in San Diego, right after my fiftieth birthday. I'm very much aware of that."

A future project she speaks of gleefully is a return to San Diego in October of 1980 to appear in Johann Strauss' Die Fledermaus, alternating in the roles of Rosalinda and Adele with, of all people, Joan Sutherland. Miss Sills thinks this inspired casting was dreamed up by Tito Capobianco, director of the San Diego Opera. "Having worked with both of us, he knows that we are rather funny ladies, and I think the idea appealed to both of us immediately. He won't say which he approached first. I'm sure he phoned one and said the other had agreed and within sixty seconds called the other one with the same story."

Angel (Sills' label) and London (Sutherland's label) both stand ready to record highlights of the San Diego Fledermaus, each with its own soprano as Rosalinda and the other as Adele, but nothing has been decided. "We'll have to wait and see how it goes. Miss Sills says. "We'll alternate roles in the performances, but I'll have to talk with Joan. She may only want to record Rosalinda."

Miss Sills has sung Rosalinda many times. It was her debut role with the New York City Opera, with which she has also sung Adele, a role she is particularly fond of. "I played in a production as the chorus maid who knocks over pictures and coffee cups as she dusts and then goes off to Orlovsky's ball and gets quite tight. I really enjoy doing that. I have a lot of Rosalindas coming up in places like Miami and Memphis, but I love Adele."

H E R Adeles and Rosalindas with the San Diego Opera will be Miss Sills' last staged performances, and that company was chosen for them because of her long and close association with Capobianco, who directed most of her successes at the New York State Theater. She regards Tito Capobianco and his wife as members of her family. But Julius Rudel feels that her last performance belongs to the New York City Opera. A gala farewell at the State Theater has been proposed with an oil-firm sponsor in the background ready to televise it and make it a million-dollar benefit for the opera company. It has taken on proportions that make Miss Sills uncomfortable, and she has not yet agreed to the proposal.

"If I go on the stage of the State Theater for a gala farewell, everybody will expect a Cleopatra and excerpts from Roberto Devereux and Manon, and I don't want that. If the public remembers me well in those roles, I would like them to keep their memories. The roles are documented on records and on television as well. In the past, before we had these means of communication, perhaps it was necessary for people to have become great personalities to give farewells. But if you want to know what Beverly Sills was like, buy the record or play the video (Continued on page 94)"
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“Victor Herbert was a genius. There was one enchanting tune after another. So I would like to make it a tradition with the company that every fall season would start with two weeks of an operetta. I would love to take the things that Sherrill and I recorded excerpts from and present the whole works. And do it with respect as an art form. Here we are with all that young American talent, and there’s nobody who can touch ‘em in this stuff. Americans singing in their own language, singing music that was made for them. When Sherrill and I began to sing those duets, it came so naturally that we realized this music belongs to us. It’s part of us. That’s why I’m extremely enthusiastic about it.”

But Sills has escaped such feuds, even with other bel canto specialists who sang the same repertoire she did. In the early Seventies a waggish friend said to me, “The important men in Beverly Sills’ career have been her conductor Julius Rudel, her director Tito Capobianco, her press agent Edgar Vincent, and Lorenzo Anselmi.” I asked why Lorenzo Anselmi was on this list. “Because he’s Renata Scoto’s husband,” my friend answered. “That Scala production of The Siege of Corinth in which Beverly’s success put the international seal of approval on her career was originally scheduled for Scoto. Renata had to withdraw because she was pregnant, so you see what an important influence her husband had on Beverly Sills’ career.”

Actually, Sills had already become an international star in Europe and South America before she sang at La Scala. Still, Scoto cannot have been precisely thrilled that her production of The Siege of Corinth turned into The Siege of the Americans. (In addition to Sills, the cast included Marilyn Horne and Justino Diaz, and the late Thomas Schippers conducted.) And the American soprano and mezzo mopped up Milan with their success. But Scoto and Sills are friends. Scoto speaks well of Sills, and Beverly says, “I wrote to her when she had the baby. And when I took over Bob Sherman’s talk show The Listening Room [on WQXR in New York], Scoto was the first guest I asked for.” The result was a very sugary dialogue.

Beverly says that if a big rivalry had sprung up in her career, it would have been with Joan Sutherland. “But if anybody ever came to me with the kind of gossip that starts such feuds, I’ve forgotten it,” she said. “And if anybody went to Joan with it, I think she would have laughed it off. As I told you, we’re both very funny ladies.”

It’s not clear where Miss Sills’ determinedly positive attitude comes from. Some say it is from her mother. Perhaps she acquired it in the years of polishing her craft before she reached the top in her field. Or it may be a result of learning to cope with the private tragedy that her daughter has been deaf from infancy and that her son had birth defects that made him severely retarded. Or it may be an intrinsic component of her impressively sunny personality. Whatever it is, it has enabled her to view with dignity, humor, and aplomb her retirement as a singer, simply as the end of a phase in what is going to be a long career in the performing arts.

“When I wrote my funny book,” she said, “I ended by saying ‘The fun is just beginning.’ People thought I meant there was so much more to sing. That wasn’t it at all. What I meant was that I was ready to move on to something else. I can’t wait to get to the City Opera, and I have these television shows. The opera board wants me to continue to be a public figure as much as possible, and I enjoy these other things. I’ve made a pilot for a CBS talk show that makes my Lifestyles show pal. And CBS would like it to be an hour-a-day, five-day-a-week magazine show that would upgrade the intellectual level of late-afternoon television. Mother advised me to keep it simple.

(Continued on page 96)
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so I start the pilot [it aired December 6] perched on the trunk of an elephant and go on from there.”

She grew very serious as we discussed her role as a spokesperson for the arts and her work for other public causes. “My husband and I have two ‘charities.’ One is the area of handicapped children and birth defects. We contribute elsewhere only financially, but to this we give our time and personal involvement.” The other is the whole area of the arts, and she participates there as much as time and units, lending the weight of her fame as a performer wherever it will help. “But I’ve asked the National Endowment not to make me the spokesperson for everything, because after a while people will say, ‘Is that woman never going to stop talking, and does she talk about everything?’

But how does she judge where to direct her energies? How, for example, did she get involved in the gala benefit concert for the International Piano Library in 1970? “Oh, when I heard about the vandalism of that library, I was so incensed that I simply had to participate in the efforts to save it.” Her participation consisted of a charming and very amusing bravura number, Sillsiana, a mélange of coloratura warhorse arias arranged by her coach Roland Gagnon. Fortunately, it is preserved in a live recording of excerpts from that concert (IPL 500516, available from International Piano Archives, P.O. Box 301, Ixor, Virginia 23866). Gregor Benko, president of IPL, said to me recently, “We have given two gala benefit concerts, one in New York and one in London, involving many artists of international stature. The only one who never presented us with a single problem was Beverly Sills. She arrived totally prepared, calm, and ready to go on. She even went around backstage soothing the nervous pianists.”

Her ability to soothe nervous artists should stand her in good stead as director of the New York City Opera. “I hope I can make my enthusiasm contagious, and I think I can since I will be ‘new blood’ as an administrator, but having come up through the ranks of that company will also help. There is no aspect of it with which I am not familiar. I know the costume department, the lighting department. I can look into the pit and see faces in the orchestra that I grew up with, men who have been playing for me for twenty-three years.”

The New York City Opera has its identity and Miss Sills has no intention of trying to change it, but she has a lot of plans. She would like to use repertoire not performed elsewhere to lure or keep singers the company needs and to reduce duplication of repertoire with the Met. She hopes to set up a program of master classes for members of the company, calling on the talents of such directors as Capabianco, Frank Corsaro, Harold Prince, and George Balanchine. Her plans include a national auditions program to comb the ranks of young American singers in need of further training and experience, and she wants to find a summer home for the company where an apprentice program can be set up.

“I’m very chauvinistic,” she said, “So I’d like to go to Germany and bring back all those American singers who have settled in places like Lübeck and Kiel to get experience. There was no reason for Tatiana Troyanos, a singer with a great voice, to have to make her career abroad. They belong here. They can get experience here.”

SILLS ON RECORDS

For someone who would like to start sampling Beverly Sills’ long list of recordings, I would recommend starting with the following operas and recitals. —W.L.

- BELLINI: I Capuleti e i Montecchi. Angel SX-3824.
- DONIZETTI: Roberto Devereux. ABC Audio Treasury ATS-20003.
- HANDEL: Julius Caesar. RCA LSC-6185.
- MAISSEN: Manon. ABC Audio Treasury ATS-20007.
- ROSSINI and DONIZETTI HEROINES. ABC Audio Treasury ATS-20001.
- MUSIC OF VICTOR HERBERT. Angel SFO-37160.
- MOZART and STRAUSS. Arias. ABC Audio Treasury ATS-20004.

They are our product. I think it’s tragic that all these young people have to spend so much time abroad. The time has come for us to take some pride in our artists. We no longer have to take a back seat to any country in the world. We have as much voice in government as the Secretary of Commerce or the Secretary of the Air Force.”

When Beverly Sills stops singing, her voice will continue to be heard in other ways. We have not seen the last of her contributions or the last of her achievements. Just as Geraldine Farrar was a symbol of liberation for the Gypsyflappers of the 1920’s, a great many young women now see Miss Sills as a symbol of what a woman can achieve as an opera singer. For anyone aspiring to a career in the arts, her career should be an inspiration. It will be interesting to see what happens when she diverts to other channels the time and energy that have gone into singing.

She has shown that she has a way of reaching the goals she sets. It may be a while before we see many more American opera singers’ names embedded in the terrazzo sidewalks of Hollywood. But I don’t think it will be long before Beverly Sills sees to it that more American names appear on the rosters of our opera companies, and to have these national singers properly she will probably make us build a Sidewalk of Stars that stretches from coast to coast, passing through, say, Davenport, Iowa.

Beverly Sills

“We no longer have to take a back seat to any country as far as the opera singer is concerned....”

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Stereo Review
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CIRCLE NO. 22 ON READER SERVICE CARD

Watch for FUJI METAL TAPE coming soon!
In 1970, Leonard Bernstein, who had previously impressed old Vienna with his Mahler, was invited to direct the Beethoven bicentennial production of Fidelio at the Theater an der Wien, the site of its first performances. Bernstein fared a lot better with Fidelio than the composer did originally. The 1805 production was a failure, but the new one was a great triumph, a success that was repeated a few years later at the Vienna Opera, on Austrian television, and now in a new Deutsche Grammophon recording.

Extraordinary as all this is, it should not really be so surprising. Bernstein is the man with exactly the right combination of theatricality, musicality, and, yes, the common touch to bring this work to its proper music-theater dimensions. Let me explain: Beethoven agonized over his only opera as over no other work—hundreds of pages of sketches, a year in the actual composition, two major revisions, and no fewer than four complete overtures! Even so, Fidelio has always been accounted deficient dramatically and operatically (no one dares question the music per se). But I think it is also clear—and this recording particularly points it up—that Fidelio contains some of the most dramatic and stageworthy music ever written. A most interesting paradox.

Beethoven’s troubles resulted from his trying to do something essentially new: express dramatic conflict, moral principles, and theatrical action in music. Furthermore, he was trying to do it in the popular form of a musical comedy! Call it operetta, opéra comique, Singspiel, or what you will, the fact is that Fidelio is written as a comprehensible play with music, in the local language, with dialogue alternating with musical numbers, and with definite popular elements in the scoring.

It starts out exactly in the manner of a musical comedy (for which it has often been criticized). Afterwards it turns serious—but then there have been other “serious” musical comedies, from The Magic Flute and Don Giovanni down to Carousel and West Side Story. Mozart obviously provided Beethoven with some models, but, in contrast to Mozart’s eighteenth-century wit and sophistication, Beethoven preferred a high moral purpose and quite straightforward emotions. The true subject of Fidelio is freedom and liberation through love and moral steadfastness;
almost all the great musico-emotional moments are overwhelming expressions of this on an almost visionary level. The extraordinary thing about much of the writing—particularly for the leads—is the way the music sweeps up detail to create tremendous, long, rushing phrases that peak only at the highest level of exaltation and vision.

Though there are two or three monumental arias, Fidelio, in its present form, is an opera of ensembles. Of the sixteen numbered pieces, only five are arias, and from the Prisoners' Chorus in Act I to the end of the opera there is only one solo number: Florestan's famous dungeon aria. The rest is ensemble: duets, trios, a quartet, and the two extended major finales. These ensembles are not abstract expressions of feelings; they stay close to the drama, and the result is a work virtually as moving and thrilling. Hans Sotin is a fierce but musical villain. René Kollo, the traditional Helden tenor Florestan, is very good, but I would like some day to hear what that difficult role would sound like in a more lyric manner. Chorus and orchestra are also excellent, and the recording is vivid.

Bernstein's is a very special view of Fidelio, at once held back and hurtling forward. It is also a highly theatrical reading, but the theatricality is derived in all its essentials from the music itself. In short, an interpretation of one of the earliest and greatest attempts, however flawed, to create a modern music theater. —Eric Salzman

BEETHOVEN: Fidelio. Gundula Janowitz (soprano), Leonore; René Kollo (tenor), Florestan; Hans Sotin (baritone), Don Pizarro; Manfred Jungwirth (bass), Rocco; Lucia Popp (soprano), Marzelline; Dietrich Fischer-Dieskau (baritone), Don Fernando; Adolf Dallapozza (tenor), Jaquino. Vienna State Opera Chorus and Vienna Philharmonic Orchestra, Leonard Bernstein cond. Deutsche Grammophon 2709 082 three discs $26.94, © 3371 039 $26.94.

Klaus Tennstedt's Mahler First Is a Revelation of Insight And Spontaneity

Conductors who come from abroad to appear with American orchestras are usually preceded here by their recordings. The late Hermann Scherchen's reputation in this country was made through his Westminster recordings for nearly fifteen years before he made his only Atlantic crossing to conduct the Philadelphia Orchestra in 1964. The Europe-based Argentine Carlos Pauíta, scheduled to make his U.S. debut as guest conductor of the Houston Symphony as this issue of Stereo Review goes to press, has been recording major orchestral works with the big London orchestras for over ten years or so.

A rare reversal of this pattern is the case of the German conductor Klaus Tennstedt: hardly anyone in America had heard of him when he first conducted the Boston Symphony Orchestra five years ago, but his return engagements with that orchestra and his appearances with the others in our "Big Five" left no doubt in anyone's mind that Tennstedt is an absolute master. Since he has especially distinguished himself as an interpreter of Bruckner and Mahler, it is only fitting that the first of his recordings to be issued in this country should be a Mahler symphony, the First, played by the London Philharmonic on a new Angel disc. I confess I was a little disappointed that it was this most popular of Mahler's works that was selected for the debut recording instead of, say, the Seventh, which is still the least familiar of the nine completed symphonies, but the freshness with which this thirteensymphony comes off here is perhaps more remarkable and unexpected than a similarly exciting presentation of one of the lesser-known symphonies would have been.

The freshness is not in terms of "different," but simply "better." Tennstedt, it seems, is the sort of musician who, without eccentricity of manner or interpretive approach, is revelatory in the insight he brings to his material; who does not set out to upset or flout tradition, but rather seeks to clarify and intensify the sense of the work as he perceives it, to find his own way rather than follow in someone else's footsteps. Thus, if his Mahler First strikes me as the most "idiomatic" realization of the work I have ever heard,
either on records or in the concert hall, it is not because it is the most like Bruno Walter's, the most like Kubelik's or Horenstein's, but because it simply gives me more of Mahler's First than I have ever received from any other single performance.

How does one pin this down? Tennstedt is not flashy, and he is not heavily mystical; he is superbly musical and obviously has a great instinctive feeling for Mahler's style. His pacing and phrasing exude spontaneity; he knows how to build climaxes convincingly and without obviousness, and he manages to get every note subtly inflected without fussiness. In short, he knows where the music has to go and that is where he takes it. I am quite sure I have never before felt such a sense of continuity in this symphony, and yet none of the individual episodes is in any way slighted. The orchestral playing is on the very highest level, and the sound, while it might have been a good deal more open (I have not heard the disc in four-channel playback), lets every detail come through clearly and presents a fine orchestral balance. Perhaps there cannot be a single "definitive" version of so vast and many-faceted a work as the Mahler First, but what Tennstedt has given us seems closer to that elusive ideal than even the rightly revered statements on this subject by Kubelik, Horenstein, and Walter. The record, in short, is an absolute must, and further recordings by this exceptional conductor should find a most receptive public.

—Richard Freed

Donna Summer: the Uncrowned Queen of Disco Summarizes Five Years of Stardom

There's a great irony in a Donna Summer live album, but also a certain justice. As the first disco superstar to make it to the status of prime-time TV talk-show guest, Ms. Summer gained the distinction of bringing to millions "live" performances of an entertainment that, by definition, is supposed to be canned.

So how does disco sound live? Well, when you have the good sense to use the same engineers who painstakingly created your highly electronicized recordings in the studio for an on-the-spot recording at the Hollywood Bowl, the results can sound surprisingly right. Sides one and three of the two-record "Live and More" concert set on Casablanca are filled with Donna Summer's top disco hits. Included are three songs from her classic album "Once Upon a Time"—the title song, Fairy Tale High, and Faster and Faster—all done here at a faster tempo than the originals. Judging from the crowd's enthusiastic response, the song everyone at the concert had been waiting for was Last Dance (there's a wonderful moment when what sounds like the entire audience, knowing the arrangement by heart, anticipates the return of the uptempo section of the song with a great roar).

Throughout all of these disco performances, Summer is less overwhelmed by the orchestration than she is in the studio versions. This is perfectly appropriate for a live performance. Otherwise, the arrangements are very close to the originals, and so is the effect. What surprises me is how well the songs hold up to listening without dancing. There's a richness of melody in them and an attention to the lyrics that most disco lacks.

Side two of the album presents a different aspect of the singer. Here, she sings her way through decidedly nondisco arrangements of such songs as The Man I Love, Some of These Days, and The Way We Were, and in the process proves her versatility. She minces through some rock-'n'-roll like an Annette Funicello, then belts like a Dolores Gray (when she really lets go, the Dolores Gray effect is thrilling). I could do without the between-numbers patter, but it's nice to know that Summer's still looking to expand her performing horizons.

The "and More" in the album title refers to the last side, which was studio recorded. It consists entirely of one new piece, a disco version of Jimmy Webb's song MacArthur Park, recorded very successfully a few years back by Richard Harris and already Donna's newest hit. For myself, I don't much like MacArthur Park and find its muddlin' sentiments at odds with the mood I want when I'm dancing. But the arrangement is high pop artistry, Donna sings the pants off it, and the two new Summer/Pete Bellotte/Giorgio Moroder songs woven into it (making it the MacArthur Park Suite) —One of a Kind and Heaven Knows—are simply terrific.

So "Live and More" is a summary of a remarkable five years, a showcase for a remarkable talent, and what ought
to be a brand new hit all in one. Quite an achievement. —Edward Buxbaum

DONNA SUMMER: Live and More. Donna Summer (vocals); vocal and instrumental accompaniment. Once Upon a Time; Fairy Tale High; Faster and Faster to Nowhere; Spring Affair; Rumour Has It; I Love You; Only One Man; I Remember Yesterday; Love’s Unkind; My Man Medley (The Man I Love/I Go! I Go! Some of These Days); The Way We Were; Mimi’s Song; Try Me; Love to Love You Baby; I Feel Love; Last Dance; MacArthur Park Suite (MacArthur Park/One of a Kind/Heaven Knows). CAS-ABLANCA NBLP 7119 two discs $9.98, © NPL5 7119 $9.98.

New Columbia Recording Suggests a Revaluation Of Thomas’ Mignon May Be in Order

Ambrose Thomas’ Mignon was a very popular opera a generation ago. Rise Stevens virtually owned the title role at the Met, Gladys Swarthout and Jennie Tourel sang it in Chicago, Ezio Pinza frequently sang Lothario, and Richard Crooks and James Melton appeared as Wilhelm Meister. And I recall a 1943 performance, with Sir Thomas Beecham conducting, in which the very young Patrice Munsel made her debut as Philine. But during the postwar years—bountiful for recordings but lean for this opera—Mignon was virtually ignored. Its only previous complete recording dates back to the mono era, and a subsequent stereo highlight disc (Deutsche Grammophon 136 279) did not last long in the catalog.

Truth to tell, Mignon is far from being a great opera. Yet, it is better than many others that enjoy wide acceptance in different recorded versions. This is not an opera that can sustain a mediocre performance, however, for its story (concocted from Goethe’s overplotted and disjointed novel Wilhelm Meister) by Messrs. Barbier and Carré, the expert streamliners and gallicizers of Gounod’s Faust) is preposterous and its musical treatment unev- en. Fortunately, the first stereo Mignon, just released on Columbia, rises so high above mediocrity that it may lead to a reevaluation of the opera and a new appreciation of its estimable qualities.

The role of Mignon, like that of Car-
The Heath Brothers: Enduring Jazz Artistry In a Laid-back Album Of Elastic Classics

Heath has been a respected name in jazz for over thirty years, starting with the emergence on the New York scene of brothers Percy and Jimmy—now fifty-five and fifty-two, respectively—in the late Forties. Both brothers were then members of a group led by trumpeter Howard McGhee, a bebop sextet with which they traveled to Paris in 1948, giving enthusiastic Frenchmen their first when he played in the French capital just weeks before.

Within months of leaving their home town, Philadelphia, Percy and Jimmy Heath established themselves as top-ranking musicians. Their associations—either jointly or separately—included the very cream of the bop crop: Dizzy Gillespie, Charlie Parker, Miles Davis, Thelonious Monk, Sonny Rollins, Stan Getz, John Coltrane. But though circumstances occasionally brought them together, Percy and Jimmy pursued separate careers; between 1965 and 1968 Jimmy was co-leader, with trumpeter Art Farmer, of a quintet, and Percy spent over ten years as a member of the enormously successful Modern Jazz Quartet, an association that would last until the group disbanded in 1974.

The Heath Brothers group was formed shortly after the breakup of the MJQ. Originally it included a third brother, drummer Al "Tootie" Heath (also known as Kuumba), but he left to form his own band, rejoining his brothers only as "special guest" on two of the tracks in Columbia's new "Passing Thru ...." At forty-three, Al Heath is the youngest Heath brother, but an even younger member of the family—Jimmy's son Mtume, whose own funk group has recorded for Epic—is also present as a percussionist.

Percy Heath and Jimmy Heath are firm believers in jazz as an art form that stands on its own and should not be fused with simplistic pop. "Your bass player only plays three notes," Percy once told Herbie Hancock after hearing his latest funk album, "so you could just as well have made a tape loop of the three notes and sent him home." No mere three notes in this album, however, and—except for Tony Purrone's guitar—no electronic instruments either. Purrone, whose considerable talent was spotted by Jimmy, makes an impressive recording debut with "Passing Thru ...."—his solos on Mellow-drama and Changes bode well for his future. Pianist Stanley Cowell has been a regular member of the group since its formation; a versatile player whose impressive background belies his thirty-seven years, Cowell is a strong asset to any group (just listen to his kalimba solo on A New Blue and his crisp, ever-so-logical piano work on In New York, Percy Heath's reworking of Body and Soul). Telemann's Wind Music Gets What It Needs: Solid Performances by Topflight Musicians

CONSIDERING the number of groups that play early music in New York City, the high quality of their work, and their importance in the city's cultural life, it seems ironic that most of the recordings of early music I review are European. It certainly bears out the fact that the New York commercial scene is not favorable to native early music making; most of it takes place in churches and very little of it reaches...
Waylon Jennings: About as Unbuttoned As It’s Wise for Anyone to Get

Waylon Jennings seemed to be trying for more looseness, more spontaneity, in his last two or three albums, and now with “I’ve Always Been Crazy” for RCA he’s started to arrive at what he must have had in mind. The album has an open, unfussy sound and a natural, flowing feel about it. And Jennings himself is as unbuttoned as it’s wise for anyone to get, to the point of dealing (wryly) in song about his cocaine bust, ad libbing (wryly) over his guitar break, and (it sounds like) live-mixing some of the takes. He does a surprisingly knowing job with snatches of Buddy Holly hits, with the old Crickets reassembled and sounding great behind him. He finds something in *Tonight the Bottle Let Me Down* not already appropriated by Merle Haggard or Emmylou Harris. And he virtually rewrites *I Walk the Line*, making the song not only worth listening to but pushing it almost to the verge of the substantial.

“I’ve Always Been Crazy” is not perfect, of course; it goes out a little weak with Waylon’s *Girl, I Can Tell* and Shel Silverstein’s *Whistlers and Jugglers*. But generally it uses the throwaway, whether it be a single line or a whole song, the way a throwaway is supposed to be used, and it has that touch of wildness in the instrumentals one wants from Waylon and the Waylors. Last and far from least it has the voice of Waylon Jennings. And that’s a lot.

—Noel Coppage

Waylon Jennings: *I’ve Always Been Crazy*. Waylon Jennings (vocals, guitar); the Waylors (instrumentals); other musicians. *I’ve Always Been Crazy; Don’t You Think This Outlaw Bit’s Done Got Out of Hand?; Billy; A Long Time Ago; As the ‘Billy World Turns; Buddy Holly Medley; I Walk the Line; Tonight the Bottle Let Me Down; Girl, I Can Tell; Whistlers and Jugglers.* RCA AFL1-2979 $7.98, ©AFS1-2979 $7.98, ©AFK1-2979 $7.98.

Waylon Jennings: a touch of wildness

Waylon Jennings: *Music for Wind Instruments*. Trio Sonata in E-flat Major for Oboe, Harpsichord, and Continuo; Sonata in F Minor for Bassoon and Continuo; Sonata in C Minor for Flute and Continuo; Quartet in D Minor for Bassoon, Flute, Oboe, and Continuo. Samuel Baron (flute); Ronald Roseman (oboe); Arthur Weisberg (bassoon); Timothy Eddy (cello); Edward Brewer (harpsichord). Nonesuch H-71352 $4.69.

TELEMANN: Music for Wind Instruments. Trio Sonata in E-flat Major for Oboe, Harpsichord, and Continuo; Sonata in F Minor

The recording studio. It is therefore with considerable pleasure that I address myself to a disc of Telemann works played by five of New York’s finest instrumentalists and recorded by one of the city’s most adventurous record companies.

The purpose of Messrs. Samuel Baron, Ronald Roseman, Arthur Weisberg, Timothy Eddy, and Edward Brewer is a modest one: to record a group of sonatas by a composer, Georg Philipp Telemann, whom they obviously admire. They make no apology for playing modern instruments rather than old ones, they make no fuss about authentic performance practice, nor do they even give themselves a fancy musica antiqua name. They simply play superbly.

Each one of these musicians is keenly aware of the early versions of his instrument, and that each is knowledgeable in Baroque performing tradition is obvious in the fine articulation and richly inventive ornamentation. Each also demonstrates his own individual personality in the solo sonatas and his excellence as a chamber musician in the precise ensemble and subtle balance of the quartet. Not only do they make Telemann sound like a million, but they have also selected for their recording stunning works of this much-maligned master. This is what early music desperately needs at the moment: solid performances by well-informed, top-flight musicians.

—Stoddard Lincoln
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**POPULAR DISCS AND TAPES**

Reviewed by CHRIS ALBERTSON • EDWARD BUXBAUM • NOEL COPPAGE • PHYL GARLAND • PAUL KRESH • PETER REILLY • STEVE SIMELS • JOEL VANCE

**RECORDING OF SPECIAL MERIT**

**BOBBY BARE: Sleeper Wherever I Fall.** Bobby Bare (vocals, guitar); Gunnar Gelotte (drums); Jack Williams (bass); Shane Keister (keyboards); Steve Gibson (guitar); other musicians. Sleep Tight Good Night Man; Hot Afternoon; What Did It Get Me; Goin' Up's Easy, Comin' Down's Hard; The Way I Feel Tonight; and five others. COLUMBIA KC 35645 $7.98, © KCA 35645 $7.98, © KCT 35645 $7.98.

*Performance: Fine  
Recording: Very good*

Some people at CBS, Nashville, think Bobby Bare is the best catch they've landed since Willie Nelson. Naturally they are thinking bigger than just the hard-country audience, and with Bare they can afford to. Here he is—with five songs produced by England Dan and John Ford Coley's producer, Kyle Lehning, and five by Steve Gibson—making a fine shambles of the distinction between country and rock. Bare has always been more of an individual than most, so when he does the Byrds' I'll Feel a Whole Lot Better and the Rolling Stones' The Last Time, it seems in keeping with his enigmatic nature. Anyway, he does those and the others so well they can worry about that with the ones who don't have his personality, punch, and humor in their music. The only (very minor) complaint I have about 'Sleeper Wherever I Fall!' is that the production is tightened up around Bare a little too much, he behaves himself a little too much. Still, he's managed to make an album that is one of his best yet, one that almost makes eye contact. There are bad shambles, you know, and then there are good shambles. This one might be nominated for the Shambles Hall of Fame. *N.C.*

**STEPHEN BISHOP: Bish.** Stephen Bishop (vocals, guitar); vocal and instrumental accompaniment. If I Only Had a Brain; Losing Myself in You; Looking for the Right One; Everybody Needs Love; When I Was in Love; and seven others. ABC AA-1082 $7.98; © 8020-1082H $7.95, © 5020-1082H $7.95.

*Performance: Terrific  
Recording: Excellent*

Stephen Bishop won nearly every Best New Artist award in 1977, as well as quite a few fans, with his debut album, "Careless," so his follow-up disc carries the burden of proving that the first was no fluke. Good news: "Bish" is even more impressive than "Careless." Bishop's lush romanticism, grace, good humor, and sense of the unpredictable are showcased here in a musical hybrid of the Thirties and Seventies that just might give us a glimpse of what Eighties pop music will sound like.

The album begins with a heavily orchestrated instrumental of If I Only Had a Brain, and in a later tribute to that song's lyricist, E. Y. Harburg, Bishop sings his own lovely What Love Can Do. (Surprisingly, the music conjures up Wizard of Oz composer Harold Arlen's style better than the lyrics evoke Harburg's.) Bish's Hideaway is an out-and-out follow-up to On and On, the big hit single from his first album (he even manages to sneak in a quick "on and on" at the end). His songs are mainly full-bodied pop ballads, although there are exceptions, notably the glowing r- &-b A Fool at Heart, with the gorgeous vocal duo of Natalie Cole and Chaka Khan backing him up. The songs of longing and losing on "Bish" take a modern pop approach to the stuff of a musical past that, at twenty-six, Bishop is too young to have lived through. He'd better watch it; a contemporary pop style like this just might give middle-of-the-road music a good name. —Rick Mitz

**JIMMY BUFFETT: "You Had to Be There."** Jimmy Buffett (vocals, guitar); Coral Reef Band (instrumentals). Son of a Son of a Sailor; Pencil Thin Mustache; Miss You So Badly; Dixie Diner; Morris' Nightmare; Havana Daydreamin'; Margaritaville; Come Monday; and eleven others. ABC AK-1008/2 two discs $11.98, © 8020-1008T $11.95, © 5020-1008T $11.95.

*Performance: Riotous  
Recording: Good*

Taken from live performances in Atlanta and Miami, Jimmy Buffett's newest album is a jumbo smorgasbord of his current repertoire. His live performances of some of his standards, such as Pencil Thin Mustache and Son of a Son of a Sailor, are so exuberant that he changes the lyrics from the original whenever the mood strikes him. But he is, of course, still the perfect master of the subtle, romantic ballad (Why Don't We Get Drunk [And Screw]) and the darting sociological aperçu (Morris' Nightmare), the keen observer of the existential nature of free-floating anxiety (A Pirate Looks at Forty). His audiences seem to be as riotously good-humored and every bit as unbuttoned as he is, with the result that the album gets funnier and funnier as it slouches along. After four sides and twenty songs, however, I began to feel like a closet glutton waddling across the parking lot after one of those Howard Johnson's Eat-All-You-Want-Of-Whatever nights; too much, too much, too much... So, in this era of Sensible Living, I recommend only two sides at a time—but I do recommend the entire album unreservedly. *P.R.*

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**Explanation of symbols:**

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Monophonic recordings are indicated by the symbol ©

The first listing is the one reviewed; other formats, if available, follow it.
ERIC CARMEN: Change of Heart. Eric Carmen (vocals, piano, synthesizer, drums, percussion); vocal and instrumental accompaniment. Ditzy Desperate Fools; Haven't We Come a Long Way; End of the World; Heaven Can Wait; Baby I Need Your Lovin'; and four others. Arista AB 4184 $7.98, © AT8 4184 $7.98, © AT 4184 $7.98.


Eric Carmen is more a songwriter than a performer, and his singing has more technique than style. Acting as his own producer gives him control over how his material is presented, but this album amounts to no more than a demonstration of his current song catalog; he shows off his ability to write, but the songs themselves are not together stylistically, so each selection is left very much on its own.

Haven't We Come a Long Way is the disc number. End of the World has its catch phrase repeated endlessly, with background vocals like the Bee Gees' nasal harmonies, and Heaven Can Wait is a very pleasant ballad. Baby I Need Your Lovin' is, of course, the Hollond/Dozier/Holland warhorse from early Motown days. Why Carmen has recorded it isn't clear; perhaps he just had fun with the tune. Change of Heart is a hit single, but the song isn't much, with the production carrying the music instead of the other way around. Hey Deanie and Someday are both teen-pop items (Shaun Cassidy had a hit with the former), but they are well constructed and cleverly presented. Carmen's own favorite of the batch appears to be Desperate Fools, since the album opens with a string ensemble playing a Desperate Fools Overture and closes with the song itself. It has nice modulations and reminds me somewhat of Heliotrope Bouquet, the piano rag begun by Louis Chauvin and completed by Scott Joplin; but although Carmen sings it with grace and restraint, it is still more a demonstration of material than a performance. "Change of Heart" might make you feel you're being shortchanged, unless demos are your thing.

You would certainly have a right to feel shortchanged when it comes to the album's playing time—slightly more than twenty-eight minutes total. The album can't even be sold at the normal price in Scandinavia (and maybe in some other European countries), since there are laws there that records must be at least forty minutes long in order to retail at the standard album price (about $12 American).

VALERIE CARTER: Wild Child. Valerie Carter (vocals); instrumental accompaniment. Crazy; Da Doo Rendezvous; What's Become of Us; Baby I Need Your Lovin'; End of the World; Heaven Can Wait; Little Miss Lovin'; Hot Streets; Take a Chance; and five others. Columbia FC 35512 $8.98, © JCA 35512 $8.98, © FCAT 35512 $8.98.


Chicago—the group, that is—is like Silly Putty: no matter how it is stretched and squeezed, no matter how it changes shape, it stays basically the same. Even though there are a lot of changes on this new album—a new producer, a new guitarist (to replace co-founder Terry Kath after his death in 1977), and even the addition of the ubiquitous Bee Gees as back-up vocalists on one cut—it all comes out the same: predictably good.

But even good can be pretty boring if it's the same stuff you've been hearing since 1969. Chicago is one of those formula groups, a band with a recipe as unchanging as a Betty Crocker cake mix. Twelve albums into their career, there isn't much difference between, say, the sixth one and this one. Chicago has consistently repeated its hits year after year for ten years ago with Does anybody know what time it is? By now the group has made more than $160 million, and "Hot Streets," with its deja vu sound, should make for more hot sales.

—Rick Mitz

RECORDING OF SPECIAL MERIT

THE CLASH: Give 'Em Enough Rope. The Clash (vocals and instrumentalists). Safe European Home; English Civil War; Tommy Gun; Julie's in the Drug Squad; Last Gang in Town; Guns on the Roof; Drug-stabbing Time; and three others. Eric JE 35543 $7.98, © JEA 35543 $7.98, © JET 35543 $7.98.

Performance: Flawed but exciting. Recording: Appropriate.

The thing you have to understand about the Clash is that, good as they are, you must take them with a grain of salt. God knows, we need bands that have more on their minds than a fat royalty statement, but I'm old enough to remember the revolutionary rhetoric of a lot of Sixties musicians, and while I doubt that the...
Clash will wind up their career singing mil- 
"ion-selling love songs à la the Jefferson Star- 
ship, that prospect does help put things in per- 
spective somewhat. So the Clash’s political 
commitment, however well intentioned, does 
not impress me particularly.

Actually, given that most of their concerns 
are not terribly relevant to an American audi- 
ence (and it is supremely arrogant for a Yank 
rock critic to pretend he understands the com- 
plicities of the English social climate), the 
Clash are already being presented here not as 
an especially political band, but rather as 
keepers of the rock-and-roll flame, sort of like 
Bruce Springsteen, and on that level I find 
them quite exciting. Oh, they have a lot of 
growing to do; their lack of polish in the great, 
early Who/Kinks tradition seems less an act 
of homage and more like simple inexperience. 
But most of the hype about Mick Jones’ re-
freshingly raunchy guitar work is justified, 
and as an ensemble the Clash has energy to 
burn. They’ve got real melodies too, which al-
ready puts them head and shoulders above the 
American heavy-metal brigade. In short, any-
one who remembers with affection a neat little 
working-class combo of a few years ago called 
Mott the Hoople will have little trouble liking 
this record.

JIMMY CLIFF: Give Thanks. Jimmy Cliff 
(vocals); vocal and instrumental accompani-
ment. Bongo Man; Footprints; She Is a Wom-
an; Meeting in Afrika; Wanted Man; and five 
others. WARNER BROS. BSK 3240 $7.98, ® 
M8 3240 $7.98, © M5 3240 $7.98.

Performance: Dynamic

Recording: Good

Jimmy Cliff's intense performances are as dy-
namic and as gutsy as ever. The problem now 
is that his agit-prop material is getting as shop-
worn and tiresome as another Jane Fonda fire-
side chat on the meaning of revolution in our 
time—as seen from the star's dressing room. 
Cliff is still pounding at the same old themes; 
Stand Up and Fight Back, Wanted Man, and 
Universal Love (Beyond the Boundaries) are all 
dismaying self-explanatory titles. Lonely 
Streets and Love I Need are about Isolation, 
and Meeting in Afrika is about Peace. So what 
else is new? Cliff races through all of this 
tapioca with the same fervor he’s been dis-
playing since the days of "The Harder They 
Fall." But if he doesn’t change his scripts 
pretty soon, no amount of intensity will save 
him from becoming a radical bore.

DONNA FARGO: Dark-Eyed Lady. Donna 
Fargo (vocals); instrumental accompaniment. 
Another Goodbye; Everybody Has a Dream; 
Reach; Tomorrow Child; Somebody Special; 
Sweet Sexy Guy; I Saw the Light; Changes in 
My Life; and three others. WARNER BROS. 
BSK 3191 $7.98, ® M8 3191 $7.98, © M5 
3191 $7.98.

Performance: Good

Recording: Good

Donna Fargo has a flair for the dramatic, a 
penchant for coming on like gangbusters with 
a rousing chorus, and a sense about when to 
let her voice crack on a sad phrase. So her 
records seem emotional, but here’s another in 
which she’s so doggedly professional you 
can’t tell whether she means it or is just push-
ning buttons. In any case, the range of emo-
tions she conveys is not great. This may be 
because a voice is versatile in inverse propor-
tion to the degree it is stylized, and hers is 
pretty stylized. On the other hand, a voice is 
identified with by most people to the degree it 
is stylized, if the artist isn’t too gross about it. 
Given the limited emotional palette she’s us-
ing, Fargo does a good job of connecting with 
the listener, whether it comes from the heart 
or not. And the saving grace of "Dark-Eyed 
Lady" is that it is tuneful, without which quality 
his histrionics would be bad news. The non-
Fargo songs are fairly well selected, and 
the production is that offend-nobody sort that 
is neither country nor pop, but it is more 
tasteful than most of its kind and contains an 
interesting jangle here and there. Donna Far-
go has learned how to handle an audience and 
how (with her husband’s help) to run herself 
as a business for some time; now there’s little 
doubt she also knows how to make albums.

HEART: Dog & Butterfly. Heart (vocals and 
instrumentals). Cook with Fire; High Time; 
Hijinx; Straight On; and four others. POR-
TRAITS FR 35555 $8.98, ® FRA 35555 $8.98, © 
FRT 35555 $8.98.

Performance: Nice enough

Recording: Excellent

Heart, like Boston, is a band that would have 
been made to order by record-company exes 
(Continued on page 112)
IT TOOK TOSHIBA TO BUILD THE WORLD'S FIRST DIGITAL-SYNTHESIZED RECEIVER.

The Toshiba 7150 locks into the center of any station's assigned broadcast frequency and eliminates drift.

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*CIRCLE NO. 62 ON READER SERVICE CARD

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When guitarist Lol Creme and drummer Kevin Godley left the internationally popular group 10cc late in 1976 in order to work on their own, the move raised eyebrows in the pop world. But it was typical of the duo that their interest in one project would wane as it developed in another (they have been friends and artistic partners for the past eighteen years, ever since Creme auditioned for the part of Igor in a Godley production of Dracula), and they left 10cc in part to devote more time to a musical invention they call the "Gizmotron."

The product of eight years' work, the Gizmotron is an electromechanical bowing device for the guitar that makes polyphonic playing practicable, produces indefinitely sustained notes and chords, and can simulate the sound of an entire string section. Since their school days Godley and Creme have tended to make ambitious plans and to think on a grand scale, so to demonstrate the Gizmotron, as well as their own compositional talents, they made a three-disc concept album titled "Consequences" (Mercury 1700) on the theme of nature running amok (it included some hilariously surreal dialogue written and performed by Peter Cook).

Godley and Creme were in New York last November to promote the Gizmotron and their new Mercury album, "L." In Britain "L." is the symbol for a learning driver ("We wanted," Godley explained with a slow smile, "to have a cover that was instantly recognizable"); the music on this "L." is mostly free-form rock with very funny lyrics. The Sporting Life presents suicide as a spectator sport, Sandwiches of You (released in England as a single) is a soft-core seduction song for the bedroom, Art School Canteen mocks the pretensions of the students' role playing, Group Life and Hi Factory/Business Is Business take on the music industry, Foreign Accents; Hit Factory/Business Is Business fare with 10cc today. "It's a warning song," Lol said. "Something starts out as fun and ends up as a trap." "We have no contact with 10cc today," Kevin explained. "It was quite a shock when we said we were leaving, much like a divorce," Lol said. "It also caused a significant dip in their income. "But Kevin and I are used to being hungry," Lol said with a shrug. "We do our best work when we're hungry." His partner added.

They admitted that Group Life is about their days with the band. "It's a warning song," Lol said. "Something starts out as fun and ends up as a trap." They have no contact with 10cc today. "It was quite a shock when we said we were leaving, much like a divorce," Lol said. "It also caused a significant dip in their income. "But Kevin and I are used to being hungry," Lol said with a shrug. "We do our best work when we're hungry." His partner added.

I asked if the lyric "Only the numb survive" (from Hi Factory/Business Is Business) was their comment on music today. Kevin answered: "New groups, kids starting out today—their ambition is to get a recording contract, and the labels tell them what kind of music they must play, what the market will bear. So commercially acceptable music perpetuates itself."

"It's too bad punk never really broke through," Lol said. "It seemed like a way for young musicians to have a style of their own. One of the hopes we had for 'Consequences' was that, if it was commercially successful, it might encourage labels to invest in other musicians who play experimental music. But it didn't do well financially, so . . . ."

Lol is blunt about the emotional exhaustion of rock. "Rock is mostly a physical music," he said. "Often it's a duet of two or three or four chords. The emotional possibilities were always slight. It depends on physical energy—youthful physical energy, which is easily expendable. It's not meant to be an intellectual or subtle style."

Kevin remarked, "Communication is too easy these days. The beginning of a new style comes along, and it's instantaneously revealed to the mass audience through records and broadcasting. It's culture shock. There's no time for small groups of people to discover it and spread the enthusiasm. Perhaps music has had its share of cultural shocks. The next big cultural shock might not even come from music."

The Gizmotron may very well come as a pleasant culture shock to guitarists. Jerry Garcia, Bob Weir, and Tommy Tedesco have already ordered units, and the device will be available internationally early in 1979. Though they hope to make some money on it, Lol and Kevin play down any excitement they may be feeling. "The Gizmotron was one of our projects," Lol summed up, "and we're glad it's on the market, but now we'll go on to something else. You'll notice it takes a back seat on "L."

We feel it can take its place alongside other instruments." Then he laughed. "Besides, we're going to be ripped off. There'll be a competitive model on the market shortly after ours appears. We know because we've demonstrated it at several trade shows and some enterprising Japanese instrument makers came up very close and took pictures. One of them even said, 'Move your hand, please, so I can see. Thank you.' And his little camera clicked happily away. They were politely relentless. But, as the walrus said, the time has come.

He leaned over and picked up a guitar with the Gizmotron attached, then played the introduction to the Beatles' I Am the Walrus. The effect was terrific; it sounded like the introduction to the Beatles' I Am the Walrus. The effect was terrific; it sounded like the string section of the London Philharmonic.

The Gizmotron is, indeed, a wonder. It may be the biggest, loudest, and most relentless thing, and it will probably become standard equipment for rock groups, just like the keyboard synthesizer. Messrs. Godley and Creme—art students, musicians, and inventors—will have contributed another notable addition to rock weaponry. --Joel Vance

LOL CREME AND KEVIN GODLEY: L. Lol Creme and Kevin Godley (vocals and instrumental); vocal and instrumental accompaniment; The Sporting Life; Sandwiches of You; Art School Canteen; Group Life; Punchbag; Foreign Accents; Hit Factory/Business Is Business. MERCURY SRM-13752 $7.98, © MCR4-13752 $7.98.
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GXC-735D: Wow/Flutter—less than 0.08% WRMS; S/N Ratio—better than 58 dB, weighted, at FeCr position, with peak level at 3% THD. Dolby on improves up to 10 dB above 5 kHz. Frequency response—35-17,000 Hz (± 3 dB) using FeCr tape.

CS-732D: Wow/Flutter—less than 0.08% WRMS; S/N Ratio—better than 57 dB, weighted, at FeCr position, with peak level at 3% THD. Dolby on improves up to 10 dB above 5 kHz. Frequency response—38-16,000 Hz (± 3 dB) using FeCr tape.

You never heard it so good.

*TM, Dolby Labs, Inc.
if they’d only been smart enough, and that is what does them in, for me anyway. Putting two extremely attractive young ladies in front of a competent, innumerable band of Led Zeppelin clones may be the sort of idea that is, on the face of it, unbeatable commercially, but it is worth noting that Heart’s success story is at least partly the result of the kind of grass-roots support from the kids that the punk bands should have been able to garner. In other words, Heart may be bland, but they’re not a hype. For all the slickness of the package, though, there’s nothing on “Dog & Butterfly” that indicates the band has much to offer beyond derivative heavy metal and the gimmick of Ann Wilson’s willowy vocals. There’s a lesson here, I think; maybe it’s that if you’re going to rewrite Led Zeep, you’d better come up with your own Stairway to Heaven before you start making a stadium-attraction nuisance of yourself.

S.S.

WAYLON JENNINGS: I’ve Always Been Crazy (see Best of the Month, page 104)

RECORDING OF SPECIAL MERIT

JULES AND THE POLAR BEARS: Got No Breeding. Jules and the Polar Bears (vocals and instrumentals). You Just Don’t Wanna Know; Black Fever Sleep; Lovers by Rote; Shadows Break; Convict; Got No Breeding; and five others. COLUMBIA JC 35601 $7.98, © JCT 35601 $7.98.

Performance: In a jugular vein

Recording: Excellent

A lot of music critics have gone off the deep end about this album, largely because it’s supposed to represent some definitive rejection of the solipsistic Me Decade school of California mush-rock. I’d agree, except that when the subject of California rock comes up I’m not quite sure who we’re talking about. Warren Zevon? The recent Jackson Browne? The Eagles since the arrival of Joe Walsh? Steely Dan? That’s a pretty diverse and cynical list, and while I’m not about to defend either the cultural advantages of Los Angeles or any of those sensitive singer/songwriters who, in Frank Zappa’s phrase, make millions out of their deep personal hurt, it’s a colossal bit of snobbery to suggest that any music made in the California environment is by definition irrelevant. Even if a lot of it is.

But no matter. The truth is that Jules and the Polar Bears are a bracing little outfit, and their debut album is funny, angry, and altogether a delight. Leader Jules Shear does the Dylan stream-of-consciousness vitriol bit with real panache (he’s a wicked punster to boot), his singing is charmingly reminiscent of Ray Davies though not so fey, his tunes are an addictive amalgam of California pop-rock and British rae-up, and his band is bedrock solid. The whole thing is comparable to Graham Parker, perhaps, or Fleetwood Mac if they all had chips on their shoulders. Questions of geographical politics aside, this is an album more than worth hearing. Anybody who can write a line as snide as Shear’s “The nice thing about true hopelessness is that you don't have to try again” has obviously got his head screwed on right and deserves support.

S.S.

KANSAS: Two for the Show. Kansas (vocals and instrumentals). Song for America; Point of Know Return; Paradox; Icarus/Borne on Wings of Steel; Portrait (He Knew); Carry On Wayward Son; and eight others. KIRSHNER PZ2 35660 two discs $11.98, © ZAX 35660 $11.98, © ZTX 35660 $11.98.

Performance: Yes and no

Recording: Very good

I’m not fond of live albums, but I must say the performances on this double-disc set are as good, generally, as the studio versions. The music is billed as a “progressive” rock group. Strictly speaking, this means only that they don’t play blatant top-40 pop or heavy-metal. Some of their music is interesting, and a few of their tunes stick with you—Dust in the Wind has a catchy melodic construction—but a lot of it sounds like ambitious flapdoodle, especially the gratuitous keyboard runs and note clusters. Moreover, the seriousness with which Kansas takes itself sometimes spoils their admirable energy by turning it into browbeating. Most of all, I get the feeling that they seldom do anything instinctively, that they are overconcerned with presenting an image. Some talent occasionally wiggles out from underneath all the “progressive” gobbledygook, but not often enough.

LINDISFARNE: Back and Fourth. Lindisfarne (vocals and instrumentals). Run for Home; Warm Feeling; Woman; Only Alone; Get Wise; You and Me; and five others. ATCO SD 33-108 $7.98, © TP-38-108 $7.98, © CS-38-108 $7.98.

Performance: Agile and expensive

Recording: Lust

Lindisfarne, newly re-formed after breaking up six years ago, has produced a debut album for Atco that is easily as slick as anything you’re likely to hear in the coming year. As in the past, this British group’s media image is on the brooding, introspective, “serious” side. Once in a recording studio, however, they are as stylish, agile, and perfectionistic as a troupe of Monte Carlo acrobats. One carefully crafted and highly polished little set-piece after another comes rolling out of their workshop, so that even as they intone such lyrics as “I’ve seen all the frowns/On the faces of the clowns/And the down that they take/Just to be free...” (from Run for Home) in a lush and expensive arrangement, it’s all about as harrowing as being smothered by a sable trenched in a crowded elevator.

There’s much more Riviera and Vegas in Lindisfarne’s material than the heath and moors they would have you believe their work springs from.

P.R.

THE OUTLAWS: Playin’ to Win. The Outlaws (vocals and instrumentals). Take It Anyway You Want It; Cry Some More; You Are the Show; You Can Have It; Dirty City; and four others. ARISTA AB 4205 $7.98.

Performance: Dry competence

Recording: Good

The Outlaws play well technically, but they don’t originate much. You’ll hear a Pete Townshend guitar lick here, a Burton Cummings vocal mannerism there, an Eagles rhythm-guitar technique over yonder, and so on. Similarly, the songs in this album seem based on other songs rather than firsthand observations. It’s all so tasteful, though, that one tends to be forgiving. I don’t know that the Outlaws ever claimed they were originators, and even if they did, con men are boringly, usual outsides, same as your swashbucklers.

Swashbucklers are just more fun.

N.C.

RECORDING OF SPECIAL MERIT

QUEEN: Jazz. Queen (vocals and instrumentals). Mustapha; Fat Bottomed Girls; Jealousy; Bicycle Race; If You Can’t Beat Them; Let Me Entertain You; Dead on Time; and six others. ELEKTRA 6E-166 $7.98, © ET8-166 $7.98, © TC5-166 $7.98.

Performance: Challenging

Recording: Excellent

I’ve admired Queen’s discipline and punch on previous albums, but this delightful package can stand by itself as a rare (from a star group) lampoon of rock, the rock audience, and society in general. They seem to be saying, “Don’t you people realize this is all an act? How can you let us get away with it?”
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In these inflationary days, fewer and fewer music lovers can afford the tabs involved in seeing favorite singers do their night-club acts. By the time you figure in the charges for drinks (usually there’s a minimum), the cover or “music charges” (as they’re euphemistically labeled), sundry tips (quarters are no longer enough for either coatchecks or washroom attendants), plus cab fare and/or tolls and parking-lot expenses—well, the sum for two can equal what a week’s take-home pay used to be not too long ago. Little wonder, then, that so many former clubgoers are staying home to watch TV.

When they do, it may be cheaper but it is not necessarily as satisfying. Not that there aren’t good programs on TV now and then—if you like situation comedies, police adventures, space fantasies, doctors, lawyers, etc. For the music lover, however, the pickings are generally slim—except for late-hour weekend specials starring rock and pop stars and the occasional classical broadcast on the “Great Performances” series on PBS. But few and far between are the shows offering even a glimpse of such MOR greats as Peggy Lee, Lena Horne, Tony Bennett, Eartha Kitt, Jack Jones, Margaret Whiting, Morgana King, and others who used to pack us into places like New York’s Basin Street East, Chicago’s Mr. Kelly’s, or San Francisco’s Fairmount.

Into the breach has come the Visiondisc Corporation, which has already filmed and released several videocassette albums featuring jazz and contemporary pop performers (see Stereo Review, July and October Issues). Its latest—an hour-long, club-type performance by Eartha Kitt called simply “Eartha”—could well be the forerunner of a whole series of albums capable of turning our own living rooms into the night clubs of tomorrow. Instead of going out (often into noisy if not offensive environments), we’d invite a few friends in, put on an album—and everyone gets a ringside seat for a taped performance not available on either commercial TV or cable TV’s Home Boxoffice. This could be an expensive showing, of course, if you played the album only once, but chances are you’d spread the initial album cost over many viewings, and over as compared to hearing it “live.”

That’s not necessarily so—any more than you get tired of hearing the same audio recording of a song, an opera, or any musical work over and over as compared to hearing it “live.” True, something of the spontaneity of a first hearing is lost with both audio and video recordings, but there are compensating factors—such as really getting to know, understand, and appreciate the artistry of the performer(s), or just the joy one gets from repeated contact with a great performance. That joy is certainly not diminished by seeing it. For example, I can’t imagine anyone who’s worn out his copy of the “Judy Garland at Carnegie Hall” album (audio version) or any of Frank Sinatra’s live-performance albums not equally enjoying seeing as well as hearing the performance any time he so desires. My own experience in videotaping many dozens of things off TV verifies this: the really great ones easily hold up with each viewing, no matter how frequent.

These reservations aside, the musical portions of Eartha are unreservedly wonderful. There are few performers around who can belt out one line of a lyric with such hair-raising venom and then purr the next line with the most insinuating of whispers. She is a spell-binder whether singing old, familiar songs in distinctively Kittish ways (I Can’t Give You Anything But Love, Ten Cents a Dance, C’Est Si Bon, Surabaya Johnny) or doing the same with some new songs (including special self-parodying lyrics for Sondheim’s I’m Still Here). And she switches languages—from English to French to Turkish to Hebrew—as easily (and quickly) as she switches the color of her vocal line.

The production values of “Eartha” may be visually routine, but there’s nothing routine about the quality of an Eartha Kitt performance—and, in the last analysis, that’s what will make this videocassette worth having if you’re among her fans or just a collector of the best pop artists. The sound is necessarily mono (until stereo TV comes along), but played through my stereo system’s amplifier and speakers it is excellent. —Roy Hemming

Down to Eartha

Not all performances are great ones, of course, but they can at least function as learning experiences for videocassette producers. “Eartha” is a case in point. Eartha Kitt is certainly a great performer in my book, and she looks great in the show that Visiondisc taped before a live audience at the Westport Coun-

try Playhouse in Connecticut. But the presentation of the show and the camerawork are routine, being generally an imitation of the Home Boxoffice type of personality show you can see regularly on cable TV, and for my money more ideas, new ideas, and greater (perhaps different) skills are going to be required in this new medium.

THESE reservations aside, the musical portions of Eartha are unreservedly wonderful. There are few performers around who can belt out one line of a lyric with such hair-raising venom and then purr the next line with the most insinuating of whispers. She is a spell-binder whether singing old, familiar songs in distinctively Kittish ways (I Can’t Give You Anything But Love, Ten Cents a Dance, C’Est Si Bon, Surabaya Johnny) or doing the same with some new songs (including special self-parodying lyrics for Sondheim’s I’m Still Here). And she switches languages—from English to French to Turkish to Hebrew—as easily (and quickly) as she switches the color of her vocal line.

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EARTHA. Eartha Kitt (vocals); orchestra. I’m Still Here; An Old-Fashioned Girl; How Could You Believe Me When I Said I Loved You; Guess Who I Saw Today; Could I Leave You?; Uskiidara; Sholem Aleichem; The French Charleston; I Can’t Give You Anything but Love; Little Baby; Surabaya Johnny; Ten Cents a Dance; All I Want Is All There Is; C’Est Si Bon; Santa Baby; I Want to Be Evil. Visiondisc EKA 482 9949 R; VHS 2 and Beta 2, $49.95; VHS 1 and Beta 1, $59.95; also available in a limited edition of $75 (from Visiondisc, P.O. Box 102, Cooper Station, New York, N.Y. 10003).
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ASHICA

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Mustapha opens with Freddie Mercury imitating the wail of a muezzin calling the faithful to prayer and proceeds to imitate Arabic musical forms. Well, we’ve had Jesus rock, why not Islamic rock? Fat Bottomed Girls is supposedly a tribute to adoring female fans but seems also to be (pardon the pun) a checkey rebuke. Let Me Entertain You, which closes side one, is practically a declaration that the audience is a bunch of suckers projecting their fantasies onto Queen (or any major group), which Queen thinks is stupid and hilarious. Not all the other selections are so bold in their dismissal of rock and rock culture, but there are moments apiently when the band—always maintaining their usual high standard of performance—takes a surgeon’s pleasure in dissecting both themselves and the audience.

Disclaimers such as Queen’s are rare. When John Lennon was asked in 1964 how good a group he thought the Beatles were, he answered: “Average, just average. We’ll last about two years, but by that time we’ll have made our money.” At thirty the garrulous Pete Townshend was quoted as saying he felt like a fool still prancing about on a stage for hours. This album finds them attempting to put some musical quality back into their act and return it to the benefit of teenage girls. Queen is one of the few top groups to say that rock’s excesses are as much the audience’s as the performers’. And be transported, then I’ve succeeded…”

Composer Larry Fast is a one-man synthesizer show, called Synergy. And, he’s made a brilliant new album—“Cords.”* The title, says Fast, “refers to patch cords and musical chords. On ‘Cords,’ I’m trying to combine prototype technology—including the first recorded use of a revolutionary guitar synthesizer—with a musical approach that will affect people emotionally. If a listener can hear “Cords” and be transported, then I’ve succeeded.”

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so artfully scattered about her performances here, her forced Wild Woman act is often as embarrassing to hear as it would be to see Vir-
ginia Graham attempt a strip-tease.) Snow has revved up and goosed such already familiar things as Every Night and Do Right Woman, Do Right Man, and one horror of her own, Mama Don't Break Down, to absolutely no
done what he does about as well as I ever ex-
ner returning
keepsreturning
depth, but it does have a poetic ring to it, along
thing he has always done things, has this time
done what he does about as well as I ever ex-
pect to hear it done. His work is not very
day— and, of course,
not much of the spontaneity that buds around
other kinds of musical personalities. It’s Al
Stewart again, doing the Al Stewart thing.
That means you can hear a little midnight oil
in some of the songs (Valentina Way), but
stuff that would sound convoluted from other
people (including Song on the Radio) some-
thing else
also
would-be eclectic, would-be mature Stills
we’ve come to know in recent years. I don’t
know how much naiveté Stills has in him as a
personality trait, but this juxtaposition seems
to confirm what his older fans must suspect:
artistically he’s better off writing a naïve
song. He needs some semblance of a cause,
that is, though not a political one. Most of all,
he needs to write in the humble spirit that
goes with concocting a naive song, to avoid
smugness and the don’t-give-a-damn attitude
that seems to go with it. He needs to write
about something he cares about. Stills is not,
some people have suggested, burned out,
but he seems to be coasting and in need of
some motivation outside his own apparently
complicated ego. At the same time, his voice
is less versatile than it used to be, but also
(Continued on page 120)

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I was about four o'clock when she walked into my office, dressed in a mourning suit that made her look like a road-show Ligeia. “Are you Marlowe?” She wiggled slightly as she sat down, which meant either she liked me or she’d noticed that my furniture is upholstered in mohair.

I looked up. “That’s me, like the sign says. Chris Marlowe, Aesthetic Investigator. What can I do for you, Miss—?” She looked vaguely familiar, but I couldn’t place her under the widow’s weeds. “The name’s unimportant, but call me Ms.”

“Frankly, I don’t care if you want to be called late for dinner. You have a job you want done, spill it.”

“Not so fast, sister. Like I said, it doesn’t add up. So I began to think. Who in her right mind would be so interested in all this that she’d hire a broken-down private dick to figure it out? And why the time limit?”

I ripped the veil and sunglasses off her face. “I knew it. You’re Paulette Weiss of Stereo Review.”

“Huh. I had to do it, Marlowe,” she sobbed. “None of my regular reviewers would touch the stuff, and I had a deadline. It was the only way.”

“You’re good, sweetheart,” I said, putting on my coat. “But not that good.”

“Whatever you mean—”

“That’s right. I won’t write the review for you. Understand?”

“But, Marlowe—”

“I won’t do it, do you hear? Get Simels, or Vance, or Coppage; they’ll write anything for free albums. But not me.”

I started out the door. “Where are you going?” she asked in a voice as quiet as the grave.

“I don’t know,” I said. “Computer school, maybe. Anywhere I don’t have to intellectualize over loud noises.”

“You can’t run out on me like this.”

I shook my head. “You should have thought about it before you got into the editing racket. See you around, sister.”

I walked slowly down the five flights of stairs to the street and thought about her. She wasn’t the first “good girl” to miss a deadline, and she wouldn’t be the last. Still, somehow I knew I’d never hear from her again. Like I said, what a world.

—Steve Simels

KISS—GENE SIMMONS. Gene Simmons (vocals, bass); other musicians. Radioactive; Burning Up with Fever; See You Tonite; Tunnel of Love; True Confessions; Living in Sin; Always Near You/Nowhere to Hide; Man of 1000 Faces; Mr. Make Believe; See You in Your Dreams; When You Wish Upon a Star. CASABLANCA NBLP 7120 $7.98, © NBL8 $7.98, © NBL5 7120 $7.98.

KISS—ACE FREHLEY. Ace Frehley (vocals, guitar); other musicians. Rip It Out; Speedin’ Back to My Baby; Snow Blind; Ozone; What’s on Your Mind?; New York Groove; I’m in Need of Love; Wiped-Out; Fractured Mirror. CASABLANCA NBLP 7121 $7.98, © NBL8 $7.98, © NBL5 7121 $7.98.

KISS—PETER CRISS. Peter Criss (vocals, drums); other musicians. I’m Gonna Love You; You Matter to Me; Tossin’ and Turnin’; Don’t You Let Me Down; That’s the Kind of Sugar Papa Likes; Easy Thing; Rock Me, Baby; Kiss the Girl Goodbye; Hooked on Rock ‘n’ Roll; I Can’t Stop the Rain. CASABLANCA NBLP 7122 $7.98, © NBL8 $7.98, © NBL5 7122 $7.98.

KISS—PAUL STANLEY. Paul Stanley (vocals, guitar); other musicians. Tonight You Belong to Me; Move On; Ain’t Quite Right; Wouldn’t You Like to Know Me; Take Me Away (Together as One); It’s Alright; Hold Me, Touch Me (Think of Me When We’re Apart); Love in Chains; Goodbye. CASABLANCA NBLP 7123 $7.98, © NBL8 $7.98, © NBL5 7123 $7.98.
MENTHOL: 8 mg. "tar", 0.6 mg. nicotine, FILTER: 9 mg. "tar", 0.7 mg. nicotine, avg. per cigarette, FTC Report MAY '78.


"Real's got dynamite taste! Strong...more like a high tar."

The strong tasting low tar.

more interesting, somewhat battered and believable. He knows his business; after going through the motions of songwriting, he can maximize his holdings, so to speak, in the studio. The result is an acceptable album, except that this is not some rookie, this is Stephen Stills.

N.C.

**STYX: Pieces of Eight.** Styx (vocals and instrumental). Great White Hope; I'm OK; Sing for the Day; The Message; Lords of the Ring; Blue Collar Man (Long Nights); and four others. A&M SP-4724 $7.97, ® AAM-4724 $7.98, ® AAM-4724 $7.98.

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

Styx is a good hard-rock band as hard-rock bands go, which isn't very far. Most of the performances here are energetic for the sake of being energetic, and that is really what rock is all about, even in its dotage. The trouble with bands of the Styx type is that, for lack of any other subject matter, they continually drop cues from their youthful audience. Thus Styx sings Great White Hope, about the audience waiting for them to flop, and Lords of the Ring (a reference to the Tolkien fantasy novels), about a pure world where violence is nonexistent. Remind you a little of the Woodstock Nation kids who thought they'd never reach thirty? The wheel turns and, yes, it goes nowhere. Nor, I fear, does Styx.

**TEMPATIONS: Bare Back.** Temptations (vocals); instrumental accompaniment. Mystic Woman (Love Me Over); I Just Don't Wanna Know How to Let You Go; That's When You Bought a Flat, and You've Got a Cold. While there are several good songs on this present album, not one song of outstanding quality for it to hang on. The group's last studio album, "Deceptive Bends," released in March 1977, was crammed with such memorable material as The Things We Do for Love, Marriage Bureau Rendezvous, Honeymoon with B Troop, I Bought a Flat, and You've Got a Cold. While there are several good songs on this present outing, none measures up to any on the above list. Indeed, some of the material on "Bloody Tourists" sounds like "Deceptive Bends" pieces rewritten without the spark of off-the-wall humor that for so long distinguished 10cc. Maybe what's missing is a sense of fun; perhaps the group is now writing and performing under pressure to maintain their reputation and prestige. "Bloody Tourists" isn't a failure or inferior to most pop albums, but from 10cc it is a disappointment.

**THIRD WORLD: Journey to Addis.** Third World (vocals and instrumental). One Cold Vibe (Couldn't Stop Dis Ya Boogie); Cold Sweat; Cool Meditation; African Woman; Now That We Found Love; and three others. ISLAND ILPS 9554 $7.98, ® MB 9554 $7.98, ® M5 9554 $7.98.

**Performance:** Afro-Caribbean fusion
**Recording:** Good

The music of the Bahamian group Third World might be called reggae, or at least a close relative of it, though they do not hail from Jamaica, home of the musical Rastafarians. They use steel drums and Caribbean percussion in combination with electric guitars, keyboards, and other instruments to create rolling waves of calypso rhythms, and they sing, robustly, lyrics that contain mysterious smatterings of religion and politics. It is possible to enjoy these songs without listening too carefully to the words or attempting to understand them, and that is part of the fun.

Caribbean music has long influenced popular American forms, with reggae being merely one of the later arrivals. But Third World seems to offer something many of the other modern Caribbean musicians do not. This group has fused the instrumental and vocal approaches of North American soul music with their own, finding a common ground and tilting it well. They use fleshy arrangements with emphasis on the bass and offer imaginative guitar work and ensemble singing built on full harmonies; furthermore, they vary their pacing to avoid any static quality. The fusion here is most complete on African Woman, where Third World sounds somewhat like the North American group War at its very best. Recommended.

**TOM WAITS: Blue Valentine.** Tom Waits (vocals, guitar, piano); instrumental accompaniment. Somewhere; Red Shoes by the Drugstore; Christmas Card from a Hooker in Minneapolis; Romeo Is Bleeding; $29.00; and five others. ASYLUM 6E-162 $7.98, ® ET8-162 $7.98, ® TC5-161 $7.98.

**Performance:** Street-poet's recital
**Recording:** Good

Tom Waits is a throwback to the "poetry-and-jazz" experiments in San Francisco in the mid-1950's, a time when leading figures of the Beat Generation—Kenneth Rexroth, Lawrence Ferlinghetti, and Jack Kerouac—recited their free verse to the accompaniment of neo-bop combos. Waits takes the role of a kind of contemporary Francois Villon who chronicles and celebrates the mean lives and bad ends of three-time losers and fourth-rate people. Waits' folk, like Villon's, are penniless crooks, sluts, winos, brawlers, and vulgar buffoons. They have little or nothing to recommend them except the humanity the poet gives them through his talent.

There are barely any tunes here; Waits recites his often brilliant lyrics while a combo plays blues or mild jazz. His hoarse, back-alley voice may strike some listeners as offensively pretentious, but if you are willing to work past it and listen to the lyrics you will hear some brutally beautiful free verse. J.V.

**JERRY JEFF WALKER: Jerry Jeff.** Jerry Jeff Walker (vocals, guitar); instrumental accompaniment. Eastern Avenue River Railway
Blues; Lone Wolf; Bad News; Boogie Mama; I'm Not Strange; and four others. ELEKTRA 6E-163 $7.98, © ET8-163 $7.98, © TC5-163 $7.98.

Performance: Flawed excellence
Recording: Good

Well, buckaroos, sounds like Jerry Jeff got even more drunked-up than usual to cut this sumbitch. That’s not all bad, as there’s a freewheeling spontaneity here you can’t get much any more, and there’s some of the boldest, best singing Walker has put on records. But it would have been good if somebody sober had looked after structuring the thing, as it just about turns out to be a lesson in how not to do it. After starting with a nice wordy-mellow song by Mike Reid (and, unfortunately, hamming up the ending), Jerry Jeff runs through three straight rockers too similar in tempo, attitude, and two or three other qualities, and then into Keith Sykes’ semi-bawdy novelty song, I’m Not Strange, also a blues derivative structurally. The second side is calmer—spiritually, thematically, and sonically. A little tinkering with the sequencing would have worked wonders for the album’s overall effect (on me, at least), since the rock stuff is welcome; it draws Walker out—especially Lee Clayton’s Lone Wolf. And the mellower stuff, starting with a rerecording of Walker’s Her Good Lovin’ Grace (he has written nothing new for this), is the kind of material that responds well to being playfully mauled by Walker’s growly-bear approach. The instrumental backing sounds a lot more, um, professional than Walker’s road band. There’s a good recording here, if you don’t mind doing a little mental editing.

JACK NEWTON DANIEL made whiskey in 1866 by a method called charcoal leaching. We say charcoal mellowing today.

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The McGarrigles

Kate and Anna

One of the most gratifying aspects of working as a reviewer is the chance to evangelize (in the original Greek meaning of “bringing the good news”) for artists who don’t immediately capture the public’s ear or don’t get the mass audience their work deserves. So it is with a great deal of pleasure that I tell you that Kate and Anna McGarrigle have created an enchanting new album for Warner Bros. titled “Pronto Monto,” and if you don’t beat feet over to your nearest record store and get a copy you are going to miss a unique and lovely listening experience.

If you are, in your fashion, a faithful reader of this magazine you will know that everyone who has listened to the previous albums by this pair of sisters from Canada has rushed into print to go publicly bananas about the haunting beauty of their work. This includes Noel Coppage in his May 1976 review of their first album and Penelope Ross, whose jubilant addendum to that rave began “You Must Hear This Record!” and concluded with the hope that the album would be the beginning of great things.

Putting its reputation where its convictions were, the magazine awarded one of its coveted “Record of the Year” awards to that debut album. Rick Mitzi’s portrait of Kate and Anna in the November 1977 issue showed that even his enthusiastic review of their second album in June of that year left them as calm and unimpressed by their own talent and achievements as Helen seems to have been at the sacking of Troy.

The main problem in trying to describe the McGarrigles in cold print to those who haven’t heard them at all or listened closely enough to them is the elusive beauty of their voices—Kate’s is perhaps a bit more memorable—and the moods they are able to create with their songs. Their performances have a surface ease and simplicity, so that if you listened for only a phrase or two, or if you just heard them in the background, you might shrug them off with a quick “So What Else Is New?” What the McGarrigles lack, if indeed it is a lack, is any kind of bombast or attention-getting gimmick. They work instinctively, assuredly, and often with enormous dramatic intensity, but they refuse to grab you by the lapels and force themselves and their performances on you. Now, we live in a lapel-grabbing age in popular music (in rock they grab you harder, further down), and the McGarrigles have paid the commercial price. They are not cult figures—they are too real-life to have developed a cult—and they do have a group of fans, but...well, let’s just say that the accountants over at their record company don’t exactly plan to work nights when they hear that a new McGarrigles release is coming up. The great record-buying public being what it is, the McGarrigles have yet to break through. And that really is a pity.

Just how much a pity you can judge for yourself when you listen to “Pronto Monto.” From the title song, a little number by the sisters and one Phillippe Tartarcheff, through the side-splitting Side of Fries by Kate and Phillippe, through Anna’s Oh My Heart, even through Galt MacDermot and William Dumarest’s Cover Up My Head, there is a presence, a style, a quiet elegance, that belies their homespun attack and their casualty unselfconscious (but incredibly well-crafted) performances.

Everyone else has taken a whack at attempting to describe them in musical comparisons, none of which seem quite to do the McGarrigles justice (I myself, for some strange reason, kept thinking of Lotte Lenya in her album of “American Theater Songs” while I was listening to this album—a suggestion that would put you totally off the track). But let me try another kind of comparison on you: Helen Hayes is a rather plain, Hausfrauish woman who would pass unnoticed in any crowd, but in her performance as Queen Victoria Miss Hayes finally made clear to American audiences just what Majesty really is; with a flick of her humdrum, everyday voice, she can bring you to attention in your seat; she can establish character and mood so effortlessly that you seldom realize you are watching acting. And though she never seems to reach for an effect she nonetheless achieves thunderous ones. Hayes’ theatrical magic is of the prestidigitator’s kind: she palms the emotional ace in full view of the audience only to present it, in triumph, at the correct moment. And it is this kind of magic that the McGarrigles have. There they are, just sweetly singing along...and BAM! they’ve got you on the ropes. Their art, like Miss Hayes’, is made of the small gesture, the minute inflection, the sudden powerful surge. Hayes’ theatrical magic is of the prestidigitator’s kind: she palms the emotional ace in full view of the audience only to present it, in triumph, at the correct moment. And it is this kind of magic that the McGarrigles have. There they are, just sweetly singing along...and BAM! they’ve got you on the ropes. Their art, like Miss Hayes’, is made of the small gesture, the minute inflection, the sudden powerful surge.

Kate and Anna McGarrigle’s albums are Listening Experiences, which is why I haven’t tried to define their songs or lyrics in any great detail. What I invite you, ask you, urge you to do is, please, just listen.

—Peter Reilly

KATE & ANNA MCGARRIGLE: Pronto Monto. Kate and Anna McGarrigle (vocals, piano, other instruments); other musicians. Oh My Heart; Side of Fries; Just Another Broken Heart; NA CL; Pronto Monto; Stella by Articis; Bundle of Sorrow; Come Back Baby; Tryin’ to Get to You; Fixture in the Park; Dead Weight; Cover Up My Head. WARNER BROS. BSK 3248 $7.98, © M8 3248 $7.98, © M5 3248 $7.98.
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**RECORDING OF SPECIAL MERIT**

**NEIL YOUNG: Comes a Time.** Neil Young (vocals, guitar); Ben Keith (steel guitar); Carl Himmel (drums); Tim Drummond (bass); Spooner Oldham (piano); other musicians. "Goin' Back; Comes a Time; Look Out for My Love; Lotta Love; Peace of Mind; and five others. REPRISE MSK 2266 $7.98, @ M5 $2266 $7.98. **Performance: First-rate Recording. Very good.** "Comes a Time" will pass in the rock environment, I suppose, for Neil Young's country album. It is his simplest, most acoustic, and best produced disc since "Harvest." It is not melodramatic and fancy like "Harvest," however, but down to earth and direct. It is also rather laid-back, not in a country way, but in a way having to do with a specific mood. He doesn't exactly set the tone for it with the line in the first song that goes, "I feel like going back to where there's no place to stay," but he comes close. So the one thing it could use is a little more energy. The place where it has this energy is in a surprisingly good rendition of Ian Tyson's Four Strong Winds. Young's roots are partly in Tyson, and this is a country album in the sense that most Canadian albums are a bit country.

"It's a good one, anyway. It has the familiar Young Angst hanging over it, but this time with a healthier look on its face, almost rosy-cheeked sometimes. Young sounds healthy, the least zonked-out he's sounded in a long time, and his new songs have variety without sacrificing style. Lotta Love is the only one that sounds contrived to fit a market (one of the new know-nothing markets), and even there Young has done a more than competent job of writing to specifications. I find it only mildly distasteful. Goin' Back, the first song, though poignant, is a bit tedious, so you have to give the album a little time to get to you. When it does, you'll have some rewarding experiences with texture and mood, some real tunes, and the real personality Young puts into his work. N.C.
effects, and arrangements that take you up, up, UP! Unfortunately, the songs themselves don't amount to much.

The latest standard-turned-disco, Unchained Melody, simple though it is, outclasses every new song here. But it is woven into such a complicated medley of four other songs that it never has a chance to develop into a full-fledged number on its own. Its good moments are my favorites on the entire album. Running a close second are a few bars of Lansdowne Suite, a purely instrumental rhumba-samba-infected section of that same song medley. One last quibble: the songs, the sound, and the accent are about as French as hush puppies.

VIVIAN REED: Another Side. Vivian Reed (vocals); orchestra. Start Dancin'; Sweet Harmony; It's Alright; You Came; and five others. UNITED ARTISTS UA-LA911-H $7.98, © UA-EA911-H $7.98, © UA-CA911-H $7.98. (Continued on page 127)

Vivian Reed is the brilliant dancer and singer who shot comet-like to stardom in the original Bubbling Brown Sugar and briefly made Broadway seem as bright as it was in the glamorous old days. She deserves a lot better than this, "this" being a routine disco album unimaginatively produced and brimming with hackneyed arrangements and wan gimmicks. The whole unfortunate enterprise droops around her lovely shoulders like a drip-dry feather boa. Forget this one.

P.R.

DONNA SUMMER: Live and More (see Best of the Month, page 101)

VILLAGE PEOPLE: Cruisin'. Village People (vocals and instrumentals). Y.M.C.A.; Hot Cop; My Roommate; and three others. CASABLANCA NBLP 7118 $7.98, ® NBL8 7118 $7.98, ® NBL5 7118 $7.98.

Performance: Relentless
Recording: Fine

I still find the Village People purveying relentlessly driving disco with none of the subtlety in arrangement or variety of melodic invention that makes dancing such fun. But who can sneer at such success as theirs? In truth, the biggies from this third album—Y.M.C.A. and the medley of The Women and I'm a Cruiser—are both a lot more interesting than Macho Man, the group's first super-hit. (True, too, they trade off of the same aggressively gay sensibility.) But the whole second side suffers from Victor Willis' invariable shouting delivery of silly lyrics backed up by monotonous, thumping vocals from the rest of the People. "Cruisin'" left me exhausted, as much from the tiring, tiresome arrangements as from dancing.

E.B.

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FEBRUARY 1979
T he acoustic jazz guitar—which is to say the American guitar, with a few notable foreign exceptions—has had a distinguished and exciting history, but one that has been largely overlooked, partly because in jazz groups the instrument has usually been assigned a rhythm-support role with only occasional solos. There would really be no jazz guitar today (or rock guitar either, for that matter) were it not for the efforts of several pioneers whose names are now known mostly to specialists and connoisseurs: Eddie Lang, Dick McDonough, Carl Kress, Lonnie Johnson, Tony Mottola, and George Van Eps. All of them are featured in a series of reissues on Yazoo Records that anyone who calls himself a jazz fan ought to own.

Jazz Guitar Pioneers

Nearly all the selections in these albums are originals, and it is impossible to miss the pride and confidence with which they are presented. The playing of these artists reveals a love for their instrument—and a fidelity to it—that is almost entirely lacking in later jazz and rock musicians associated with the guitar.

The most important of these reissues, both historically and musically, is the one devoted entirely to performances by and with Eddie Lang. Born in South Philadelphia in 1902 as Salvatore Massaro, Lang took his professional name from that of a high-school basketball team, inventing "chamber-music jazz" as his recorded. As boys they had played waltzes, tarantellas, and classical pieces, and this experience gave the duo a technique and a catholic taste unmatched by other jazzmen.

Lang was brisk, deft, and charming. When McDonough died in 1938 (available by mail from Yazoo Records, 245 Waverly Place, New York, N.Y. 10014. Allow 50¢ per disc for postage and handling.)


JAZZ GUITAR VIRTUOSO. Eddie Lang: Prelude (Rachmaninoff Op. 3, No. 2); Rainbow Dreams; April Kisses; I'll Never Be the Same; Eddie's Twister; Perfect; A Little Love, a Little Kiss; Melody Man's Dream; Church Street Sobbin' Blues. Eddie Lang/Carl Kress: Feeling My Way; Feeling My Way. Eddie Lang/Lonnie Johnson: Blue Guitars; Blue Room; Midnight Call Blues. Yazoo 1059 $7.98.

FUN ON THE FRETS (EARLY JAZZ GUI-

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STEREO REVIEW
RECORDING OF SPECIAL MERIT

ART BLAKEY: In This Korner. Art Blakey (drums); the Jazz Messengers (instrumentals). Pamella; Dark Side, Light Side; Blues for Two; and three others. CONCORD JAZZ CJ-68 $7.98.

Performance: Hard-boiling jazz
Recording: Excellent remote

If one were to list the musicians who were at one time or another members of Art Blakey's Jazz Messengers, it would be a most impressive assemblage of names. Chances are that you have never heard of Valery Ponomarev, Robert Watson, David Schnitter, James Williams, or Dennis Irwin, the current members of Blakey's group, but it's a safe bet that you will hear a great deal about these gentlemen in the future.

This album was recorded last May before an audience at Keystone Korner, a San Francisco club. It swings consistently and hard, from the Blakey solo that opens it to Blues for Two, the Ponomarev original that ends it. There are outstanding solo and ensemble performances by all six men, especially tenor saxophonist David Schnitter, who has been a Jazz Messenger since 1974, and pianist James Williams, a marvel who takes no back seat to such illustrious predecessors as Horace Silver, Bobby Timmons, and Cedar Walton. Williams is also a noteworthy composer, as exemplified by Unlimited and the whimsical In This Korner. He'll go far, and so should you, if you have to, to get this album. C.A.

RECORDING OF SPECIAL MERIT

RON CARTER: A Song for You. Ron Carter (acoustic and piccolo basses); Kenny Barron, Leon Pendarvis (piano); Jay Berliner (guitars); Jack DeJohnette (drums); Ralph McLaughlin (percussion); other musicians. El Ojo de Dios; Someday My Prince Will Come; A Quiet Place; and three others. MILESTONE M-9066 $7.98, M-9086(S) $7.95, M-9161-9086(H) $7.95.

Performance: Still batting a thousand
Recording: Excellent

With "A Song for You," his fourth Milestone album, bassist extraordinaire Ron Carter offers further proof that "commercial" jazz doesn't have to be banal. Carter's music—whether the quartet playing it is augmented with woodwinds (as on his "Peg Leg" album), or as it is here, with cellos—is as accessible as an André Kostelanetz footlight favorite, yet it has all the sophistication of a Miles Davis quintet date. If any music is going to win fusion fans over to the real thing, this ought to do it.

Produced and arranged by Carter himself, "A Song for You" is skimpier as far as running time goes (under thirty-five minutes), but ev-
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RECORDING OF SPECIAL MERIT

DEMONSTRATION RECORDS

Dexter Gordon: Manhattan Symphonie. Dexter Gordon (tenor saxophone); George Cables (piano); Red Rodney (bass); Eddie Gladden (drums). As Time Goes By; Moment's Notice; Body and Soul; and three others. COLUMBIA JC 35608 $7.98, © JAC 35608 $7.98, © JCT 35608 $7.98. Performance: Intimate Recording: Very good

You would think the Columbia people would have electrified Dexter Gordon by now, but it seems that it is he who has electrified Columbia with his playing, at least to the extent that we now have the label's third Gordon release, a first-class quartet session of enduring quality. With additional releases by such groups as the Heath Brothers and the Woody Shaw Quintet, and promises of more unadulterated sessions by the likes of Arthur Blythe, Columbia just might redeem itself for having encouraged some of our top jazz artists to walk the fusion plank.

Dexter Gordon's two previous Columbia albums featured a quartet and an eleven-piece band, respectively, so there is more Dexter in this new one, and there is nothing wrong with that. The born-again saxophonist, from whom both John Coltrane and Sonny Rollins learned a trick or two, might—if the label continues to push his records—inspire a new generation of players to go the jazz route. His work on "Manhattan Symphonie" is certainly among his best efforts in recent years, and the quartet setting shows his artistry off most impressively. My particular favorite is Body and Soul, the 1930 ballad Coleman Hawkins turned into a tenor classic in 1939. Gordon gives it an altogether different translation with a wonderful, unaccompanied final statement. The rhythm section keeps up with Gordon, and pianist George Cables delivers some of his most impressive work to date. He is someone we can expect a great deal from, both as a player and composer, in the future. An excellent disc.

C.A.

HEATH BROTHERS: Passing Thru . . .

(see Best of the Month, page 105)

RECORDING OF SPECIAL MERIT

EARL HINES: "Fatha" Plays Hits He Missed. Earl Hines (piano); Red Callender (bass); Bill Douglass (drums). Birdland; Blue Monk; Humoresque; Squeeze Me; Ain't Misbehavin'; Sophisticated Lady; and three others. M.K. REALTIME © RT-105 $15.

Performance: Exquisite Recording: Superior

I consider Earl Hines the greatest jazz pianist of all time, in any style, and it amazes me that he continues to be so some fifty years after he started. The conception, imagination, technique, and majesty are all still there in his playing, which is still firm, still wondrous. It seems marvelously appropriate to assign Hines material not ordinarily included in his repertoire while using the direct-to-disc method of recording the performances—in effect making records the way they did in the 1920's when Hines first began recording. The sound is excellent and Hines' performances exquisite. This is billed as "limited edition" (as all direct-to-disc records must be), so I advise you to get your copy fast.

J.V.

WOODY SHAW: Stepping Stones. Woody Shaw (cornet, flugelhorn); Carter Jefferson (soprano and tenor saxophones); Onaje Allan Gumbs (piano); Clint Houston (bass); Victor Lewis (drums). In a Capricornian Way; Seventh Avenue; It All Comes Back to You; and two others. COLUMBIA JC 35560 $7.98, © JCA 35560 $7.98, © JCT 35560 $7.98. Performance: Inspired Recording: Very good remote

This is good, straightforward jazz from the same Woody Shaw quintet that gave us the...
excellent album "Rosewood" (Columbia JC 35309) early last year. This time we hear the group in live performances at New York's Village Vanguard last August.

The quintet offers a winning combination of technical skill, imaginative and well-constructed solos, tight ensemble work, and spirit. But annotator Jim Fishel—who, it should be noted, is on Columbia's staff—stretches loyalty a bit too far when he suggests that the sound of this quintet "could be a new musical direction." It is a good, unadulterated sound that represents the more conservative type of modern jazz well, but there is nothing innovative about it.

RECORDING OF SPECIAL MERIT

DICK WELLSTOOD/MARTY GROSZ: Take Me to That Land of Jazz. Dick Wellstood (piano); Marty Grosz (guitar, vocals); Sam Parkins (clarinet, tenor saxophone); Mickey Goliazza (bass); Tommy Benford (drums). Snowy Morning Blues; We're in the Money (two versions); T'Ain't No Sin; Isn't Love the Strangest Thing?; Sleep; and five others. AVIVA 6001 $7.98 (from Aviva Records, P.O. Box 156, Hicksville, N.Y. 11802).

Performance: Lively
Recording: Excellent

Besides being gifted, dedicated musicians, pianist Dick Wellstood and guitarist Marty Grosz have in common a profound affinity for the music of Fats Waller. Teaming them up seems most logical, and it was first done for a recording session (for the defunct Jolly Rogers label) twenty-eight years ago. For some strange reason, however, the two were not to get together again until 1977, when they did a tribute to Fats Waller at Michael's Pub in New York. That led to an as yet unissued album for Chiaroscuro and, shortly thereafter, this delightful collaboration on Aviva.

Grosz's bouncy acoustic guitar—a propellant of the group Soprano Summit—is a perfect partner for Wellstood's Wallerish piano, and to hear them romp and stomp their way through a well-chosen program of tunes extracted from the past is simply exhilarating. Aiding them rhythmically is bassist Mickey Goliazza, whose father, Matty, played guitar behind Frank Sinatra in the early Fifties, and Tommy Benford—now approaching seventy-four—who participated in the aforementioned Jolly Rogers session and counts both Jelly Roll Morton and Fats Waller among his past associates.

Rounding out the quintet is Sam Parkins, who put aside playing music in 1967 to become a record producer. Judging from his clarinet and tenor-saxophone performances here, however, he should put his stopwatch aside more often. Parkins' years as a performer were mostly spent playing in Dixieland bands, but his musical tastes are catholic. He had not played in eight months when he was called to do this album, but one would never know it; he has a wonderful, rich tone, especially on the tenor, and he plays with imagination, swing, and joy. Indeed, joy is the key word here, for this album is permeated with it. Add to the rollicking music Marty Grosz's characteristically humorous interpretations of such off-beat songs as T'Ain't No Sin and I Nearly Let Love Go Slipping Through My Fingers and you have an album of resounding, refreshing echoes of an era when jazz musicians actually enjoyed themselves.

C.A.
BEETHOVEN: Fidelio (see Best of the Month, page 99)

BOCCHERINI: Concerto No. 2, in D Major, for Cello and Strings (see VIVALDI)


Performance: Well thought-out
Recording: Good


Performance: Variations better
Recording: Better in Variations

James Levine, with the Chicago Symphony Orchestra, has now completed his first traversal of the Brahms symphonies on record; I am sure that it will not be his last. By and large, this performance of the D Major is well turned out—more convincing in conception and execution than his First, which is the only other one of his cycle that I have heard. If the opening pages seem a trifle cool, the lamenbency of the music shines forth ever more warmly as things progress, and in the first movement codetta, with its wonderful horn solo, Levine really comes into his interpretive own. The slow movement comes off very well indeed, with Levine rightly making the most of its dramatic aspects. The two final movements are handled with neatness, dispatch, and no little brilliance. The recording is fine.

Eighty-four-year old Karl Bohm regrettably offers an old man's account of the Brahms D Major, stressing the autumnal aspects of the first two movements. The slow movement is certainly adagio—without the non troppo indicated by Brahms. Things liven up momentarily in the third movement, where Bohm elicits some beautifully perky playing in the presto middle section. The symphony performance is presumably from the integral Deutsche Grammophon album of 1976, while that of the Haydn Variations, added to this disc as a filler, was done at another time. Not only does the violin tone have more body than in the symphony recording, but the performance (except for a rather heavy-handed Variation No. 4) has more life altogether, with a good many especially felicitous moments. D.H.

COPLAND: El Salón México; Rodeo, Four Dance Episodes; Appalachian Spring, Suite. Dallas Symphony Orchestra, Eduardo Mata cond. RCA ARL1-2862 $7.98, ® ARSI-2862 $7.98, © ARK1-2862 $7.98.

Performance: Crisp and trim
Recording: Slightly cramped

The choice of Copland repertoire for this disc is appropriate in more ways than one: Eduardo Mata's senior compatriot, the late Carlos Chávez, conducted the world premiere of El Salón México in Mexico City in 1937, and the first recording of the Rodeo episodes was done by the Dallas Symphony Orchestra during the Antal Dorati regime in the late 1940's. Mata chooses to emphasize the poetry rather than the facile brashness of Copland's south-of-the-border counterpart to Chabrier's España, and, on the whole, it works. The same holds true for much of the Rodeo music until the final Hoedown, which Mata and his players bring off with tremendous verve. The Appalachian Spring music is the familiar concert version, and here Mata tries for leaness of texture and rhythmic tautness, much to the benefit of the music in its symphonic guise.

Ah, the sackbut! What a loss to the language when it became the trombone, and what a loss to the ear when its velvety sound became strident and brassy! Now you can hear nine sackbuts playing beautifully in tune, with perfect ensemble, and with a musical sensitivity equal to that of a body of strings. But that is not all: add four cornets for a clarion upper register. The cornett, a wooden-bodied instrument capped by a brass mouthpiece, has traditionally been the scourge of early-music performing. As attested by the first years of its appearance on records, it can be excruciatingly out of tune, raucous to the point of turning one's teeth around in their sockets, and musically stiff-necked. On this disc, however, the cornets put on a good show even if now and then there is a rather broad pitch fringe. The sackbut and cornett ensemble has been supplemented here by Baroque strings, dulcian, theorbo, and organ. The resultant sonorities are rich and noble and bring off these multi-

Explanation of symbols:
- = reel-to-reel stereo tape
® = eight-track stereo cartridge
= quadraphonic disc
= digital-master recording
= direct-to-disc recording

Monophonic recordings are indicated by the symbol ©

The first listing is the one reviewed; other formats, if available, follow it.
grouped works of Giovanni Gabrieli in a thrilling manner.

One tends to think that once one has heard one Venetian canzona, one has heard them all. Part of this attitude is, of course, due to conductors who treat them as though they were all alike. Brott sees from sonata or canzona as an individual work and brings out its unique character. The range of moods is remarkable, moving from the somber colors of the Sonata Pian’ e Forte to the high-spirited rhythms of the Canzon III Septimi Toni a 8. Although the engineers have beautifully caught the antiphonal effects, always a delight to hear in stereo, the sound is rather too dry to create a true blend of the various groups. Recording in a church would have helped the blend, and it would certainly have been appropriate for these works written for St. Mark’s. Nonetheless, this is one of the finest renditions of the grand Baroque available today. Let us hope that the cornets and satchets will join up with one of London’s fine choral groups and give us some of Gabrieli’s motets.

S.L.

GLAZUNOV: Concerto for Saxophone and Orchestra. Lev Mikhailov (saxophone) and ensemble of soloists of the All-Union Radio and Television, Alexander Korneyev cond. Quartet for Saxophones in B-flat Major, Op. 109. Lev Mikhailov (soprano saxophone); Alexander Oseichuk (alto saxophone); Yuri Vorontsov (tenor saxophone); Vladimir Eremin (baritone saxophone). ODYSSEY/MELODIYA Y 35205 $3.98.

Performance: Amazing
Recording: Good

Russian Romantic saxophones? It is easy to forget that the saxophone was invented in the mid-nineteenth century to enrich-I almost said “lushen up”—the rather crisp sound of the symphony woodwinds. Not that it ever caught on in that guise; it was the marching band and, later, jazz that brought the sax into its own.

This is Russian Romantic music, all right, but as written in the 1930’s in Paris by an old, bitter man whose heyday had long since passed. The concerto, by far the better of the two works, was written for Sigurd Rascher, who has done as much as anybody to make the saxophone “respectable.” (The second professional review I ever wrote was of a concert by Rascher; too bad he didn’t record the work.) The Russian Lev Mikhailov is also a very respectable player, and this odd Soviet recording must rate at least a footnote in the history of Russian Romanticism. As for the Saxophone Quartet, I will say that it provides one of the most horrendous ensemble sounds—what Leschetizky would have said of this pianist is open to doubt, after hearing Maurizio Pollini’s extraordinary presentation of Beethoven’s last sonatas, what Leschetizky would have said of this pianist. Pianistically and interpretively, his playing is definitely more expansive and eloquent in the arietta of Op. 111 (London CS 6843), and Vladimir Ashkenazy is a bit more expansive and eloquent in the Hammerklavier, a work which has had its share of exceptional recordings. I think he is simply all-surpassing. There is surely nothing that could be called cold or remote in his expressive playing of the slow movement, and the finale in particular is a marvel of both virtuosity and poetry, with dramatic points made by the most subtle shadings of tone and a judicious use of power giving the impression of limitless reserves.

When we return to, or simply remind ourselves of, the aforementioned Gilels and Ashkenazy discs, Solomon’s superb performances of these five sonatas plus the Waldstein in Turnabout © THS-6506(78), or Schnabel’s recently unearthed American recordings of Opp. 109 and 110 (Victrola ® AVM1-1410), we have to remember that at this level of music-making comparisons are meaningless not in terms of better and best but only for the different light each masterly approach throws on the many-faceted subject. Pollini’s light is brilliant in the best sense, and its power and clarity are underscored by DG’s well-nigh perfect reproduction and flawless surfaces. This is an expensive set, but it is one that no one who takes this music seriously should be without.

Richard Freed

Pollini’s Beethoven

A R T U R S C H N A B E L ’ s teacher, the great Arthur Schnabel, is supposed to have told him: “You will never be a pianist; you are too much a musician.” I had to wonder, after hearing Maurizio Pollini’s extraordinary presentation of Beethoven’s last sonatas, what Leschetizky would have said of this pianist. Pianistically and interpretively, his playing is without a doubt very clear vision. This sort of poise and objectivity may strike some listeners as cold, but to my mind there is no question about Pollini’s deep and extraordinarily productive involvement. Emil Gilels, hardly less patrician, manages to show a warmer heart in Op. 101 (DG 2530 253), and Vladimir Ashkenazy is a bit more expansive and eloquent in the arietta of Op. 111 (London CS 6843), but Pollini is just as compelling in his way, and in the Hammerklavier, a work which has had its share of exceptional recordings. I think he is simply all-surpassing. There is surely nothing that could be called cold or remote in his expressive playing of the slow movement, and the finale in particular is a marvel of both virtuosity and poetry, with dramatic points made by the most subtle shadings of tone and a judicious use of power giving the impression of limitless reserves.

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Richard Freed

HINDEMITH: Sonata for Unaccompanied Violin, Op. 25, No. 1 (see SHOSTAKOVICH)

JANÁČEK: Sonata for Violin and Piano (see Collections—Sergiu Luca)

KETELBEY: In a Monastery Garden; In a Persian Market; In a Chinese Temple Garden; In the Moonlight; In the Mystic Land of Egypt; Gypsy Lad; The Clock and the Dresden Figures; Bells Across the Meadow; Sanctuary of the Heart. Vernon Midgley (tenor); Jean Templer (mezzo-soprano); Leslie Pearson (piano); Ambrosian Singers; Philharmonia Orchestra. John Lanchbery cond. ANGEL S-37483 $7.98.

Performance: Too lavish and too late
Recording: Superb

Way back when, longer ago than you would believe, at P.S. 173 in the upper reaches of Manhattan Island, the high point of our musical appreciation sessions in the school auditorium was invariably Albert W. Ketelbey's In a Persian Market. I didn't know then, and probably neither did anybody else at P.S. 173, that he had written In a Persian Market, with all that local color, and that was enough for me. There was a time when I actually liked it almost better than In the Hall of the Mountain King. Had I known there were such trifles as In a Monastery Garden, In a Chinese Temple Garden, In the Moonlight, and In the Mystic Land of Egypt to be chosen from the same musical chocolate box, I would have been beside myself with joy.

Now, some of the best musicians in England have assembled to record all these and more Ketelbey "masterworks" in all their atmospheric glory and in overwhelming quadraphonic sound. The Ambrosian Singers chant the monks' Kyrie eleison in the monastery garden, the Philharmonia Orchestra (under John Lanchbery, no less) plays its heart out, birds twitter in the trees, bells tinlde in the Chinese temple garden and toll out over the meadow. Too late! The Maxfield Parrish of that he used with great skill over an extended range. His intonation is unfailing, and he executes the florid runs in K. 512 with virtuosic ease and accuracy. Vocaally he copes with the substantial challenges in an impressive man-

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MOZART: Concert Arias. Aspri Rimorsi Atroci (K. 432); Mentre Ti Lascio, O Figlia (K. 513); Io Confesso... Non So d'Onde Viene (K. 512); Ich Möchte Wohl der Kaiser Sein (K. 539); Per Questa Bella Manto (K. 612); Un Bacio di Mano (K. 541); Rivolgete a Lui lo Sguardo (K. 384); Io Ti Lascio, O Cara, Addio (K. anh. 245). Joszef Gregor (bass); Szeged Symphony Orchestra, Pál Tamás cond. HUNGAROTON SLPX 11870 $7.98 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

Performance: Generally good
Recording: Good

Most of these concert arias for bass have been recorded by such specialists as Italo Tajo, Fernando Corena, Dietrich Fischer-Dieskau, Walter Berry, and even Ezio Pinza (K. 513), but previous versions have been either withdrawn or scattered through the catalog. Every one of the arias is a gem, and it is good to have so many of them on one disc. Joszef Gregor (b. 1940), a leading Hungarian opera artist, has sung in some oratorio recordings, but this is his first recorded solo recital. He has a flexible, well-centered voice that he uses with great skill over an extended range. His intonation is unfailing, and he executes the florid runs in K. 512 with virtuosic ease and accuracy. Vocally he copes with the substantial challenges in an impressive man-

MAHLER: Symphony No. 1 (see Best of the Month, page 100)

MOZART: Clarinet Concerto in A Major (K. 622); Sinfonia Concertante in E-flat Major for Wind Quartet and Orchestra (K. 297b). Dieter Klöcker (clarinet); Gernot Schmaifuss (oboe); Hermann Baumann (horn); Karl Otto Hartmann (bassoon); Salzburg Mozarteum Orchestra, Leopold Hager cond. TELEFUNKEN 6.42131 $8.98.

Performance: Pleasant
Recording: Very good

These are certainly agreeable performances, though I do not find them quite as satisfying as some others. Dieter Klöcker is a fluent soloist in the Clarinet Concerto, and Hermann Baumann's presence in the Sinfonia Concertante is an indication of the high level of the entire solo quartet. For his part, conductor Leopold Hager has both works neatly in hand; tempos are extremely well judged and the string body sounds just the right strength. The recording itself is very good, too, though the soloists are a little farther forward than ideal. If the coupling (which seems to be unique in the current catalog) is especially appealing, the disc may be recommended safely enough, but otherwise I would prefer the more eloquent recording of the Clarinet Concerto by Gervase de Peyer and Peter Maag on London CS 6178 and the more ebullient and subtle, gorgeously recorded version of the Sinfonia Concertante under Neville Marriner on Philips 6500 380.

R.F.
Yuri Temirkanov cond. ANGEL □ S-37250 $7.98, □ 4XS-37520 $7.98.

Performance: Impassioned
Recording: Superb


Performance: Taut
Recording: Good

Yuri Temirkanov makes a most auspicious disc debut on Angel with his reading of the uncut version of Rachmaninoff's Second Symphony. My experience with this symphony is of long standing, and the recording I have chosen to live with up to now is the 1956 mono Deutsche Grammaphon disc by Kurt Sanderling and the Leningrad Philharmonic Orchestra (released here by Decca). Despite a minor cut in the finale (the only one actually sanctioned by the composer) and an ac- celearando treatment of the first-movement introduction that the fiercely urgent character of this reading has stayed with me through the years. Well, Temirkanov provides that urgency in spades, and with gloriously full-blooded recording to match. Unlike Sanderling, his first-movement introduction is magnificently controlled, with the dynamic tension and release flawlessly timed, so that the entire epi- sode emerges melodically and dynamically as one unbroken line. This sets the tone for all that follows: the interlaced counterpoint of the scherzo's midsection comes off exactly right, and the great clarinet solo in the slow movement has seldom been more poignantly moving. The finale, of course, with its apo- theosis of the motif elements in the final bars, is a real smash. Angel's recording team has contributed enormously to the end result with an acoustic perspective that yields full-bodied presence and all the richness of detail that the score demands. And the Royal Philharmonic players transcend themselves, as one must in music as complex, lengthy, and impassioned as this. I have found this recorded performance a supremely gratifying experience.

As in all his other Rachmaninoff recordings, Edo de Waart gives his very best in his reading of the Second, but I still find that care and refinement of detail are less than suffi- cient to give us Rachmaninoff entire. The notes are all there, in the right places, and beautifully recorded, but compared with Temirkanov, and even Previn and Ormandy, De Waart fails to capture the grand scale and opulence of Rachmaninoff's music.

REGER: Suite No. 1, in G Minor, for Unaccompanied Viola, Op. 131b (see SHOS- TAKOVICH)


Performance: Good
Recording: Good

I knew virtually nothing of the German com- poser Hermann Reutter before I received this
Art of Fuguing

The title "The Art of Fuguing" conveys better than the nine-page apologia by arranger William Malloch the point of view implicit in a highly entertaining and stimulating new realization and elaboration of Bach's Die Kunst der Fuge, or Art of the Fugue. Not only is this reworking intended as an antidote to the sometimes deadly monotony of more "scholarly" treatments (whether for a keyboard instrument or an instrumental ensemble), it is also clearly meant to underline the fantastic rhythmic vitality in this supposedly most abstract of Bach's musical compositions. By the very sequence of its twenty numbers and the instrumentation and performing styles employed, this metamorphosis of the art of fugue into the art of fuguing cries out for choreographic treatment.

Malloch's arrangement calls for some forty instrumentalists—a string body of chamber-orchestra proportions, flutes, alto flutes, piccolos, oboes, English horns, bassoons, piano, celeste, timpani, and additional percussion for four players—plus a boys' choir at the end. The product of this layout in performance, a piece of harpsichord (its realization or transcription—comes off best in an organ realization. Still, percussion in Bach? Here's where the final gigantic fugue breaks off in the manuscript after "spelling out" in key signatures the name of the composer, B-A-C-H. Using the basic motive of the work as a kind of basso ostinato, Malloch fashions what he calls an "orchestral" version. Besides the general order to an end, the orchestral sections go their separate ways, fuguing away forever, past the horizon line; Bach ascends to Heaven, and we hear his sweet admonition to us to begin anew. "That "sweet admonition" comes in the form of a boys' choir transition. With restrained orchestral accompaniment, the chorale that Bach dictated on his deathbed, Vor Deinen Thron Tret' Ich Hiermit.

Aside from the arrangement and the brilliant performance (including the lovely work by the choir in its brief appearance), the recording is of more than usual interest technically, since two different microphone setups were used and the results are being issued as separate albums. One is the product of a relatively close-up multiple-microphone arrangement; the other was done with a comfortably distant single-capable stereo pickup. Quite frankly, I prefer the latter, since it provides some welcome "air" around the notes that adds transparency without compromising the clarity of the individual polyphonic lines. The multiticking adds an element of close detail, but it also adds a degree of acoustic density that music of this complexity doesn't need, even with Malloch's airy instrumentation.

As a listening experience, I thoroughly enjoyed "The Art of Fuguing." I wouldn't want to do without a first-rate Baroque-organ realization of Die Kunst der Fuge, but this is certainly a stimulating and delightful supplement, even if it does at times verge on the kooky.

—David Hall

the nature paintings on which Rimsky-Korsakov lavished all his imagination and the riches of his orchestral palette. Unfortunately, he did it without a judicious sense of form and balance. To put it bluntly, The Snow Maiden is just too long. An opera in which not much happens should not last as long as Verdi’s La Forza del Destino, in which everything happens.

For the most part, the performance here is excellent. In the double role of Spring Beauty and the shepherd Lel, Irina Arkhipova has the most grateful arias in the score, and she sings and the shepherd Lel, Irina Arkhipova has the excellent. In the double role of Spring Beauty and the shepherd Lel, Irina Arkhipova has the most grateful arias in the score, and she sings and the shepherd Lel, Irina Arkhipova has the excellent. In the double role of Spring Beauty and the shepherd Lel, Irina Arkhipova has the excellent. In the double role of Spring Beauty and the shepherd Lel, Irina Arkhipova has the excellent. In the double role of Spring Beauty and the shepherd Lel, Irina Arkhipova has the excellent. In the double role of Spring Beauty and the shepherd Lel, Irina Arkhipova has the excellent.

Maiden is just too long. An opera in which not much happens should not last as long as Verdi’s La Forza del Destino, in which everything happens. To put it bluntly, The Snow Maiden is just too long. An opera in which not much happens should not last as long as Verdi’s La Forza del Destino, in which everything happens.

The chorus and orchestra are excellent. Less might be more, but The Snow Maiden is still very enjoyable—one act at a time. G.J.

SAINT-SAËNS: Cello Concerto No. 1, in A Minor, Op. 33 (see SCHUMANN)

RECORDING OF SPECIAL MERIT


Performance: Elegant
Recording: Good

Seventeen or eighteen years ago János Starker cited the Angel disc on which these two performances first appeared as the record he was prouder of than any other he had made. Since he had by then recorded the Complete Works of Everybody for cello, that was quite a recommendation, but his enthusiasm was not misplaced. There have been many recordings of both concertos since then, including remakes of both by Starker, but none, I feel, excel these elegant performances, which ought never to have left the active catalog in the first place. They are most welcome returnees on the lower-price label. There was a certain magic in the collaboration of Starker and Carlo Maria Giulini, a thoroughlygoing mutual


Performance: First-rate
Recording: Excellent

This is the third of the three discs in Barenboim’s Schumann symphony set to be made available on its own, and, as David Hall indicated in his review of that set last September, it is the strongest of the three. The slow movement of the symphony, in particular, as D.H. observed, is “simply marvelous,” and there is an appropriately Schumaninesque flexibility throughout the work, in which the great orchestra and DG’s engineering team are at their very best. No one can pretend that the Konzertstuck is a great work, but it makes a very impressive and enjoyable filler, with Chicago’s magnificent horns exulting in the challenges Schumann set forth for them and Barenboim shaping the performance with affectionate spontaneity. R.F.

RECORDING OF SPECIAL MERIT


Performance: Superb
Recording: Realistic

Vladimir Ashkenazy’s splendid earlier record of Scriabin solo works (London CS 6920) included Sonatas Nos. 3, 4, 5, and 9. Volume Two has a more interesting as well as a more varied program, and the playing is, if anything, even more remarkably brilliant than in the all-scionata collection. Here Ashkenazy is very nearly a match for Horowitz’s incredible performance of the Tenth Sonata (Columbia M 31620), and the superiority of London’s exceptionally realistic sound rather effectively closes the narrow gap. The dazzling presentation of the Seventh Sonata alone would make the record a must for admirers of pianistic wizardry as well as for Scriabin devotees: every diabolical/ecstatic phrase is ablaze with wizardry as well as for Scriabin devotees: every diabolical/ecstatic phrase is ablaze with wizardry as well as for Scriabin devotees: every diabolical/ecstatic phrase is ablaze with wizardry as well as for Scriabin devotees: every diabolical/ecstatic phrase is ablaze with wizardry as well as for Scriabin devotees: every diabolical/ecstatic phrase is ablaze with wizardry as well as for Scriab
TELARC has released what I understand to be the first digital recording made by a symphony orchestra in this country; it is an impressive demonstration of Thomas Stockham's Soundstream process (exhibited earlier in Frederick Fennell's Cleveland Winds program on the same label.—reviewed by David Hall last month) and, by no means incidentally, a stunning showcase for the Atlanta Symphony Orchestra and the fine chorus formed by the orchestra's conductor, Robert Shaw. The material on display comprises Stravinsky's Firebird Suite (the standard 1919 version) and the Overture and Polovetsian Dances from Borodin's Prince Igor. The colors and textures created by Stravinsky, Glazounov (in the Igor Overture), and Rimsky-Korsakov (in the dances) are of course ideally suited to such a demonstration, or test, since all of the music utilizes the resources of the large orchestra at just about every level of strength imaginable, from solo winds to hushed strings to the entire ensemble in full cry.

The superiority of the digital process to conventional recording has been demonstrated before—most notably in the Denon PCM series from Nippon Columbia, with its dozens of chamber-music and solo instrumental recordings as well as a few orchestral items—and the advantages of this approach over direct-to-disc in the practical sense need no further citing here. The feeling that comes over the listener (using adequate playback equipment) of virtually unrestricted dynamic range and total freedom from even the thought of distortion is no less thrilling than the impact of the bass-drum thwacks at the end of The Firebird. It is especially gratifying to be given real music to show off what the digital process can do, instead of the Ping-pong games and rushing trains that were felt appropriate to usher in the stereo disc. Denon's concentration on chamber music is itself a sort of validation of high musical purpose, and so is the way Telarc has presented Mr. Shaw and his associates.

Aside from the digital process itself, recording producer Robert Woods and engineer Jack Renner have done an exemplary job in achieving a full and natural orchestral balance, and the performances they have so handsomely captured are absolutely first-rate. I don't think I had ever heard the Atlanta Symphony before, and the quality exhibited here—by the various choirs and section soloists as well as the orchestra as a whole—came as the most pleasant sort of surprise. The flute, oboe, and horn solos, the juicy clarinet, the crisp brass and full-bodied strings (especially the creamy cellos) sound like the proverbial million before inflation devalued such references. Shaw himself has a fine grasp of the material. His Firebird is competitive with the best, and his handling of the Igor Overture is just about ideal: those fanfares at the beginning of the allegro evoke just the sort of depth, distance, and mystic imminence one hopes for, and the lyrical sections are bathed in a tasteful voluptuousness.

The Polovetsian Dances presented here are those from the end of Act II (No. 17 in the score), without the earlier Girls' Dance (No. 8) which is sometimes included. The pacing, articulation, and inflection on the part of both orchestra and chorus add up to a really exciting performance, one filled with beautiful moments as well as heady momentum. The chorus (whose excellence should surprise no one) sings in Russian; the annotation gives the text in English, with a helpful breakdown of the sequence. There are, of course, other outstanding recordings of both of the works presented here (with more generous selections from Prince Igor available), but none is vastly superior to these in performance and none can compare with the sonic realism achieved here.

On the basis of the two Soundstream products I've heard on Telarc (this record and the aforementioned Fennell disc), I would be reluctant to essay a comparative evaluation against Denon's PCM: both are marvelously successful sonic breakthroughs which must leave the listener with some sense of loss when he returns to conventional recordings. One observation I can make, though, is that the German-pressed Telarc discs, while superior to our domestic norm, are not quite as quiet and free of pops and clicks as what Nippon Columbia has been doing for Denon.

—Richard Freed


Sweden, from whence the excellent Bis records originate. Zahari Tchavdarov has that big, robust, gritty viola sound that seems to have survived in Eastern Europe better than in the west, where suavity is the style in violas, oboes, and related matters. This interesting and well-played program is a bit on the heavy side, however. The three works have perhaps too much in common. The Shostakovich sonata—the composer's last completed work—might seem to be an exception, but like the others it is full of gravity and homage to the past. In fact, the big adagio finale is a curious mélange of semi-quotations from the Moonlight Sonata and other nineteenth- and twentieth-century works. Reger, like Hindemith, combined modernity with neo-Classicism, and Hindemith, who was a professional violist, was influenced by Reger. A solo viola sonata of Reger's followed by one of Hindemith's is not exactly light programming. But no matter. The playing has real character and strength.

E.S.

SMETANA: From My Homeland (see Collections—Sergiu Luca)

STRAVINSKY: Pulcinella Suite; Scherzo Fantastique; Symphonies of Wind Instruments. New York Philharmonic, Pierre Boulez cond. Columbia @ M 35105 $7.98, @ MT 35105 $7.98.

Performance: Symphonies best Recording: Sounds good

The first side of this recording, one of Boulez's last with the New York Philharmonic, has received a truly remarkable amount of air play—at least in the Northwest in range of my car radio. But, although I'm a fan of both Boulez and Pulcinella, I don't think the combination is ideal. The performance is dry; it never sparkles and it never cooks. For a real sample of what Boulez can do with Stravinsky, try the overside Symphonies for Wind Instruments. This remarkable work of the post-WWII period is, in its way, one of Stravinsky's most original scores, and it is treated here with the gravity and the ear for sonority that it deserves. The Scherzo Fantastique, written in 1908-1909, is a novelty. Inspired by the life of the bee (!), the score has wonderful lightness and sonorous ingenuity and strength. Boulez's is not exactly light programming. Sonatas of Reger's followed by one of Hindemith's is an unacknowledged one to Debussy and, especially, Dukas. These Francophile qualities are important because they impart to the music a wonderful lightness and sonorous ingenuity that are also right up Boulez's own alley.

RECORDING OF SPECIAL MERIT

SUPPE: Overtures to the Operettas. Light Cavalry; Pique Dame; Poet and Peasant; The Beautiful Galatea; Morning, Noon, and Night in Vienna; Boccaccio. London Philharmonic Orchestra, Neville Marriner cond. Philips 9500 399 $8.98, @ 7300 612 $8.98.

Performance: Splendid Recording: Superb

Franz von Suppe overtures—I just counted twenty-three collections of them in Schwann! Evidently no record company ever went that far. Scherzo Fantastique, written in 1908-1909, is a novelty. Inspired by the life of the bee (!), the score has wonderful lightness and sonorous ingenuity and strength. Boulez's is not exactly light programming. Sonatas of Reger's followed by one of Hindemith's is an unacknowledged one to Debussy and, especially, Dukas. These Francophile qualities are important because they impart to the music a wonderful lightness and sonorous ingenuity that are also right up Boulez's own alley.

E.S.
fragile flower among such hardy perennials, the interesting, surprisingly understated, but scarcely sleepy overture to Bocaccio. Well, is Neville Marriner's Suppé so different from everybody else's that it's worth acquiring? I should say it is. As those who know his method might have expected of him, Marriner finds genuine music in these scores where others seem content to settle for bombast. His treatments are reined in yet as smartly polished as a Hussar's boots, and he can let the superb London Philharmonic players relax for a songful tune without losing the necessary propulsion to build climaxes. In Pique Dame, for example, Marriner's approach to the Magyar melody strikes exactly the right balance between tautness and tenderness. In The Beautiful Galathea and Bocaccio the emphasis is on the intricacies of instrumentation rather than the mere accumulation of power. And even in Poet and Peasant the opening cello solo is played more eloquently and less pertunctorily than I can remember hearing it in any other performance. Of course it's still Suppé, shot through with vulgarity and theatricality, but the elements somehow fall into place here more elegantly than they usually do, the playing is splendid, and Philips' recorded sound is brilliant and unexaggerated.

P.K.

TARTINI: Concerto in A Major for Cello and Strings (see VIVALDI)


Performance: Very good
Recording: Very good

The first three of Tchaikovsky's orchestral suites are full of fascinating leavings from the master's workbench—out-takes, one might say, from ballets, symphonic movements, and the like. Suite No. 3 is typical in this respect, and, considering the dance-like character of much of the music, it is hardly surprising to have it turning up as a ballet on its own. Lorin Maazel elicits gorgeous playing from the Vienna Philharmonic on this disc, with recorded sound to match from London's producers. If you find the first movement tempo a bit lingering and the treatment of the famous variations finale a bit mannered in spots, you will either have to turn to Antal Dorati's complete set of the suites on Mercury Golden Imports or wait for Angel to issue the 1975 Boult/London Philharmonic taping. D.H.

TELEMANN: Music for Wind Instruments (see Best of the Month, page 103)

THOMAS: Mignon (see Best of the Month, page 102)

VIVALDI: Concertos for Cello and Strings in C Major (P. 31) and G Major (P. 120). BOCCHERINI: Concerto No. 2, in D Major, for Cello and Strings. TARTINI: Concerto in A Major for Cello and Strings. Mstislav Rostropovich (cello); Collegium Musicum Zurich, Paul Sacher cond. EMI, © 1978 TDK Electronc, Corp.

Performance: Strong
Recording: Very good

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et; it is a poster of Mstislav Rostropovich.
This is the same effect one gets from listening to the record itself: Rostropovich's personality dominates the music. Sometimes this is good, at other times bad. It is superb in the Boccherini D Major, where the cello writing, especially in the first movement, is full of ornate flourishes and fancy fluidization. Rostropovich turns each phrase to perfection,有毒与之在

a thousand different ways and then putting it in its place. The same style is also fine for the roccoco lines of the Tartini. The reading of the 

Gregorian slow movement is deeply moving.

The discrepancy between style and content begins to show in the two Vivaldi concertos. In order to achieve a robustness appropriate to the music, Rostropovich forces the tone and comes up with a sound that is too thick for the figure. As is typical of Vivaldi's writing, much of the figureation is symmetrical and rigid in its construction. It is what gives drive to the music. Trying to make it into what is not by fussing around with it and being apologetic for it merely debilitates its vigor.

On the other hand, the slow movements here are bald, without ornamentation. If only Rostropovich could learn to apply the sort of rich embellishments that are written out by Boccherini and Tartini. To the Vivaldi largos, the music would take on much of the "affection" that the composer intended and that the performer must at least partially furnish.

The real hero of this album is Paul Sacher. His sense of phrasing and balance dominates the ritornellos and supports the soloist magnificently. The first-movement ritornellos of the Vivaldi G Major are particularly difficult with their unusually busy inner parts and duple and triple rhythmic relationships, but Sacher brings clarity to Vivaldi's complex plan. In the same movement, the solo sections are accompanied by busy violin parts with no supporting bass; Sacher again achieves the perfect balance, bringing order to what could easily be chaos. And how nice to hear the fresh Boccherini D Major Concerto rather than the tired and inauthentic one in B-flat.

S.L.


Performance: Excellent
Recording: Good

Jan Václav Hugo Vorišek, a contemporary of Franz Schubert, was a transitional composer who was really a Romantic but felt compelled to look back occasionally (and rather nervously) at the Classical era. The collection of pieces on this disc represents those traits perfectly. The two rondos and the variations look back nostalgically but lack the taste and conviction of the works of his predecessors. The sonata and the two character pieces, on the other hand, reveal that he was, indeed, a true Romantic. The sonata, especially, is a magnificent work, well crafted and full of dramatic contrast. The character pieces, Le Désir and Le Plaisir, overflow with Schubertian charm and sentimentality.

Radoslav Kvapil seems to share Vorišek's ambivalence: he is not at all at home in the rondos and variations, but in the rest his fine
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Historically, the comparison of Verdi's Otello on records can match the sensitive, clear, and precise work of the singers and musicians. Both new versions, Placido Domingo's and Levine's, are led with vigor, clarity, and precision. This preference is readily extended to RCA's Otello as well. Placido Domingo's early assumption of this punishing role may cost him valuable years in his career, but surely no Otello on records can match the sensitive, sustained lyricism of his cantabile passages. An outstanding example is the line “se dopo l'ira immensa vien quest' immenso amor” in the Act III duet, in which Domingo executes the composer's dolce and morendo markings perfectly. In the martial passages and the many violent outbursts the tenor’s vocal powers are undeniably taxed to the limit, but there is never an ugly or unsuual sound, never any exaggerated theatricality at the expense of the musical line. Like Domingo, London's Carlo Cossutta never fails to sing the role. Both artists possess the Italianate sound and legato that are, for me, essential. I concede that Cossutta's darker tone quality than Domingo's brighter, more youthful timbre, and in the Act III Monologue Cossutta reaches moments of rare poignancy. But he cannot match Domingo in tonal beauty.

Both new versions are led with vigor, clarity, and precision.

This opportunity to sing the role of Iago came much too late in Gabriel Bacquier's distinguished career. His sovereign dramatic command of the character is evident, particularly in the conversational passages, but his voice no longer has the volume or the steadiness for the big moments. Sherrill Milnes lacks Bacquier's gift for the light parlando, but he works with a bigger, healthier voice and a wider coloristic palette, using his lovely mezzo-voce to very good effect. Milnes' “Era la notte” is excellent, though his intonation strays at forte levels and some of his top notes are unsteady.

Both Desdemona and their different ways. Renata Scotto (RCA) creates a touching, very vulnerable figure, inflicting every phrase with expressive nuance. There is a moving, pervading sadness in her Willow Song that we don't get from Margaret Price (London), and the difference cannot be explained in terms of less poetic conducting alone. Scotto's Ave Maria is also marvelously effective: she treats the opening lines as an almost childlike spoken prayer before soaring into her cantabile. She lives the part and draws us into Desdemona's tragedy, but she has a few uneasy vocal moments along the way (in the Act III duet with Otello, for example). It is in such episodes that the absolute technical mastery of Margaret Price calls a well-deserved attention to itself. A good example is the phrase “Dammi la dolce e lieta parola” in the Act III duet, which Price spins out in one almost literally breathtaking arch. Her Desdemona is not as poignant as Scotto's, but the precision of her attacks, the absolute purity of her intonation, and her ability to rise above the ensemble in Act III with the ease of a master violinist—these are qualities not to be taken lightly.

Both sets deserve praise for good casting of the supporting roles, particularly the two Lovovicos and the Cassio of Peter Dvorsky (London). London also scores with its superior children’s chorus in the second act. As for the engineering, RCA appears to have captured the orchestra in a more natural sound, though at times it overpowers the voices (London's orchestral fortissimo in the opening storm scene appears to be artificially held down to avoid that possibility). The London set, then, has much to commend it, particularly Margaret Price's Desdemona, but the RCA recording is my clear choice between the two, a good alternative to London's earlier version with Del Monaco, Tebaldi, and Karajan, which remains emphatically in the running for top honors among the stereo sets.

VERDI: Otello. Placido Domingo (tenor), Otello; Renata Scotto (soprano), Desdemona; Sherrill Milnes (baritone), Iago; Frank Little (tenor), Cassio; Jean Kant (mezzo-soprano), Emilia; Paul Plushka (bass), Lovovico; Paul Crook (tenor), Roderigo; Malcolm King (bass), Montano, Herald. Ambrosian Chorus and Boys Chorus; National Philharmonic Orchestra, James Levine cond. RCA CRL3-2951 three discs $15.98, CRK3-2951 $15.98.

VERDI: Otello. Carlo Cossutta (tenor), Otello; Margaret Price (soprano), Desdemona; Gabriel Bacquier (baritone), Iago; Peter Dvorsky (tenor), Cassio; Jane Berbéi (mezzo-soprano), Emilia; Kurt Moll (bass), Lovovico; Kurt Equiluz (tenor), Roderigo; Stafford Dean (bass), Montano; Hans Helm (baritone), Herald. Vienna State Opera Chorus and Wiener Sängerknaben; Vienna Philharmonic Orchestra, Sir Georg Solti cond. LONDON OSA 13130 three discs $23.94.
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What a marvelous program Sergiu Luca has put together here, and what a marvelous feeling he shows for this material! My only prior exposure to this violinist was through his set of the Bach sonatas and partitas (Nonesuch HC-71038), which I found thoughtful, knowing, and altogether one of the most winning presentations of those works. In this Czech program he shows the same characteristics, together with a fluency and warmth of heart that suggest he has lived intimately with these works, learning all their secrets, and now takes special pleasure in sharing them with us. There is a sense of joyous fulfillment in his playing that the listener will find almost impossible not to share. The three works are in distinctly different styles, but Luca is thoroughly inside all of them. The restless intensity of the Janáček sonata is more compellingly realized here than in any other performance I have heard, and the enduring Dvořák and Smetana pieces (the latter's is not related to his well-known My Fatherland orchestral cycle), alive with the freshness of new discovery, entice the listener back again and again without a hint of wearing thin (lovable as they are), they are so unselfconscious, so free of real dignity, which Luca very happily recognizes. Paul Schoenfield is at all times a sympathetic partner, the sound and the quality of the pressing strike me as just about as good as anything achieved so far on either side of the Atlantic, and Jack Dieterle's thorough and resourceful annotation is especially valuable with music of this sort. Luca has achieved so far on either side of the Atlantic, and Jack Dieterle's thorough and resourceful annotation is especially valuable with music of this sort. 

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The first disc (still available separately under the title "Ecco la Primavera," ZRC 642) is devoted to music of fourteenth-century Florence. Among other things it includes one of the finest extant collections of works by Francesco Landini, the culminator of this attractive school. Both the poetry and music here are devoted to music of the Crusades, and the performers' gaiety seems a bit forced.

The second disc, "Songs of Love and War," ZRG 673), is at its best when reconstructing the monophonic songs of the troubadours, trouvères, and minnesingers. His choice of accompanying instruments and usual is particularly imaginative, and he often brings out an Orient al quality in the music that is not only effective but freshly illuminating. Rogers' performances of Marcbaru's Pax in Nomine Domini and Sede, Syon, in Pulvere are deeply moving, and Bowman is at his best in the two lovely songs by Walther von der Vogelweide and Richard the Lionhearted. 

The third disc (not previously released or available separately) is of music written for the court of Emperor Maximilian I and features the work of Ludwig Senfl. Although both the music and the performances are of a high caliber, the collection simply does not come off as well as the two others. Senfl's choral music seems too closely knit for the lusty melodies and texts he is dealing with, and the performers' gaiety seems a bit forced.

The records are attractively packaged, texts are given both in the original languages and in translation, and the musical forces for recording are top-notch. There are copious notes, taken mostly from the writings of David Munrow, are not only informative but a delight to read.
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