SPECIAL TAPE RECORDER ISSUE

Basic Training for the Microphone Shopper
The Power Supply. The S7900A/S8900A uses an extremely well-regulated power supply. The heart of it is a massive power transformer employing very high purity iron core material and heavy gauge copper wire for increased operating efficiency and improved voltage regulation. Two large 7000 mfd electrolytic capacitors insure the maximum in clean, well-regulated, low frequency audio output.

Epoxy Printed Circuit Boards. Superior to conventional phenolic boards, these boards have improved moisture-resistance, higher "Q", less internal losses.

Poly-Carbonate Capacitors. Fourteen of these new devices are used throughout the circuit. A "pure" capacitor, the poly-carbonate capacitor is superior to conventional mylar or paper capacitors—has less internal losses [higher "Q"], much less capacity variation due to temperature fluctuations, capacity tolerance of 5% instead of the usual 10 to 20%.

Exclusive Impedance-Sensing Overload Protection Circuit. [Patent applied for] New "ISOP" circuit senses the exact impedance condition of speaker load as well as voltage to it, offers double protection to output devices and speakers.

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The most extravagant $459.95 receiver money can buy.
Construction and Layout.
Construction of the S8900A and S7900A can best be described as rugged. The thick steel chassis is strengthened by two side brackets to prevent warping or bending in shipment. Layout of the chassis is designed so that both sides of each printed circuit board are accessible for servicing.

Sherwood-Produced FM Coils. We manufacture our own coils. These coils—heart of any tuner section—are part of the secret of Sherwood's consistently superior FM performance.

Darlington Fully Complementary Monolithic Output Transistors. These components actually house two devices—the driver transistor as well as the output transistor—assuring optimum match, a simplified circuit design and better reliability. It's expensive, but the result is better power bandwidth and improved high frequency performance.
This may be the only stereo receiver you'll ever need. Or want.

The S7900A. From Sherwood.

Designed to take fullest advantage of today's hi-fidelity potential, Sherwood's top-of-the-line provides exceptional flexibility of operation.

Features like a tandem tape-deck capability. Front panel jacking of 4-channel decoder (for later). And a Dynaquad matrix, for the closest approximation to 4-channel sound outside of true quadraphonics. (For right now.)

The S7900A can also honestly claim a minimum RMS power output (@ 0.3% Total Harmonic Distortion, both channels driven) of 60 watts per channel (@ 8 ohms, 20-20,000 Hz.).

That's not only a more substantial power base than most comparable competitive units. It's sufficient to drive even low efficiency speaker groupings.

And we offer perhaps the most sensitive Sensitivity ratings currently found on the market: 1.7 µV (IHF: -30 dB noise and dist.). As well as an overall set of specifications that make it, in every sense, a "State-of-the-Art" instrument.


But more important, we've managed to make such opulence popularly-priced.

At $459.95, the S7900A costs roughly $40 less than competitive receivers. (The S8900A—the FM-only version—costs about $60 less than competition.)

Either way you look at it, our best set is also the Best Buy for your money.

Sherwood Electronic Laboratories
4300 N. California Ave.
Chicago, Illinois 60618

Sherwood
The word is getting around.
BENEATH THE SURFACE OF EVERY B·I·C TURNTABLE BEATS THE HEART OF A SIMPLE MACHINE.

What you see here is the difference between B·I·C Programmed Turntables and all the others.

Simplicity.
Look underneath the finest, the most expensive automatic turntables from other makers and you'll find more machinery than you see here.

The virtues of simplicity
A modern multiple-play turntable is a complex electro-mechanical device, manufactured to tolerances that turn engineers' hair grey. To give acceptable performance it must operate at levels which approach perfection.

Every gear, cam, lever, pivot, spring, and moving part that can be eliminated eliminates a point of stress, wear, and possible malfunction.

Every part that isn't there eliminates a source of noise, vibration, resonance, and service problems.

Less is more
As so often happens, simplification has bred a more effective, more durable system.

The B·I·C 980 and 960 are the only belt-drive turntables that can play as many as 6 records in series.

The scarlet cam you see above is made of specially formulated, self-lubricating acrylonitrile. It has greater strength, durability, and dimensional stability than the zinc cams used in other machines.

The low-speed 300 RPM motor is quieter than 1800 RPM motors standard in other automatics. In life tests it has operated for the equivalent of 14 years without faltering.

So, the 980 and 960 operate with silent dependability and generate wow, flutter, and rumble numbers any manual would be proud of.

Before you buy any turntable, regardless of price, find out all there is to know about the B·I·C Programmed Turntables. We'll send more information if you write to British Industries, Dept. 3C, Westbury, L.I., N.Y., 11590. Or better yet, see your audio dealer.

When you see the 980 and 960 in action, we think you'll be impressed by what simple machines can do.

This is the 980 with solid state speed control and strobe. About $200*
The 960 is identical except for these two features.
About $150*
*Less base and cartridge.
The Music

A MULTI-Piano GALA AND OTHER DELIGHTS
There's more than the strikes going on in London
WILLIAM LIVINGSTONE

THE BASIC REPERTOIRE
Prokofiev's Violin Concerto No. 1
MARTIN BOOKSPAN

KIRI TE KANAWA
The young Metropolitan Opera soprano is a dedicated musician
WILLIAM LIVINGSTONE

¡SALSA!
A lot has happened to Latin music since the cha-cha-cha
JOHN STORM ROBERTS

THE EX-BEATLES KEEP TRYING
Late efforts by George and Ringo are weighed and found wanting
LESTER BANGS

THE SOUND OF AMERICA SINGING
An ambitious Vox anthology takes on the whole of our song tradition
PAUL KRESH

MORATH SINGS BERLIN
Good enough that there simply has to be more
PETER REILLY

BIGGS' FOUR-ORGAN BACH
The kind of disc quadraphonic sound was invented for
DAVID HALL

ANDRE WATTS AT THE PIANO—FOUR TIMES
The pianist's matured powers are applied to a varied repertoire
DAVID HALL

NEW PRODUCTS
A roundup of the latest in high-fidelity equipment
10

AUDIO QUESTIONS AND ANSWERS
A compendium of advice on readers’ tape problems
LARRY KLEIN

AUDIO BASICS
Glossary of Technical Terms—17
RALPH HODGES

TAPE HORIZONS
Too Much of a Good Thing
CRAIG STARK

TECHNICAL TALK
The Power of Music; Hirsch-Houck Laboratory reports on the Radford HD250
integrated amplifier and HD22 preamplifier, Empire 4000D/III phono cartridge,
Hitachi PS-12 record player, and Philips RH 532 speaker system
JULIAN D. HIRSCH

HOW TO SELECT A MICROPHONE
A recording engineer's candid advice to the amateur
JOHN M. WORM

THE FUTURE OF TAPE
A piercing look into a somewhat murky crystal ball
LARRY KLEIN

BEST RECORDINGS OF THE MONTH

69

POPULAR DISCS AND TAPES
74

CLASSICAL DISCS AND TAPES
96

EDITORIALLY SPEAKING
WILLIAM ANDERSON

LETTERS TO THE EDITOR
6

THE SIMELS REPORT
STEVE SIMELS

GOING ON RECORD
JAMES GOODFRIEND

CHOOSING SIDES
IRVING KOLODIN

ADVERTISERS’ INDEX
116

COVER: Design by Borys Patchowsky; photo by Bruce Pendleton
COMPOSER CHARLES IVES ENTERS HISTORY

THERE is a great Man living in this Country—a composer. He has solved the problem of how to preserve one's self and to learn. He responds to negligence by contempt. He is not forced to accept praise or blame. His name is Ives." The foregoing is from the pen of Arnold Schoenberg (it was found amongst his papers after his death in 1951), and it has over the past couple of decades taken on something of the character of a Sacred Text—which is to say that it is rather more often merely invoked than explicated. There is, first of all, every reason to suppose that Schoenberg, himself no stranger to neglect and contempt, had more than Ives in mind when he wrote these lines, and the fact that they were not published or otherwise made public during his lifetime may indicate that he understood very well that subjectivity begins where silence ends. Then too, Ives was of course not "forced" to accept anything at all; he sensibly decided quite early in life to insulate his family from having to "stand on his dissonances" by making a fortune in the insurance business. He deserves for this an acknowledgment of his canny Yankee foresight, perhaps, but hardly, as Schoenberg seems to suggest, a low bow to his unassailable artistic virtue. Finally, the Ives biography indicates that he also came very early to his virtuosity, opinionated cantankerousness, and the question of which came first, the contempt or the neglect, therefore remains moot.

Ives was, in truth, an early prototype of our lately ubiquitous cultural critics, a kind of prescriptive sociologist who saw his duty and did it: to outwit, confound, insult, dethrone, and otherwise discombobulate the Genteel Tradition, the cowardly, reactionary Establishment of American art music. He was trying to tear down what Bostonian John Sullivan Dwight had built up with his influential Journal of Music, to substitute his vision of a vigorous, American-oriented music written for the people at large for what he saw as an effete, elitist, and essentially European tradition. In short, he fired off one of the first broadsides in a battle that continues to this day. Music itself is not interested in such things; it is more a hindrance than a help to the moralist, the politician, the polemicist. But Ives did his best, using in his music those materials—hymn-tunes, popular marches, even ragtime—he thought might further his program and help him reach the majority audience he sought.

Perhaps he knew that the music alone was not enough. Even if we did not have his extended writings on the subject (Essays Before a Sonata—"written by the composer for those who can't stand his music—and the music for those who can't stand his essays...")), his music manuscripts fairly burst with prose jottings, asides, and snide nose-thumbings aimed at the Little Rollo pantywaists of the musical program and help him reach the majority audience he sought.

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Is it live or is it Memorex? Who knows?

In our most recent test, we asked Ella Fitzgerald's old friend and longtime jazz arranger, Nelson Riddle, if he was listening to Ella live, or Ella as recorded on a Memorex cassette.

He couldn't tell.

We believe that's a strong endorsement of our exclusive MRX₂ Oxide formulation.

In fact, since we introduced MRX₂ Oxide, a lot of other ferric tapes have been scrambling to find something to beat it. Nobody has.
LETTERS TO THE EDITOR

Poulen Songs

It is good to have the Musical Heritage Society release of Poulen songs sung in an exemplary manner by Bernard Kruysen, but I must point out that Mr. Kruysen is not a Danish baritone as Harold Lawrene says he is (January). Kruysen is the Swiss-born son of a noted Dutch painter. His youth was spent in France, and he is a graduate of the Royal Conservatory of Music in the Hague. The recording in question first appeared on the French Erato label about ten years ago and shortly thereafter it appeared in this country as Westminster WST-17105. Therefore, I don't think it is accurate to call the new release "the latest in a series of recordings of French songs."

CALVIN R. LE COMTE, JR.
Washington, D.C.

The difficulty is a semantic one, caused perhaps by the looseness of the word "latest" to "recordings." "The latest release in a series" might be better, for MHS is currently releasing the Kruysen recordings sequentially in this country.

Browne Metaphysics

I couldn't agree more with the placement of Jackson Browne's latest album, "Late for the Sky," in the Best Recordings of the Month (January) or with Noel Coppage's feelings about the album and Jackson's work in general. The risks of trying to slip grace and poetry into the format of rock/folk music are great yet. The reality metaphor, but not nearly as much as I might have hoped (I, too, am bothered by the "hot-wiring reality" metaphor, but not nearly as much as I am by the first lines of Fountain of Sorrow: "I was taken by a photograph of you"), is enough to make me wince every time I think about putting the album on, though it hasn't stopped me yet. Just hope I don't catch any more minor metaphysical impossibilities sitting around.

MARK SMITH
Durham, N. C.

Feminist Dialectics

Regarding Steve Simels' diatribe (January) on Ms. magazine in particular and women in general: Bob Dylan once said (and I paraphrase), there's something happening here and you don't know what it is, do you, Mr. Simels? I'll be sure to pass on this piece to the staff of Ms. I'm sure they'll be interested — if they can read it through their fits of uncontrollable laughter. Especially the part where the champion of Macho Rock can't summon up the courage to buy a magazine.

I was also intensely interested to hear that Joni Mitchell is supposed to be the "model" for contemporary liberated women. I'd never heard that before, but I'm sure you'd know all about it, Steve, having apparently read one issue of one publication put out by women. And who would you suggest — Bianca Jagger?

Seriously, Steve, keep it up. It's this kind of patronizing condescension that turns more "females" into feminists.

COLLEEN MCGRAW
Ann Arbor, Mich.

Mr. Simels replies: It's a rather astonishing dialectical jump from a gentle satiric poke at a specific women's magazine to an attack on all the women in the world, but being misread is in the nature of an occupational hazard, and I suppose I expected a batch of letters similar to this one. (Incidentally, we didn't get them, which leads me to believe that most of our readers can tell when my tongue is at least partly in my cheek!) At any rate, I plan to clear the air, as it were—but for now, to answer Ms. McGraw, let me simply say that the point I was trying to make in the column was that the article in question (Karen Durbin on the subject of the Rolling Stones) was itself condescending to women. For Ms. Durbin to make a Big Feminist Deal out of a very obvious insight strikes me, at least, as displaying aoungly condescending lack of respect for the intelligence of the women she is writing for.

Henry Cowell

I don't usually bother to offer corrections on articles about my husband, but one in your article "American Songwriter Henry Cowell" (December) I feel should not go unnoticed: It was Felix Gallimir with the Gallimir Quartet who gave the first performance of what Mr. Cowell used to call his "rhythm-harmony" quartets, and not the Griller; Oliver Daniel was doubtless misled by those double l's.

KENNETH ROBBINS
Alexandria, Va.

Author Oliver Daniel replies: There are no recordings of Cowell's Romantic and Euphometric quartets, nor of Symphony No. 13 or the Koto concertos. The Ensemble, however, is available in its symphonic form (Sinfonietta) on Louisville S-681.

Viennese Operetta

To answer Paul Cohen's inquiry about complete recordings of Viennese operettas (December Letters column), my record collection includes at least a dozen of them, nearly all purchased in this country. Among them are A Night in Vienna, Gypsy Baron, Waltz Dream, and Wienerblut by J. Strauss: The Land of Smiles, The Count of Luxemburg, Der Zarenwisch, and Giuditta by Lehár; Countess Maritza and Across the Pacific by Kálmán; Der Bettelstudent by Millicz; and Dreimünderhaus by Schubert/Berté.

Most of these are imports. Eight are on the Odéon label, purchased in a good record store, two are on Decca, two on Everest, and one on Angel. Eurodisc offers at least eight complete operettas in a list I have seen. (Eurodisc records are carried by Bremen House, 218 East 86th Street, New York, N.Y., 10028, an import firm.) All of these operettas are available only in the German language and come in two-record sets.

Records were always more expensive in Germany and in other countries abroad. The standard price for a 12-inch disc was 22 Deutsche marks (about $9) even ten or twenty years ago. It was too expensive a hobby for most people over there to indulge in, so the record industry never developed to the extent it did here. An imported record still costs less here than abroad.

WALTER LAUING
Garden Grove, Calif.

Bix's Piano Pieces

Joel Vance said in his December review that Bix Beiderbecke's piano pieces have "... (always) ... been tenderly dismissed as the ... incoherent and feeble last gasps of the Little Prince of jazz." Not always

(Continued on page 8)
Empire’s new wide response 4000D* series phono cartridge features our exclusive “4 Dimensional”™ diamond stylus tip. This phenomenal cartridge will track any record below 1 gram and trace all the way to 50,000 Hz.

Empire’s “4 Dimensional”™ diamond has a 0.1 mil radius of engagement yet the very low force required for tracking prevents any discernible record wear. Every Empire long-playing cartridge is fully shielded with 4 poles, 4 coils and 3 magnets (more than any other brand).

For a free Guide to Sound Design write to: EMPIRE SCIENTIFIC CORP. Garden City, N.Y. 11530.

Mfd. U.S.A.

* Plays any 4 channel system perfectly. Plays stereo even better than before.
Mr. Vance replies: I was not aware of Mr. Berton's magazine article, nor have I read his book. My essay echoes one of the points brought out in the Evans-Sudhalter book. When I said that two "major" books had been written about Bix last year, I meant to point out that no major, minor, or any books at all had been written about Beiderbecke for fifteen years.

Mr. Berton's observations of me were painfully close to home. I know my music is a hybrid, but it is a true reflection. Perhaps a North Dakota birth, a California up-bringing, and a Tennessee marriage are all apparent. For me, trying to present myself like Kitty or Dolly would be an obvious lie. But I sing country music for the same reason I live in Nashville. I like it! Could this not, then, be "what we want": the freedom to express ourselves as honestly and openly as we please? But then, about whom are we talking? Women? Men? Blacks? Indians?

LYNN ANDERSON
Nashville, Tenn.

Audio Basics

My thanks for the "Audio Basics" column. No doubt many an audiophile (whatever that might be) will benefit from the clear and concise glossary. Perhaps it will be offered in booklet form when completed?

R. L. WILLARD
New Orleans, La.

That's the plan, though it is still some little distance from realization.

Truth comes in all sizes.

Our professional studio monitor speakers are large. They have to tell the absolute truth, because they are the final reference source for recording albums. And they have to be big to handle the power requirements demanded by the recording engineers. Our Mini-Monitors are bookshelf size. They have to be to fit in your home. But they have to tell the same truth. We've given them the same accurate definition and sound purity as our studio monitors. Only less acoustic output.

How much? $89 for Mini-Monitor II, $149 for I. (In walnut-grained vinyl, $199.) The truth doesn't have to be expensive. Before you buy your next speaker system, stop by an Altec dealer and listen to something you can believe.

"After trying lots of different speakers over the years, we finally found a speaker system all of our engineers could agree on. Altec. They tell the truth." Larry Levine, Chief Engineer, A&M Records.

ALTEC
The sound of experience.
The Classic Cassette with ferri-chrome.
Truer than chrome.
Truer than iron oxide.

In these Classic cassettes, advanced 3M technology brings you ferri-chrome, a truly superior cassette tape with not one, but two distinct layers of oxide. Directly on the backing is a coating of gamma ferric oxide designed for rich low and middle frequencies and low noise levels. Above it is a layer of chromium dioxide coating for brilliant high output at high frequencies. Together, they combine to give you full-range performance never before possible from any single-oxide cassette tape.

To prove ferri-chrome's remarkable fidelity, we taped a broad spectrum piece of music from a disc recording with our Classic cassette, our iron oxide cassette and our chrome cassette. Then we compared the output of all three with the original source on a precise Bruel and Kjaer sound spectrum analyzer. Our graph shows you the results.

Along with superior fidelity, ferri-chrome also offers you full compatibility. These Classic cassettes will deliver optimum performance on any high quality cassette machine you may own.

But there's even more from Scotch brand. Outstanding Classic 8-track cartridges and Classic open-reel tape. Both with their own improved oxide. Both super quiet. Beautifully responsive. More brilliant than even the best previous Scotch home recording tapes.

The Classics — cassette, cartridge and reel tape — are quite simply and clearly the best we've ever made for you.
JVC CD-1669
Stereo Cassette Deck

The top of JVC’s cassette-deck line is the Model CD-1669, with switchable bias and equalization (three positions) for different tape types and the company’s ANRS noise-reduction system built in. Frequency response is 30 to 16,000 Hz with standard tape and 30 to 19,000 Hz with chromium dioxide. The basic signal-to-noise ratio is 50 dB, improving to 60 dB with ANRS. Harmonic distortion is rated at 2 per cent, and wow and flutter are 0.08 per cent. The transport is a two-motor design, with solenoid-operated functions activated through light-touch push keys.

The CD-1669 has the customary transport controls plus a pause function. A remote-control box that duplicates the transport controls, including the RECORD button, is supplied with the deck. The control box has a 12-foot cable. A memory-rewind feature, operating in conjunction with the three-digit tape counter, automatically rewinds the tape to any preselected point and either stops the transport there or puts it into the play mode. The ANRS is switched on automatically by tapes that have had a special sensing-foil strip (supplied by JVC) applied to them. There are separate slider controls for recording and playback levels, and an input selector to choose between microphone and line inputs. The playback-level controls are concentrically mounted, with a center detent to serve as a reference point for Dolby calibration. A three-position microphone attenuator prevents overload of the input circuitry by high output microphones. Frequency response at 7½ ips is 30 to 50,000 Hz with Sony SLH-I tape and 30 to 20,000 Hz with standard tape, both ±3 dB. At 3½ ips response is 30 to 17,000 Hz with both tapes (tolerances not specified). The signal-to-noise ratio is 56 dB with the Sony tape (53 dB with standard tape), and wow and flutter are 0.05 per cent at 7½ ips, 0.08 per cent at 3½ ips. The recording bias frequency is 160 kHz. A front-panel headphone jack will drive 8-ohm phones.

Dimensions of the TC-758 are 17¾ x 17¼ x 8½ inches, complete with the wood case supplied. The machine weighs 54 pounds. Price: $999.95. Accessories supplied include two 10½-inch-reel hub adapters, patch cords, a head-cleaning ribbon, and sensing foil that is applied to the tape to initiate reverse.

Circle 115 on reader service card

Sony TC-758
Stereo Tape Deck

Superscope has announced a new three-motor 10½-inch-reel tape deck from Sony, the TC-758, with automatic reversing capability in both the record and playback modes. The transport employs two erase heads and separate, centrally located record and playback heads that switch positions when the tape direction reverses. A dual-capstan tape-drive system and symmetrical tape path maintain identical tape-guidance conditions in both directions. The basic transport functions are solenoid switched through logic circuitry that permits rapid switching from one mode to another. Additional transport controls select tape speed (7½ or 3½ ips), program continuous-reverse operation, a single back-and-forth pass, or non-reverse, and adjust tape tension for large or small reels. There is a pause control and a switch that facilitates connection of an external timer that will turn the deck on and off for unattended recording.

The TC-758 has separate bias and equalization switching for “normal” and “special” tape, and separate microphone and line recording-level controls that permit input mixing. The playback-level controls are concentrically mounted, with a center detent to serve as a reference point for Dolby calibration. A three-position microphone attenuator prevents overload of the input circuitry by high output microphones. Frequency response at 7½ ips is 30 to 25,000 Hz with Sony SLH-I tape and 30 to 20,000 Hz with standard tape, both ±3 dB. At 3½ ips response is 30 to 17,000 Hz with both tapes (tolerances not specified). The signal-to-noise ratio is 56 dB with the Sony tape (53 dB with standard tape), and wow and flutter are 0.05 per cent at 7½ ips, 0.08 per cent at 3½ ips. The recording bias frequency is 160 kHz. A front-panel headphone jack will drive 8-ohm phones.

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Circle 115 on reader service card

Acoustic Research AR-10π Speaker

A new line of speaker systems from Acoustic Research has been inaugurated with the Model AR-10πr, a three-way acoustic-suspension design employing a 12-inch woofer, 1½-inch dome-type mid-range, and a ¾-inch dome tweeter. The π designation refers to the system design that allows adjustment of the woofer output (according to the setting of a three-position switch) to suit the speaker’s placement (and hence radiation loading) in the listening room. The highest position of the switch corresponds to a free-standing installation away from all room surfaces: this presents the system with a spherical radiation environment (or a solid angle of 4π steradians). The mid position is for placement on the floor or a wall (2π steradians), and the lowest position for installation near a floor-wall or wall-ceiling junction (π steradians). The woofer output is altered 3 dB for each switch position. The mid-range and tweeters have similar output-level switches, operating in 3 dB steps from 0 to –6 dB.

The tweeter in the AR-10π is a new design capable of large energy outputs. An input to the system of 1 watt will produce a sound-pressure level of 86 dB at a distance of one meter. Crossover frequencies are 555 and 5,000 Hz. The system's nominal impedance is 8 ohms (minimum impedance is 5.5 ohms). Amplifier power of at least 25 watts per channel is recommended. The in-enclosure resonance of the woofer is 42 Hz. The enclosure of the AR-10π, finished in walnut, has an internal volume of approximately 1½ cubic feet and external dimensions of about 25 x 14 x 11 inches. A walnut trim panel at one end of the system pivots aside to reveal the three output-level switches. Price: $350.

Circle 117 on reader service card

Kenwood AM/FM
Four-channel Receivers

The latest four-channel receivers to join the Kenwood line, the Models KR-9940 and KR-8840, incorporate CD-4 demodulation, SQ decoders with wave-matching and variable-blend logic, and RM (essentially QS) decoding facilities, as well as provisions for discrete four-channel tape sources. The 9940 (shown).

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Circle 117 on reader service card

Acoustic Research AR-10π Speaker

A new line of speaker systems from Acoustic Research has been inaugurated with the Model AR-10π, a three-way acoustic-suspension design employing a 12-inch woofer, 1½-inch dome-type mid-range, and a ¾-inch dome tweeter. The π designation refers to the system design that allows adjustment of the woofer output (according to the setting of a three-position switch) to suit the speaker's placement (and hence radiation loading) in the listening room. The highest position of the switch corresponds to a free-standing installation away from all room surfaces: this presents the system with a spherical radiation environment (or a solid angle of 4π steradians). The mid position is for placement on the floor or a wall (2π steradians), and the lowest position for installation near a floor-wall or wall-ceiling junction (π steradians). The woofer output is altered 3 dB for each switch position. The mid-range and tweeters have similar output-level switches, operating in 3 dB steps from 0 to –6 dB.

The tweeter in the AR-10π is a new design capable of large energy outputs. An input to the system of 1 watt will produce a sound-pressure level of 86 dB at a distance of one meter. Crossover frequencies are 555 and 5,000 Hz. The system's nominal impedance is 8 ohms (minimum impedance is 5.5 ohms). Amplifier power of at least 25 watts per channel is recommended. The in-enclosure resonance of the woofer is 42 Hz. The enclosure of the AR-10π, finished in walnut, has an internal volume of approximately 1½ cubic feet and external dimensions of about 25 x 14 x 11 inches. A walnut trim panel at one end of the system pivots aside to reveal the three output-level switches. Price: $350.

Circle 117 on reader service card

Kenwood AM/FM
Four-channel Receivers

The latest four-channel receivers to join the Kenwood line, the Models KR-9940 and KR-8840, incorporate CD-4 demodulation, SQ decoders with wave-matching and variable-blend logic, and RM (essentially QS) decoding facilities, as well as provisions for discrete four-channel tape sources. The 9940 (shown).

Rated at a continuous power output of 50 watts per channel into 8 ohms from 20 to 16,000 Hz, it has a maximum of 0.5 per cent harmonic or intermodulation distortion at rated output or below. Corresponding figures for

(Continued on page 12)
For the best performance, get a manual turntable.

For the best manual turntable, get a Pioneer PL-71.

At Pioneer, we’re convinced that a manual turntable is the best possible component for reproducing the sound of records. That’s why we offer a complete line of manual turntables — topped by the truly superior direct-drive PL-71.

Perfection in a turntable means just three things — (1) elimination of vibration or rumble, (2) accuracy of rotation, (3) unwavering constancy of speed, or elimination of wow and flutter. The PL-71 is magnificent in all three areas. Ultra-precise speed controls plus a built-in strobe help you adjust and monitor speed for absolute accuracy. The slow, stable direct-drive motor reduces vibration to the vanishing point and keeps wow and flutter well below an undetectable 0.05%.

Direct-drive for precision platter rotation.

Electronic speed adjustment for each speed.

Strobe light to adjust and monitor for accurate speed.

As for record groove tracking, our S-shaped tonearm is tops, too, with its adjustable anti-skating, viscous damped cueing and direct-reading tracking force calibration.

S-shaped tonearm for optimum groove tracking.

The Pioneer PL-71 is the best of the manual turntables. And a manual turntable is best for your listening needs. With its extraordinary performance, design and engineering, the PL-71 is only $299.95. If you want the best of the best, you want the PL-71. Other Pioneer manual turntables are available from $99.95.

U.S. Pioneer Electronics Corp.,
75 Oxford Drive, Moonachie, New Jersey 07074.
West: 13300 S. Estrella, Los Angeles 90248 / Midwest: 1500 Greenleaf, Elk Grove Village, Ill. 60007 / Canada: S. H. Parker Co.
The best of both worlds

For the World of STEREO and MATRIX— XV-15/1200E

The 1200E is the furthest advance achievable today—and perhaps in the foreseeable future—in stereo cartridge design and performance. Its exceptional ability to pick up all the material recorded at the highest possible tracking forces plus its tracing ability at high frequencies make it totally unique. Pickering's exhaustive testing shows that the 1200E is superior in the flatness of its frequency response and channel separation to competitive cartridges.

For the World of DISCRETE 4-CHANNEL—UV-15 SERIES

The discrete 4-channel system requires completely new cartridges that could not only faithfully reproduce the 20 Hz to 20 kHz AM signals, but also the 30 kHz FM modulated signals. This requires exceptional ability to trace high frequency signals. The UV-15 Series cartridges are capable of satisfying all technical and aesthetic requirements for playback of both discrete and stereo discs.

NEW PRODUCTS
THE LATEST IN HIGH-FIDELITY EQUIPMENT

the 8840 are 40 watts per channel, with 0.8 per cent distortion or less. Their FM sections have IHF sensitivities of 1.8 and 1.9 microvolts, respectively. All other specifications are identical for the two receivers, and include 3-dB capture ratios, 50-dB alternate-channel selectivity, 60-dB AM suppression and image rejection, and 90-dB i.f. rejection. Signal-to-noise ratio at full modulation is 63 dB, and FM harmonic distortion is 0.5 per cent in mono, 0.8 per cent in stereo. Stereo FM separation is 40 dB at 1,000 Hz, and 20 dB at 10,000 Hz.

Exceptional ability to pick up all the material recorded at the highest possible tracking forces plus its tracing ability at high frequencies make it totally unique. Pickering's exhaustive testing shows that the 1200E is superior in the flatness of its frequency response and channel separation to competitive cartridges.

For the World of DISCRETE 4-CHANNEL—UV-15 SERIES

The discrete 4-channel system requires completely new cartridges that could not only faithfully reproduce the 20 Hz to 20 kHz AM signals, but also the 30 kHz FM modulated signals. This requires exceptional ability to trace high frequency signals. The UV-15 Series cartridges are capable of satisfying all technical and aesthetic requirements for playback of both discrete and stereo discs.

McIlroy's cartridges makes possible...

For the World of STEREO and MATRIX— XV-15/1200E

The 1200E is the furthest advance achievable today—and perhaps in the foreseeable future—in stereo cartridge design and performance. Its exceptional ability to pick up all the material recorded at the highest possible tracking forces plus its tracing ability at high frequencies make it totally unique. Pickering's exhaustive testing shows that the 1200E is superior in the flatness of its frequency response and channel separation to competitive cartridges.

For the World of DISCRETE 4-CHANNEL—UV-15 SERIES

The discrete 4-channel system requires completely new cartridges that could not only faithfully reproduce the 20 Hz to 20 kHz AM signals, but also the 30 kHz FM modulated signals. This requires exceptional ability to trace high frequency signals. The UV-15 Series cartridges are capable of satisfying all technical and aesthetic requirements for playback of both discrete and stereo discs.

A continuously variable control adjusts the output level of all three simultaneously.

The woofer has a diameter of 10 inches, it is mounted in a fully sealed enclosure that provides an in-box woofer resonance of 50 Hz. The crossover between woofer and tweeters occurs at 1,750 Hz. The nominal impedance of the FRM-2 is 8 ohms. Amplifier power of as little as 10 watts per channel is said to be adequate to drive the system; power-handling capability is 60 watts continuous. The overall dimensions of the system are 25 4 x 1 5 x 1 / 2 inches. The cabinet is finished in walnut vinyl. Price: $129.

Circle 119 on reader service card

Scott T33S Digital Stereo FM Tuner

H. H. Scott's Model T33S is a frequency-synthesizing FM tuner with illuminated digital readout of the station frequency. The frequency-synthesizing portion of the tuner is referenced to a quartz-crystal oscillator and provides guaranteed tuning accuracy within 0.001 per cent. Several ways of selecting the desired station are possible with the T33S. The insertion of a pre-punched "memory card" into a slot on the tuner's front panel instantly tunes the unit to that station. Alternatively, pushbuttons that cause the tuner to scan either upward or downward in frequency permit manual tuning. In this manual mode the tuner can be set to scan continuously, stop at every station, stop at every stereo station, or stop only at signals of acceptable listening quality. Illuminated legends on the front panel show what mode of tuning has been selected. The T33S also has a mono/stereo switch and a pushbutton for high-frequency blend to reduce the noise of hissy stereo broadcasts.

The T33S has an IHF sensitivity of 1.8 microvolts, a capture ratio of 1.2 dB, and a frequency response of 20 to 15,000 Hz ± 1 dB. The AM suppression is 75 dB, and image and i.f. rejection are 85 and 70 dB, respectively. Alternate-channel selectivity is 75 dB. At full modulation the ultimate signal-to-noise ratio of the tuner is 70 dB. Stereo separation at 1,000 Hz is 40 dB. Total harmonic distortion is 0.25 per cent for mono, 0.35 per cent for stereo. In its manual tuning mode the T33S scans stations at a rate of five channels per second. Channels are spaced at 100-kHz intervals, enabling the tuner to be used in Europe as well as the U.S. The tuner has output-level controls for both channels, oscilloscope outputs, and a jack for the connection of any four-channel FM decoder that may become available in the future. Dimensions are approximately 17 1/2 x 5 1/3 x 11 3/4 inches. The front panel is finished in brushed aluminum, and a cabinet is integral with the unit. Price: $999.95, which includes twenty-five blank memory cards and a punch card with which to code them for stations.

Circle 120 on reader service card

NEW PRODUCTS
THE LATEST IN HIGH-FIDELITY EQUIPMENT
After 87 years, almost everybody is still evading the problem of tracking error.

The tonearm of the original Emile Berliner gramophone of 1887 had tracking error. Why? Because it was a pivoted arm with a fixed head, traveling across the record in an arc. Just like almost every tonearm today. The main difference is that today's tonearms don't have a big horn attached to them. But they have tracking error for the same inescapable reasons. The laws of geometry.

Mr. Berliner didn't talk about tracking error. He had bigger news for the world—and more important causes of distortion in his machine. Today's manufacturers, on the other hand, have every reason to talk about tracking error, but they don't. They've refined their designs to the point where they call the tracking error and the resulting distortion "minimal," and they don't like to think about that irreducible minimum.

Except us. Garrard.

Our leading position in the industry carries the obligation to solve the nagging little problems, too.

We spent seven years of our corporate life to devise a method that would keep the tonearm head at a constant 90° angle to the line drawn through the stylus tip and the turntable spindle. So there'd be no distortion at all from that source.

The basic concept was simple. Why not put a hinged rather than a fixed head on the tonearm? Then the head could keep correcting its angle during play.

It was the execution of the concept that took all that time. We had to develop a whole new approach to tonearm engineering, from pivots to inertia distribution.

The result is available in the top models of the current Garrard line. The Garrard Zero Tracking Error Tonearm. Nobody else has anything remotely like it.

How important is the new development? High Fidelity magazine called it "probably the best arm yet offered as an integral part of an automatic player." And the first Garrard turntable to incorporate it received the Emile Berliner award for "An Outstanding Contribution to the World of Sound."

That's poetic justice.


CIRCLE NO. 14 ON READER SERVICE CARD
In recognition of this month's Special Tape Issue, I am departing from the usual format of this column to address myself to some of those recurring questions that seem to be especially troublesome for both old and new tape-recording enthusiasts.

**Adding a Tape Machine**

**Q.** I'm considering adding a tape machine to my system, but can't make up my mind whether to go cartridge, cassette, or open-reel. Can you spell out the relative advantages of each system?

**A.** Briefly, choose open-reel if you are interested in editing the tape and monitoring while recording. The open-reel format also provides the lowest distortion, the best frequency response, the lowest wow, and the lowest noise levels, and it is much less likely to distort high-frequency signal peaks. Cassettes, on the other hand, have the virtues of compactness, convenience, and a performance level (in the top-quality machines) that will satisfy all but the most critical listeners. Off-the-tape monitoring is available with cassettes, but only in the very expensive decks.

Theoretically, eight-track cartridges could provide somewhat better performance than cassettes simply because they operate at 3 3/4 ips (twice the speed of the cassette). There are a few quality eight-track record/playback decks available that are designed for connection to a home audio system and will turn out tapes that are far superior to the commercial prerecorded product. But, in general, they have the same deficiencies as the cassette units when compared to open-reel machines. Prerecorded eight-track cartridges played at home—rather than in a car—have a hiss level that makes them unacceptable for critical listeners (road noise masks the hiss in automotive applications). I find the prerecorded cassettes marginally better in this regard. Although the commercial prerecorded releases of both formats usually suffer from a lack of high frequencies, there are some hopeful signs that things are getting better (see "Dolbyized Highs" below). Open-reel prerecorded tapes have slowly improved over the years, but to my ears they don't sound sufficiently superior to the best discs to justify their extra cost—there are also considerably fewer of them. And prerecorded tapes in any format certainly don't provide the easy location of selections that discs do.

**Cassette-deck Tape Switch**

**Q.** Please tell me, once and for all, whether it is okay to use the chromium-dioxide switch on a cassette deck for low-noise/high-output, superdynamic, or extra-dynamic tapes. The manual for my cassette deck says it's okay, but I read elsewhere that it should not be done.

**A.** This letter has a note of desperation in it that is hard to understand. As with many other questions that come to me, the answer is: try it and see what happens. If some brands or types of cassettes sound better (in respect to noise, frequency response, sensitivity to overload, or output level) with the switch in one position rather than the other, then that's the position to use, no?

**DIN Tape-jack Sensitivity**

**Q.** The test reports on various products with DIN connectors usually state that they are paralleled with the normal phono-jack connectors. However, when I attempted to use its DIN socket input, my tape recorder overloaded and distorted severely. What happened?

**A.** The input pins of the DIN socket in some tape recorders are connected in parallel with the microphone jacks rather than the high-level "line" or "aux" inputs. Feeding a high-level signal of 0.5 volt into a mike input designed to accept perhaps a 0.005-volt signal is going to produce just what you got—severe overload distortion. So, if you have to rewire the DIN socket on your recorder or install some signal-attenuating resistors at the plug to reduce the tape-output signal voltage from your preamplifier to a suitable level. The exact values of the resistors will have to be determined by trial and error, or possibly your recorder manufacturer may have some recommendations. This strange state of affairs comes about because many DIN inputs have been designed to accommodate the very low signal levels provided by some European equipment.

**Tape-recording Level**

**Q.** I have a high-quality machine that I use mostly for recording off the air. I have found that if I record with VU-meter readings of +2 or +3 on peaks, I get much less hiss than when I set for 0 level on peaks as recommended in the instruction booklet. I have been told, however, that when I go over 0 VU my recorder is distorting. On playback, my tapes sound perfectly fine. Am I recording distortion that I can't hear?

**A.** You can be quite sure that you are recording distortion that you can't hear, since every time anyone tapes anything some distortion of the original material takes place. A good pragmatic test of permissible distortion is annoyance value. If your tapes sound fine to you and others when played on a variety of machines, then there is no point in suffering an audible loss of signal-to-noise ratio in order to minimize inaudible distortion. Perhaps the manufacturer was conservative in establishing his 0-VU reference point, or it may be that the VU meters in your unit are (Continued on page 18)
You'd swear it had 10 1/2" reels and 15 ips.

Sony's New 3-Head Stereo Cassette Deck.

Built-in dual process Dolby.*
Applies Dolby Noise Reduction to both recording and playback simultaneously for Tape/Source monitoring with signal-to-noise ratio of 63dB.

Three ferrite heads.
One ferrite erase head. Two separate ferrite and ferrite record and playback heads. Inside: core and pole pieces are solid ferrite. Outside: another precisely machined layer of ferrite. Ferrite and ferrite heads last up to 200 times longer than standard permalloy. They give you wider frequency response and dynamic range and better tape-to-head contact. And Sony's exclusive three-head system provides the added advantage of Tape/Source monitoring.

0.07% wow and flutter and at 1 1/8 ips.
The TC-177SD features the same Closed Loop Dual Capstan Tape Drive system as Sony's finest reel-to-reel decks. Isolates the tape path in the tape head area from external vibration and abnormal tape movement. Eliminates the cause of modulation distortion and optimizes tape-to-head contact.

Mic/Line Mixing.
Previously available in reel-to-reel only. Records two different sources simultaneously: microphone inputs and line inputs (receivers, turntables, other tape decks). Provides precise fade-in/fade-out and cross-fading techniques.

The Sony TC-177SD Stereo Cassette Deck also features separate 3-position bias and EQ selector switches, peak limiter, dual VU meters with LED peak indicators, memory counter, stereo headphone monitor jack and echo capability with the optional SB-200. This top-of-the-line Sony goes for $699.95 at your Superscope dealer.

SONY®
Brought to you by SUPERSCOPE.
Before you buy a manual turntable, consider what "manual" really means.

"Manual" means more than just "single play." Every time you play a record, you must pick up the tonearm and move it to the record. And at the end of play, you must stop whatever you're doing, go to the turntable and return the tonearm to its resting post. All by hand.

Not only is this inconvenient, it's also risky, because the business end of a tonearm is virtually weightless. Handling it without damage to the delicate stylus and your fragile records takes a very steady hand.

What about the automatic turntable's extra moving parts?

An advantage often assumed for the manual turntable is simplicity: few moving parts. The automatic turntable does have additional parts, but they serve only to move the tonearm to and from the record when cycling. During play, a fully automatic Dual turntable has no more moving parts than a manual: motor, platter and drive system.

What's more, every manual turntable requires one additional moving part that no Dual ever requires: you.

Why many manual turntable owners switched to Dual.

From warranty cards, we know that many Dual owners formerly owned manual turntables and switched to enjoy Dual's quality performance plus fully-automatic convenience and safety.

For many years, more audio experts—hifi editors, engineers and record reviewers—have owned Duals than any other make of quality turntable. So have the readers of the leading music/equipment magazines. Certainly no group is more concerned about record protection and the quality of music reproduction than these people.

Even the lowest priced Dual, model 1225, at $129.95 has more precision than you are ever likely to need. As for the highest priced Dual, the $400 electronic, direct-drive model 701, test reports have been extraordinary. Most independent test labs acknowledge that its rumble, wow and flutter are below the measuring capability of their test equipment.

A word for those who still think they want to play records manually.

Despite all the above, you may still prefer to play your records manually. The Dual tonearm gives you this option, because it is as free-floating during play as any manual-only tonearm. Thus you can always place it on the record or lift it off—manually.

However, we predict that you will soon take full advantage of the convenience and security of Dual's full automation. Which is what most Dual owners prefer.

And considering what kind of people own Duals, that's something you really should consider.

United Audio Products
120 So. Columbus Ave.,
Mt. Vernon, N.Y. 10553
Exclusive U.S. Distribution Agency for Dual

The multi-play automatic Dual 1229Q, $259.95; Other multi-play automatics from $129.95. All less base and dust cover. Single-play automatics are the Dual 601, $270; and the electronic direct-drive Dual 701, $400. Both include base and dust cover.

CIRCLE NO. 50 ON READER SERVICE CARD
The Phase Linear 400 Power Amplifier has only one serious competitor when it comes to advanced design, superior performance, made-one-at-a-time craftsmanship, proven reliability, elegant appearance... and incomparable value. And that’s the Phase Linear 700B. Hear them both at your dealer soon.

**Tape Q and A . . . (Continued from page 14)**

out of calibration. In any case, some experimentation will tell you the VU levels your machine will take before the recording starts to “break up.” Remember that the higher frequencies tend to distort before the lows, and that cassettes have less “headroom” before audible distortion occurs than open-reel units. In addition, some tape formulations will take more signal before overload than others. This too will determine the effective THD reference point for your specific machine.

**Cassette Drag**

Q. A few of my many cassette tapes get draggy in spots—I guess you could call it wow, except that it doesn’t happen regularly and is far worse than anything I have heard on records or open-reel tapes. I own an expensive portable player. Is there any care?

A. We first have to determine whether the fault lies with the cassette itself, the machine on (or is it “in”?) which it is being played—or both. Since only a few of the cassettes suffer from speed irregularity, let us assume that the major part of the blame lies with them.

The better late-model cassette portables have electronic regulators built into their motor circuits that will maintain correct speed even when the battery voltage falls somewhat. However, when the batteries grow too weak, then the motor torque becomes inadequate, and any greater-than-normal frictional drag inside the cassette will tend to cause wow. In every case, the longer-length cassettes (C90’s or 120’s) will be more of a problem for a marginal drive mechanism to handle than the shorter lengths will. But, assuming that your battery voltage and the speed-regulation circuit in your machine are okay (and that there are no other mechanical slippage problems in the transport, such as caused by glazed or oxide-coated rubber parts), the cassette itself is suspect.

I assume that you are using standard-brand, good-quality cassettes such as are advertised in the pages of the hi-fi magazines. Aside from the superior quality of the tape they contain, one of the big differences between the cheapies and the recognized standard brands is in their mechanical assemblies. It is obvious that irregularities in the tape path, in the operation of the internal guides, or in the hub area will offer enough resistance to tape flow to cause drag. Sometimes these problems occur even with good-quality cassettes because the tape has been shutted back and forth with numerous stops and starts. This tends to cause pileups in the head assembly and random tape jams. If you look at the tape pack through the center window during play and it seems to be wobbling, bumping, or jerking, this may be the problem. It is sometimes helpful to slap the flat side of the tape cassette several times against a flat surface (but not hard enough to crack the case!) to loosen up the tape layers that may be binding. Then a run-through at normal playing speed may put things right.

Another procedure that is sometimes helpful is to add a spot of lubrication to the tape hubs. A silicone lubricant (available in either spray can or liquid dispenser) would be best.

Be very careful to keep the silicone away from the tape itself, because if it gets on the tape and is subsequently transferred to the pressure roller, speed irregularities will almost surely develop because of slippage at the drive capstan. If you have a spray can, veer a bit of the fluid into a small container, extract a couple of drops with a toothpick and apply them sparingly to both sides of both tape hubs in the area where they touch the shell. Tape drag is frequently caused by an accumulation of dust in the operation of their mechanical assemblies. It is obvious that any mechanical irregularities in the transport, such as caused by glazed or oxide-coated rubber parts, the cassette itself is suspect.

**Record/Tape Overload**

Q. When I dub some of my records onto tape, my cassette unit acts very peculiarly. I get a sort of harshly distorted break-up in the sound perhaps once a second or so. This happens only with some records, and when I listen to those discs during dubbing or later they sound fine. What is wrong?

A. The records you are trying to dub are probably warped sufficiently to cause severe vertical deflection of your phono stylus. The stylus deflection produces a very low frequency, high-amplitude signal that appears at the tape-output jacks of your amplifier and overloads (overdrives) the tape amplifier or cassette deck’s electronics. The reason the records sound okay when played through your system is that either the warp “signal” is handled without overload by the non-tape components in your setup or it undergoes normal subsonic attenuation (in the circuits and components in your setup or it undergoes normal subsonic attenuation (in the circuits and components in your setup). This too will determine the effective VU reference point for your specific machine.

(Continued on page 20)
The BASF 90-minute sale.

Buy one BASF 90-minute cassette or 8-track cartridge at the regular price, and get a second one at half price.

That amounts to 45 minutes of free music. And not just free, but fabulous because BASF cassettes and tapes are the best in the world. Every 90-minute cassette and 8-track cartridge BASF makes is included in this half-price sale:

**BASF LH Super Cassette.** Quite simply, the best high-density ferric oxide tape your money can buy. It gives you less noise, more pure sound. It also provides 50% more playback volume at the same record level—the very ultimate in sound reproduction on any equipment.

**BASF Chromdioxid: the world's finest cassette.** For the most demanding music selections. It brings the brilliance of LP discs or open-reel tape to equipment designed for chromium dioxide cassettes.

**BASF SK / LH Cassette.** The tape used by many professional studios. It's a low-noise, high output cassette that reproduces the best sound with great clarity and distortion-free fidelity, and at a very attractive price. Like all BASF cassettes, it has our patented Special Mechanism that makes it guaranteed jamproof.

**BASF LN 8-Track Cartridge.** A low-noise tape with a remarkably high output. Ideal for music, because its dynamic range is far superior to that of other ferric oxide tapes.

**BASF LN 8-Track Cartridge**, a low-noise tape combining BASF quality with unmatched low-noise performance at an economical price. The BASF 90-minute half price sale is on right now. So hurry down to your BASF dealer, stock up and save money on the BASF tape you like the best. For more information, call or write BASF Systems, Crosby Drive, Bedford, Massachusetts 01730. Telephone: (617) 271-4000.

Available at participating dealers only while supply lasts.
Tape Q and A...

(Continued from page 18)

Dolbyized Highs

Q. I don't understand why you keep plug-
ging the Dolby system in your col-
umn. The prerecorded cassettes I have been
buying lately, which are marked (sometimes
in very small print) as being mastered to
the Dolby B standard, have highs only when
the Dolby circuit is switched off. As soon as I
switch in my deck's Dolby circuit the highs
disappear. I think I would rather have the
highs and the hiss than neither.

A. I have had the same experience, but I
interpret it differently. Most of the cas-
ette duplicators in the United States, for
one reason or another (mostly lack of care
and/or inadequate equipment), don't record
the higher frequencies on their prerecorded
 cassette products. Since the Dolby encoding
 process boosts the low-level high frequen-
cies, when you play Dolbyized tapes without
 decoding them they sound somewhat brighter
than non-Dolbyized tapes. However, when you
flip the Dolby decoding switch, the extra
boost is removed—as it should be—along
with 5 or 6 db of hiss, and you are left with a
tape that is reasonably hiss-free but then lacks
the highs that were lost in the duplication pro-
cess. It is obvious that the problem lies not
with Dolby processing per se, but rather with
the duplicators who, by and large, are doing
such a rotten job. For examples of how good
prerecorded cassettes can be, listen to some
of the new Advent tapes reviewed in the De-
cember 1974 issue.

Studio Sound Proofing

Q. I would like to make live recordings in
my home and need to build a sound-
proof area, both to keep from bothering my
parents and to provide myself a distraction
for writing. Where can I obtain plans for building one or
more isolation booths?

A. There is a confusion in most people's
minds between sound proofing and sound
 treatment. Most of the techniques used
 for sound treatment (that is, adjusting the
 acoustics of an area) are not suitable for
 sound proofing (preventing noise originating
 inside the room from getting out—or noise
 from outside getting in).

Let's look at sound proofing first. Think of
sound as vibrations of (not in, of) the air
which impinge on surfaces and cause them
to vibrate. Therefore, to keep sound out— or
in—one has to make sure that all possible
pathways of vibration are interrupted or an-
other are eliminated. First of all, this means
that all air transmission paths must be totally
blocked. This includes ventilation ducts,
seams around door edges, etc. Measurements
have shown that even small air leaks can
defeat an otherwise effective approach.

Once the air-borne sound pathways are elimi-
nated—and that isn't always easy—then you
have to minimize the vibrations in solids that
also serve to carry sound from one area to
another. One very effective technique is to
increase the mass of the solids forming the
transmission path. For example, you can use
heavy wall panels instead of thin ones and/or
you can brace the panels with 2 x 4 studs at
more frequent intervals than is usual in nor-
mal construction practice. Or, instead of studs
and panels, you can use brick, concrete, con-
der blocks, etc., all of which are excellent
 acoustic barriers.

Another isolating technique is to build up a
wall or a door using sandwiched layers of dif-
ferent types of material to take advantage of
the fact that vibration tends to be "damped"
when traversing the interfaces of dis-
parate substances. But it must be noted that
even the screws or nails used to hold such an
assemblage together can provide a transmis-
sion path. The mastic material commonly
used to mount ceiling tiles is therefore pre-
ferred in this sort of application. The double
glass windows (with spaces of 3 inches or
more in between) used in the control rooms
of recording studios also function on this princi-
ple. Another example: I recently sound-insu-
lated a glass-panel door by using a layer of 1-
inch glass-fiber wool pressed against the
panes by a ¼-inch panel of dense Homasote
wall board screwed to the door. (Foam rubber
would have done as well as the glass fiber.)

The door treatment actually represents a dual
approach to the problem in that the com-
pressed glass-fiber dampened the glass vibration,
and the Homasote (relatively inert because of
its softness and mass) served as a sound barrier.
The door edges were also lined with adhesive-buckled foam tape to
inhibit the transmission of air-borne sound.

Inert materials, because of their vibration-
free qualities, are excellent sound barriers.
Sheet lead, for example, is a popular sound
shielding material either by itself or bonded to
other materials. Sand poured between panels
also forms an excellent inert sound barrier.
But it is worth repeating that a sound barrier,
no matter how well constructed, will achieve
nothing if there is air leakage around it.

Now we come to the question of sound
 treatment—which is another ball game alto-
gether. The two areas do overlap somewhat,
in that a very reverberant room (highly reflec-
tive or hard surfaced) is going to "mushroom"
internally and hence will tend to emphasize
any noise that gets in from the outside. I have
found that, for best music reproduction (and
even best voice intelligibility), a room should
tend toward "softness" acoustically—though,
it if is too soft, much of the "live" quality will
be lost in your recording.

Through practice and training I can judge
fairly well by ear how a room is affecting the
sound in it. But I have not been able, unfortu-
nately, to come up with an easy formula or
test that will enable John Q. Audiophile to tell
whether his room is "right" for music repro-
duction—or production. One very rough test
of a room's acoustic qualities is to clap your
hands, once and sharply, and listen carefully.

In an anechoic chamber, the total lack of
sound reflection will cause a handclap to have
a dull "thud" rather than a "snap" quality.
Conversely, a loud handclap in a reverberant
test chamber will have a bright "bwa-n-g" quality
and may take a second or so to die
down. Is it helpful to say that an acoustically
"good" room should be somewhere between
these two extremes? I find that a room with
a barely perceptible "bwa-n-g" to it seems just
right, but I'm sure that taste is a factor here.

In any case, heavy carpeting, wall hangings,
heavy drapes, upholstered furniture, etc. can
be used to damp high-frequency reverbera-
tion, and their absence will encourage it.
You ears will have to take it from there.
Introducing BASF/LH Super.
A technical breakthrough in sound reproduction.

Our LH Super tape isn't just a new tape on your dealer's shelf. It's a technical breakthrough in sound reproduction. We've actually redesigned the surface of ferric oxide recording tape.

When you listen to a playback on LH Super, you'll know you're listening to something new. The volume will be up 50 per cent at the same record level. Noise will be down, perceptibly. Highs will be strong and clean. All this, yet distortion will not be increased.

If you record LH Super on a late-model, high-quality deck at 1/8 ips, the dynamic range and frequency response will exceed hi-fi standards. You'll get twice the playing time for the same money. On the other hand, if you prefer to record at 7 1/2 or 3 3/4, the sound may even exceed your standards.

Technically, it's easy to understand what we've done if you can imagine conventional recording tape as a cobblestone road, with large, unevenly shaped magnetic particles as the rough cobblestones. In this arrangement, a great deal of sound "slips through the cracks" and never gets recorded.

LH Super is more like a brick road. The magnetic particles are smaller. And they're all the same shape. This allows us to arrange them closer together in even rows. Which gives LH Super a smoother, quieter surface and reduces the size of the "cracks" between magnetic particles, so less sound "slips through."

The result is a reel-to-reel tape that gives you more pure sound — and less noise — than any other ferric oxide tape.

For more information, call or write BASF Systems, Crosby Drive, Bedford, Massachusetts 01730. Telephone: (617) 271-4000.
Crown POWER reveals a new level of listening

Discover the five elements of Crown power that make hearing the DC300A such a unique listening experience.

Extreme low distortion:
Maximum total harmonic and intermodulation distortion of 0.05% over a bandwidth of 1-20,000 Hz. Such minute levels made it necessary for Crown to design its own intermodulation distortion analyzer, now in use industry wide.

Continuous power:
155 watts/channel minimum RMS into 8 ohms stereo, 310 watts minimum RMS into 16 ohms mono, over a bandwidth of 1-20,000 Hz.

Complete protection:
The DC300A is fully protected against shorted loads, mismatched connections, overheating and excessive line voltage, input overload as well as RF burnout. And this amp will drive any type load, resistive or reactive.

Uncommon reliability:
The DC300A's reliability is legendary. Leading big name rock groups demand DC300A's because of their rugged ability to withstand tour-length punishment and still produce flawless sound. And major recording studios insist on Crown to keep time losses at a minimum. The professionals know from experience Crown's unqualified dependability.

Exclusive warranty:
Crown's unique warranty covers not only parts and labor but round-trip shipping for three years. These shipping costs are an important factor in our warranty, and it is not surprising that no other amplifier manufacturer offers this service.

For color brochure, write Crown, Box 1000, Elkhart, IN 46514. For the most sensational sound demo of your life, take your best material to the nearest Crown dealer.

Crown AUDIO BASICS
By RALPH HODGES

GLOSSARY OF TECHNICAL TERMS

Readers may have noticed that FM specifications have generally been omitted from this glossary up to now. This is because the Institute of High Fidelity, with several other groups, has been at work on a much-needed revision of FM rating standards and procedures. Although not officially accepted as yet, the standards have now been completed, and the following brief descriptions of specifications reflect their contents.

The first four specifications deal with the ability of a tuner to produce a quiet, distortion-free program from incoming signals of various strengths. Both mono and stereo modes of reception should be rated, and any given tuner's performance will be better in mono than in stereo.

- Usable sensitivity. This is the smallest input signal adequate to suppress the noise and distortion in a tuner's output by 30 dB relative to the signal output. A small figure indicates good weak-signal performance. The new standard calls for sensitivity to be stated in decibels measured on the femtowatt scale (it was formerly specified in microvolts), with 0 dBf equaling 1.1 microvolts under standard test conditions.

- Quieting sensitivity. The first four specifications deal with the ability of a tuner to produce a quiet, distortion-free program from incoming signals of various strengths. Both mono and stereo modes of reception should be rated, and any given tuner's performance will be better in mono than in stereo.

- Signal-to-noise ratio. This is the ultimate (best) signal-to-noise ratio of which the tuner is capable with a good, typically strong input signal (equivalent to 1,000 microvolts). Essentially, this specification reflects performance under normal use conditions. A large figure (in decibels) is desirable.

- Distortion. The standard lists several ways of measuring harmonic and intermodulation distortion under various conditions. However, unless specified, a single distortion rating usually refers to total harmonic distortion for a 65-dBf 1,000-Hz input signal, fully modulated.

The following specifications relate to a tuner's ability to reject various types of interference.

- Capture ratio. In the presence of two incoming signals of the same frequency, a tuner should be able to reject the weaker. The capture ratio states, in decibels, how much stronger the desired signal has to be for substantial rejection of the weaker signal to take place. A small figure is desirable.

- AM suppression. An FM tuner should not be sensitive to amplitude modulation (AM). The test signal used contains both FM and AM components, and the specification states (in decibels) how successful the tuner is in suppressing the AM part. A large figure is good.

- Selectivity. This is a measure of how well a tuner can reject an incoming station signal that is close to the desired signal in frequency. The specification states, in decibels, how much stronger than the desired signal an unwanted signal can be before significant interference takes place. The larger the number the better. Since in most cities FM stations are assigned broadcast frequencies that are at least two channels (400 kHz) away from other stations, selectivity specifications usually refer to alternate-channel selectivity.

- Spurious-response rejection. Occasionally a tuner will respond to very strong signals that are far removed in frequency from the station to which it is tuned. Often this involves frequencies (or multiples of frequencies) employed in (or related to) certain internal circuits of the tuner, such as the so-called intermediate and image frequencies. Image and i.f. (intermediate-frequency) rejection are therefore a part of the tuner's spurious-response performance. Once again, the higher the figure, the better.
This somewhat peculiar-looking speaker is the result of years and years of CBS research. Some people say it looks weird. But you should hear how it sounds.

The Leslie DVX speaker has a patented swivel-mounted dipole coupler so you can "aim" the speakers to fit the individual acoustics of your room. At the same time, this dipole coupler gives you a true stereo image no matter where you sit in the room.

There's more. The revolutionary Leslie DVX speaker reproduces sound with unmatched clarity and acoustic definition from the deepest bass to the highest treble. It gives you the optimum balance of direct and reflected sound to project presence and ambience. And its high efficiency gives you full concert hall dynamics combined with virtual freedom from distortion.

Two DVX models are available. The one pictured below is our DVX-580. For more conservative audiophiles, we also offer the DVX-570 with the same basic components in a fine-crafted walnut finished cabinet. But how it looks is less important than how it sounds. So visit your nearest Leslie DVX-Plus 2 dealer for an eye-opening demonstration.

Some people think it looks weird.

Leslie Speakers

In addition to the DVX Series, see the Leslie Plus 2 system, a patented sound system consisting of two speaker cabinets that augment your present stereo. The Plus 2 speakers break up the standing waves in a room and give your stereo system the "live" ambient quality of the original performance.

Leslie and Plus 2 are registered trademarks of CBS Inc.
Outsider the lab or studio, “tape saturation” isn’t exactly a household phrase, but nonetheless it’s a problem that probably afflicts nearly all the tapes in your collection to a greater or lesser degree. If your recorder is properly designed and adjusted, saturation results from the attempt—usually unwitting—to put more signal onto the tape than it can handle. In other words, overload. The audible result is a muddying or dulling of some of the sounds, or, in extreme cases, the creation of a raspiness on peaks that has been likened to what you hear from a phono cartridge played with too little tracking force—or an amplifier being driven beyond its power rating.

Up to a point, of course, you want to record at as high a level as possible, so as to minimize the annoyance of background tape hiss. Record-level indicators notwithstanding, this often produces overload, another way of saying that an increase in input-signal volume does not result in a proportional increase in tape-playback output and distortion rises drastically. If you look at one of the Hirsch-Houck Lab graphs for an amplifier, you’ll see an analogous “knee” in the distortion curve where this occurs.

Why does this dramatic upsurge in distortion take place so frequently with tape? The answers are many, but one of the most significant is that recorder manufacturers don’t always agree on just how close to the tape’s limit to set the 0-VU reading on their machines’ meters. As a rule, sensitivity to low-frequency saturation of a tape depends on the thickness of its oxide coating—how much magnetizable material is actually passed across the record-head gap at a given moment. At the treble end, “coercivity”—the electromagnetic force it takes to coerce the oxide particles on the tape into magnetizing in accordance with variations in the musical signal—seems to be the most significant factor. In either case, however, internal electrical adjustments on a machine must be made for a specific tape, and if you use a different type, you may alter the high-frequency/low-frequency balance and/or increase the incidence of saturation.

Let me provide a homely analogy to what your tape faces. A child in his bath can create gentle ripples by moving a leg, and these are like the sine waves we read from the attempt-usually unwitting—to put more signal onto the tape than it can handle. In other words, overload. The audible result is a muddying or dulling of some of the sounds, or, in extreme cases, the creation of a raspiness on peaks that has been likened to what you hear from a phono cartridge played with too little tracking force—or an amplifier being driven beyond its power rating.

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Load up with blanks
Buy two. Get one free.

Here's a sure-fire way to save on the music tape by CAPITOL premium quality blank cassettes and cartridges. Buy two and get a third one free. You'll find these special three-packs of cassettes (60 and 90 minutes) and cartridges (45 and 100 minutes) at participating stores while supply lasts. If you record music, quit horsing around with ordinary tapes. The music tape has greater sound sensitivity at both high and low frequencies, a better signal-to-noise ratio and less audible noise. It is also mechanically superior. Cassettes and cartridges are jamproof. The cassette tape has our exclusive cushionaire™ backcoating to prevent static, jamming and dropouts. The cartridge tape is lubricated for smooth, even winding over hundreds of passes. We make more blank cartridges than any other manufacturer. In fact, every major music company uses our tape for prerecorded cartridges. There's no better time to try the music tape than now, when you can load up with blanks without shooting your budget.

If you record ordinary things, use an ordinary tape. But if you record music, record on

the music tape

by CAPITOL
What's the return on your record investment?

Your largest hi-fi investment will probably be in your record collection. Yet it is generally known that the quality of music you hear from your records is determined primarily by your loudspeakers.

The technology of DIRECT/REFLECTING® speakers offers you the opportunity to increase the return on your record investment. This technology, developed from twelve years of university research on musical acoustics, brings music to your ears that is much closer to that of a live performance than can be achieved by conventional speakers. The result is a new dimension of clarity and realism. Owners comment they now hear music on their records never heard before.

Compare a BOSE DIRECT/REFLECTING® speaker with any other in your own living room. You will appreciate why BOSE has received the highest reviews from around the world.

Your return on your record investment is, after all, measured by your enjoyment. Shouldn't you consider increasing it?

1. The design, development, and technology behind the BOSE Direct/Reflecting® speakers is presented by Dr. Bose in the article, "Sound Recording and Reproduction," published in TECHNOLOGY REVIEW (MIT), Vol. 75, No. 7, June '73. Reprints are available from BOSE for fifty cents.

2. For copies of the reviews, write BOSE Rm. S

The Mountain, Framingham, MA 01701
THE POWER OF MUSIC: The recent Federal Trade Commission ruling on amplifier ratings, which was universally welcomed (in the early days at least) by the component high-fidelity industry, was intended to put an end to the ridiculously inflated power ratings being applied to many home entertainment products. The target was principally the mass-produced units, but some component manufacturers were also among the offenders.

For the most part, the new Rule makes sense, and it does not require any drastic re-orientation on the part of either manufacturers or consumers. However, one item in the Rule has introduced a bizarre element into the picture, arousing more controversy among quality amplifier manufacturers than anything ever, and one item in the Rule has introduced something bizarre.

The options open to the manufacturer are limited. He can add more cooling capacity with a fan, by increasing the size of the heat-sink radiating surfaces, or both. Either step will probably necessitate a price increase. Alternatively, he can reduce the advertised rating of the amplifier, so that the "one-third" power is really much less (perhaps one-tenth of its true power capability). Obviously, in a competitive market, a 200-watt-per-channel amplifier might be a salable item at, say, $700, but if the same amplifier had to be sold as a 75-watt amplifier for the same price, no one would buy it. And, of course, if the price had to be raised substantially to cover the additional cooling facilities, it would also become a less attractive item in the marketplace. (For a copy of the FTC Rule and a discussion of the entire power-rating question, see Larry Klein's "Amplifier Power Output Ratings" in the November 1974 issue. A limited number of reprints are available: send a stamped, self-addressed long envelope and 25¢ to STEREO REVIEW, Department FC, One Park Avenue, New York, N.Y. 10016.)

One of the principal objections to the one-third-power preconditioning requirement is that it is unrealistic. Let us examine the situation to see why this is so. It is well known that a power output of 1,000 Hz into their rated load impedances, for a period of one hour. On the face of it, this seems like a perfectly reasonable procedure, since most amplifiers deliver somewhat less power when hot than when cold. (The former IHF amplifier standard had a similar preconditioning provision, but at one-tenth of rated power.) It was discovered somewhat belatedly that many amplifiers could not survive this preconditioning process. They became so hot that their thermal protective devices shut them off, and the subsequent tests could not be made. Without the tests the amplifier could not be sold or advertised (unless no mention was made of its power capability).
In this oscilloscope photo of the opening chords of Beethoven's "Pathétique" Sonata, Op. 13, No. 8, the signal peaks are slightly more than three times as high as the average signal level. This is about a 10-dB difference, which means that on these momentary high-level signal peaks the amplifier must supply at least ten times the average power level if the peaks are to be reproduced without distortion.

Power outputs of 100 watts or more from the amplifier. This power is needed not so much because it lets you play louder at all times (although it does), but so that the momentary peaks that come along will not be clipped by the amplifier's running out of power.

In practice, recorded and broadcast music is always processed to limit its dynamic range, so that a 20-dB peak-to-average ratio is not often encountered. However, program peaks are almost certain to exceed 10 to 1 (10 dB), except in the case of some rock music, which may have a somewhat reduced dynamic range. But even the most dedicated rock listener will rarely operate his amplifier at more than one-fourth of its rated maximum power for more than a small percentage of the time. If this is done with a powerful amplifier (say, more than 100 watts per channel), neither the speakers nor the neighbors will tolerate the situation for very long.

My own experience, and that of many others who have had occasion to use high-powered amplifiers for extended listening, is that one will almost never call upon a high-power amplifier to deliver more than one-tenth of its maximum power for a continuous period exceeding a few minutes. A full hour of such operation would constitute cruel and unusual punishment for amplifier, speakers, and listener stamina, and might in that sense, at least, be considered "unconstitutional." As for one-third power, the idea is simply ridiculous.

For a variety of reasons, the FTC is reluctant to modify its stand, and at least one manufacturer plans to take the matter to the courts. The Catch-22 aspects of this matter add a certain irony to the situation. A low-power amplifier, possibly of inferior quality, would have no trouble meeting the FTC requirements and perhaps earning the right to be advertised as delivering a substantial wattage (albeit over a restricted frequency range and with a distortion percentage higher than most audiophiles would accept). But a highly refined, powerful amplifier, with almost unmeasurable distortion and the ability to deliver far superior performance (and reliability) in home music systems, is severely penalized, and might have to be advertised as having a fraction of its true power capability or else be redesigned in such a way as to become even bulkier and more expensive. All of this provides absolutely no benefit to the consumer, in whose interest the FTC is supposedly acting—unless one considers a lighter wallet to be beneficial. Let us hope that reason will prevail and that the situation will soon be resolved to everyone's satisfaction.

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EQUIPMENT TEST REPORTS

By Hirsch-Houck Laboratories

Radford HD250 Integrated Amplifier and HD22 Preamplifier

The HD250 has a clean, uncluttered front panel without the styling flourishes that characterize so many contemporary audio products. All the variable controls are vertical slider potentiometers with a smooth, positive feel; all the switching is done by pushbuttons. The small black control knobs contrast with the satin-finish aluminum panel, and a small pilot light is the only indication that the amplifier is on. There is a front-panel jack for driving stereo headphones.

Eight pushbuttons select the operating mode of the amplifier. Four of them are input selectors: DISC, TUNER, TAPE 1, and TAPE 2. The others are function switches: TONE CANCEL.

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(Continued on page 30)
Introducing the KLH Research X Model Sixty Turntable:

A solid triumph in human engineering.

There are more manual turntables to choose from these days than ever before. And most of the better models share many of the same fine features and specifications.

So why make a turntable? (And we are making it—not just slapping our name on someone else's product. Every part is hand assembled in our plant in Cambridge, Mass.)

The answer is in the product itself. The Model Sixty is a two speed, belt-driven, transcription quality turntable that combines all of the most wanted features with exceptional performance and a maximum of something we call "human engineering."

Human engineering is designing an electro-optical system that automatically shuts off the turntable at the end of the record and gently lifts off the tonearm. This is achieved through the use of a light detector resistor (shown here) rather than a mechanical device which would have to be tripped by the side force of the tonearm. Since our system requires no side force, it virtually eliminates all potential distortion and side thrust problems.

Human engineering is designing a special low mass aluminum tonearm and unique low friction pivot block and post assembly to such exacting standards that usage deterioration and performance deviation is all but eliminated.

Human engineering is designing all the electronic controls into an upright module for incredibly simple and convenient operation. It's also making the controls feel as good as they look.

(Just one touch and you know there's something substantial here.)

In short, human engineering is finding out what people want and need in a product and putting it there. That's why the Model Sixty also features push-button electronic cueing, anti-skating control, a discrete suspension system that minimizes rumble, acoustic feedback and vibrations, one piece dynamically balanced platter, 24-pole synchronous motor and every other important feature you could want in a precision turntable.

All for $150.

Now that's human engineering.

The Model Sixty, another superb new product from KLH Research—a new era in audio.

For more information, visit your KLH dealer or write to KLH Research & Development Corp., 30 Cross St., Cambridge, Mass. 02139.

Specifications

Rumble: -58 dB (CBS-RRLL), exceeds DIN requirements.

Wow & Flutter: .09%, lower than one half of DIN requirements.

Tracking Force: Continuously adjustable from 0.5 to 4.0 grams, with precision calibrated scale.

Average Absolute Tracking Error: 0.01 radian.

Arm Structure: Low inertia, precision ground, high strength aircraft aluminum alloy.

Suspension: Tripoint seismic suspension of arm and turntable on single precision casting, damped to minimize influence of external vibrations causing high order resonances.

300 RPM Motor: Precision polyphase synchronous low speed motor for minimal vibrations and optimum instantaneous speed accuracy and freedom from counter-rotation.

Timing Accuracy: Better than 5 seconds per average LP side; twice as good as DIN requirements.

Speeds: 33⅓ & 45 RPM

Record Sizes: 7", 10", 12"

Operates on: 105-125 volts, 60Hz only, pilot light indicates power "ON".

Dimensions: 17" (W) 13¾" (D) 6¾" (H) with dust cover.

CIRCLE NO. 20 ON READER SERVICE CARD
either or both decks or copied from either one to the other. Another pushbutton serves as the power switch.

Two sliders are the bass and treble tone controls, and another is the master volume control. The remaining two, marked channel gain, are individual channel level controls connected at the input to the power amplifier (after the phono preamplifier section). The master volume control, which affects both channels, is connected near the output of the control amplifier section of the HD250. The channel gains can be set so that the master control operates in the most effective part of its range over a very wide range of signal input levels. Also, by appropriate settings of these controls, the S/N and dynamic range of the amplifier can be optimized. Since the two channel gain controls are independent, they provide the channel-balance function as well.

The power amplifiers of the HD250 are rated to deliver 50 watts per channel, both channels driven, into 8- or 4-ohm loads with less than 0.02 per cent distortion. The preamplifier overload at a 0.1-volt input (tuner) or 2.1 millivolts (disc). Through either input the output noise level was too low to measure—less than the 100-microvolt sensitivity of our test meter. This would correspond to a noise level of (0.0048 per cent that rose to only 0.03 per cent at 10 volts output (a figure that is far beyond the input requirements of any power amplifier).

With the channel gain controls set to their 0-dB calibrations (6 dB below maximum), a reference output of 1 volt required an input of 0.1 volt (tuner) or 2.1 millivolts (disc). Through either input the output noise level was too low to measure—less than the 100-microvolt sensitivity of our test meter. This would correspond to a noise level of typically 0.03 to 0.05 per cent from 0.1 watt to 40 watts, increasing to 0.075 per cent at 50 watts and about 0.1 per cent at 500 watts. At the rated 50 watts per channel output, the distortion was about 0.02 per cent from 100 to 3,000 Hz, rising at lower and higher frequencies. It reached 0.2 per cent at about 35 and 20,000 Hz. The distortion curve had a similar shape at lower power levels, although the percentages were lower. At half power or less, the THD was typically between 0.005 and 0.01 per cent from 40 to 1,000 Hz, about 0.05 per cent at 20 Hz, and 0.1 per cent at 20,000 Hz. The power amplifier rise time was about 4 microseconds. It clipped cleanly with 8-ohm or higher loads, but when we drove it beyond its limits into clipping with a 4-ohm load, there were signs of instability. The amplifier was stable with large capacitive loads, although placing 2 microfarads in parallel with the load severely limited the undistorted power output available at very high frequencies (for example, 20 kHz).

Laboratory Measurements. The preamplifier and power-amplifier sections of the Radford HD250 were tested separately as well as together to better evaluate their special characteristics. The preamplifier output clipped at 19.5 volts into a 100,000-ohm load, and at 12.6 volts into 10,000 ohms, which is the lowest power-amplifier input impedance we have yet encountered. The output impedance of the preamplifier was approximately 1,000 ohms, making it suitable for driving long shielded cables without loss of highs.

With a high-impedance load, the preamplifier’s distortion at 1,000 Hz was not measurable within its normal operating range. At a 1-volt output it read 0.01 per cent, but this was not distortion but inaudible noise (hisss), and it was necessary to drive the preamp to a 3-volt output to make a genuine distortion reading—a minuscule 0.0048 per cent that rose to only 0.03 per cent at 10 volts output (a figure that is far beyond the input requirements of any power amplifier).

The channel gain controls set to their 0-dB calibrations (6 dB below maximum), a reference output of 1 volt required an input of 0.1 volt (tuner) or 2.1 millivolts (disc). Through either input the output noise level was too low to measure—less than the 100-microvolt sensitivity of our test meter. This would correspond to a noise level of typically 0.03 to 0.05 per cent from 0.1 watt to 40 watts, increasing to 0.075 per cent at 50 watts and about 0.1 per cent at 500 watts. At the rated 50 watts per channel output, the distortion was about 0.02 per cent from 100 to 3,000 Hz, rising at lower and higher frequencies. It reached 0.2 per cent at about 35 and 20,000 Hz. The distortion curve had a similar shape at lower power levels, although the percentages were lower. At half power or less, the THD was typically between 0.005 and 0.01 per cent from 40 to 1,000 Hz, about 0.05 per cent at 20 Hz, and 0.1 per cent at 20,000 Hz. The power amplifier rise time was about 4 microseconds. It clipped cleanly with 8-ohm or higher loads, but when we drove it beyond its limits into clipping with a 4-ohm load, there were signs of instability. The amplifier was stable with large capacitive loads, although placing 2 microfarads in parallel with the load severely limited the undistorted power output available at very high frequencies (for example, 20 kHz).

Comment. The performance of the Radford HD250 is rather thoroughly specified in its instruction manual. Within normal measurement tolerances, our tests confirmed almost every specification, which is a not incon siderable achievement when dealing with such a highly refined product. Instead of an array of colored lights and fancy panel trim, the HD250 offers one of the smoothest and easiest-to-operate control arrangements we have ever seen. Rather than provide a multitude of features and functions that most users will never need, Radford has concentrated on reducing noise and distortion to an absolute minimum. A few other amplifiers have comparably low distortion levels, but the noise (Continued on page 36)
The largest dome mid-range voice coil in the audio industry makes Empire's new 9000GT speaker system more than just another entry in the speaker race.

Any handicapper would bet on Empire's new 8 ohm, 3 way speaker system. The dome mid-range is a sure thing with it's 2-3/4" voice coil.

It's the largest dome mid-range coil in the field and it can jockey more horsepower than most woofers. Up to 86 watts without burnout.

Still, we didn't saddle up with just a mid-range. This 3 way thoroughbred includes a 15" woofer with a ceramic magnet that weighs in at almost 4 lbs. (54 oz.). And the 1" dome tweeter runs to 20,000Hz without breaking stride.

Now, that's a good start, but every entry has to have a finish. Our's is a smoked glass top and American walnut veneer. Every piece is cut out of the same sheet for a perfect pattern all the way to the winner's circle.

For a more complete track record on our new 9000GT entry, and a free Empire "Guide to Sound Design" write:

Empire Scientific Corp.
Garden City, N.Y. 11530
Mfd. U.S.A.
To honor the 200th birthday of the "greatest composer of all time" TIME-LIFE RECORDS presents

BEETHOVEN BICENTENNIAL COLLECTION

Start your collection with the first six symphonies, recorded by the Berlin Philharmonic Orchestra under the direction of Herbert von Karajan.
All six symphonies are yours to audition for 10 days free.

Beethoven's achievements are a reflection of the man himself, for his music is like a diary into which he poured his life, his desires, his regrets, his furies, his melancholies and his loves. Beethoven was at constant odds with his society—a society shaken by the opposing forces of repression and revolution. He transposed his own personal struggle to the scale of the whole human race, and dreamed of bringing to it joy and universal brotherhood.

Over the years there have been many record albums devoted to various works of the immortal Ludwig van Beethoven. But there has never been a truly comprehensive collection of his works. That is why TIME-LIFE RECORDS assembled this magnificent collection that contains every important work the master ever wrote—even some rare vocal pieces never before available! It's the BEETHOVEN BICENTENNIAL COLLECTION, recorded by the famous Deutsche Grammophon Company of Germany.

10-day free audition: To introduce you to this incomparable collection we invite you to audition Volume I, the first six symphonies plus the popular LEONORE OVERTURE NO. 3 for 10 days FREE.

These selections were performed by the renowned Berlin Philharmonic Orchestra under the direction of Herbert von Karajan. Highlighted in Volume I are:

SYMPHONY NO. 3 IN E FLAT MAJOR—the "Eroica." This was Beethoven's first symphony on the "new" road—a decisive break from the eighteenth century school.

SYMPHONY NO. 5 IN C MINOR—The opening is probably Beethoven's most well-known theme. It is merely four notes but those four notes color and characterize the entire work, a work filled with violence and muscle, struggle, anger—and triumph.

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Empire 4000D/III Phono Cartridge

4000D/III can operate at low tracking forces, with 1/16 grams being the maximum recommended value. Its rated frequency response range is 5 to 50,000 Hz, with over 35 dB of mid-range channel separation and a nominal output of 3 millivolts. Cartridge mounting is simplified by a separate metal clip which is first installed in the arm, after which the small cartridge body snaps into place. Price: $149.95. The 4000D/II (1/2 to 1/2 grams) sells for $124.95, and the 4000D/I (3/4 to 1/2 grams), $84.95. All of the other printed specifications of the three cartridges are approximately the same.

- Laboratory Measurements. The Empire 4000D/III cartridge was tested in the arm of a Dual 1229Q automatic turntable. Special low-capacitance cables were installed to keep the capacitance below the cartridge's rated maximum of 100 picofarads (pF). At a 1-gram tracking force, the maximum levels of the Cook 60 and Fairchild 101 records were tracked successfully, although there was some distortion on the 32-Hz high-level section of the former record, and slight peak clipping on the 30 centimeters per second (cm/sec), 1,000-Hz tones of the latter. We used a 1-gram force throughout our other tests. The output of the cartridge was 2.8 millivolts (mV) at a 3.54-cm/sec velocity, and the outputs of the two channels were identical.

The frequency response was measured with the JVC 1005 test record, which sweeps from 401.1.1.4 to 50,000 Hz, with over 45 dB of mid-range channel separation and a nominal output of 3 millivolts. The frequency response was measured with the JVC 1005 test record, which sweeps from 401.1.1.4 to 50,000 Hz, with over 35 dB of mid-range channel separation and a nominal output of 3 millivolts. Cartridge mounting is simplified by a separate metal clip which is first installed in the arm, after which the small cartridge body snaps into place. Price: $149.95. The 4000D/II (1/2 to 1/2 grams) sells for $124.95, and the 4000D/I (3/4 to 1/2 grams), $84.95. All of the other printed specifications of the three cartridges are approximately the same.

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In the graph at left, the upper curve represents the smoothed, averaged frequency response of the cartridge's right and left channels; the distance (calculated in decibels) between it and the lower curve represents the separation between the two channels. The inset oscilloscope photo shows the cartridge's response to a recorded 1,000-Hz square wave, which gives an indication of the 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.
Put your favorite record on the large 12" aluminum platter of the new Sansui SR-212 automatic return turntable and you will be pleased with the results. You'll be pleased with the ease of operation. A cueing control that lets you place the arm at any point on the disc and go "automatic" from there. You'll be pleased with the reliability and rugged construction of the SR-212's belt-driven full size platter powered by a 4-pole synchronous motor.

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Hi-Fi" record, was not quite equal to that of the best stereo cartridges, although it was still quite good. A trace of mistracking was heard on the highest level of musical bells and on the higher levels of the sibilance test. In the latter case, it was quite noticeable on the maximum level portion, and was not improved by increasing the tracking force to 1.5 grams. All other portions of the record, including the violin and bass drum, were played with no strain or audible mistracking.

Although so far we have not seen any cartridge which was unequivocally "the best" for both stereo and CD-4 applications, the Empire 4000D/III comes very close to hitting the mark. It is certainly a very good stereo cartridge and is one of the best CD-4 cartridges currently available. Furthermore, most others we have seen with comparable performance require a higher tracking force.

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**Hitachi PS-12 Record Player**

- The Hitachi PS-12 is an integrated semi-automatic single-play record player consisting of a belt-driven, two-speed turntable, a high-quality tone arm, and a stereo phonograph cartridge. The assembly is installed on a wooden base and fitted with a hinged plastic cover. All that is necessary to put it into service is to connect the supplied signal cables and ground wire to the amplifier and the line cord to an a.c. outlet.

The die-cast aluminum platter, 11 5/8 inches in diameter, weighs 2 pounds and is covered by a ribbed rubber mat. The soft rubber drive belt is shifted between different diameters of the stepped motor shaft by a lever on the motorboard to select either 33 1/3 or 45-rpm operation. The sixteen-pole synchronous motor, which turns at only 450 rpm, or 45-rpm operation. The sixteen-pole synchronous motor, which turns at only 450 rpm, reduces the primary rumble frequency to a subsonic 7 Hz.

The tone arm has a detachable, low-mass perforated metal cartridge shell with a bayonet-type connector that plugs into the arm and is held in place by a locking ring. The cartridge position is adjustable within the shell for correct overhang. An "overhang indicator" mark is located on the motorboard near the control lever for this adjustment.

The arm is balanced by a counterweight, after which a tracking-force scale on the weight is turned to align its zero marking with a line on the arm tube. The entire weight is then rotated until the marking for the desired tracking force is next to the reference line. The scale is calibrated from 0 to 4 grams at 0.5-gram intervals, and can be moved through more than one revolution if a force greater than 4 grams is desired.

A single lever controls all the operating functions of the PS-12. Pushing it back, to its upper position, raises the pickup, and returning it to the center down position lowers the arm slowly. Pulling it forward to cut interrupts the playing cycle at any point, returns the arm to its rest, and shuts off the motor. After playing a record, the arm automatically returns to its rest and the motor shuts off. The coupling between platter and motor through the belt brings the platter to a swift stop when the motor shuts off.

The Hitachi VFS-260 cartridge, which is supplied factory-installed in the arm shell, is a stereo magnetic cartridge (described only as having "vertical magnet" construction) with a 0.7-mil conical diamond stylus rated to track at 2 grams. This PS-12 arm and connecting cables are of the low-capacitance type, so that a CD-4 cartridge can be installed if desired and used without further modification of the player.

The overall dimensions of the Hitachi PS-12, including the hinged dust cover in its lowered position, are 19 1/4 inches wide, 15 3/4 inches deep, and 7 1/4 inches high; it weighs 19.8 pounds. Price: $179.95 with cartridge. By the time this report appears, the turntable will probably also be available without cartridge for about $20 less.

- Laboratory Measurements. Although the spacing between the stylus and the overhang gauge markings makes the overhang adjustment a trifle awkward, we judged that it could be done with sufficient accuracy. With the cartridge in its factory-installed position, the tracking error was less than 0.5 degree per inch of radius over the entire useful record surface. The tracking-force calibrations were very accurate, showing less than 0.1 gram of error from 1 to 3 grams. We operated the cartridge at its recommended 2-gram force. The Hitachi is nearly unique nowadays in having no anti-skating compensation; however, since the cartridge is not operating too close to its limits at the rated force, we doubt that the lack of anti-skating would ever be audible. A bonus from this "omission" is that the cueing descent is absolutely free of sideways drift, and the stylus always returns to the place from which it was raised.

The belt-drive turntable showed itself to be the peer of most of today's most respected turntables, with an unweighted rumble of -40 dB (-44 dB with vertical rumble cancelled). With RRL weighting the rumble was a very low -60 dB. The flutter was an almost unmeasurable 0.03 per cent at both speeds, while the wow was 0.06 per cent at 33 1/3 rpm and 0.03 per cent at 45 rpm. The speeds were exactly correct, and did not change at all when the line voltage was reduced from 140 volts to 30 volts (at which point the motor stalled). Since the turntable will start up and come to its correct speed with as little as 50 volts applied, it would appear to be truly independent of line voltage. The automatic features of the PS-12 were intended to simplify and work very smoothly. The automatic shut-off cycle, from the time the end-of-play trip mechanism was actuated until the motor shut off, required 8 seconds at 33 1/3 rpm and 6 seconds at 45 rpm. The damped turntable suspension, which effectively isolates the assembly from the base by means of soft springs, could not be made to exhibit acoustic feedback during our usual test of operating the record player directly in front of a speaker.

The VFS-260 cartridge also proved to be a pleasant surprise. Although it tracks at a force slightly higher than that for some of today's finest cartridges, it rivals the best of them in performance. The frequency response was ±1 dB from 40 to 20,000 Hz, with channel separation typically 20 to 25 dB up to 10,000 Hz and beyond, and still 12 dB at 20 kHz. The arm/cartridge low-frequency resonance was at 6 Hz, with an amplitude of about 7 to 8 dB.

The intermodulation (IM) distortion playing the Shure TTR-102 record (a 33 1/3-rpm equivalent of the 78-rpm RCA 12-5-39, which we have been using for IM measurements) was exceptionally low. It measured 1 per cent or less up to a velocity of 22.6 centimeters per second (cm/sec), and was only 2 per cent at the maximum recorded level of 27.1 cm/sec. The distortion when playing the 10.8-kHz pulsed tone bursts of the Shure TTR-103 record was also low, measuring between 1 and 2 per cent for velocities of 15 to 30 cm/sec. The heavily recorded 32-Hz portions of the Cook 60 record were tracked easily at the 2-gm force. The 30-mg/sec, 1,000-Hz signals on the Fairchild 101 record, which was originally produced to demonstrate the value of anti-skating compensation, did so very effectively when we played them via the Hitachi VFS-260. Although the left channel (the inner groove wall) was reproduced without significant distortion, the right channel showed some peak clipping (an anti-skating adjustment

(Continued on page 40)
ment, if it were provided, would be set to give identical waveforms from both channels.

The arm and cable capacitance was only 90 picofarads (pF). To see the effect of more usual circuit capacitance on the VFS-260 cartridge, we loaded it with an additional 235 pF (the total of 325 pF would be considered a "normal" load for most stereo cartridges). The highs rolled off at 6 dB per octave above 10,000 Hz, indicating that the VFS-260 requires the same order of low capacitance as most CD-4 cartridges. The cartridge output of 4.8 millivolts at a 3.54-cm/sec velocity was slightly higher than average but should not cause any overload problems with a correctly designed preamplifier.

*Comment.* The listening quality of the Hi-

**Philips RH 532 Speaker System**

The system input attenuates frequencies below 35 Hz at a 12-db-per-octave rate.

The motional-feedback signal is derived from a piezoelectric accelerometer mounted with several other components near the end of the voice-coil form, behind the dust cap. Most of the motional feedback is applied at frequencies below 100 Hz, where the woofer resonance (80 Hz in this case) usually has its greatest effect.

The RH 532 can be driven directly from a preamplifier output of about 1 volt. However, the system's 3,000-ohm input impedance is too low for many preamplifiers to drive without loss of low-frequency response and/or an increase in distortion. The Philips Model SC-102 preamplifier ($299.50), also a part of their new audio component line, is suitable for driving the RH 532, and most good preamplifiers with an output impedance of less than 200 ohms should also be satisfactory. However, it is not necessary to retire your present amplifier or receiver in order to use the Philips speakers. A three-position slide switch in the rear of the speaker adapts it to (1) preamplifier drive, (2) for use with amplifiers with up to a 45-watt rating, and (3) amplifiers with a higher than 45-watt rating. (The latter two positions switch in a 25-ohm load resistor.) One useful application of these speakers in an existing system is to increase the capabilities of a good quality (but low-power) amplifier or receiver.

A 10-watt amplifier, in effect, becomes 60 watts when it is connected to an RH 532, and the improvement in sound quality when compared with any conventional speaker that might ordinarily be paired with a low-power amplifier would be substantial.

The purpose of the motional feedback is to force the woofer voice-coil motion to correspond exactly to the electrical driving waveform. A major benefit is the achievement of a very flat and extended low-frequency response (given the cabinet size), as well as some reduction of harmonic distortion. A bi-amplified system reduces the effect of amplifier intermodulation distortion on speaker performance and simplifies the crossover-network design. As used in the RH 532, it also safeguards the drivers against damage from excessive external amplifier power. Philips has simplified the installation of the RH 532 speakers by designing them so that the left- and right-channel signals can proceed in a direct line from the amplifier to one speaker, and from it to the other one. This avoids having wires fan out in two directions from the amplifier. There's a similar arrangement for the a.c. line cords.

Although each speaker has an a.c. power switch in its rear, this is normally left on all the time.

(Continued on page 44)
Don't ask me why I smoke. Ask me why I smoke Winston.

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times. A control circuit in the speaker responds to any audio input signal over about 1 millivolt and switches on the power to the speaker amplifiers. The low-level stages are always energized, eliminating turn-on transient thumps. A light on each speaker glows red when it is on. About three minutes after the signal source has been turned off, the speakers automatically shut down with a barely audible click.

Considering its size, the Philips RH 532 seems surprisingly heavy at 26 pounds, but, of course, the weight includes 60 watts worth of power amplifier. The wooden cabinet is finished in walnut, and it has a black perforated-metal front grille. Each speaker is supplied with two 23-foot signal cables fitted with phono plugs at both ends (the speaker inputs are through phono jacks), a phono socket/spade-lug adapters for connecting them to conventional amplifier output terminals, and a 10-foot a.c. power cord. Price: $365 per speaker system ($730 per pair).

- **Laboratory Measurements.** The integrated frequency response in a normal room environment was measured to be within ± 4 dB from 50 to 18,000 Hz. The bass, from 350 Hz to about 65 Hz, was exceptionally flat, varying only ±0.5 dB. Bass rolloff started at 40 Hz and at 40 Hz it was about 5 dB below the mid-frequency level. At lower frequencies it fell off rapidly. After a moderate (±3 dB) variation in the 400- to 2,000-Hz region, the upper mid-range was impressively smooth (±0.5 dB from about 2,000 to 5,500 Hz), and the response rose gradually to a maximum of +5 dB in the 12,000- to 15,000-Hz range.

Bass distortion could not be related to driving power in the usual sense, so we measured it at constant voltage inputs of 0.3 volt (−10 dB) and 1 volt (rated maximum). At the lower level, the distortion was measured as 1.4, and 9 per cent, respectively, at 80, 60, and 50 Hz. At maximum signal input, the distortion was much higher, measuring 5 per cent in the 80- to 100-Hz range, 10 per cent at 70 Hz, and 25 per cent at 60 Hz. However, it must be noted that this is the equivalent of a 40-watt drive level to the 8-inch woofer, and the acoustic power in the usual manner. With a 1-volt input at mid-frequencies, the measured SPL at a distance of 1 meter was 104 dB, which is quite loud, and we found that the pair of speakers, playing ordinary music program material, could easily generate a SPL of over 100 dB in the reverberant field of the room without apparent distortion or strain. The high-frequency dispersion was only fair, with noticeable beaming as one moved past the front of the speaker, but this seemed to have little effect on the sound quality under normal listening conditions, except to provide a more "forward" quality (as opposed to wider-dispersion speakers, which tend to provide a feeling of greater distance from the listener). The tone-burst response, in the operating range of each driver, was good, if not exceptional. We saw no evidence of ringing or other unwanted behavior. Under no-signal conditions, the RH 532's amplifiers could be heard hissing softly if you brought your ear close.

- **Comment.** Given the previous test results, we were not surprised to find that the RH 532 was just about 100 per cent perfect in the simulated live- vs.-recorded test. The flat response of the RH 532 enabled it to reproduce the entire mid-range (including its lower end) of our special taped "live" program without any detectable coloration. In a few instances, we noted some added brightness, which was easily corrected by a cut of about 5 dB in the 10,000- to 20,000-Hz octave.

From the response curve and other tests, one would expect that on music these speakers would sound smooth, uncolored, and flat, except for a lack of deep bass and possibly a little extra brightness. And this does indeed describe the general sound quality of the speaker. But there's more to the story. When we first switched back and forth between the RH 532 and any of several fine conventional speakers, our first impression was that the Philips was a trifle "thin" in the upper bass area. However, after some concentrated listening over a period of weeks, our opinion was that what we were hearing was instead true and uncolored bass reproduced with great clarity and accuracy. In contrast, most of the other conventional dynamic speakers we had on hand tended to sound somewhat heavy and muddy.

We are aware that even experienced listeners can become accustomed to the specific sound idiosyncrasies of any speaker that overall is reasonably accurate—and then to accept its particular qualities as the "norm." We are also aware that among experienced listeners judgments may differ when they are asked to select "the best" among a number of excellent, but slightly different-sounding, speakers. Since the audible bass quality of the Philips speaker is distinctly different from that of the other fine speakers we had at hand, we solicited the reactions of other members of STEREO REVIEW's technical staff. By and large, there was general agreement that the overall sound from the RH 532 was as smooth and uncolored as anything any of us had ever heard. The disagreements, as expected, centered almost entirely on the quality of the system's bass performance. Whereas H-H Labs found the Philips to have an accurate, tight, and absolutely boom-free bass, other members of STEREO REVIEW's technical staff, auditioning the system in different acoustic environments, judged the bass to be clean, but thin and lacking robustness or warmth. (H-H's view is that the "lack" of bass warmth is simply an absence of spurious upper-bass resonances.) There was, however, general agreement that the speaker did not deliver much output in the very lowest bass octaves, nor could it play rock at discotheque sound levels.

In summation, there is no question that the Philips RH 532 is a high-quality, high-accuracy reproducer with a particularly smooth, flat, and extended mid-range and high-frequency response. The quality—not quantity—of the bass may particularly appeal to some listeners (as it did to us) and perhaps disappoint others. The choice then becomes a matter of taste. But if your taste in bass performance agrees with that of H-H Labs, you'll love the Philips RH 532.

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The family that plays together... pianists Gina Bachauer, Garrick Ohlsson, and Alicia de Larrocha address themselves to W.F.E. Bach's Das Dreyblatt at the International Piano Library's benefit concert in London last December

A Multi-piano Gala and Other Delights

By William Livingstone

The first gala benefit concert for the International Piano Library, given in New York in 1970, gave me so much pleasure that when a second one was scheduled at Royal Festival Hall in London last December 9, I decided to fly over for the event. And I'm glad I did. It was worth the trip.

The London concert, like the one in New York, provided an opportunity to see a dozen of the world's top pianists playing, mostly, repertoire they would not ordinarily program—piano transcriptions, light or showy pieces, and four-hand arrangements. There was a lot of beautiful playing and some very funny moments, all carried off in a spirit of great good humor as well as love and respect for the piano and its literature.

Victor Borge was the compère (they think that means "master of ceremonies" in England), assisted by Martin Goldstein. The participating pianists were Gina Bachauer, Stephen Bishop, Jorge Bolet, Shura Cherkassky, Jeanne-Marie Darré, Alicia de Larrocha, John Lill, Rudu Lupu, John Ogdon, Garrick Ohlsson, Tamás Vásáry, and Bálint Váizzly.

The program opened with Beethoven's Turkish March from The Ruins of Athens in a charming arrangement by Richard Blackford for eight pianists at as many instruments (Bachauer, Bolet, Darré, De Larrocha, Lill, Lupu, Ohlsson, and Vásáry). When that had been applauded, the octet launched into an improvised gag version of the same piece with wrong notes, wrong keys, and fragments of other music. (What's M'appari doing in there?) It set the tone for the evening and let the audience know that the artists were planning to enjoy themselves. They then advanced singly or in pairs to perform selections by Bartók, Dohnányi, Debussy-Ravel, Milhaud, Medek, Liszt, Saint-Saëns, Schubert, Shchedrin, and so forth.

High points for me were Glazounov's arrangement of the Romanza from Chopin's First Piano Concerto, played very sensitively by Garrick Ohlsson, and the Albeniz-Godowsky Tangos and Josef Hofmann's Kaleidoskop played by Shura Cherkassky, a pianist I had never heard before. A Hofmann pupil, Cherkassky has a gorgeous tone and tremendous dexterity.

The funniest selection was W. F. E. Bach's Das Dreyblatt for six hands at one piano. The composer specified that it be played by a gentleman seated between two ladies. Since the gentleman's part lies at the extremes of the keyboard, he has to reach around the ladies and things get pretty cozy on the bench. The gentleman was Ohlsson costumed as Bach, and his ladies were Mesdames Bachauer and De Larrocha got up as the child prodigies Gundula and Gisela. I wish you could have seen them in their satin party dresses, braided blond wigs, Mary Jane shoes, and white socks. They brought down the house.

The program closed with suitable fireworks provided by Bolet with Godowsky's Symphonic Metamorphosis on themes from Johann Strauss' Die Fledermaus. It was all taped by BBC/TV and recorded by I.P.L. The recording of the 1970 New York gala is reviewed in this issue; I hope we won't have to wait five years for records of the London concert.

While in London I took in a couple of other musical events, including a new production of Faust at Covent Garden. Stuart Burrows sang very elegantly in the title role, and Kiri Te Kanawa was a most interesting Marguerite. As she interpreted the part, Marguerite was not the usual trilling ninny who doesn't know where babies come from, but a rather more passionate young woman who decides to take a calculated risk.

Soprano Renata Scotto was in London taping a couple of albums for Columbia Records, and I dropped in at one of the sessions. This in itself is not remarkable—one recording session is much like another. What is significant is that Columbia, which has never had a particularly strong vocal catalog, is now taking measures to remedy that deficiency. Schoenberg's Gurre-Lieder and Moses und Aron (yes, another one) and a recital by Judith Blegen and Frederica von Stade are among the things recorded and awaiting release. According to producer Paul Myers, Columbia will try not to duplicate works already available in good recordings, but will concentrate on filling gaps in the recorded vocal literature. At the session I attended, Mme. Scotto was taping a verismo album with the London Symphony Orchestra under Gianandrea Gavazzeni. Earlier in the week she had completed an album of Verdi arias, including a couple from I Vespri Siciliani, in which she had conspicuous success at the Met this season.

And as a souvenir of London, I offer you this literate musical graffiti from the Leicester Square tube station:

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THE SIMELS REPORT

By STEVE SIMELS

FEELING KINKY

Something very strange happened the other week. While waiting for the subway, I happened to glance at a newstand and noticed that the covers of Time and Newsweek — displayed, as usual, side by side — featured, respectively, pictures of Joni Mitchell and Martha Mitchell. I haven’t the faintest idea what that has to do with anything, but it does seem to be as good a way as any to start talking about the Kinks, a group whose praises I used to sing, back in the days when I was writing the equivalent of this column in my college paper, with such obsessiveness that even my most charitable friends began to find me a bit of a pain. Ray Davies is a genius, I thought. I would insist both verbally and in print, and the Kinks are one of the all-time great rock-and-roll bands, and as proof I would drag people into my room at ungodly hours to listen to scratchy copies of obscure B-sides, and occasionally I would even slip people into my room at ungodly hours to listen to scratchy copies of obscure B-sides, generally when what they really wanted to do was get drunk and have a good cry over a James Taylor album.

Well, quality will out (sometimes), and eventually several people I pulled this routine on were actually won over, helped along, I suppose, by the fact that by now the band had begun to tour again after the four-year hiatus during which they had turned from teen idols to straight rock shows they’d been doing it near as chaotic and unprofessional as the Preserves, and if anything, they were in even better form than they had been before. But all too soon that palled as well. Around the time of “Everybody’s in Showbiz,” Ray became caught up in an increasingly banal preoccupation with currently fashionable Hollywood-ish nostalgia, and his writing deteriorated into the kind of half-baked sloganeering I’d had to endure from other former heroes like John Lennon and Lou Reed. Enough was enough, and I eventually stopped listening to the records (even the older ones), stopped going to the concerts, and stopped telling people that my favorite band was the Kinks.

They were in New York recently, and against my better judgment I went to see them for what I can only call perverse reasons. They had promised a stage version of the Preservation album, and if it was anything like the Preserves, my reviewers were similarly impressed. I sat at the Felt Forum, watching them run through the 30 separate songs, which forms the bulk of the production), and the rest of the cast—the remaining Kinks and a large contingent of background singers — were similarly aces, and brother Dave’s entrance-dressed as a seedy East End hoodlum, wielding his guitar like a switchblade while spewing out the intro to Here Comes Flash — was itself worth the price of a ticket.

Given all that, I still have reservations about the basic concept, and although the weaker songs (mostly from “Act Two,” which forms the bulk of the production) made sense to me in a theatrical context, I just can’t imagine the home listener making much of them. I also can’t help thinking that Ray at his peak would have made more of his not originally original theme — once described accurately by Noel Coppage as “power corrupts” — than he has now. But he has pulled off an incredibly ambitious undertaking with really breathtaking success. On the night I saw it, at least, “Preservation” was filled with such style, good humor, and real rock-and-roll excitement that I am willing to forgive him all sorts of songwriting lapses. The bottom line of all of this, as you probably have guessed by now, is that I’m a Kinks fan again, and it’s such a relief. Ray, Dave, Mick, et al., come home. All is forgiven.

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With the Bicentennial of the United States approaching, more concentrated attention is being paid to the subject of American music—serious and popular, but taken seriously—than has probably been accorded that subject in the preceding 199 years. Home-produced classical music has lived the hard life of an accepted and tolerated, but only rarely loved, product of an accidental conception. Popular music has led the perhaps equally unappreciated career of an uncultivated, money-grubbing foster son. Only jazz and, in a smaller circle, some of the varieties of ethnic music have been sufficiently respected that average high-brow, middle-brow, and low-brow Americans could consistently point the finger of pride at them—even, perhaps, without liking them much themselves. The proportions of pride and unloving tolerance have varied slightly through time, but until recently that is pretty much the way things have been. Now, however, as we prepare for the fancy dress ball of the Bicentennial, the tables have been turned; “American” has quite suddenly become an admirable family name.

Among the most interesting works in progress planned to coincide with the Bicentennial is the American Music Recording Project, initial funding for which has just been approved by the Rockefeller Foundation. It is not a Johnny-come-lately idea: studies for it were made as long as ten years ago. But it is only in the last year or so that the myriad suggestions, statistics, researches, and pipe dreams have been hammered into a specific and detailed course of action by administrator-producer Herman E. Krawitz, Rockefeller Foundation arts director Howard Klein, and a host of consultants including this writer and many people from the recording industry.

The basic aim of the project is to assemble an anthology of one hundred records that will be representative of American music from its earliest days to the present “in all its richness and diversity.” The sets of records will be extensively annotated and presented as gifts to music libraries, music schools, music departments of colleges and universities, educational radio stations, and other nonprofit institutions here in the States and abroad.

Certain other potential users (such as primary and secondary schools) will be offered the set “at cost,” and some thought will be given to making the anthology commercially available. Although one can question a few things about the distribution plans (wouldn’t a music library, for example, be more likely, and in a better financial position, to purchase a set than a primary or secondary school?), the concept seems eminently reasonable, comprising, as it does, a specific product and a specific use for the product.

The architects of the project have realized from the outset one exceedingly important thing: that such an anthology could best be assembled through neither archival work nor new recording alone, but only through a combination of both. The tentative design of the project, then, comprises forty-five records of new recordings and fifty-five records of already recorded material to be drawn from all available commercial and noncommercial sources. It is, of course, the very existence of the phonographic medium during the last three-quarters of a century that has provided us with authentic documentation of many musical styles and that obviates the need for modern re-creations.

Although the final, detailed decisions about the repertoire have yet to be made, the newly submitted report gives a good approximation of the types of music involved and the degree of their representation. Space forbids a full listing here, even in the detail established so far, but a rough account would be feasible:

- Religious music, 1620 to the present, six records;
- Classical music, including songs, piano works, chamber, orchestral, and choral works, with the songs beginning at 1860 (no Hopkins?), piano at 1770, and the rest at 1620, all continuing to the present, twenty records; theater music, including early American stage music, opera, minstrel songs, vaudeville, operetta, musical comedy, and revues, fourteen records; dance music, two records; film music, three records; popular music, beginning at 1770 to the present, fifteen records; folk/ethnic music, both vocal and instrumental, seventeen records; jazz, twelve and one-half records: “American Sounds,” including band music, barber-shop quartets, jingles (commercial?), four and one-half records; “Music for the Home,” including player-piano music, salon music, ragtime, and MuzaK (?), four records; and children’s music, two records.

Despite the best of intentions, though, and the considerable skill, knowledge, and expertise that have already been put into the project, there are a number of dilemmas with which it will still have to wrestle. Primary among them will be that continual choice between the best or most representative work (which may well be easily available on records elsewhere) and the less important, though still valuable, work that is not currently available. In the classical music section that choice will be further complicated by factors of time. When you have three records available for a survey of serious piano music, do you give one of them to an Ives sonata available elsewhere? The work’s significance rates it, but wouldn’t it seem fairer to spend the money on something never before recorded or currently unavailable? Such difficult specific decisions will be legion. Ultimately, the dilemma will be resolved by deciding for whom the set is really intended: those who already have nearly everything or those who have virtually nothing. I throw my own sympathies toward the latter, particularly as that group includes virtually every school-attending boy and girl under the age of eighteen in this country. They, it seems to me, are the ones who could most use one hundred records’ worth of exposure to American musical culture. In any event, it will be an interesting and valuable project to see come into existence. Let us hope that it does, and that current economic problems will not make pumpkin time come too soon.

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SERGEI PROKOFIEV'S First Violin Concerto has been variously ascribed by different sources to the years 1913, 1914, and 1916-1917. In any case, it is the work of a young man, and if the 1913 date is the correct one, then Prokofiev was only twenty-two at the time he created this remarkable amalgam of rhapsodic lyricism and fanciful diablerie.

Whenever it was composed, the First Violin Concerto had to wait perhaps as long as a decade before anyone would play it. In his unfinished autobiography, Prokofiev described some of the circumstances surrounding the slow acceptance of the First Violin Concerto by both performers and public:

"The first performance of my [First] Violin Concerto took place in Paris on October 18, 1923. Bronislaw Huberman and some other violinists flatly refused to learn 'that music' and the solo part had to be given to the concertmaster [Marcel Darrieux], who did quite well with it. The critics were divided; some of them commented not without malice on its 'Mendelssohnism.'"

"... In the summer of 1924 [Joseph] Szigeti played it at a festival of modern music in Prague and afterwards toured all the main cities in Europe with it. When he came to Paris and I expressed the desire to attend the rehearsal, his face fell. 'You see,' he said, 'I love that concerto and I know the score well that I sometimes give pointers to the conductor as if it were my own composition. But you must admit that under the circumstances the presence of the author would be embarrassing for me, I agreed and went to the concert instead. Szigeti played superbly.'"

Serge Koussevitzky, who had conducted the 1923 première performance of the concerto, brought the score with him to the United States, and in April 1925, near the end of his first season as conductor of the Boston Symphony Orchestra, he introduced the work to this country. His soloist on that occasion was Richard Burgin, the young virtuoso who a few years earlier had been selected by Pierre Monteux to become the new concertmaster of the Boston Symphony.

The concerto is in the "violinist's key" of D Major. Except for the eerie scherzo movement it has nothing to do with virtuoso display. The orchestral part, of truly sympohonic interest, can in no sense be termed mere accompaniment, and there is nothing of the traditional tossing back and forth of material between solo instrument and orchestra.

The opening movement begins in a contemplative vein; gradually the music becomes more energetic, then returns to the prevailing mood of easy repose. The middle movement is a fantastic scherzo in which the solo violinist is required to perform all manner of technical fireworks. The last movement returns to the mood of the first one, and the end is pure magic.

Szigeti, the concerto's first champion, also made the first recording of it, a 1935 collaboration with Sir Thomas Beecham and the London Philharmonic Orchestra. Szigeti and Beecham brought back a reading that was very nearly the last word in sophisticated elegance and passionate intensity. The performance, in monophonic sound, of course, is now available again in the six-disc Columbia album (M6X-31513) released shortly before Szigeti's death to celebrate his eightieth birthday. Some surface noise remains from the 78-rpm originals, but otherwise the reproduction is startlingly lifelike.

Of the half-dozen or so more recent recordings of the Prokofiev D Major Concerto that are currently available, my own favorites are those by Stojka Milanova (Monitor S 90101), Nathan Milstein (Angel S 36009), and Isaac Stern (Columbia MS 6635). Stojka Milanova is a young Bulgarian violinist who studied with David Oistrakh and exhibits some of the qualities of her mentor: intonation that is impeccable, rock-steady rhythm, and a bow arm that is piston-like in its dependability. Together with conductor Vassil Stefanov she fashions a performance of the concerto that crackles with temperament and fire. And the reproduction is better than one might have anticipated, considering its source.

Milstein adopts a more patrician approach, but the music responds well to this attitude also. Carlo Giulini and the Philharmonia Orchestra supply superb orchestral support, and the decade-old sound is still remarkably vivid. Stern is an old hand at this concerto: he made his Boston Symphony debut playing it with Koussevitzky in that master's final season at the helm of the Boston Symphony, and he recorded it not long after with Dimitri Mitropoulos and the New York Philharmonic. His current recording, with Eugene Ormandy and the Philadelphia Orchestra, is most impressive, with a glowing vigor and extroversion mated to supremely confident technique and robust recorded sound.

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A professional recording engineer tells you

HOW TO SELECT A MICROPHONE

By John M. Woram

Collecting things may not be the world's oldest profession, but it is surely the world's oldest hobby—well, maybe the second oldest. In the beginning, plus or minus 3 dB, man began accumulating things. First it was fig leaves, later on arrowheads. Eventually collecting became big-time. By the time of the Renaissance, the Medicis had made it a science, and now collecting things is everyone's hobby.

Usually, collecting remains a reasonably passive sport. The most rabid philatelist is more than content to sit in front of the fire and gaze for hours upon his collection of first-day covers. Barring any interest in making a quick profit in the forgery business, he probably never gives a thought to the possibility of manufacturing stamps himself. Likewise, the avid art collector rarely tries his hand with a paint brush or sculptor's chisel. But what about the sound enthusiast? As long as he sticks to prepackaged material (FM, discs, and prerecorded tapes), his role, like that of the hobbyists above, is a passive one. Every once in a while, however, some casual tape-recorder owner, without design or premeditation, falls under the spell of that enticing little red button marked "record." One touch, and a lifelong obsession may be born. Collecting records becomes a subsidiary activity; now there are important recording sessions just waiting to be done. It starts simply enough, with a few tapings of FM broadcasts—for private use only, of course. But that's not very challenging. How much better it would be to have a microphone or two of one's own that can be set up to gather some of the enticing sounds that surround us. This brings us face-to-face with our subject: the art—or science—of selecting microphones.

Microphones are tools, not just objects to be contemplated pleasurably. As such, their utility lies in the way they adapt to your requirements, your recording practices, your ancillary equipment, and yes, even your taste in recorded sound. How do you go about making a proper choice given these factors?

A good first step may be to take the microphones (if any) that came with your tape recorder and have them recycled for their metal content, or give them to a friend you don't really like. With relatively few exceptions, you can be sure that the microphones that were "included at no extra cost" are of generally depressing quality.
However, replacing them with something more suitable requires some careful thought. And a little homework may be in order, for although a microphone’s worth is largely a subjective thing, there are at least a few design variables that you should know about before starting your selection.

**Construction Details.** A logical starting point is the matter of microphone *type*, which will tell you something about the way the microphone converts acoustical energy into an electrical signal. Although you may not particularly care how this is done, a nodding acquaintance with the basic principles need not be painful, and it will help you to hold your own when the conversation gets around to the relative merits of dynamics, ribbons, and condensers. It also, as we shall see, has some bearing on the microphone’s price. The classifications are made according to the way in which the microphone’s diaphragm works.

**Dynamic (Moving Coil) Microphones.** The dynamic microphone’s diaphragm is attached to a coil of wire. As the diaphragm moves, so does the coil, which is immersed in a magnetic field provided by a permanent magnet. The coil movement in the magnetic field generates a voltage within the coil that is proportional to the acoustical forces pushing against the diaphragm (Figure 1).

Dynamic microphones are relatively easy to build, and the good ones are all but indestructible. As long as you don’t drop it from an airplane, it should be able to survive years of controlled abuse. In a professional studio, most microphones are regularly dropped, kicked, spit upon, and otherwise insulted, and the dynamic’s ruggedness has made it a favorite of many engineers. In addition, many dynamic microphones can withstand, without distorting, sound pressure levels that will peel the paint off the walls.

**Ribbon Microphones.** In these microphones, the diaphragm is a very thin ribbon of corrugated foil suspended within a magnetic field. The ribbon itself takes the place of the dynamic microphone’s moving coil (Figure 2).

The earliest ribbon microphones were quite fragile, and the slightest breeze could sometimes damage or destroy the ribbon. Consequently, they were not seriously considered for amateur use—indeed, they were handled with tender loving care even in the professional studio. Because of their vulnerability, they were until recently pretty much eclipsed by the more robust dynamic microphones. However, the latest ribbons are quite sturdy, and may be counted on for years of dependable service under conditions that would have been considered impossible several years ago.

**Condenser Microphones.** The lightweight diaphragm of a condenser microphone is actually one half of an electronic component known as a condenser, or more recently as a capacitor. As the diaphragm moves, the capacitance (an electrical quantity) varies, and these variations ultimately become the output signal of the microphone (Figure 3).

The strength of the signal is quite small, however, so a preamplifier, often built into the microphone’s case, boosts the signal to a usable level. Of course the electronics package adds to the complexity, and therefore to the cost. In addition, the microphone will require a power supply to charge the diaphragm and plate. However, the so-called “electret” condenser microphones, many of which are very attractively priced for the consumer, use a permanently charged material for the diaphragm.

![Fig. 1. A moving-coil dynamic microphone slightly resembles a loudspeaker in its construction, and works like a speaker in reverse. Instead of the coil’s moving the diaphragm, the diaphragm moves the coil, which has a voltage induced in it as it is driven to and fro in the magnetic field.](image)

![Fig. 2. The ribbon microphone is electrically identical to the moving-coil design, but the moving mass is lower because of the lighter diaphragm and the absence of a coil. Unmodified ribbon microphones exhibit a bidirectional pickup pattern.](image)

![Fig. 3. Condenser microphones tend to have the lowest moving mass of all. However, they have very low output, requiring special preamplification (often built in), and some means of electrically polarizing the diaphragm and plate must be provided.](image)

Many listeners feel subjectively that the “condenser sound” is worth the expense, although there are as yet no scientific tests that will distinguish the condenser from its dynamic and ribbon competitors. In any case, microphone maniacs will gladly spend hours expounding on the total superiority of the particular construction styles that capture their fancy. Such “experts” are usually considered harmless, and need not be locked up at night.

**Impedance.** Another (and surely the least interesting) consideration is called impedance, often indicated by
the letter Z. (If you must know more of the story of Z, any basic electricity text will tell you perhaps more than you would want to know about it.) Most, if not all, microphones used by professionals are low-impedance or "low-Z," meaning that they're rated at 600 ohms or less. Having said that, we might leave the subject, since there's no real shortage of reasonably priced low-impedance microphones on the market. However, there is often some confusion over the relative merits of high-Z versus low-Z microphones, and someone who just happens to own some seemingly good high-impedance microphones may be puzzled by the professional's insistence on using low-Z units.

Although neither is inherently superior by virtue of its impedance, the high-impedance microphone may present some operational difficulties in all but the simplest of set-ups. For one thing, cable lengths must be kept short: ten to fifteen feet is about as long as should be used. In high-impedance circuits, a shielded cable is a very effective high-frequency roll-off filter. The longer the cable, the less high-frequency response you get. Not very promising for serious recording.

The typical high-impedance microphone cable (called an "unbalanced line") consists of a single conductor and a shield, pretty much like a typical connecting cable in a high-fidelity system. Although fine in most hi-fi applications, as a microphone cable the unbalanced line offers little protection against hum pickup. A more trouble-free system uses low-impedance microphones and balanced lines—that is, microphone cable consisting of two conductors plus a shield. The shield is not part of the actual signal path, and the arrangement offers much more protection against hum, buzz, and all the other little nasties that have a way of creeping into a low-level signal path.

But since your tape recorder undoubtedly has unbalanced (two-conductor) input connections, how do you plug in your balanced lines? The answer to that one depends on your particular tape recorder. So-called "line" or "aux" inputs are intended to be fed from a high-level source, such as the tape-output jacks on a receiver, or from a mixing console. They are not much good for microphones except in the rarest instances.

However, most tape decks of a quality commensurate with live-recording applications have microphone inputs, and on modern machines these are suitable for low-impedance microphones. Of course, most of these are also unbalanced, being designed to accept two-conductor phone plugs. Nevertheless, you will probably be able to connect your balanced lines directly to these inputs without getting into too much trouble. Simply wire the two conductors in the microphone cable to the two terminals within whatever type of plug your tape recorder accepts. One of the conductors may be black—if so, connect it to the ground terminal on the plug. In addition, the microphone cable's shield should also be wired to the plug's ground terminal.

An alternative, actually much more consistent with studio practice, is to terminate the cables with suitable transformers (sold especially for this purpose), and then connect the unbalanced cable from the transformer to the input. This is the proper technical approach, but if you can get away without using the transformers, do so by all means, since good transformers are expensive.

If you are planning on an eventual "collection" of microphones, you will sooner or later no doubt want to use all of them at once, in which case you will need some sort of mixer between your microphones and the tape recorder. If you can manage, buy the mixer first, since it will have the necessary combination of connectors (and perhaps even transformers) built-in, saving you the trouble of wiring up a complicated system of individual transformers.

- **Microphone Polar Patterns.** And now we come to a specification that tells us a little something about how the microphone may behave in public. Like ears, microphones hear sounds all around them. However, unlike ears (which come attached to a brain), the microphone does not have the natural ability to concentrate on wanted sounds while ignoring all the other racket. But, at the cost of some increase in complexity, a microphone can be constructed that will be most sensitive to sound originating on-axis—that is, directly in front of it. Off-axis sounds—from the rear, for example—will still be heard, though

![Diagram of Microphone Polar Patterns](image)

Fig. 4. The polar patterns for (left to right) cardioid, bidirectional, and omnidirectional microphones are shown. The polar plots should be visualized as roughly three-dimensional shapes (the omnidirectional plot is a spheroid, for example). The outermost circle, labeled 0, represents a reference response, while the inner circles, labeled -5 dB, -10 dB, etc., indicate the relative attenuation of the microphone's response. The calibrations in degrees show the angles relative to the microphone's front, with 180 degrees being directly behind the microphone.
with a reduction in relative strength.

A polar pattern is simply an indication in graphic form of a microphone's relative sensitivity to sounds arriving from various directions. According to its designed-in sensitivity, a microphone may be considered as unidirectional (one direction), bidirectional (two), or omnidirectional (all directions), and polar patterns for these three designs are shown in Figure 4. In each case, the heavy line is the actual polar pattern. Note that for the state of the audio art will permit. In fact, the conscientious engineer may spend hours trying to get a fraction of a decibel of improvement out of his equipment. Then, without batting an eyelash, he'll go out to the studio and plug in a microphone whose frequency characteristic looks like a profile of the Rocky Mountains.

It turns out that a microphone's frequency response may not be quite the life or death matter that it is with, say, an amplifier. By comparison, an amplifier's duty is simplicity itself: it must amplify the signal and not fool around while doing so. But a microphone must convert energy from acoustical to electrical and at the same time please the engineer, the producer, the artist, and anyone else who may be hanging around. To add to the confusion, all these experts are evaluating the microphone's performance while listening to yet another energy conversion—from electrical to acoustical via the loudspeaker.

Depending on what's going on in front of the microphone, a flat frequency response may be something of a mixed blessing. A booming guitar or squeaky violin may sound a lot better over a microphone whose frequency response flatters it a little. And similar-sounding instruments may be a bit more clearly focused when recorded with two microphones with slightly different responses. For a basic two-microphone setup, of course, a reasonably flat response is no doubt best, but, when adding extra microphones to your collection, don't reject out-of-hand those whose responses do not look like they've been drawn with a straightedge. As usual, some experimentation is in order. And don't forget to disregard the advice of all your friends. Their tastes are different, and you are the one who must like what you hear.

**Putting It All Together.** To summarize, outside of purely practical concerns, your two main criteria for selecting microphones are likely to be frequency response (which you'll have to grapple with as best you can) and polar pattern. Some high-quality condenser microphones come equipped with a three-way switch that permits the user to choose the polar pattern he wishes to use. They also come equipped with a price tag that will bring the buyer to his knees, and so are probably out of reach for most amateur recordists. Since more reasonably priced microphones are not switchable, the question arises, "Which pattern is best?"

Who knows? Eventually, you may hope to have several of each in your collection, but for a start, your choice of polar pattern should take your immediate needs into account. And, of course, your budget may also be a consideration. You get more overall sound quality for your money with omnidirectional microphones, since they are much simpler to build than cardioids. A good cardioid may be two or more times the cost of an omni of similar quality. Figure-eight microphones are usually of the ribbon type, and although the design may not be complex, ribbon construction costs

$\theta = 0^\circ$

$\theta = 180^\circ$

$\theta = 90^\circ$

$\theta = 45^\circ$

$\theta = 135^\circ$

$\theta = 155^\circ$

$\theta = 160^\circ$

The unidirectional microphone, the polar patterns cross the concentric circle marked 5 dB at about 135 degrees. This means that sounds arriving from this angle will be attenuated by 5 dB compared with the same sound level arriving on-axis. Following the polar pattern, we see that sounds arriving from the rear (an angle of 180 degrees from the front) are attenuated by about 20 dB. Because of the characteristic shape of the unidirectional polar pattern, these microphones are popularly known as cardioid (heart-shaped) microphones. Notice that the bidirectional (or figure-eight) microphone is highly insensitive to sounds arriving at right angles—even more than the cardioid is to sound coming from the rear. As might be expected from its name, the omnidirectional microphone is equally sensitive to sounds regardless of their direction.

**Frequency Response.** Most pros will agree that amplifiers, mixing consoles, and tape recorders should have as uniform a frequency response as

MARCH 1975 57
lie, in general, somewhere between dynamics and condensers.

But let's get back to your needs. If you usually record orchestras, bands, or choirs, you will probably want a pair of cardioid microphones, one for each for left and right tracks. The cardioid pattern will help keep down unwanted noise from the rear, and by moving the microphones closer in or further back you can get the blend of direct to reverberant sound that suits you. On the other hand, if your favorite recording star is yourself singing and playing the guitar, you may prefer a couple of omnidirectionals, placed extra close in, so that one picks up just the guitar, the other just your voice.

But why not use cardioids here too? With cardioids, especially those less expensive ones, you may have trouble with the so-called proximity effect. As the cardioid microphone is moved in close to the sound source, its low-frequency response improves (or rather, increases, since under some circumstances the increase may not sound like an improvement at all).

Even if you like the added bass, you won't like the way the sound quality changes as you move back and forth while performing. If you put the microphones back a bit, the proximity effect will be minimal or gone completely, but so will all your separation—that is, the guitar microphone will now also pick up your vocal, and the vocal microphone will "hear" the guitar. And you may have excessive room noise (reverberation) in both mike channels. No doubt you can find a reasonable compromise position, but so will all your separation.

If you've used the omnis in close and have not rebalanced later on, you'll have a guitar on the left and a vocal on the right, or vice versa. Very interesting, but not quite what you would hear in an actual performance. On the other hand, if you plan to alter the recording at a later date (remove the vocal or even try a different guitar), it's back to the omnis for super separation. For although you'd think the cardioids' directionality would make them a better choice for maximum separation, it often just isn't so. Certainly, the cardioids are less sensitive to off-axis sounds than the omnis, but their proximity effect may keep you from working in as close as you would like. Since the omnis allow you to move in closer with no ill effect, their sensitivity in other directions is more than overcome by the up-close volume of the guitar or voice being picked up in front.

What about the bidirectional, or figure-eight, microphone? Many recordists get so busy comparing the relative merits of omnis and cardioids that the figure-eight is all but forgotten. No doubt the beginner will be better served by either an omni or cardioid microphone, but there are a few situations where the bidirectional pattern may be put to good use. For example, the figure-eight is an obvious choice for recording interviews and discussions. Placed in the middle of a table, it picks up voices on both sides, while pretty much ignoring noises at right angles to the microphone. And it's also a serious contender for small ensemble work, where the musicians may sit facing each other.

Some care must be taken when using a figure-eight in company with other microphones—either another figure-eight or a cardioid or omni. The rear of the figure-eight is out of phase with its front. Electrically this means that, although front and rear are essentially identical, a signal from the rear produces a voltage of equal but opposite polarity (compared with the same signal received at the front of the microphone). That's why the figure-eight is so insensitive on its sides, for there the signals reach front and rear at equal levels but produce voltages of opposite polarity, resulting in total (well, almost) cancellation.

If you're not planning to get involved in this sort of thing, you may prefer the two-cardioid approach for its more convincing perspective. Even if you like the added bass, you may have not rebalanced later on, you'll have a guitar on the left and a vocal on the right, or vice versa. Very interesting, but not quite what you would hear in an actual performance. On the other hand, if you plan to alter the recording at a later date (remove the vocal or even try a different guitar), it's back to the omnis for super separation. For although you'd think the cardioids' directionality would make them a better choice for maximum separation, it often just isn't so. Certainly, the cardioids are less sensitive to off-axis sounds than the omnis, but their proximity effect may keep you from working in as close as you would like. Since the omnis allow you to move in closer with no ill effect, their sensitivity in other directions is more than overcome by the up-close volume of the guitar or voice being picked up in front.

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Don't lose any sleep trying to figure this out, but do remember that if the rear of the figure-eight is near the front of another microphone (figure-eight, cardioid, or omni), and if both microphones are connected to the same input (through a mixer, for example), there may be some cancellation of signal if a voice or instrument is located somewhere between the two microphones. In such a situation, try to keep the performer significantly closer to one or the other of the microphones, and do a little experimenting before the final take.

**Recommendations.** Now all this theoretical stuff is very nice, but what about some specific recommendations on the correct microphone for acoustic guitar, solo kazoo, or perhaps a choir? Sorry about that, but there aren't any. Most pros will, with a little prodding, tell you what microphones they prefer. They'll also tell you that most other pros are either tone deaf or just plain incompetent. In a large studio, you can often identify the recording engineer just by looking at the microphone setup. Each one is different, and the choice of microphones is pretty much a matter of personal taste. Furthermore, the same engineer may very well choose a different microphone for the same musical instrument, depending on the nature of the music, the acoustical conditions of the studio, the style of the performer, or perhaps the advice of the coffee-shop delivery boy.

So, after a little basic training, the rest is up to you. As you add to your microphone collection you will discover favorites for each application. If you wind up with an artistic lemon, you can always trade it for someone else's mistake. Given the very subjective nature of sound, your nightmare may be someone else's impossible dream, or vice versa.

John Woram heads Woram Audio Associates, which offers recording services and consultation on all aspects of studio design. He is an authority on microphones.
For the past couple of decades, audiophiles have watched as a fascinating intramural rivalry has been played out between the proponents of disc and tape reproduction of music. The pattern of challenge and response has been frequent and regular over the years, with first one and then the other taking the lead. That it has all been worthwhile for the connoisseur of fine music reproduction is beyond dispute, but it must certainly have occurred to some observers to ask, What have you done for us lately? In last month's issue, Craig Stark reviewed a few of the technological options freshly available to the phonograph-disc industry. If these opportunities are seized, what are the possible responses available to the proponents of tape? Technical Editor Larry Klein casts his eye over some of the prospects in the following discussion.

— Editor

For a variety of reasons difficult to sort out, we seem to be in a period of accelerating audio technology. These days the technical "breakthroughs" you read about in the advertisements are not only likely to be real, but they frequently even provide genuine benefits to the audio consumer. What brought about this strange but happy state of affairs? If you have been following audio developments, you should be aware that for the past decade or so the advancements in the audio art have mostly been spin-offs from aerospace tech-
ology and, to a lesser extent, pick-ups from mass-market areas such as TV-circuit design. As examples, consider the field-effect transistor, the integrated circuit (IC), the phase-locked loop, and the crystal and ceramic FM-tuner filters—all provide enhanced audio performance but were originally developed for radio communications, broadcast, computer, or TV use. Today, however, the market for hi-fi components has expanded to the point that it becomes economically feasible for manufacturers of semiconductors and other parts to design circuit components specifically for use in stereo and quadraphonic equipment.

In a sense, tape recording has always been in a somewhat privileged position compared with the rest of the audio field. For example, in a number of respects the design parameters of high-fidelity amplifiers are completely different from those of public-address or even broadcast-station line amplifiers. And as many an engineer from outside the hi-fi field has found, there is no automatic conversion of know-how—or parts—from one to the other. For tape recorders, however, there’s always been a sort of continuum between the wish-fulfillment fantasies of the home recordist and the practical commercial needs of the recording studio. This means that over the years the home recordist has seen ongoing improvements in his machines as a result of developments introduced in professional studio machines. A specific personal illustration of the contrast between the amplifying and tape-recording areas comes to mind. In the early 1950’s, I was the proud owner of a large Concertone 1401 tape deck (actually a scaled-down professional machine). At the same time, my home-built power amplifier used a pair of 807’s as power-output tubes. To spell it out: although my tape deck’s heads and technology were lifted straight from the studio machines, I had to go to tubes intended for low-power transmitters to get the kind of amplifier performance I wanted.

It will come as a surprise to most readers to learn that magnetic recording actually predates electronic amplification. Valdemar Poulsen, a Danish engineer, was granted a patent in 1908 (!) on the first magnetic recorder. Poulsen’s magic machine was a wire recorder, not too dissimilar in principle from the Webster models popular in the very early 1950’s. It would be spiritually profitable for latecomers to home recording upset about mechanical snags and snarls in 1/2-inch cassette tape to learn about the tribulations of those early wire buffs. Have you ever tried to untangle a snarled length of very thin string? Now imagine, if you will, what happens when a spool of almost hair-thin flexible wire embodying a prized recording is dropped and wobbles across the floor distribution its contents as it goes. I suspect that it was the dropped-spool blues—whose symptoms were trembling hands and dimming eyesight—that drove most of the wire recordists into other, less demanding hobbies and gave impetus to the development of open-reel tape machines.

Where do we go from here with home tape recording? It’s traditional—and sometimes even valid—to check what’s new in the laboratories and recording studios for clues as to the goodies that will appear in tomorrow’s home machines. (And if there are any doubts about the accumulated improvements in taping over the years, consider that in 1953 my $350 Concertone deck had a specified frequency response of 50 to 12,000 Hz ±2 dB and a signal-to-noise ratio of about 50 dB at 15 ips! I suspect that for the same $350—which elsewhere in the marketplace buys considerably less—one could pick up a cassette through my autocorrelator preamplifier. If the same results could be achieved without using the best of everything (in other words, less expensively), I would say that an advance had been made. And though the trend continues to be more performance for less money, it is getting increasingly difficult to achieve significant increments of improvement on the lower-priced equipment given the inherent restrictions of the formats.

There are several potential tape developments waiting in the wings, some aimed at the general tape consumer, others at the studio user. Over the years, various cartridge formats designed to compete with cassettes have appeared—and then disappeared because of lack of acceptance. The cassette machine was not originally intended to be a high-fidelity product (it was meant to be a sort of
low-fi "sound camera"), and the fact that it has reached the exalted status of a "component" is a tribute to countless inspired mechanical and electrical engineers—and tape-oxide manufacturers—here and abroad.

Anyone who has been following the technical progress of the cassette knows it ain't been easy. And it still isn't. For high-fidelity results, everything has to be exactly right. Too much or too little tape tension, too much friction, a speck of dirt on the head, too high or too low a recording level, a Dolby misadjustment, or the cast-station use for commercial spots. How about open-reel machines? What we have been seeing for the past several years are refinements, convenience features, slowly improving specs, and selling prices approaching $2,000. However, for under $250 you can still buy performance that far exceeds anything that was available at double that figure ten years ago.

Earlier I wrote that a dubbed tape that is indistinguishable from the original disc is good enough for me, but apparently it is not good enough for some studio engineers. Given the need to manipulate the multitrack tape in its "raw" unmixed state, plus the losses, however subtle, in fidelity that occur every time a tape is processed, all sorts of special techniques are being explored (and patented) to preserve the sound quality of the original master. I've written about at least two of them in my "Audio News" column—pulse-code modulation recording (July 1974) and the Ambisonic techniques (November 1974).

There are other approaches in the works, some embodied in products such as professional and audiophile autocorrelators to join the noise-reduction ranks of Burwen, dbx, ANRS, and Dolby.

Many studio recording engineers talk about "air" or "space" in their recordings. They are not referring to spatial or four-channel phenomena but rather to a quality of "openness" or "realness" lacking in many master tapes (and, of course, in the discs made from them). I suspect that this "open" quality is a product of many factors (phase accuracy, low IM distortion, etc.), but it will be a while before the specifics are pinned down. Most of us would be happy if we could consistently hear this "open" quality in commercial records first, and would perhaps be willing to wait for its appearance in our home tape machines later.

As far as the tape itself is concerned, each advance brings another several decibels of recording head-room and/or sensitivity. For the home open-reel recordist, however, the improvements are usually only marginally audible. On the other hand, cassettes and cartridges (including video) still need whatever help they can get from improved formulations and manufacturing techniques. Although many companies are experimenting with a pure metal-particle tape coating, it is years away from marketing—if it ever appears at all.

In general, the future seems to hold somewhat better recorder performance at slightly lower cost. But if you want the latest functions, features, and fanciness in your tape machine, you had better be prepared to pay a stiff price for them.
A visit with the Metropolitan Opera’s
KIRI TE KANAWA
By William Livingstone

Soner or later the radio audience for the Metropolitan Opera’s Saturday matinee broadcasts hears almost everyone who performs with the company: but few major artists have made their Met debuts on the broadcasts. Conductors Fritz Busch and Georg Solti and singers Bidu Sayao, Astrid Varnay, Jan Peerce, Rise Stevens, and Kirsten Flagstad are among those few. Last year on February 9, the radio audience heard the unscheduled Met debut of a young soprano from New Zealand, Kiri Te Kanawa, who on a few hours’ notice replaced Teresa Stratas (who was indisposed) as Desdemona in Otello. Miss Te Kanawa’s performance made it quite clear that she was a major artist and not just an understudy gallantly stepping in so that the show could go on.

Since it was the first Otello of the season, there were many critics in the audience: and they wrote at length of Miss Te Kanawa’s physical beauty, the beauty of her voice, and her considerable acting talent. Harriett Johnson of the New York Post said of the new singer’s voice: “It is a large, full, easily produced soprano that opens up on top like a luscious rose.” Allen Hughes in the Times said, “She is slim and attractive, and the impression she made as Desdemona was satisfying in every way.” In the New Yorker Andrew Porter spoke of the way she sang “phrase after phrase of effortlessly spun and firmly supported tone, culminating in a last act that would have drawn tears from a stone.”

This was not the first time praise of this kind had been lavished on Miss Te Kanawa. In 1971 when she sang her first major role at Covent Garden in London, the Countess in Mozart’s The Marriage of Figaro, she created such a sensation that it was reported throughout the English-speaking world as a news item. When I interviewed her the day before her last Otello at the Met, I asked her what it was like to set off such a barrage of publicity for the second time. She answered, “Incredible! I thought, ‘Haven’t I flooded the market already?’ But it seemed it would never stop—the photographs, the interviews. I began to wonder what else I have done in my life.”

She was dressed casually in black slacks and a plain blouse, and as we chatted in her hotel room she seemed almost like a big kid: she was very pleased that her father had come to New York, was looking forward to showing him the sights, and excitedly awaiting the arrival of a friend who was flying all the way from New Zealand to hear her sing at the Met. She was not especially eager to hold forth on her career. “The word ‘career’ is sort of ostentatious. People are always talking about their career if they are exceptionally good and are thinking of retiring or exceptionally bad and thinking of starting. For me, in one way, singing is a job, it’s what I do. But it’s also a dedication, almost a religion.”

Kiri Te Kanawa (pronounced KIL-rih teh KAH-nah-wah) was born in Gisborne, a small city on the eastern coast of the North Island of New Zealand, on March 6 of a year she declines to reveal. (By my calculations she turns either twenty-nine or thirty this year.) On her father’s side she is of Maori descent. “The Maoris are a singing race,” she says. “They’ve got music in their bones.” Her mother, who thought Kiri might become a singer, gave her some early musical training, and she began formal studies in 1958 when her family moved to Auckland where she was sent to a Catholic school. By her late teens she was singing on television in New Zealand and Australia. She entered various singing contests and won several prizes, including the Sun Aria Competition sponsored by a newspaper in Melbourne. The New Zealand Arts Council then awarded her a grant for four years of study at the London Opera Centre.

“I studied with all sorts of people, mainly at the London Opera Centre, and I found a couple of teachers unde-
dependently, but I didn’t get on very well with either of them—singing teachers are rather like psychiatrists, I think. Then I sang for a friend’s teacher, Vera Rosza, and it’s been a marvelous relationship ever since. Finding her was the best thing that ever happened to me.”

In England she met Desmond Park, an engineer, whom she married in 1967. They live about twenty miles outside London. For the season of 1970-1971 she was engaged by the Royal Opera and made her debut at Covent Garden as Xenia in Boris Godunov and also sang the first Flower Maiden in Parsifal. A few months before her great success in London as the Countess in 1971, she sang the role in her American debut in Santa Fe, New Mexico.

“My agent thought it would be a good idea for me to go away and do it quietly—an out-of-town try-out. I met a lot of wonderful people in Santa Fe, but I was upset because the press had seen the Figaro the year before and didn’t want to be bothered with it again. It was a shame because it was a beautiful production and it was very well done, but no one was interested. My English agent invited a number of American agents to see me, but they were all too busy except one—Sam Niefeld, who became my agent here. After the Covent Garden Figaro, it was like all hell let loose. Suddenly the people who couldn’t be bothered with hearing me in Santa Fe wanted to try out—and I’d studied for a month with a professor at the Scottish Opera —another out-of-town try-out. I was terrible at the time and have a happy home life as well. I’m not one to want twenty-two major roles—I’d like eight or nine and sit on those for a while and see what happens. People always mention Butterfly to me, so let’s announcement at once. It’s a role I hope never to do. I don’t fancy it. Tosca doesn’t appeal to me now, but it may in time, and I’m looking at Traviata for my five-year plan. Actually Richard Strauss is my favorite composer. I’ve done his Four Last Songs, which I adore, and I love Der Rosenkavalier. The role I fancy knew carpenters could do such things.”

Miss Te Kanawa is back at the Met this season singing Elvira in Don Giovanni. She will then go to France for her debut at the Paris Opera in the same role and return to Britain for La Bohème at Scottish Opera (“another out-of-town try-out—I’ll just sneak away and do it”) and Così Fan Tutte at Covent Garden. “I don’t want to work too hard and burn myself out,” she says. “I want to sing for a long time and have a happy home life as well. I’m not one to want twenty-two major roles—I’d like eight or nine and sit on those for a while and see what happens. People always mention Butterfly to me, so let’s announcement at once. It’s a role I hope never to do. I don’t fancy it. Tosca doesn’t appeal to me now, but it may in time, and I’m looking at Traviata for my five-year plan. Actually Richard Strauss is my favorite composer. I’ve done his Four Last Songs, which I adore, and I love Der Rosenkavalier. The role I fancy

“I’ve worked with good conductors and stage directors. One who has been fantastic is John Copley in London. He’s not the kind of director who plucks your hand or turns your body. He’d say, ‘Oh, my dear! What are you doing? Look at your feet!’ And he’d roll his eyes heavenward and walk away. I’d think: Oooh, horrible man! And I’d look at my feet, and they’d be turned in like this. He’d make me so mad I wanted to prove to him that I could do well. I came to trust him, and I’ve learned a lot from him.”

When traveling Miss Te Kanawa listens mostly to pop music on a portable cassette machine, such singers as Aretha Franklin, Vikki Carr, and the Carpenters. “Some people think Andy Williams is soppy, but I think he’s nice. My favorite is Bill Withers—he’s the best of the males.” She herself can be heard on a number of recordings. Her first in this country were released by London Records—Fedora, Rigoletto, and Parsifal, complete opera sets on which she sang very small parts. Later Philips released her recording of Mozart’s Vespers and Exsultate Jubilate and a complete Don Giovanni in which she sings Donna Elvira. Westminster has also released a recital which includes a few Broadway show tunes, such as I Feel Pretty. “I did that ages ago in New Zealand. You do certain stupid things in your life. I did it just for fun, but I don’t do those songs very well so I won’t be doing them for fun any more.”

She plans to record Mozart’s Abduction from the Seraglio with Colin Davis for Philips and says she has had a few other “bites and nibbles.” One of the bites is the new RCA album “The Classic Film Scores of Bernard Herrmann,” on which she sings a single aria, the one Herrmann composed for a fictitious opera, Salomé, for the film Citizen Kane. The plot of the movie required that the aria be sung poorly, but for the recording and home listening the producer of the album felt that it should be performed well, and he hired Kiri Te Kanawa to record it. Purists among film-score collectors argue that her radiant performance is untrue to the composer’s intentions, but no one disputes the fact that she sings it beautifully, right up to the ringing high D at the end.

MARCH 1975
Salas, the modern, up-tempo, urban Latin music, is a lot easier to hear in American cities today than it is to describe. It swings, and the original musical use of the word was in the phrase "con salsa," meaning literally "with sauce," figuratively with spirit or "swingingly." As a noun, "salsa," like "jazz," is a loose term, loosely applied, and that is as it should be, for salsa is almost as varied as jazz and equally hard to define without defining out something that belongs in.

Unlike jazz, in salsa the vocal and instrumental elements are just about equal in importance. But like jazz, the term is newer than the music and will take some getting used to. You are not, in short, likely to find the word in your dictionary any time soon.

This music has often been discovered by non-Latins and then gotten lost again, and I have come to the conclusion that this was so because until fairly recently the music never had a name. (To call something "Latin" is just so vague as to be meaningless.) Many musicians still object to the name "salsa," perhaps on the same grounds that some originally objected to the name "jazz." But a major, influential, and clearly recognizable music needs a name, and as a matter of objective fact, "salsa" has come to be that name.

Salsa spread from Havana in the 1940's to the rest of Latin America and to the United States. Its main inspiration is the Cuban dance music.
of the Forties and Fifties. Its basic structures are Cuban, and so are its basic rhythms: the guaracha, the guaguanco, the son montuno, the montuno, and the guajira. But salsa is no longer Cuban. If Havana was salsa's New Orleans, then New York was its Chicago, and in New York salsa developed into a jazz-inflected style that could not properly be called jazz. Having absorbed influences from jazz, salsa, in turn, exerted an influence of its own on jazz and other kinds of mainland American music from Dizzy Gillespie to such contemporary groups as Malo and Azteca. In this sense it is a permanent part of the musical scene in the United States, and it remains the principal musical expression of the Spanish Caribbean and the large Hispanic communities of the Eastern United States. It is becoming increasingly popular with Mexican-Americans as well.

The prototypes of the classic Cuban dance groups from which modern salsa sprang were the Afro-Cuban conjuntos. These began as festival street bands, and at first they consisted of trumpets together with drums of African origin—principally conga and bongó. They added pianos and other instruments when they moved into the cafés and dance halls. The basic conjunto sound was opened up with the introduction of the Cuban guitar called the tres, whose dark string tone provided a rich contrast to the brass and drums. The potentialities of this combination were developed to the full by the Afro-Cuban musician Arsenio Rodriguez, who augmented the nuclear conjunto, composed profusely, and is credited with bringing the mambo from the religious cults into dance music.

As the conjuntos developed, they began to breed star soloists, such as the trumpeters Chapotín and "Chocolate" Armenteros. The music already had an ideal arena for improvisation in the montuno—a two-chord, call-and-response section for small chorus and improvising lead singer (sonoro)—and another in the estribillo, later called the mambo section, which featured highly rhythmic instrumental interplay. Later groups grafted other instruments onto the basic few.

This Afro-Cuban sound was rooted in trumpets and drums. But there was another kind of Cuban dance music, that of the flute-and-strings charanga, in which the flute is an improvising lead instrument and the basic violin parts are riffs called guajeos. A good charanga can swing as much as a conjunto, but its sound is lighter and more lilting. Its rhythm section, based on timbales (a set of tuned drums played with sticks), was closer to European dance music, and even its name—an abbreviation of "charanga francesa," or French orchestra—reflected the charanga's Euro-Cuban antecedents.

The classic charanga rhythms were the danzón, the chachachá (or, as it became known here, cha-cha-cha), and the pachanga. The modern danzón, which dates from the 1870's, belongs to a large family of Caribbean dances descended from the seventeenth-century Spanish contradanza. It was first a salon dance, with a white-gloves-and-potted-palms quality typical of the time. The danzón was danceable and, in the 1940's, the influence of jazz and the conjuntos brought the charangas nearer to Afro-Cuban music. Music historian Rene Lopez, discussing one of the most influential groups of the time, the Orquesta Aragon, put the resulting change in a nutshell: "The rhythm was more aggressive, while the melody still wore at your heart."

The chachachá of the 1950's, basically the second section of the danzón, was best performed by the charangas that originated it. It was, in fact, closely linked to the rise of one of the longest-lasting of all charangas, the Orquesta Aragón.

The pachanga started in Cuba, but it became wildly popular in New York around 1960-1961, and its success brought a new crop of musicians to the fore—among them a young Dominican, Johnny Pacheco, who played flute with New York-born Puerto Rican pianist Charlie Palmieri's charanga, and then formed his own extremely successful group.

In New York, the charanga period was a phase. Though a few New York-based charangas remained, notably the Orquesta Broadway, most bandleaders switched to conjunto-style groups after a year or two. But charangas are still popular in Cuba and also in Miami, which has its own groups like Jovenes del Hierro and, recently, the Orquesta Broadway, which moved south in 1974.

Naturally, neither salsa nor its Cuban antecedents sprang fully armed from anybody's head: they have strong roots in the folk musics of the Spanish Caribbean islands. Of these, the most important in its effect on the dance bands was the music of the Afro-Cuban religions, of which the most significant one is the Yoruba-derived Lucumi. Other cults preserve Congolese, Ibo, and other African groups' beliefs and music. All are basically West African with Christian accretions. These religious cults were crucial in Cuban music because they contained a fund of almost pure West African music, and many dance-band musicians belonged to them.

One of the classic Cuban rhythms is the son, which has always had strong black elements; it is said to have been invented by a sixteenth-century black woman, Ma Teodora. The son became part of Havana dance music around 1917, performed by groups that added first a trumpet and then other band instruments to the basic tres, guitar, and percussion instrumentation. But the son always
retained something of a country feel, even when performed by the classic groups of the Thirties, such as Ignacio Piñeiro's famous Septeto Nacional.

The impact of the Dominican Republic, whose most popular dance form is the merengue, has been relatively small, but merengue musicians often perform with salsa groups, and salsa bands may play merengues. Moreover, the modern merengue as performed by groups like that of Johnny Ventura is really a substyle of salsa.

The Puerto Rican influence on salsa, on the other hand, has been vast. Puerto Rican rhythms have "crossed over" at times—notably the plena, the Puerto Rican equivalent of the urban son, whose best-known exponent was Canario, and the bomba, which was originally an Afro-Puerto Rican drummed dance. Puerto Rican bandleaders Cortijo and Cesar Concepción recorded band plenas and bombas during the 1950's, and Cortijo and the marvelous singer Ismael Rivera both maintain the Puerto Rican stream to this day. Willie Colon uses the jíbaro country music of Puerto Rico in a most un-rural manner, and (in a striking minor example) Ismael Quintana used jíbaro phrasings in Eddie Palmieri's original version of Muñeca.

But the major Puerto Rican contribution to salsa came not from the island's folk music, but from New York-based Puerto Rican musicians who, from the 1940's on, began to move the music away from its purely Cuban origins—in the first instance, through a major jazz input. Of the four major figures in U.S. salsa's early days, two—Machito and Perez Prado—were Cuban, and two—Tito Puente and Tito Rodriguez—were Puerto Rican. The Big Four introduced Latin music to a wider audience. Machito primarily through the jazz world. Puente and Rodriguez through years of playing at the popular Palladium Ballroom in New York, and Prado through a distinctive (and, in the end, highly commercialized) approach to the mambo. One or the other hired almost every Latin musician of note at one time or another. And all ran big bands with brass and sax sections.

Even in Cuba, the Latin big band was essentially predicated on the big jazz band, and its relationship with jazz has always been very close. In fact, the New York Latin and jazz bands of the 1940's were almost poles of one movement. Cuban conga player Chano Pozo's stint with Dizzy Gillespie's big band in 1947-1948 is the most famous example, but there are many others.

The mutual feedback was, in fact, massive. The most important of the early Latin big bands in New York, José Curbelo's, was clearly affected by Duke Ellington, though the main influence on Latin big-band arrangements was Count Basie. The first big Latin bands used jazzmen in the wind section because there were not enough Latinos to fill the horn chairs. And as only one example on the other side, Machito's musical director, Mario Bauza, played with Chick Webb, Don Redman, and Cab Calloway. It is hardly surprising that some of Machito's finest recordings were essentially Latin jazz, including a marvelous album recently reissued under the title "Latin Jazz Plus Soul" (Tico CLP 1314), featuring Joe Newman and Cannonball Adderley.

The last determinant in the formation of modern salsa may have been the break in relations between the United States and Cuba in 1961, which meant that the fountainhead of tipico (the music of the "old country") was no longer accessible. Filling the resultant gap gave some of the best known of modern salsa bandleaders their start. Modern salsa, then, is a music of the Sixties and Seventies and is still being created. It is a living, developing music, not the
remains of some dead or lost culture.

The bandleaders that came up during the Sixties vary considerably within salsa's general limits. Of the best known, Johnny Pacheco has stayed close to the Cuban models from the days of his charanga on — too close, some say. Larry Harlow, while very conscious of the Cuban origins of his music, reblends them with freshness. Ray Barretto, a New York-born Puerto Rican, cut his musical teeth on jazz, and some of his best albums have reflected this.

Two of the most creative individual musicians in New York salsa today are the Palmieri brothers, each of whom is a pianist with his own band. Charlie Palmieri, a masterly soloist, has successfully integrated strong piano jazz influences (especially Art Tatum and Oscar Peterson) into his style, and his arrangements are models of how fresh and original mainstream salsa can be. His brother Eddie, nine years younger and easily the most adventurous of the modern Latin musicians, is capable of such diverse explorations as going back to the danzón, working with the black vocal group Harlem River Drive, exploring the musical-technical options opened up by quadraphonic tape, and blending into his music diverse elements that range from Chopin to avant-garde rock via John Cage. Yet his live performances generate a fierce swing.

Among the most creative young New York Latinists is Willie Colon, who built his success on a two-trombone front line, the use of Puerto Rican and Panamanian rhythms, a joke-gangster image, and an acute musical intelligence. His music annoys many old-timers, perhaps because his attitude to Cuban-roots orthodoxy is heretical. But his band combines a joyousness and unobtrusive originality that are a delight.

The move away from Cuban models was inevitable, but it has been as difficult as the move away from any musical orthodoxy. Perhaps more so, since salsa is a music with strong formal elements, all stemming from the Cuban golden age, which represent the only valid way of distinguishing it from its various offshoots, such as Latin jazz and Latin rock. Like every form of music, salsa has its roster of undervalued artists — many of them arrangers, such as Louie Ramirez and Javier Vasquez, or older bandleaders such as Hector Rivera, Orlando Marin, and Willie Rosario, whose talents far exceed their current fame. There are also people whose success is more due to organizational or promotional flair than to talent. But mainstream salsa has two important strengths: a reserve of fine musicians going back to the Cuban days, and plenty of young blood and new groups. And taking the music as a whole, a genuine golden age seems to be at hand.

Salsa, itself a fusion music, has given rise to a number of hybrids. The oldest of these, Latin jazz, is sometimes hard to distinguish from its sources, since it straddles styles that already overlap and many musicians cross over repeatedly between jazz, Latin jazz, and salsa. But it is probably accurate to say that true Latin jazz usually involves "mixed" groups of jazz and Latin performers, that it must have jazz, rather than jazz-influenced, solos, and that it must be "in clave." Clave, the two-bar rhythmic phrase heard or felt as tick-tick-tick — or the reverse — is fundamental to Latin music, and every element in the entire arrangement, solo or whatever, must fit. Many of the best Latin-jazz musicians go back, like Cal Tjader, to the Fifties, or even, like the superb saxist José "Chombo" Silva, to Cuba. But there are some good newer groups such as the Newark band called Ocho.

A man of many fusions is the fine conga player Mongo Santamaria, who came from a heartland Afro-Cuban background, played with Perez Prado and Cal Tjader, and was in demand during the Fifties for sessions with everybody from Sarah Vaughan to
Ray Charles. Santamaria has cut a long series of Latin jazz, Latin r-b, and Latin almost-everything recordings with his own band, besides writing many Latin jazz standards including the delightful Afro-Blue.

If Latin jazz is a fusion of fusions, so is Latin rock. The best known groups—Azteca, Malo, and Santana when he's in the mood—all hail from the West Coast (though they all have Antillean conga players to keep an eye on their clave). But its other homelands appear to be Miami—with its large Cuban population—and Puerto Rico. The Miami group Wild Wind is nearer to mainstream rock, as is Puerto Rico's Frank Ferrer. Tempo 70, also from Puerto Rico, leans toward a young-Latin sound that still contains a lot of well-blended rock. Cafe—another Miami group—has horns in its front line, and is more Latin than rock, with heavy jazz infusions. San Francisco Latin trumpeter Luis Gasca's album "Born to Love You" (Fantasy F 9461) goes even further into a jazz-rock-Latin fusion, using musicians like Joe Henderson and Jack de Johnette.

The least flourishing of the newer fusions is Latin soul, which is perhaps odd since Latin rhythms have had so much influence on soul music. The mid-1960's saw an outburst of English-language soul-derived forms, especially the boogaloo. This had its moments, but despite a catchy hip-slo h beat, it was basically secondhand soul. Some Latin bands played boogaloo in the vain hope of a crossover "American" hit, others in hopes of appealing to "the kids." On the whole it was a digression, though Joe Bataan still sings it, and I have so far found nobody at all who regrets its demise.

One of the most striking things about salsa, given its immense impact on other musics, is its role as the invisible man of modern American music. It is the music of an ethnic minority, and although it is readily available on the radio in cities with large Spanish-speaking communities, it is generally ignored by non-Spanish-speaking Americans, whose ears are not attuned to it. This may be because it is both highly structured—almost stylized—and full of scope for improvisation. In other words, like jazz in the old days, it is both simple and complex, formal and free, and it simply isn't generally understood. A good short cut to the heart of salsa is through the element least appreciated by non-Latin: the improvisational art of the singers. This comes to flower during the montuno section, and improvisatory skill and an advanced rhythmic sense are the sonero's tools.

The greatest of all soneros on record was probably Beny Moré. "El Barbaro del Ritmo." Tito Rodriguez the bandleader was a noted sonero. Another magnificent singer is Celia Cruz, still going strong after starting in the Havana of the old days. In New York, Eddie Palmieri's former singer Ismael Quintana, Ismael Miranda, Vitin Aviles, and Ismael Rivera are all fine soneros.

SELECTED DISCOGRAPHY

The following records will enable you to sample the best of current salsa. They can be found at record stores with large international departments or at stores that specialize in Spanish-language records. They can also be ordered by mail from certain stores that do a large mail-order business, such as King Karol Records, Box 629, Times Square Station, New York, N.Y. 10036.

Willie Colon, Willie, Fania XSLP 00464
Orquesta Harlow, Tribute to Arsenio Rodriguez, Fania SLP 00404
Johnny Pacheco, Los Compadres, Fania SLP 00400
Charlie Palmieri, Vuelve el Gigante, Alegre CLPA 7008
Ray Barretto, Hard Hands, Fania SLP 362
Eddie Palmieri, The Best of Eddie Palmieri, Tico CLP 1317
Eddie Palmieri, Live at Sing Sing, Tico CLP 1303
Orlando Marin, Saxofobia, Manana LP 503
Willie Rosario, Infinito, Inca SLP 1032
El Gran Combo, El Gran Combo, EGC 006

For those who would like to investigate salsa further, the author has prepared a longer discography of current salsa and its antecedents; this can be obtained by sending a stamped self-addressed long envelope to Salsa Discography, Stereo Review, One Park Avenue, New York, N.Y. 10016.

Like anything, of course, the art of the sonero is best understood by exposure. The selected discography that accompanies this article should make that easier, though it contains only a fraction of the fine current salsa on record. An even more rapid, but excellent, course in the music could be gotten from just two records: "La Gloria del Chachachá" and "Bravos del Ritmo" (U.A. Latino LT-LA 084-E2 and LT-LA 192-E2, respectively). Though short on documentation, these are both marvelous anthologies covering both the Cuban and the New York aspects of salsa.

The musicians may eye the supposedly golden "American" market wistfully, but salsa probably has not suffered from the benign neglect of America at large. In fact, it may even have benefited from remaining strongly rooted in a particular ethnic community. But many people have certainly suffered nonetheless: those who have missed so much fine music for so long.

John Storm Roberts, the author of Black Music of Two Worlds, is a critic for the Village Voice and contributes to such magazines as Crawdaddy and Melody Maker.
Tedd Joselson: The Disc Debut Of a Brilliant Young Pianist

A great many people already own recordings of Tchaikovsky's Piano Concerto No. 1. Comparatively few people own a recording of Prokofiev's Piano Concerto No. 2. Until now no one has had the opportunity to own a commercially produced recording by the young Belgian-American pianist Tedd Joselson. The acquisition of a new RCA stereo disc will gain for the purchaser recordings of both the aforementioned works on what is certainly one of the longest playing long-playing records ever issued—69'37" total playing time. For the somewhat reluctant buyer, the quantity of music may make up for the necessity of taking a concerto he may not want (whichever one that is) along with one he does want. But there can be no complaints about the pianist. Joselson is brilliant.

If this seems an odd sort of a debut disc, Joselson's New York concert debut was also somewhat odd. He played the Prokofiev Second, with Ormandy and the Philadelphia Orchestra as on this disc, and though audience response was overwhelmingly enthusiastic, the chief critic of the New York Times, an acknowledged piano expert, spent most of his review talking about the premiere of a contemporary work by Nicolas Maw that was also on the program, the sort of thing he rarely does. And Joselson did not come to his New York debut, as so many young pianists do these days, from a string of contest prizes. Rather, he made his American debut with the Detroit Symphony, played with Fiedler and the Houston, and then filled in for an ailing pianist in a cross-country concert tour by the Cologne Chamber Orchestra. He has obviously attracted more attention from conductors than from critics, audiences, and perhaps even other
pianists, and one engagement seems very much to lead to another. Why this is so is not exactly obvious (no criticism of his abilities), but it is not a total mystery either.

Joselson is a pianist with an enormous technique, excellent musical sense, and a real virtuoso flair. He is not in the slightest (on the evidence of one concert and one record, at least) an oddball. He plays both concertos here in just about the way you or I or Eugene Ormandy would expect them to be played, producing no surprises but considerable satisfaction. The Tchaikovsky is eminently impassioned (Joselson gets the real virtuoso's lion's roar out of the piano), the Prokofiev sensual where written that way (the first movement particularly: had you thought Prokofiev never wrote sensual music?), and coming on like gangbusters where that particular musical attitude is called for. In fact, Joselson really gives us more of the music's personality than of his, not at all the expected division of spoils from a certified virtuoso. It is not the only way to be a fine pianist, but the late George Szell, I think, would have loved him. Obviously, other conductors do.

Ormandy's orchestral direction here goes a little slack at times, but the orchestra never produces an ugly sound and the musical points that have to be made are made. And Joselson's excitement is obviously contagious; given his prior example, the orchestra never fails to come through. The stereo recording is clean, open, and well balanced, and though there is a slight constriction in sound at the ends of the long sides, the degree of distortion is really amazingly low. Surfaces are better than average. The recording is too long to be made into a CD-4 disc, so don't bother waiting.

James Goodfriend


Two Complementary Readings of Richard Strauss' Four Last Songs

A stroke of coincidental historical extravagance has just placed before us two new recordings of Richard Strauss' Four Last Songs (1949), the composer's own touching musical epilogue as well as his final statement in a lifetime's glorification of the soprano voice. Gundula Janowitz and Herbert von Karajan are teamed in one of these versions, Leontyne Price and Erich Leinsdorf in the other. In their different ways, both teams serve the music extremely well, and, since the two discs offer entirely different accompanying material, I cannot resist the temptation to recommend both releases to avid Straussians.

The poetic texts notwithstanding, it is possible to conceive of this song cycle in purely orchestral terms, treating the voice merely as a central instrument in Strauss' rich yet subtle musical fabric. If this, as it appears, is Karajan's conception, he chose the perfect soloist in Gundula Janowitz, who sings with tones of ethereal beauty and purity, frequently sacrificing poetic communication to perfection of vocal line. One may take issue with singing of this kind, yet who can deny its ravishing beauty? In any case, Miss Janowitz's rendition of the exquisite cantilena in the phrase "in freien Flügen schweben" (in the song Beim Schlafengehen) or of the embellishments in September represents singing of almost superhuman beauty and refinement.

By contrast, Leontyne Price is a very human singer. Her singing may be short of the Janowitz kind of technical perfection, but it offers beauty
of its own kind, enhanced by more warmth, passion, and even earthiness. She conveys the poets' messages with clarity, and, as a result, there is a sense of ecstasy in her first song (Frühling) that we miss in the Janowitz treatment. The songs lie, moreover, in her best range, and she gets excellent support from Leinsdorf, though I find Karajan's broader tempos more eloquent, particularly in the last two songs.

The reverse side of the Price disc offers a real discovery: an aria from Strauss' first opera, Guntram (1894); it has echoes of Wagner, but there are also clear indications of the mature Strauss to come. Both this and the Awakening Scene from Die Frau ohne Schatten tax the soprano's capacity to the limit, but she manages the often murderous writing very impressively. She is equally convincing at the opposite end of the Strauss spectrum, in the Marschallin's introspective Monologue. The poignancy of its conclusion will doubtless be heightened when Miss Price brings her interpretation to the stage—which, judging from this performance, her fans will want her to do soon.

The second side of the Janowitz/Karajan disc offers Tod und Verklärung, the tone poem Strauss wrote while he was working on Guntram. (He met the soprano Pauline de Ahna then: she was to be the interpreter of Freihild in that opera—and his inseparable companion for the rest of his life. In a moving bit of musical recollection, the "Verklärung" motive provides the gentle conclusion of the last of the Four Last Songs, symbolizing the end of the pair's shared journey.) Karajan offers an eloquent and impassioned statement of this music, eliciting a blaze of tonal splendor from his Berliners. Some might wish that the cutting edge (the brass) of the orchestration had not been dulled to gain that superb blend Karajan achieves, but the sensuous appeal of the sound cannot be denied—or resisted.

Both discs are well engineered, and texts are supplied. The annotations for RCA are by London Times critic and Strauss authority William Mann.

George Jellinek


Jerry Jeff Walker's "Collectibles"
Are a Sacrilege—And a Joy

Spontaneity is much more difficult to find in pop music albums, or in any other representation of fat corporeal conservatism, than it is among drunken cowboys. How 'bout that, eh? But the albums of Jerry Jeff Walker do have the quality of spontaneity, the next step goes—and you can see where this is leading, I guess. Walker's musical personality includes an ambition that is, as the saying has it, short but not too big around, and it also involves having faith that a bunch of drunks is going to sound like a bunch of drunks when what is wanted is a drunken chorus (and sometimes when it isn't). I conclude, therefore, that he is an honest man, for I can see he's willing to risk winding up stone broke if that's to be the price of his rowdiness.

Right now, I'm here to report that Jerry Jeff's latest album for MCA, "Walker's Collectibles," is both a sacrilege and a joy, randy with small off-center surprises and smart-ass carryings on. The album before it, "Viva Terlingua," was even better, I thought, since its songs had a more conventional excellence about them.
but "Collectibles" is the best exhibit for showing how Walker's humor works—all but three and a half songs are played for laughs—and the times, they do need humor. Salvation Army Band may be a little late with the sleazy-horn motif, but it's useful in front of the *a cappella* musical question that follows: "Will there be any up in heaven?" Wingin' It Home to Texas "ends" its chorus with the line, "They lost my bags again," and then has a tacked-on instrumental resolve which happens to have words that go, "That Dallas air-port-sucks." That remark unkindly reminds me of Gary P. Nunn's singing—and, for that matter, his writing—of Rock Me Roll Me, an example of an offhand Walker decision (letting Nunn sing lead) that doesn't work out. But some similar kind of decision to re-record My Old Man for seven minutes does work, and it is hauntingly laid back throughout. The melody is a little dumb—repeat and repeat—but it's eternally catchy. and there's a little about the rhythm and a lot about the words that make it one of Walker's most moving songs. We can be absolutely sure he's reasonably serious about it.

Most of the album, though, is not even reasonably serious. It has the snide grin and the paint-peeling breath of a real buckaroo. My advice is to tell it howdy, and tell it to come on in.

Noel Coppage

**JERRY JEFF WALKER:** Walker's Collectibles. Jerry Jeff Walker (vocals, guitar); Gary P. Nunn (vocals, keyboards, guitar); Robert Livingston (bass, piano, mandolin); John Inmon (guitar, bass); Donny Dolen (drums); Kelly Dunn (organ, synthesizer); other musicians. Salvation Army Band; Will There Be Any; I Like to Sleep Late in the Morning; My Old Man; Rock Me Roll Me; Well of the Blues; Wingin' It Home to Texas; The First Showboat; O. D. Corral. MCA MCA -450 $6.98, MCAT -450 $7.98.

**Jones and Lewis: The Best Big Band Around Today**

No question about it. Thad Jones and Mel Lewis have the best big band around today. They have had this band for ten years and have recorded numerous albums, but none of them has been as fine, as an *courant*, as the new "Potpourri," their first for the Philadelphia International label.

"They gave us the freedom to record without sticking a label on us or on what we were playing," says Jones, speaking of their new label in an interview that accompanies the album. That may, of course, be something of a political statement, but the fact is that "Potpourri" is a fair and non-labelous description of what is going on here. The repertoire includes Stevie Wonder compositions, an O'Jays hit, a Marian McPartland piece, and original Thad Jones material, and through it all the band sounds much freer than it has in previous recordings.

What a joy it is to hear Jones' arrangement of Living for the City, the horns capturing the drama of Stevie Wonder's remarkable composition and Buddy Lucas' harmonica wailing the mood that marked the original recording. Lucas is heard again on For the Love of Money, a powerful blues by Gamble and Huff that is given new life in Thad Jones' surging arrangement. Jerry Dodgion's soprano saxophone further enhances the rifty O'Jays hit and reappears on Stevie Wonder's Don't You Worry 'Bout a Thing, a samba that also features some of Dodgion's flute work and potent ensemble writing by Jones.

Ambiance, a hauntingly melodic tune by Marian McPartland (she recorded it with her trio as a waltz), is beautifully charted as a bossa nova by Dodgion. I could go on, but suffice it to say that the entire album is exquisite: great material, outstanding arrangements, dynamic ensemble work, and memorable solos by a star-studded cast that includes Pepper Adams, Roland Hanna, Billy Harper, and Quentin Jackson. Add to that an inner sleeve containing an illuminating interview with the two leaders and informative notes by Ed Beach and you have that rare commodity, a flawless album.

Chris Albertson

**THAD JONES/MEL LEWIS ORCHESTRA:** Potpourri. The Thad Jones-Mel Lewis Orchestra (instrumentals). Don't You Worry 'Bout a Thing; Ambiance; For the Love of Money; Living for the City; Quiet Lady: Blues in a Minute; All My Yesterdays; Yours and Mine. PHILADELPHIA INTERNATIONAL KZ 33152 $5.98, ZA 33152 $6.98.
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March 1975

CIRCLE NO. 25 ON READER SERVICE CARD

73
POPULAR DISCS AND TAPES

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

RECORDING OF SPECIAL MERIT

GREGG ALLMAN: The Gregg Allman Tour. Gregg Allman (vocals, keyboards); instrumental accompaniment. Don't Mess Up a Good Thing; Queen of Hearts; Feel So Bad; Stand Back; Double Cross; Dreams; and six others. CAPRICORN 2C 0141 two discs $11.98, © 2K8 0141 $12.97, © 2K5 0141 $12.97.

Performance: Marvelous
Recording: Excellent

I very much regret not having been at the concert where this album was recorded. It would have been a memorable evening, watching Gregg Allman and his superb back-up band, especially saxophonist Randall Bramlett and drummer Bill Stewart.

Allman is one of the most exciting and satisfying young musicians in the United States today. His brilliant "Laid Back" studio album was one of the best records released in 1974. This live album, which duplicates only a few of the songs on the studio LP, offers so many mental accompaniment.

GREGG ALLMAN: The Gregg Allman Tour. Gregg Allman (vocals, keyboards); instrumental accompaniment. Don't Mess Up a Good Thing; Queen of Hearts; Feel So Bad; Stand Back; Double Cross; Dreams; and six others. CAPRICORN 2C 0141 two discs $11.98, © 2K8 0141 $12.97, © 2K5 0141 $12.97.

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Explanation of symbols:

- reel-to-reel stereo tape
- eight-track stereo cartridge
- stereo cassette
- quadraphonic disc
- reel-to-reel quadraphonic tape
- eight-track quadraphonic tape
- quadraphonic cassette

Monophonic recordings are indicated by the symbol 📧

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

DONOVAN: 7-Tease. Donovan (vocals, guitar, harmonica); Norbert Putnam (bass); Ken Butterly (drums); Reggie Young (guitar); David Briggs (keyboards); other musicians. Rock and Roll Souther; Your Broken Heart; Salvation Stomp; The Ordinary Family; Ride-a-Mile; Sadness; and six others. Epic PE 33245 $6.98, © PEA 33245 $7.98, © PET 33245 $7.98.

Performance: Good, no kidding
Recording: Very good

I'm disgusted with myself for liking this, but there it is. Nothing in it to indicate this kind of thing. What are these people on, anyway? I've been told my ability to concentrate is better than average — I can listen to the tional irritating habit of addressing lyrics to female listeners, which puts me off the way daytime television puts me off. His gentlemanly still sounds: Going Two-Step, one of the least awk-

For the life of me I can't figure how people actually listen to three consecutive discs of this kind of thing. What are these people on, anyway? I've been told my ability to concentra-

Stereo Review
National Lampoon Radio Hour and read Tom Wicker at the same time—but Keith Emerson’s rococco razzle-dazzle on the keyboards (which seems to be what this group actually exists for) leaves me numb, craving aspirin, and mentally singing over and over the first lines of Kristofferson’s Why Me, Lord?: Emerson has fast hands, everyone knows that, and Carl Palmer seems to be a competent drummer (although his taste in gadgetry does belong right beside Emerson’s), and Greg Lake, one discovers once every twenty minutes when Emerson and Palmer allow him to be heard, is a decent guitar player. But if this is music, I’m glad I’m still hooked on what used to be music.

There are some piano improvisations, incorporating some of Friedrich Gulda’s Fatigue, that prove Emerson is capable of sounding like a musician—and there is interminable synthesizer and organ glop that proves he isn’t much interested in doing it. Decorations are decorated until one would think we could no longer detect how lame the melody was at the bottom of these “original compositions,” but we do detect it. I’m sure some people really do like this stuff and listen attentively all the way through (some people, according to some letters to the editors of Oui magazine, like being spanked with a paddle that has holes in it), but what concerns me is the greater number of people who are afraid of what their peers would say if they admitted they hate it. Well, peers, I can’t stand it. What their peers would say if they admitted greater number of people who are afraid of what the bottom of these “original compositions,” are decorated until one would think we could incorporating some of Friedrich Gulda’s Fugue, is that they are hooked on what used to be music.

Our National Lampoon Radio Hour and read Tom Wicker at the same time—but Keith Emerson’s rococco razzle-dazzle on the keyboards (which seems to be what this group actually exists for) leaves me numb, craving aspirin, and mentally singing over and over the first lines of Kristofferson’s Why Me, Lord?: Emerson has fast hands, everyone knows that, and Carl Palmer seems to be a competent drummer (although his taste in gadgetry does belong right beside Emerson’s), and Greg Lake, one discovers once every twenty minutes when Emerson and Palmer allow him to be heard, is a decent guitar player. But if this is music, I’m glad I’m still hooked on what used to be music.

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**RECORDING OF SPECIAL MERIT**

**FAIRPORT CONVENTION:** *A Moveable Feast.* Sandy Denny (vocals, piano); Trevor Lucas (vocals, guitar); Jerry Donahue (guitar); Dave Swarbrick (vocals, fiddle); Dave Pegg (bass, vocals); Dave Mattacks (drums); Maddy Groves; Fiddlegon: Rosie; John the Gun; Something You Got; Sloth; Dirty Linen; Down in the Flood; Sir B. MacKenzie: Island II PS 9285 $6.98, Y 819285 $7.98.

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

Over the last year and a half, I have developed into a Fairport Convention Junkie. Many of my critic acquaintances are suffering from similar afflictions, and it’s understandable, given the staggering ennui that results from having to wade through ninety-five percent of the music currently being foisted on us. The symptoms may vary, of course—passions for reggae, old rock-and-roll, eccentrics like Bryan Ferry and Enyo—but the bug is the same. With me, as I said, it’s Fairport Convention. And this new album is simply marvelous. Recorded live in England and Australia, it catches the band, newly reunited with Sandy, in rousing form. Since it’s also been programmed as a sort of greatest hits collection, I can safely say that if you don’t have the bread to lay out for their nine previous albums, then this is the one to get.

I could do a little obligatory carping. I suppose, since for my taste there’s a wee bit too much of the traditional material here, but I just don’t care; all Sandy has to do is open her mouth and I’m gone. Further, the new line-up is probably, on balance, the strongest in the band’s history, and their interaction is nothing short of irresistible. If, like me, you have been frantically seeking an answer to the Question of the Age—that is, what can you listen to if both John Denver and Emerson, Lake, and Palmer drive you out of the room—you’re really going to appreciate this record. To paraphrase Mr. Jagger, it’s only British Folk Rock, but I like it.

**BRYAN FERRY:** Another Time, Another Place. Bryan Ferry (piano and vocals?); John Porter (guitar); Paul Thompson (drums); John Wetton (bass); other musicians. The “In” Crowd; Smoke Gets in Your Eyes; Walk a Mile in My Shoes; Fancy How Time Slips Away; and six others. Atlantic SD 18113 $6.98, TP 18113 $7.98, CS 18113 $7.98.

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

Bryan Ferry can’t sing. Never mind all the jabber in the press about his expressivity and subtle sense of humor—the only people who can take that sort of stuff seriously are jaded, aging rock critics who, perhaps understandably, have lost all sense of perspective after trying to reconcile the public’s seemingly inexplicable adoration of acts as disparate as Carly Simon and Uriah Heep.

What he can do, however, is be sneaky: in fact, he may be the first pop star to raise sneeziness to the level of genius. Ferry knows, you see, that (not so long ago as it seems) many people who should have known better were saying that Bob Dylan couldn’t sing either, and that since then people are naturally a bit reluctant about making sweeping judgments like that. In fact, he not only knows it, he’s counting on it. You’ll notice, of course, he’s even got me doing it—bracketing Dylan and Ferry as I just did already makes him seem more respectable than I intended.

Ferry, sneaky devil that he is, also knows that arguing the relative merits of different brands of trash is self-defeating, so in “Another Time, Another Place” he favors us with triumphantly godawful renditions of the “In” Crowd and Smoke Gets in Your Eyes, and you can almost hear him laying the traps for the unwary reviewer. A critic might respond to them with something like “The “In” Crowd was wretched song when Dobie Gray did it in 1965, but Ferry robs it of the one virtue it did possess—namely, its lack of self-consciousness, of the awareness that it was stupid and poorly written.” or even “Smoke Gets in Your Eyes has been done as rock-and-roll before, with the rocker’s supreme disregard for the canons of good taste, but whereas the famous mid-Fifties version by the Platters was sublimely cummy, Ferry’s is merely bad.” That’s good criticism, and may even be good writing, but from the readers’ or the listeners’ point of view, it’s only18113 $7.98.

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

We are currently in the middle of a Holmes revival, and luckily it’s Sherlock and not Rupert. Rupert is fascinated by old films (Psycho Drama, a witless parody of The Maltese Falcon), old radio serials (Soap Opera), and our old attitudes toward baseball in the days before the kids found out that their champion’s breakfast was likely to be a screwdriver and a joint and that he hadn’t tasted Wheaties since his days in reform school (Our National Pastime). His ultimate fascination, however, seems to be with his own childish sense of humor, and although his album has been elaborately produced and excellently cast—Alison Steele sounds more like Lauren Bacall than anyone since the pubescent Andy Williams—everything falls flatter than a cement
is no clear-cut reason for this, but I suspect lack of promotion and exposure is a factor (King is backed by a well-oiled publicity machine). Let us hope that this album will rectify that situation and perhaps inspire some TV czar to book the two men together; two hours with the two finest blues singers in the land would be two hours well spent before the tube.

What a perfect match they are! Nothing they do in this extraordinary live studio session is undeserving of your attention. Drawing from past repertoires, the awesome duo takes us through such items as That's the Way Love Is, Chains of Love, I'll Take Care of You, Three O'Clock Blues, and My Own Fault, Baby, supplementing their musical reminiscences with verbal ones. The horns—probably an afterthought—are used with discretion, which is fortunate because they tend to disrupt the air of informality that characterizes the session. But no horns could possibly mar this remarkable reunion of two major blues stars.

RECORDING OF SPECIAL MERIT

KOOL AND THE GANG: Light of Worlds. Kool and the Gang (vocals and instruments). Street Corner Symphony; Summer Madness; Fruitman; Here After; You Don't Have to Change; and four others. DE-LITE DEP-2014 $6.98, © 8088-2014 $7.95, © 5088-2014 $7.95.

Performance: Fine and funky Recording: Good

Kool and the Gang can whip the soufflé crowd and bring to its attention music that could easily spark an interest in purer forms of jazz.

C.A.

JOHN LENNON: Walls and Bridges. John Lennon (vocals, guitar, piano); Jim Keltner (drums); Jesse Ed Davis (guitar); Klaus Voorman (bass); other musicians. Going Down on Love; Whatever Gets You Through the Night; Old Dirt Road; What You Got; Bless You; Scared; and six others. APPLE SW-3416 $6.98, © 8XW-3416 $7.98, © 4XW-3416 $7.98, © QSW-3416 $8.98.

Performance: Hard walls, rickety bridges Recording: Very good

Up here where I live, we call it "bumped out." Sorry if that's dated or slangy, but we've got too much of aging hippies' home—and perhaps you recall that it means feeling, as John puts it in one song, down and out. Everybody, just about, seemed to be feeling bumped out when this album showed up—not just the people I know here but some people I know in New York, and some the Sunday Times seems to know about, and some other people I heard about through friends in Texas. Everyone seemed to be having personal problems and money problems, and some were additionally plagued with animal problems. In my case, it's been the damned cats, knocking things over and generally carrying their selfishness to ridiculous extremes.

So here's old John, pretty generally bumped out himself, I suppose, having ironically good luck with the timing on this downer. I didn't even bother to blink when I heard on the radio that it was the "number one album in Boston" even before I'd heard my supposedly early review copy. I'd heard too many bummed-out stories by then. Of course there are a lot of references to John's Yoko problem in here, and who expected otherwise? Of course there is a good deal of honesty, but not what one would call real depth. And of course there are so-called attempts to cheer someone up, which of course are so pathetic—that poor Yoko thing at the end and that distasteful teenybopper ending grafted onto Surprise Surprise, especially—they actually help make it all more melancholy. Everyone in Boston, or anywhere else, probably knew what to expect. But you know what else is in here and isn't really surprising either? Jazz chords, for one thing. I believe John, you know, I believe him about how painful it all is and all that, but I don't quite believe what he once said about never listening to pop music to see what might be trendy. Plastic Ono fans should not despair about this, however, seeing as how they have enough despairing to do anyway, and the Plastic Ono sound still has its main characteristic... something like an electric guitar with
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In short, the ultimate system. We’re convinced that no matter what you think is the best today, it will make you disappointed with it. Don’t say we didn’t warn you.
silver strings coated with olive oil. Jesse Ed Davis’ presence makes for no measurable increase in funkiness. John seems also to have just about lost interest in melodies, although he’s still reshuffling some of his old ideas around, and his lyrics this time are a little more superficial and a little less incoherent than usual. But Whatever Gets You Through the Night and that Nobfry Loves You (When You’re Down and Out), which goes beyond being a rewrite, are great songs to moan “woe is me” to when everyone is so bummed out. So you’ll probably find the album a little more fascinating than you feel you should. That’s how I found it.

N.C.

BARRY MANILOW: Barry Manilow II, Barry Manilow (vocals and piano); orchestra. It’s a Miracle; Mandy; Sandra; Home Again; Avenue C; and five others. BELL 1314 $6.98. © 8301-1314H $7.98.

Performance: Okay
Recording: Good

While Bette Midler continues her vacation from performing, her musical director, Barry Manilow, is putting his time to profitable use. He has written a couple of very successful TV commercials, and his new album has a couple of tracks that might attract some attention: The Two of Us and I Want to Be Somebody. More to the point, everything else here is not good—but possibly a commercial success. Instead, he devoted himself to poetry, acting, however, he’s a solid craftsman with a flashy technique. As an album, his latest is not bad, not good—but possibly a commercial success.

P.R.

RECORDING OF SPECIAL MERIT
MIKE McGEAR: McGear. Mike McGear (vocals); instrumental accompaniment. Narton: Sea Breezes; What Do We Really Know?; The Casket; Rainbow Lady; The Man Who Found God on the Moon; and four others. WARNER BROS. 2825 $6.98. © M8 2825 $7.98. © M5 2825 $7.98.

Performance: Excellent
Recording: Excellent

Mike McGear is Paul McCartney’s brother. Over the years, he has gone to great lengths to disguise this fact, including changing his name, on the honorable grounds that he did not want to trade on his brother’s success. Instead, he devoted himself to poetry, acting, skit writing, and occasional recording as a part of the Scaffold, a satirical trio which became quite successful in England, although they never had quite the sweeping insanity of the classic British comedy groups. At any rate. Mike’s identity is firmly established, at least in his homeland, and he is no longer worried about being thought of merely as Paul’s brother. Now they have collaborated on an album, with Paul as co-writer and producer, and the results are excellent for all intents, as a matter of fact, this is the new Wings LP—they provide the backing—with Mike as lead vocalist.) McGear acquires himself very well, doing each tune as a mixture of singing and acting. The album is Mike’s show, make no mistake, but it also happens to be Paul McCartney’s most artistically cohesive effort—and the most admirable—since his departure from the Beatles. Given the overall quality of his other recent music (the “Band on the Run” album and the Junior’s Farm single), it looks like his protracted Mickey Mouse period may finally have come to an end. We should therefore be doubly grateful to Mike McGear, first for making an excellent and highly entertaining album, and second for giving his brother a little creative shot in the arm. Good show.

J.V.

RECORDING OF SPECIAL MERIT
DON McLEAN: Homeless Brother. Don Mclean (vocals and guitar); orchestra. Winter Has Me in Its Grip; La La La Love; Homeless Brother; Sunshine Life for Me; The Legend of Andrew McCrew; Wonderful Baby; and five others. UNITED ARTISTS UA-LA315-G $6.98. © EA315-G $7.98. © CA315-G $7.98.

Performance: Fine
Recording: Good

Don McLean was, I’m sure, the kind of little kid that used to drive adults crazy. He probably sat slightly to one side, listened to everything, finally gave his own opinion, and then left the room before anyone could catch him and choke him. Self-assured and self-approving as a marmalade cat, McLean still has the kind of personality that prompts people to ask, “If you’re so smart, why aren’t you rich?” Well, a few years ago, he wrote American Pie, and now he is, Rich and smart, that is.

His new United Artists album, Homeless Brother is another level-headed, soft-spoken, and intelligent collection of his songs. Oh, he does give Arty Glenn’s Crreg in the Chapel a run-through, assisted by the Persuasions, in as ripe a style as you are likely to find this side of an old American Bandstand show. But you know how people expect you to be silly every once in a while. And he does pick through George Harrison’s Sunshine Life for Me, but that’s just noblesse oblige.

More to the point, everything else here is pure McLean, which means super high quality. Wonderful Baby, the most joyous bit of carefree frivolity that I’ve heard in years, is quite possibly the best lullaby ever written. Then there is La La Love, a little ode to sex and the open road that only he could have conjured up. The most impressive band is The Legend of Andrew McCrew, a song about the mummified corpse of a hobo that was exhibited for years at local fairs (true, by the way, and just the other day Andrew was buried in a real grave in Texas after apparently having come down far enough in the world to have been shelved in someone’s basement for years; McLean’s song about him apparently provided the impetus for the interment). The title song, Homeless Brother, is the kind of strong, allusive work that probably only a McLean can bring off so successfully. It’s bitter and poignant, and yet somehow enormously compassionate and human.

All in all, this is a very fine album by one of the best observers and commentators of the Seventies. Get it.

P.R.

JONI MITCHELL: Miles of Aisles. Joni Mitchell (vocals, guitar, piano, dulcimer); L. A. Express (instruments). You Turn Me On I’m a Radio; Big Yellow Taxi; Rainy Night House; Woodstock; Cactus Tree; Cold Blue Steel and Sweet Fire; Woman of Heart and Mind; Blue; Circle Game; and nine others. ASYLUM AB 202 two discs $11.98.

Performance: Moving on
Recording: Good

Most of what Joni Mitchell does is so hard to do—even the relatively overlooked bits like the tricky dulcimer accompaniment she gives herself sometimes—that it’s always a little astounding to see her on stage actually doing it all at once without a net, without the crutch the studio provides. This live album is a faithful representation of her act, which relies far more upon natural, instinctive musicianship than on polish. The L. A. Express, pegged to Tom Scott’s reeds, sits out the middle portion, with Joni accompanying herself on guitar, piano, and dulcimer (one at a time), and I think most of us old-line Mitchell fanatics like
that part best. Scott and his crew have a distinctive sound—their backing for Carey is a bedazzling suggestion of something between the Grateful Dead and Steeleye Span—but there is so much nuance in Mitchell's voice and solo instruments, with her guitar tunings and her contrapuntal piano introductions and everything, that adding a full-band sound creates an overload. I feel slightly betrayed by her letting the band in on Rainy Night House, an old favorite that, I feel, should be just between Joni and me. Seven, counting the two of us, is a crowd. I'd also counsel dropping Woodstock, with its dated lyrics and its one redeeming chord progression...but the band does belong in it. For what that's worth, Scott himself is astute at weaving through Joni's vocals, and the interplay between the two of them, sans band, makes this the better recorded version of Real Good for Free.

Old friends will notice also that Mitchell's use of falsetto is less obvious than it used to be; her singing is smoother, but not yet ritualized. Her new material—there are two new songs at the end—seems to show the influence of working with a near-jazz band. Melodically it's disappointing, but the words of Love or Money have some truth in them about how immobilized we romantics can get, fretting about the little things attended to. Rusty Young's pedal steel is not seeming overly concerned about the latest death suffered by rock, just keeps on getting better at playing it. This album, like most of their better ones, is not very imposing, just even and consistent with a lot of the little things attended to. Rusty Young's pedal steel makes this the better recorded version of Rainy Night House.

**RECORDING OF SPECIAL MERIT**

MARI A MULDAUR: Waitress in a Donut Shop. Maria Muldaur (vocals); orchestra. If You Haven't Any Hay; Travelin' Shoes; Gringo en Mexico; Cool River; and seven others. Repri se MS 2194 $6.98, © M8H 2194 $7.98, © M5 2194 $7.98. © L9M 2194 $8.98.

*Performance: Witty and stylish*  
*Recording: Excellent*

Maria Muldaur has come on awfully long way since her days with the Kweskin Jug Band, and her new album is a consistently witty and stylish delight. Most of the tracks feature her as the sort of gum-chewing, hip-swinging vocalist that used to appear with the big bands in the Forties. But her gimmick doesn't quite end there with Linda Ronstadt (oh, so sexy, so stylish, so sure of herself), turning it into something even and consistent with a lot of the little things attended to. Rusty Young's pedal steel makes this the better recorded version of Rainy Night House.

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We'll be happy to describe our complete line of speakers in detail, and send you the names of the selected group of ADS dealers in your city. Write ADS, Analog & Digital Systems, Inc. (ADS & BRAUN Loudspeakers), 377 Putnam Avenue, Cambridge, Massachusetts 02139. Phone: 617/492-0970.

**THE SOUND OF ADS AND BRAUN**

**CIRCLE NO. 9 ON READER SERVICE CARD**

MARCH 1975

$6.98, © M8H 4968 $7.98, © M5 4968 $7.98.

*Performance: Dank Recording: Good*

As if things weren't depressing enough. Now we are faced with a new album by Donny and Marie Osmond, members of a family that seems to beget as casually and as profitably as Hapsburg cousins once did. Their territorial aim, however, is to capture some strange, squicky-clean subculture that worships and exalts The Cute (and, judging by their sales, they have certainly captured some kind of audience).

At any rate, this is an ear-bending and mind-fogging album, as dismal as the Osmonds' continuing popularity is dismaying. P.R.

**RECORDING OF SPECIAL MERIT**

POCO: Cantamos. Poco (vocals and instruments). Sagebrush Serenade; Susannah; Whatever Happened to Your Smile; High and Dry; Another Time Around; and four others. Epic PE 33192 $6.98, © PEA 33192 $7.98, © PET 33192 $7.98.

*Performance: Tight Recording: Superb*

POCO, not seeming overly concerned about the latest death suffered by rock, just keeps on getting better at playing it. This album, like most of their better ones, is not very imposing, just even and consistent with a lot of the little things attended to. Rusty Young's pedal steel makes this the better recorded version of Rainy Night House. (Continued on page 82.)
...it's time to let go of the Beatles once and for all.

We (14;x -`Beatles Keep Trying

None of the former Beatles have traveled their separate solo highways with consistent grace. John and Paul got most of the publicity because of their love-hate feud, but the forking in the separate paths of George Harrison and Ringo Starr is as determinedly absolute as the Lennon-McCartney schism was violently rancorous (and for that reason implicitly complementary). George, of course, has clung to the mystical Indian malarkey he got the Beatles into in the first place; it was perhaps the earliest sign of their impending downfall. He's a Believer in much the same sense as Lennon. But the trouble with believers, from George to John to Mahavishnu John McLaughlin, is that, like blues purists, they are not merely content to work within a closed system but they are adamant about it, and so they are condemned to repeat themselves in a finally suicidal manner. George having almost nothing to say in the first place, has contented himself with falling back upon music from familiar moulds, the sound serving on album after album merely as the stage upon which he trots out his little pasteurized-Hindu truisms.

In his latest release, “Dark Horse,” he's hired the same predictably professional stable of anonymous back-up Names that everybody’s employing these days—Tom Scott, Klaus Voormann, Andy Newmark, Willie Weeks, etc. (If you ever wonder why all the albums by fading Sixties superstars are starting to sound identical, take a gander at the personnel.) The material is just as predictable. Hurry’s on Tour, the instrumental opener of both the album and George’s recent tour, is glossy lounge music, and after it he is compelled to come up with some new words to reassure us that he's anything more than a sideman himself. Things improve somewhat with Simple Shade and So Sad—in fact, the lyrics of Shade suggest that Harrison’s groveling at the feet of Sri Krishna may actually spring from the same sort of misanthropic impulse that made so many of his early Beatles songs (Don't Bother Me, etc.) downright hostile.

There is some turbulence beneath the cloying spirituality: “The action that I’ve started/Sometime I’ll have to face/My influence in motion/Rebounding back through space.” Hmmm. Can it be that George is somehow nervous about neo-Beatles outfits like the Raspberries? In any case, throughout the rest of the record he's in full retreat, for most of the other songs in the album are simply hymns to Krishna, and those of rather erratic quality. Maya Love, for example, rocks along in a Get Back groove, but it would be vastly more tolerable without a lyric sheet telling us that Maya Love (which, behind its monoric play on words, George actually stole from McCartney, not Sri Krishna) is “like the sea/day/wind/rain/stream/flowing through this cosmic dream.”

George's new stuff is, at least, inoffensive if you throw away the lyric sheet, forget the subject matter, and just let the music eddy along. Ringo’s “Goodnight Vienna,” on the other hand, can be neither enjoyed nor ignored—it’s downright obnoxious, and provides a landslide of incriminating evidence in support of what many of us began to believe against our will years ago—namely, that Ringo is a jackass. His oafishness, his aw-shucks incompetence are no longer charming; in fact, he may at this point be the most irritating ex-Beatle around. He’s had his moments since the empire toppled (Back Off Boogaloo), but without his former cohorts to brace him, he's become a bad joke that's crossed the line into insult. Essentially what he's done, beginning with his last album and continuing unbearably with this one, is to get pretentious about his mawkish hi-folks-I'm-a-rank-amateur-so-what routine, with the result that it's become annoying in much the same way as Sonny Bono's Ché-less pratfalls.

Ringo has had help in this offense against nature, of course: a sizable slew of the usual ubiquitous plodders, one helluva roster of Big Names who don't mind sitting in for just a lark or two, and, most important, Richard Perry, who may be the single most depressingly facile producer in pop music today. Perry spe-
cializes in taking people who have begun to languish in the middling-straight MOR leagues and wrapping them in enough Peter Max musical tissue to make them palatable to some invisible audience of thirty-eight-year-old greenhorn pot smokers who apparently can't connect with Chicago or John Denver and so want their Andy Williams or Barbra Streisand nudged just a silly millimeter or two in the direction of Relevance.

Perry is a producer's producer, which means he can easily swamp the performer who lacks the chops or personality to rise above his cutey settings. The joke of his work in the "Ringo" album was that this schlub was being given a Busby Berkeley musical fairyland to kitsch around in, and you were supposed to love the irony and celebrate the fact that Ringo was no longer an embarrassment. Whether they got the irony or not, the public went for the setup, and "Ringo" yielded three hit singles.

In "Goodnight Vienna" it looks like everyone involved has begun to take the joke seriously, as if it was never a joke at all, and from the sound of it, it too contains several potential hit singles. Of course, hit potential and total obnoxiousness have never been mutually exclusive, and this is one of the most idiotically irritating albums in recent memory. Everything has been ground out to a formula which produces relentlessly, unbearably Happy! music whose smile is frozen in a cherubic affability rigid enough to be totalitarian.

The only break in this musical death louse is Husbands and Wives, in which for the first time Ringo actually sounds like he means what he's saying. It's a Bobby Goldsboro-esque reading of a Roger Miller song, and it works, perhaps because of the relative lack of show-biz glitz, perhaps because Ringo actually seems to relate to this kind of schmaltz himself. Maybe he'd do best as a soppy c-&-w crooner like Freddie Hart.

The whole album reminds me of a metal-flake, glow-in-the-dark music box, and it's as hard to take in its arrogance as Harrison's is in its sniveling genuflections. Along with Lennon's recent and dismal "Walls and Bridges," these two albums suggest that perhaps it's time to let go of the Beatles once and for all, admit that their magical mystery pose was hollow in the first place, and accept whatever we can stomach of this (and perhaps, retroactively, much of their collective output) as Muzak, plain and simple. At least Paul McCartney writes good movie soundtracks.

--Lester Bangs

GEORGE HARRISON: Dark Horse. George Harrison (guitar, sitar, vocals); other musicians. Huri's on Tour (Express); Simply Shady; So Sad; Bye Bye, Love; Ding Dong Ding Dong; Dark Horse; Far East Man; It Is "He" (Jai Sri Krishna). APPLE SMAS 3418 $6.98, 0 8XW 3418 $7.98, © 4XW 3418 $7.98.

RINGO STARR: Goodnight Vienna. Ringo Starr (vocals, drums); other musicians. Goodnight Vienna; Occapella; Oo-Wee; Husbands and Wives; Snookeroo; All By Myself. APPLE SW 3417 $6.98, © 8XW 3417 $7.98, © 4XW 3417 $7.98.

IF THE SUPREME JUDGES of Jack Daniel's Whiskey don't always agree, the minority rules.

These gentlemen taste our whiskey as it comes from 12-foot vats of tightly packed, hard maple charcoal. And even if only one taster says the charcoal needs changing, the vat is emptied and changed. What's more, the last batch of whiskey through is put through again. That way, we can be sure not even a minority of our friends will ever find fault with Jack Daniel's charcoal mellowed whiskey.
and this is a very pleasing collection of ballads which, as usual, could stand improvement, but Tim Schmitt has made up a nice slow one called Whatever Happened to Your Smile, which is just as pastel-sad as it ought to be with a title like that, and Paul Cotton has put some wrinkles, mainly melodic, into two or three, his Susannah having words that stand up also. But the chief rouser-upper is Young's Sagebrush Serenade, a two-speed job that is half vocals, half instrumental break, in that order, the break being one of those showy ones that wring in fragments of other songs and make them all fit. What they fit is explained in the title, and the thing, one might say, gets the album off to a jack-rabbit start.

It slows and sutters some before it's over, but selective inattention to the lyrics should pull you through all right. The overall sound — Poco's overall sound is still somehow more overall than most groups' — is even-handed and yet ardent, not rushed but somehow driven. Now don't tell me you couldn't use some of that.

N.C.

DORY PREVIN. Dory Previn (vocals and guitar); orchestra, The Obscene Phone Call; The Empress of China; Atlantis; Brandon; Coldwater Canyon; and five others. WARNER BROS. BS 2811 $6.98.

Performance: Shrell Recording: Good

Still stamping her foot at life in a world-she-never-made and endlessly re-opening old wounds, Dory Previn continues her long, shrill scream of anger and resentment in yet another album. She's exhausting to listen to, and her recital is about as inviting as bed sheets made out of cold, raw veal. That something is bugging Ms. Previn has been all too obvious for years, and that her bitter ruminings in song after song have an eerie touch of mordant triumph in the manner of Eliza's Just You Wait (vocal) is to dabble in the Gertrude Hart rhythm is three notes, and that he sings all three range is three notes, and that he sings all three

Performance: Overproduced Recording: Very good

Hard luck and trouble gone be the death of me. Before I even received this album, and a long time before this could be printed, Bonnie Raitt was out publicly apologizing for it. The only thing I can do is try to put into perspective where the apology should be coming from — 'where' because it's an area, the vicinity where music and business usually clash, and Bonnie doesn't occupy a very large percentage of the space there, I would guess.

I suppose she wishes she'd exercised more control, especially over the arrangements — which, in this case, would have meant keeping producer Jerry Ragovoy from exercising so much control over them, letting things loosen up. They'll never make just another consumer product out of that great voice of Bonnie's, and it seems strange that this isn't obvious so far. Compounding the present depression is the fact that the song selection isn't so hot, and that he sings all three

Performance: Excellent Recording: Good

Ismael Quintara is a vocalist very much in the style of Tito Rodriguez and Cheo Feliciano — he shows good taste in selecting his models — and this is a very pleasing collection of ballads...
from this album that Lou Reed is an evangelist sent by the Great Robot in the Sky. In which case, what can they know of life, and what can life know of them? N.C.


Performance: Carny barking
Recording: Very good

If Todd Rundgren's name were not on this LP it could, with minor changes, pass as a contemporary jazz album—which is not meant as praise. There is a great deal of electronic whacky-whacky here, doodles of clever tape splices, and extended samples of how technically proficient musicians can play anything they've had a chance to study. But there's absolutely no music being made. None at all.

Todd Rundgren is a whiz and all that, and his tricks are flashy. I was going to say that flashy stuff can't pass itself off as music forever, but dammit. I'm afraid it can. Ah well. Rundgren seems to want to be a showman rather than a musician. I guess vaudeville isn't his tricks are flashy.

MONGO SANTAMARIA: Live at Yankee Stadium. Mongo Santamaria (congas); instrumental and vocal accompaniment. Dr. Gaspa; Cousin Jody; Cowhide; Black Dice; Leath; Naked Files XVX-26 $5.98.

Performance: Good
Recording: Sufficient

There's nothing startling going on here. Mongo Santamaria, the big and best daddy of Latin percussionists, leads or sits in with several reliable groups of jazzmen. The horn section plays American, and the rhythm section is as delicious as a home-cooked pot pie. The performances are fine, the recording is okay, the crowd had a good time, and it was all very nice. Nobody did anything wrong; nobody did anything exceptional. Why should they? If you are performing at the bottom of a bowl of sound like Gringo Stadium, minus the intimacy of a club where you can look at girls, less the pressure of a recording studio where you play well just for spite, why do anything more than just be good, give a show, pick up your money for the night's work, and go home? To hell with "live" albums.

J.V.

SANTANA: Borboletta. Carlos Santana (guitar and percussion); other musicians. Practice What You Preach; Mirages; Borboletta; Canto de Los Flores; Life Is Anew; Give and Take; and six others. COLUMBIA BL 33135 $6.98. 8 PCA 33135 $7.98. 8 PCT 33135 $7.98. 8 CAQ 33135 $8.98.

Performance: Smug
Recording: Very good

Carlos Santana started his career by watering down Latin rhythms and playing as though his hands were Blood, Sweat & Tears without the horns, vocals, or rhythm section, and he has since gone on to embrace certain elements of jazz. He has also thrown in some New Delhi hoodoo and combined it with the pentecostal traditions of Latin culture, arriving at what George Harrison arrived at after messing around with the swamis—an amalgam of the worst elements of Eastern and Western religious dogma, in which the convert bides his faith on smugness and moral superiority.

Santana is still playing the same guitar solo...
he was playing five years ago, but now he is calling in more hired help to disguise it. Here he tries a few songs in the Sly Stone manner and moves closer to the hybrid jazz that has come along in recent times as jazz musicians, envious of rock-and-roll's popular success, have made some striking concessions. Santana also calls upon the Brazilian percussionist Airtto Moreira and his wife, jazz vocalist Flora Purim, to open and close the album with brief pieces that are more interesting than anything else here. Still, there is no real music here. There is only the appearance of music, following the current rule that good appearances are worth everything — hell, they are everything. For carefully crafted mediocrity, Santana has everybody beat.

J.V.

NEIL SEDAKA: "Sedaka's Back." Neil Sedaka (vocals, piano); instrumental accompaniment. Sad Eyes; Little Brother; That's Where the Music Takes Me; A Little Lovin'; The Immigrant; Solitaire; and six others. ROCKET MCA-463 $6.98. © MCAAT-463 $7.98. © MCAC-463 $7.98.

Performance: Tinny
Recording: Very good

Neil Sedaka is just coming off his first American hit in eons, but apparently he was already having some success in England. This album, with its ardent endorsement by Elton John (who owns the Rocket label), is a collection of tracks from earlier Sedaka LP's released in Britain. I do not normally keep up with the doings of personalities like Neil Sedaka, Adlai Stevenson III, or Judy Garland's last husband. So I will take Elton's word that Sedaka has picked up his career where it fizzled out some time in the early Sixties. The baby-faced Mr. Sedaka still has his baby-face voice and prissy, cloying style. There is some skill evident in the construction of his songs (listed as being written by him and "Cody," otherwise unidentified), but whenever Sedaka the vocalist tries to be funky or meaningful he winds up being ludicrous.

Those who remember him as the blunter of teen laments may be shocked at Little Brother, wherein he relates a boy's efforts to get rid of his sibling first by sticking him in the oven and later by dropping him into the bears' cage at the zoo. Then there is The Immigrant, about how the bad old U.S.A. has closed its doors to those seeking liberty. This is the cheap-shot kind of "social consciousness" hokey that well-dressed and comfortably employed entertainers like to throw out to show that they're Serious Artists and not mere vaudevillians.

Elton John, who derived some of his own style from Sedaka—his records, like Neil's, are very well produced but invariably boxy and square and mechanical—is thrilled by the resurrection of his hero on the hit charts. Others may be less so.

J.V.

FRANK SINATRA: "The Main Event Live." Frank Sinatra (vocals); orchestra, Woody Herman cond. The Lady Is a Tramp; Let Me Try Again; Angel Eyes; Bad, Bad Leroy Brown; My Way; and six others. REPRICE FS 2207 $6.98. © 1 FS 2207 $7.98. © 1 FS 2207 $7.98.

Performance: Not good
Recording: Fair

Probably everyone who was interested (not as many as predicted, obviously, since the ratings were a big disappointment) saw Sinatra's one-man show from Madison Square Garden on television last October, and probably everyone for whom Old Blue Eyes can do no wrong has this album already. But the telecast seemed a weary, overproduced, ponderous hour, with Sinatra sawing and straining to charm the audience of screaming thousands—while what the TV lens revealed was merely a portly, sixtyish, wise-talking man who looked like the owner of a successful aluminum siding business who does Sinatra imitations. So, too, the recording of the show will be listened to through a haze of memory by many, though in reality it has a ventriloquial quality. Some thing similar happened in Garland's last few recordings, but that I understood. She needed the money. What's Sinatra's excuse? P.R.

ROD STEWART: Slow Flux. Steppenwolf (vocals and instruments). Straight Shootin' Woman; Justice Don't Be Slow; Gypsy War Blues; A Fool's Fantasy; Smokey Factory Blues; Children of Night; and four others. MUMS PZ 33093 $6.98. © PZA 33093 $7.98. © PZT 33093 $7.98.

Performance: Dated
Recording: Excellent

Steppenwolf broke up around the turn of the decade after notable success. Lead singer John Kay went off to run for political office and to make a solo album; record buyers stayed away from the polls, and voters stayed away from the record stores. The reunion of the band seems to have come from (1) economics: (2) a cooling of whatever fevers made them disband; and (3) a longing to get back in the big time.

The reconstituted Steppenwolf is still energetic and aggressive. At times here they recall the days they occasionally got off a great single. But they are dated by their attitude. Things move very quickly these days, and what worked for the middle and late Sixties doesn't necessarily work now. There have been scads of blues-rock bands featuring a growly singer fronting prominent organ and guitar since Steppenwolf's time. The group is also dated by their visions of Armageddon. Mr. Kay's strident posturings on such subjects as "America" and the band's fascination with violence are kids stuff in a nation which.

ROD STEWART: a freak, off-the-wall, one-shot deal?
during recent events, revealed how deep its maturity is.

The album might well have been titled "Music for Aging Radicals Now Doing Social Work or Growing Vegetables Who Think That, on Balance, the Symbionese Revolution Army Was Counterproductive." Steppe-

wolfs time has come and gone—and this album makes one wonder whether their time was ever really there in the first place. J.V.

ROD STEWART: Smiler, Rod Stewart (vocals); Ron Woods (guitar); Spike Heatley (bass); Pete Sears (piano); other musicians.

JOHNNY WINTER: John Dawson Winter III. Johnny Winter (guitar, vocals); instrumental accompaniment. Stranger; Sweet Papa John; Mind Over Matter; Roll with Me; Love Song to Me; Pick Up on My Mojo; and five others. MERCURY SRM 1-1017 $6.98. 2 MCR4-1-1017 $7.98. 2 MCR5-1-1017 $7.98.

Performance: Average Recording: Very good

Poor Johnny Winter. Back in 1969, with an immense amount of publicity, he was presented as the albino hope of rock-and-roll. He was signed to a recording contract for $300,000, which was given as proof of his talent. His manager, a man with an eye for theater, required that the president of the label drive several miles from Manhattan for the signing ceremony in a rustic cabin.

So what happened then? Did the world fall down when the first Johnny Winter album was released? Did thousands of teens hurl themselves off building tops because they weren’t able to get to the record stores to purchase a copy? Alas, no. What happened is that Johnny Winter’s publicity came at a time when there were so many messiah’s that another one didn’t make much difference. He was not, in subsequent years, hailed as the godhead he was first touted to be—but then he himself never said he was. So what we have had, since those halcyon days of 1969, is a series of really very average albums, albeit well produced, showing a facile guitarist without much imagination playing licks that everybody—but everybody—has been playing for some time. Winter is the outstanding figure of rock antichrist. Almost everything in this current album can be described as loudmouth vocals and average guitar solos. Only in two tracks—Stranger and Sweet Papa John—do we get any indication of a different Winter, one who might have been. Here he drops the buff-puff nonsense and actually plays a little. But the rest of it is just show biz. Too bad, too bad.

FRANK ZAPPA/MOTHERS: Roxy & Elsewhere. Frank Zappa (guitar, vocals); George Duke (keyboards, synthesizer, vocals); Tom Fowler (bass); Ruth Underwood (percussion); other musicians. PENGUIN IN BONDAGE: Pygmy Twylde; Dummy Up; Village of the Sun: Echidna’s Arf (Of You); and five others. DISECTRACT 2DS 2202 two discs $9.98. 2 D28 2202 $10.97. 2 D25 2202 $10.97.

Performance: Zapparoony Recording: Live with overdubs

Frank Zappa, the Franz Liszt, Jonathan Swift, and Spike Jones of the pop avant-garde, is the standard bearer of whatever is left of that theatrical school of rock music which is at once commedia dell’arte zaniness, social...
... it is Ives' ingenuities that stick in the mind.

The Sound Of America Singing

The awesomely ambitious Vox anthology called "America Sings" has just weighed in with six very complete sides (one of them runs thirty-four minutes and forty-seven seconds!) titled "The Great Sentimental Age" (it is actually Volume II—Volume I, not yet released, is called "The Founding Years"). The period covered is roughly the second half of the nineteenth century, and the forces employed are formidable: the Gregg Smith Singers, the New York Vocal Arts Ensemble, four string soloists, a flutist, a guitarist, four featured vocalists in addition to the choruses—the whole thing recorded in the Renwick Gallery of the Smithsonian Institute in Washington, D.C., with the gallery's "newly reconstructed 1873 Steinway" played by pianist Stephen Crout.

As with most such encyclopedic ventures, the value of the collection would seem to be more for the library shelf than for the home record cabinet, yet there is much here that is entertaining for the casual listener, and the notes by Gregg Smith make for fascinating as well as informative reading. The two great giants that overshadow all the other songwriters of the period are Stephen Foster and Charles Ives, but also represented are such popular composers as Will S. Hays, O. B. Brown, Henry Work, E. N. Catlin, and Walter Kittridge, no one of whom, perhaps, ever expected to find his ballads and ditties so honored.

The first side is devoted to Civil War songs ranging from the swagger of Marching Through Georgia and The Battle Cry of Freedom to the touching strains of E. N. Catlin's Comrades Lay Me Gently Down and the surprisingly antiwar sentiments of Walter Kittridge's Tenting on the Old Campground. Foster is represented on this side only by Willie Has Gone to the War, but as sung byzzo-soprano Alexandra Ivanoff that song is just about the most distinguished item in the group—unless you count Charles Ives' A Civil War Memory, a medley of period tunes which wasn't composed until 1917.

Side two is devoted entirely to love songs and ballads by Foster. We have been hearing most of them all our lives, but what distinguishes this recital is the deference shown to the composer's own arrangements and his suggested approaches to performance. The campaign and comedy songs that follow provide a welcome relief from the gentler sentiments; "Buchanan is our candidate and we'll put him in the White House"—lines like that are set to vigorous, bouncing tunes. There is also a whole skit of a number called The Final Sweep Out. Mr. Hays' Put the Right Man at the Wheel, along with a couple of nonpolitical comic numbers that didn't exactly move me to fall down laughing. Of the lot, only the tune of Ives' A Son of a Gambolier is likely to be familiar. There are more comic and love songs, including five by Ives topped by his remarkable Romanzo di Central Park of 1900, a segment entitled "Good Times and Dance," and finally, on side six, thirty-four minutes of "Nostalgia." It is here, at the end, that we run into all those sticky nineteenth-century ballads dealing with blighted love, hardships, misfortunes, and early sorrow that were the curse of the age, from the music of Foster to, in England, the "serious" side of Sir Arthur Sullivan.

When the records have all been played, it is Foster's melodies and Ives' ingenuities that stick in the mind. Of course we know just what to expect of Foster, having imbibed his ballads with our baby food, but one never knows what to expect of Ives. His manuscripts are rife with silly (or snide) marginal notes and comments, and his scores are not always to be taken at face value. A seemingly sentimental piece like In the Alley turns out to be a take-off on just the sort of maudlin material that coaxed tears at recitals toward the close of the Victorian age. The compilers have deliberately included some songs Ives did not write until his later years—Down East in 1919, Old Home Days in 1920—but which deal poignantly with his memories of growing up in New England toward the close of the nineteenth century.

Let me write a nation's songs," some pundit has said, "and I care not who makes its laws." Playing this long concert through, I began to see what he meant. The music so lovingly assembled and respectfully performed and recorded here provides boundless insights into the period it represents: the swagger of patriotism and the cheerful cynicism of political lampooning, the wide-eyed love songs and the sad-voiced requiems, the rude energy that began to appear in our ballads as balladeers began to look less and less frequently over their shoulders at Europe for inspiration and stylistic guidance, and the burgeoning genius of a composer like Ives who more than a century ago stood apart from his time—and much of whose music, indeed, is still waiting for our own age to catch up.

—Paul Kresh

Zappa's mixture of funkiness and America-abased with the most precise sort of performance and production has led him to a record-absurd with the most precise sort of performing-theatricality of rock performance.

Jazzy musical developments, and a rousing can life—a dippy blues riff, some elaborate lowbrow trip. Zappa has perfected a kind of critique, and high-class musicianship on a rock-and-roll tone poem, with a surrealistic source of inspiration is Hollywood-America. The best material here mostly on side three, including a brilliantly orchestrated song about cheapie horror movies. an ode to ex-President Nixon, and a 1965 song about watching the news on television, all strung out as a continuity—is California America bottom-side-up.

The fact that Zappa could so easily include a 1965 song demonstrates that he has not changed very much in a decade. But I don't think that makes the best of what he has to say less good. Everything is as tight, as mean, as lunatic, as precise as ever, and every bit of craziness is carefully in place.

The ever-changing Mothers are particularly strong here. Zappa has a very good lead vocalist in Napoleon Murphy Brock—who also plays tenor and flute with the excellent horn section—and a wonderful mallet percussionist (obviously classically trained) in Ruth Underwood. Zappa's hand is, of course, everywhere, and, frankly (pardon the pun), all he really lacks is self-criticism. Anyway, for the price of a double album we get one good solid album's worth of stuff, which comes out to a better percentage than most anything else these days.

Eric Salzman

ZION HARMONIZERS: You Don't Have to Get in Trouble. Louis Johnson, Howard Bowie, John Hawkins, Henry Warrick, Allen Butler (vocals); Henry Warrick (guitar). Call on Jesus; Blind Barabaj; Build Me a Cabin in Gloryland; You Better Leave That Lie Alone; How Great Thou Art; Ezekial [sic] Save the Wheel; Blessed Quietness; and seven others. FLYING FISH 002 $5.98

Performance: Affable Recording: Good

The Zion Harmonizers are a group organized in New Orleans a quarter of a century ago by two ministers. Reverend B. Maxon and Reverend Russel Parker, who later gave up their own harmonizing to concentrate on more austere aspects of the ministry. Meanwhile, the Harmonizers gathered such new members as manager and lead singer Sherman Washington, tenors Louis Johnson and Howard Bowie, bass John Hawkins, and baritones Henry Warrick and Allen Butler. Once a chorus of four who sang strictly a cappella, they have yielded to the demands of the times and added a guitar, which Mr. Warrick strums with vigor. And it is with vigor and much good cheer that the Zion Harmonizers harmonize here on their very first record, in gentle, simple numbers urging their listeners to "call on Jesus," remember Ezekiel and that great big wheel and other instructive incidents from the Bible. eschew the company of liars ("Better leave that liar alone," they chant in warning), and stick to the straight and narrow. They are never hard-driving or overbearing, bring humor as well as good humor to their ballads (their version of Didn't It Rain is just about as good as anything else I've heard), and so have produced a record that wears well on the ears as well as the nerves. I was particularly impressed by their sweet, soft-spoken version of The Lord's Prayer.

P.K.

(Continued overleaf)

FRANK ZAPPA AND THE MOTHERS OF INVENTION

The Franz Liszt, Jonathan Swift, and Spike Jones of pop
RECORDING OF SPECIAL MERIT

GEORGE BENSON: Bad Benson. George Benson (guitar); orchestra, including Wayne Andre and Garnett Brown (trombones), Kenny Barron (piano), Phil Upchurch (guitar and electric bass), Ron Carter (bass). Take Five; My Latin Brother; The Changing World; and three others. CTI CTI-6045 S1 $6.98, CT-6045 $6.95, © CTC-6045 $6.95.

Performance: "Badder than bad"  
Recording: Excellent

If there is such a thing as a bad Benson, I haven't heard it. That is, "bad" in the old sense of the term. In modern parlance, the term "bad," when applied to a performance, is roughly equivalent to "mean" a few years back. In that sense, George Benson plays a BAD guitar indeed, Don Sebesky writes BAD arrangements, and this is one very BAD album, perhaps even wicked.

To come straight to the point, George Benson is the sovereign of today's jazz guitarists; I was impressed ten years ago when I wrote the liner notes for his first album, and he has never let me down. Sure, some of his albums—particularly those on Verve—have suffered from unsuccessful attempts at commercialization, but Benson himself has always come through without resorting to electronic trickery.

Rather than single out any track here, I will single out this album as one of Benson's best and baddest. Do your ears a favor.

C.A.

CHICK COREA AND RETURN TO FOREVER: Where Have I Known You Before. Chick Corea (keyboards and percussion); Al Di Meola (guitar); Stanley Clarke (bass); Lenny White (drums and percussion). Vulcon Worlds; Beyond the Seventh Galaxy; Where Have I Loved You Before; and five others. POLYDOR PD 6509 $6.98, © 8F 6509 $7.98, © CF 6509 $7.98.

Performance: Integrity lost  
Recording: Excellent

Armando "Chick" Corea makes no bones about it. In a blurb that accompanied my review copy of this album he states that he and his musicians have "changed from being art-for-art's-sake musicians into musicians who want to contact and communicate with audiences." If this album reflects what "audiences" want, as opposed to what Corea has offered in the past, we are indeed in a sorry state. Corea himself provides some blessed relief from electronic effects with three brief solo piano pieces, but the selections featuring the group—all first-rate musicians—are a study in misunderstood commercialism. I'll take art for art's sake over pap for money's sake any time.

C.A.

GIL EVANS: The Music of Jimi Hendrix. Gil Evans (piano). Foxey Lady; Castles Made of Sand; Gypsy Eyes; Voodoo Chile; and five others. RCA CPL 0667 $6.98, © CPS1-0667 $7.98.

Performance: A let-down  
Recording: Dull

Gil Evans is unquestionably one of the most inventive and brilliant arranger/composers around, and Jimi Hendrix—who died in 1971—was one of the most inventive guitarists to emerge on the rock scene. Evans and Hendrix were scheduled to record together in 1971, but Hendrix died a week before their preliminary meeting. Last year, however, the Gil Evans Orchestra devoted a Carnegie Hall concert to the music of Jimi Hendrix, and what we hear on this album is the same program, which was recorded a few days later. The planned combined effort could have resulted in an extraordinary session, but Hendrix was a rather ordinary composer whose improvisational skills far exceeded his writing talent. Bearing that in
mind, consider the fact that only two arrangements in this set were actually written by Gil Evans. Thus, what started as a promising idea has resulted in plodding arrangements of undistinguished compositions further handicapped by remarkably lackluster recorded sound.

C.A.

JAN GARBAREK-BOBO STENSON QUARTET: Witchi-Tai-To. Jan Garbarek (soprano and tenor saxophones); Bobo Stenson (piano); Palle Danielsson (double bass); Jon Christensen (drums). A.I.R.: Hasta Siempre, Kukka; and two others. FCM 1041 ST $6.98.

Performance: Cold Trane
Recording: Excellent

I presume this group is Norwegian, but all I really know about the Jan Garbarek-Bobo Stenson Quartet is what the music on this record tells me: Scandinavia has come a long way, musically, since peasants tapped their rugged toes to a farmer's fiddle or a mariner's accordion. The music of this quartet is, of course, no more Scandinavian than, say, a Cliburn performance of Chopin would be American, but just as Aksel Schiötz masterfully interpreted Schubert, so the Garbarek-Stenson group has captured an essence of current Afro-American music as originally presented by the John Coltrane Quartet. They add some flavors of their own, as in Hasta Siempre, which contains a tango segment in the cabaret style of pre-Nazi Berlin, but there is little else here that is original. It's Coltrane without warmth, and I suspect that, in the final analysis, Schiötz probably came closer to Schubert.

C.A.

MICHAEL HOWELL: In the Silence. Michael Howell (guitar); Bennie Maupin (tenor saxophone, saxella, bass clarinet, alto flute, piccolo); Henry Franklin, Glenn Howell (bass); Ndugu, Kenneth Nash (drums, percussion). The Call: Ebon Kings; Althea; Don't Explain; and three others. MILESTONE M-9054 $6.98.

Performance: Uninspired
Recording: Very good

San Francisco guitarist Michael Howell is new to me. All I really know about him is what I have heard on two recent Art Blakey albums and on this set. Frankly, none of it impresses me. A technically facile Wes Montgomerie disciple, Howell plays what now must be termed an old-fashioned electric guitar without employing any of the electronic accoutrements that mask the shortcomings of many of his colleagues. Thus we get an honest picture of his abilities, and we hear that he can play nice, clean notes and chords in logical progression, but, listenable as the result is, it suffers from lack of invention. Of the two bass players, Glenn Howell—heard only on two tracks—is the better man for Michael Howell, Bennie Maupin (of the Herbie Hancock group) has some good moments, and the two drummers work exceedingly well together, but only on the last selection, Think On Me, does the group seem to get off the ground.

The case is by no means closed, however. Less auspicious beginnings have, in the past, ultimately led to outstanding careers. C.A.

RECORDING OF SPECIAL MERIT

MILT JACKSON: Olinga. Milt Jackson (vibraphone); Jimmy Heath (soprano and tenor saxophones); Cedar Walton (piano); (Continued on page 91)

MARCH 1975

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CIRCLE NO. 27 ON READER SERVICE CARD

89
Morath Sings Berlin

Sixty-two years ago Irving Berlin wrote about the ragtime craze of that era that had everybody, "Italian opera singers [who] Have learned to snap their fingers," even "Dukes and Lords and Russian Tsars/Men who own their (own!) motor cars," caught up in its compulsive beat. The resulting mental picture of Nicholas and Alexandra finger-snapin' their way around the Peterhof palace (to, perhaps, The Grizzly Bear?) remains as irresistible all these years later as The International Rag itself. Chalk it up to the genius of Irving Berlin, the meticulous and beautifully realized performances of Max Morath, the cleverly idiomatic arrangements of Manny Albam, and an exceptional production by Seymour Solomon that a new Vanguard release is a continuous, finger-snapping delight right now in 1975.

Irving Berlin's work, as Robert Kimball points out in his informative and evocative liner notes, "expressed his times as eloquently and unerringly as the poetry of Walt Whitman and the songs of Stephen Foster gave voice to the aspirations, joys, and sorrows of mid-nineteenth century America." Berlin's astonishing string of hits continued well into the Fifties—Call Me Madam was probably his last great score—but the songs in the Morath album date roughly from 1910 to 1928. Among them are such classics as Blue Skies, All Alone, and When the Midnight Choo-Choo Leaves for Alabam' along with such hits of fooling around as the obligatory Irish-mother song, They Were All Out of Step but Jim; the star-vehicle song, Let Me Sing and I'm Happy (written for Al Jolson); the nostalgic song, Crinoline Days; and three gorgeous commercial rags, The International Rag, The Grizzly Bear, and Everything in America Is Ragtime. The message of these songs scarcely needed a Western Union to deliver them: they were pure commercial entertainment contrived by a master. That such seeming gossamer can achieve when he bothers to concentrate on the recording itself and not just the control-room dials.

The rattle of the great Ragtime Bandwagon has inspired so much bad music lately that it is a pleasure to come across an album as filled with accomplishment as this one. No, it has little to do with the real rag, that sad-sweet, often pensive, at times moon-drenched, at times jaunty and rollicking style that is so completely, uniquely American. It is a tribute, not a rip-off. Everything else I hear these days that calls itself ragtime sounds rather like the soundtrack from an old Mae West movie. You know, the part where she's sitting around playing bezique with some reason other than that it is a pleasure to come across an album as filled with accomplishment as this one.

Thus, even though it is called "The Ragtime Years," this album has little to do with real ragtime, but everything to do with Berlin's gloriously vital perception of a popular rage.

Max Morath has been singing ragtime and accompanying himself on the piano in fine music-hall style for years on recordings and on TV. He does the rag with here with an up-and-at-em gusto that puts him in the same class as Judy Garland and Al Jolson, the only two other performers I've ever heard who had the natural ebullience to slam the songs across while at the same time wittily putting the audience on with their Reuben-Reuben characterizations. Morath is a bit subtler dynamically, but what he lacks in decibels he more than makes up for in enthusiasm and skill. The real surprise here, and a lovely one, is his work on two Berlin masterpieces, All Alone and Blue Skies. For some reason I associate the first with George Burns and one of his "recitals," and the second with Bing Crosby, singing it as if he had forgotten to take the pipe out of his mouth. Morath does them both slowly, intimately, and superbly. In All Alone he reads into the lines a wistful pathos and yearning tenderness that I had no idea were there, and in Blue Skies he conjures up a bittersweet mood that has certainly always been in the lyrics but that escapes most singers. Morath is so good in these two songs that I think he ought to give some serious thought to bringing out a whole album of ballads.

Manny Albam's arrangements here are all splendid, catching handsomely the three styles of the era: the marching band, the theater orchestra, and the salon sound. My only quibble is with the sound of the strings in the "salon" numbers: they sound anachronistically sharp, with the bee-like hum of a swarm of Mantovani. And Vanguard, a company with a deservedly high reputation in these matters, has produced a sound that is as awesomely transparent and as intelligently warm as only a really good producer can achieve when he bothers to concentrate on these matters, has produced a sound that is as awesomely transparent and as intelli-

Everything in America Is Ragtime. The International Rag, The Grizzly Bear, and Blue Skies; The Circus Is Coming to Town, Crinoline Days; Let Me Sing and I'm Happy; Mr. Jazz Himself; When the Midnight Choo-Choo Leaves for Alabam'. Van-

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Ron Carter (bass); Micky Roker (drums); other musicians. Lost April; The Metal Metter; The Steel Bender; I'm Not So Sure; and two others. CTI CTI 6046 $6.98, CT 6046 $7.95, CTC-6046 $7.95.

Performance: The very best of vibes
Recording: Excellent

If Lionel Hampton is the Coleman Hawkins of the vibraphone, the man who established it as an instrument of jazz, Milt Jackson is the Lester Young who took it into its next phase and the John Coltrane who gave it its final touch of modernity. Since 1945, when Dizzy Gillespie brought him out of Detroit, Jackson has been the main source of inspiration to virtually all modern vibraphone players, and, for the past twenty-three years, a very important fourth of the recently disbanded Modern Jazz Quartet. Luckily, Milt Jackson made frequent excursions on his own during the M.J.Q years, broadening his horizons and enabling us to enjoy his artistry in a variety of settings. This is one such side trip, recorded in January of last year with an imposing quartet of star "sidemen" and an occasional dash of strings arranged by Bob James.

Saxophonist Jimmy Heath is not a member of the sort of repertory company CTI has established over the past few years, but he is an old cohort of Milt Jackson's, and the rapport that exists between them accounts greatly for the success of this set. Heath appears on all but one cut, Lost April, a beautiful but fairly obscure ballad recorded by Nat King Cole in 1947 (and again, with George Shearing, in 1961). That selection features the strings, as does Dizzy Gillespie's Olinga, but the rest of the album is an intensely swinging, cohesive quintet session.

Quartet, quintet, strings, no strings—it all spells expertise, taste, and imaginative music performed by artists whose integrity remains beyond question.

JAZZ PIANO QUARTET: Let It Happen. Dick Hyman, Roland Hanna, Marian McPartland, Hank Jones (pianos). Lover Come Back to Me; Maiden Voyage; Here's That Rainy Day; Variations on Scott Joplin's "Solace"; How High the Moon; You Are the Sunshine of My Life; and four others. RCA CPL-1-0680 $6.98. ® CPS-1-0680 $7.98.

Performance: Proficient
Recording: Excellent

It escapes me why four pianos are required to do the work of one, but I suppose it has something to do with "jazz concepts," that continuing stream of oddities suggested by record producers and musicians alike to make the ordinary seem extraordinary. Jazzniks are forever coming up with these ideas. They take a trumpeter and put him together with a Boy Scout marching band, drag a saxophonist in to baa along with a chorus of East Indian divinity students wearing glow-in-the-dark saris, or place a guitarist with the Podunk Symphony Orchestra. The idea is to show that jazz is compatible with (but still superior to) anything else. Frankly, I find it mere featherbedding. It is also, in the present case, a waste of four very considerable talents.

THAD JONES/MEL LEWIS ORCHESTRA: Potpourri (see Best of the Month, page 72)

ZOOT SIMS: Zoot Sims' Party. Zoot Sims (soprano and tenor saxophones); Jimmy Rowles (piano); Bob Cranshaw (bass); Mick-

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CIRCLE NO. 23 ON READER SERVICE CARD 91
JOE VENUTI AND ZOOT SIMS: Joe and Zoot. Joe Venuti (violin); Zoot Sims (soprano and tenor saxophones); Dick Wellstood (piano); George DuVivier (bass); Cliff Leeman (drums). C Jam Blues; The Wild Cat; There's a Small Hotel; Indiana; and five others. CHIAROSCURO CR 128 $6.98 (available by mail from Chiaroscuro, 173 Christopher Street, New York, N.Y. 10014).

Performance: Viva Venuti
Recording: Unbalanced

RECORDING OF SPECIAL MERIT
ZOOT SIMS: Zoot At Ease. Zoot Sims (soprano and tenor saxophones); Hank Jones (piano); Milt Hinton (bass); Louis Bellson, Grady Tate (drums). Do Nothing Till You Hear From Me; My Funny Valentine; Cocktails for Two; Rosemary's Baby; and four others. FAMOUS DOOR H1-2000 $7.00 (available by mail from Harry Lim Productions, 40-08 155th Street, Flushing, N.Y. 11354).

Performance: Impeccable
Recording: Excellent

Tenor saxophonist Zoot Sims is an alumnus of Woody Herman's famous Four Brothers saxophone team of the late Forties, an on-and-off member of Benny Goodman's band for the past thirty years, and a sporadic partner of Al Cohn (they were reunited on a Mise album recently) since 1957. Now approaching fifty, Sims additionally took up the soprano saxophone a couple of years ago, and these three albums—each in a different setting—serve well to demonstrate what he can do with it and also confirm that he is still a tenor par excellence.

Potentially most interesting, but least successful, is the Chiaroscuro set with Joe Venuti, the seventy-eight-year-old, near-legendary violinist whose musical past is well documented for the past thirty years, and a sporadic part-timer of the late Forties, an on-and-off member of the great bands of the thirties and forties. Venuti still performs in and around Las Vegas, sounding every bit as good as he did back in his Paul Whiteman-Red Nichols days. Venuti and Sims are products of disparate periods in jazz, but they adapt to each other wonderfully and make us forget the idiomatic barrier that might easily have separated them. What marks this album is Cliff Leeman—whose drumming is strictly for the middle-age, swing-era adolescent-turned-businessman for whom it all ended with bop—and poor engineering, which sometimes all but wipes out George DuVivier's bass.

Far better is the Choice album, recorded in the relaxed atmosphere of a private home in Sea Cliff, New York, with pianist Jimmy Rowles and what the notes describe as Sims' "favorite rhythm team," Mickey Roker and Bob Cranshaw. The piano is, as the notes admit, slightly out of tune, and the recording is technically not of studio quality, but the repertoire is more up Sims' alley, and Roker's sensitive drums are a joy.

But the real gem of this album trio is the set on Harry Lim's new Famous Door label. Hank Jones, Milt Hinton, and Lousi Bellson may not be Zoot Sims' "favorite rhythm team," but, if we are to believe these notes, it's the team he himself chose to record with. That may all be a lot of annotator nonsense, but we can believe what we hear, and that is a swinging, free-flowing Zoot Sims breathing along with a top-notch rhythm section and sounding more at home in the studio than he does at the house in Sea Cliff. Four of the eight sides have Grady Tate replacing Bellson on drums, and those sides are rhythmically less interesting, but nothing here is less than very good, and most of it is excellent. Sims' soprano work is particularly effective in Rosemary's Baby; and his tenor is excellent throughout. Milt Hinton is his old reliable self, and Hank Jones is simply superb. Veteran producer Harry Lim's label is very new, just three releases to date, but so far he's batting a thousand. C.A.

C. A. MINGUS

RECORDING OF SPECIAL MERIT
THE BASS. Jimmy Blanton, Oscar Pettiford, Charles Mingus, Scott La Faro, Sirone, Richard Davis, Stanley Clarke, Cecil McBee, Paul Chambers, George DuVivier, Milt Hinton, Ron Carter, Reggie Workman, Ray Brown, Henry Grimes, Jimmy Garrison, Charlie Haden, and David Izenzon (bass); various groups led by Clark Terry, Shelly Manne, John Coltrane, Dewey Redman, Elvin Jones, and others. Plucked Again; Tricoritism; Gloria's Step; Walls-Bridges; Summer-
sessions of Armstrong's big band and the amazing "live" after-hours album by Art Tatum. But most of their reissues, no matter how great the names, are made up of odd "filler" recording dates, and it is fair to say that, while their discoveries may be historical events, the performances do not always make them musical finds.

Of the four groups captained here by Don Redman, Jimmy Rushing, Russell Jacquet, and Joe Thomas, Redman's sides are the most interesting and worthwhile. Composer-arranger, reedman, and occasional vocalist, Redman was one of the all-time jazz talents, largely responsible for the "big-band sound" that started with Fletcher Henderson's 1924 group. If you want to improve your life, listen to "Master of the Big Band" (RCA LPV-520), covering two of his richest periods—with McKinney's Cotton Pickers and with his own orchestra. The 1946 Redman sides here were made by a pick-up band. Though several first-rate musicians are on hand (Cozy Cole has a blazing drum solo on Mickey Finn), the standout feature is Redman's arranging and composition. The band is a little ragged, having probably been put together for the record date, and it isn't able to achieve the relaxed precision of execution that was a hallmark of Redman's groups. Still, there are some fine moments.

The other outfits are pretty tame. All of them were trying to sound like big bands without the required number of personnel, so the riffs and reed parts are blared out. Apparently they hoped that sheer volume would patch everything up. Trumpeter Russell Jacquet, the older brother of well-known saxophonist Illinois Jacquet, plays and sings well, but the honors to go to Ms. Numa Lee Davis' vocal work on these 1947 sessions. Joe Thomas' group was a contingent from the Jimmie Lunceford band: Thomas was a good saxist very much from the Coleman Hawkins school. I have always thought that if Hawkins' tone had matched his improvisations he would have been a lot easier to listen to. It's the same with Thomas; some of his thinking on 'Don't Blame Me' is lovely, but that annoying tone keeps getting in the way. The cut is also hampered by a pianist who does fine on solos but lays down the clumpiest box-square rhythm imaginable—almost oom-pah.

Jimmy Rushing was a model vocalist, and his Hey, Miss Bessie and Lotsa Poppa are double-entendre blues, clever enough to keep you interested. But the other two selections are rather thin and shopworn. Ain't It Lonesome, which is really Mean Old World with a slight rewrite, doesn't fit Rushing's style: if the tune is going to work it has to be low-down and slightly sloppy, and Rushing was too much of a pro for that. Little Walter's version is, to quote Chairman Mao, the "correct" one. The band behind Rushing is energetic, but the style they play in was already dated in 1953 when these records were made.

As for the quality of the sound: a label like Onyx, without access to the wonder cures that the major labels with their highly complex studios can provide for archive material, often has to settle for the best it can get. But the quality here is better than on some other Onyx albums. The Rushing sides are especially clear. Unfortunately, the Redman ones are not as good, but my guess is that part of the fault lies with the original recording director and engineer, who, on January 29, 1946, made some poor technical decisions. Historians, please note.

J.V.
CHOOSING SIDES
By IRVING KOLODIN

AUCH KLEINE MENDELSSOHN

The coupling of Daniel Barenboim, pianist, and Felix Mendelssohn, composer, in Deutsche Grammophon's recording of the complete Songs Without Words (DG 2709 052) inevitably recalls a celebrated remark of the composer's bunker-father: "Once I was known as the son of my father [the philosopher Moses Mendelssohn]. Now I am known as the father of my son." Enrique Barenboim, now living and teaching in Tel Aviv (where young pianists of many nationalities seek him out for the values he imparted to his son Daniel) might say as much.

The performances on these three discs are rooted in an affinity, rarely encountered, between creator and re-creator. Daniel Barenboim knows what it is to have been taken seriously, at fifteen, by musicians three and four times his age. He responds to Mendelssohn as a mirror image of his own earlier capacity to do extraordinary things while still in his teens. He addresses this music with neither awe nor condescension, but as one who readily comprehends a miracle— even in scant two-page scope— when he encounters one.

All of this affinity, when controlled by a musician of Barenboim's cultivation, conveys a reassuring promise of good things to come from the very first "song" (written in 1829). This particular composition (Op. 19, No. 1) is in E Major, andante con moto, with a flowing, cantabile melody in the right hand and various accessory matter in the left. It could be construed as a solo with accompaniment or, differently, as a quartet in which everything is on the same plane of importance. What one hears from Barenboim, though, is a duet of treble and bass, which is indeed what Mendelssohn wrote, with a murmur of interior voices in between.

Half a dozen years later (in 1836), Mendelssohn wrote a somewhat similar piece. No. 18, in A-flat (Op. 38, No. 6). This is also an andante con moto, and the layout of elements is an elaboration of what is contained in Op. 19, No. 1. This time, however, to make sure there was no misunderstanding of intent, the piece was published with the title "Duet," and so it is known today.

The noticing of this reversion to a previous pattern with the intention of improving or elaborating on it is an insight into Mendelssohn that only a treatment as complete as Deutsche Grammophon's could provide. Like countless others, I suspect, I had long supposed that there was only one Venetian Boat Song. When I came upon song No. 6 in this sequence (it bears the title "Venetian Boat Song"), I was disappointed to discover that it lacked the charm I thought I remembered. The reason became apparent as the songs progressed, for there are no less than three "Venetian Boat Songs" in the total of forty-eight Songs Without Words. The one I know as the Venetian Boat Song is No. 12 in F-sharp Minor (Op. 30, No. 6). When its turn arrives, Barenboim oars it gently, securely, to its destination, with just enough of the rocking motion to define its character. The more surprise, then, to discover on side six, which offers a miscellany of other Mendelssohn works, still another Gondola Song: Op. 102, No. 7— which strange and unexplained opus number would make it the forty-ninth "song." I would have preferred more variety on this side rather than the total of ten more short pieces supplied— Kinderstücker, Op. 72, etc.)

If there is more than one Venetianisches Gondellied (as the label copy describes each in turn), there is only one singular, intimitable Frühlingslied. It may surprise some (it surprised me) to find that the Spring Song is not encountered in the first dozen or twenty of the collection. It is so familiar a part of the genre that it is natural to assume that it occurred to Mendelssohn early on. But it bears the number 30, and was not written until 1842, nearly fifteen years after the first Song Without Words.

It is also the one of the forty-eight that gives Barenboim the greatest difficulty. I can't imagine how many takes were made before one was finally accepted, but I can say that if the one recorded here is the best of the lot, then the rest would be something awful to hear. This one is what could be called a "creditable failure," in the sense that Barenboim does his level best to find a mood, a manner honestly suitable to its prettily unsophisticated content— but can't. The absence of sophistication he simply cannot command, yet.

Perhaps this is because the so-called "Spring Song" (the title is not Mendelssohn's) is rather more a piano piece than it is a true "Song Without Words," for, in the best of them, the idea of a narrative, a story element, is so strong that one can imagine a voice part and mentally frame words that might be sung (a vocal recording of the Spring Song by no less a singer than Conchita Supervia is listed; one only wonders what words she might have sung). Among the distinctions of Barenboim's many good performances here is that, in the best, one can sense his responding to the narrative flow, mentally imagining a vocal collaborator (more likely than not the one named Dietrich Fischer-Dieskau). But the rather simpering melodic line of the Spring Song has occasioned no widely performed verbal counterpart (which may be one of the best things that can be said about it).
Even in the *Spinning Song*, which moves swiftly (*presto*) throughout, one can imagine a staccato kind of word play on the brightly articulated melodic line above the whirring of the wheel. This song, too, falls in the second half of the sequence (No. 34, written in 1843), and it manipulates a more allusive kind of imagery than Mendelssohn had previously dealt with within a piano technique more advanced than he had originally commanded. Slowed down and relieved of some of its embellishing tones, the sound of the spinning wheel could be related to its source in Schubert's *Gretchen am Spinnrad*. Speeded up a trifle and with the form of the spinning-wheel phrase in the bridge passages between "stanzus" stressed, it could be recognized as a link to Rimsky-Korsakov's *Flight of the Bumble Bee*.

These songs are the result of Mendelssohn's devotion, across almost his entire mature compositional career, to a form he himself devised. At the outset, we have the extraordinarily precocious young man of twenty, with the *Midsummer Night's Dream* Overture and the E-flat Octet for Strings already behind him, reveling in the opportunity to work within a new, almost pictorial form with terseness and brevity.

The heredity of the form is obvious: song accompaniments of Schubert married to the shorter slow movements of Beethoven's piano sonatas (the D Minor Andante of the Op. 28 Sonata, with its ostinato bass, is a perfect example). As the offspring accumulated, they acquired such nicknames as "Sweet Remembrances" (No. 1), "Regrets" (No. 2), "Consolation" (No. 9), "May Breezes" (No. 25), and "The Bee's Wedding" (No. 34), very few of which had parental sanction. (Owners of the Deutsche Grammophon collection are, fortunately, spared them as well.)

But Mendelssohn himself did not remain unchanged over the span of time in which the forty-eight *Songs Without Words* were composed. What he had given, by way of example, to Schumann, Chopin, and even Liszt came back to him in their expressions, to which he was both sensitive and responsive. As a result, such a late "song" as No. 33, in B-flat (composed in 1845, two years before his death), is so compounded of the Schumann-esque that it brings us to the threshold of the next "new thing" to come in piano music: the Brahms intermezzo. A new experience to me, it has all the component parts: simplicity of line, harmonic finesse, and the twilight mood.

To see all this in its proper perspective requires more than just a pianist with fine fingers and refined impulses. It asks for a musician with an awareness of the background that produced Mendelssohn—Bach, Mozart, Beethoven—and a comprehension of the direction piano music would take thereafter. Barshai is such a performer, wonderfully equipped to make Mendelssohn's "Forty-eight" a new watchword for quality. He isn't all-embracing in his success, any more than every one of Mendelssohn's efforts is equal to every other. But those that bring together the best of both—and they are by far the most numerous in this uniquely rewarding enterprise—are a response for which Paul Heyse once wrote some wholly applicable words:

> Auch kleine Dinge können uns entzücken.  
> Auch kleine Dinge können tief sein.  
> Even little things can delight us.  
> Even little things can be precious.

Performance: Accomplished
Recording: Very good

RECORDING OF SPECIAL MERIT

Performance: Mannered but fascinating
Recording: Excellent

In nearly all respects the performance by Eva Heinitz and Malcolm Hamilton of the three Bach gamba sonatas (as well as that of the ten-minute Telemann filler) is an able one, understanding as to stylistic detail and representative of well-nigh ideal ensemble. If I have reservations, it has to do with technical matters: a somewhat scruffy, unrefined approach to the gamba, a decided lack of affect caused in part by gamba dynamics too much on one level (and almost none of the exquisite shadings, swellings, and other dynamic effects associated with the gamba), and, surprisingly, some less than ideal intonation on the fretted instrument. If there wasn't a superb performance of these three sonatas by Harmoncourt on Telefunken, I might welcome the Delos recording far more cordially. The sonic reproduction is quite satisfactory, but again the Telefunken must be ranked higher for its greater clarity and transparency.

The Bach gamba sonatas have, of course, often been played in our own day on the cello and even the viola, sometimes with harpsichord but more often with piano, as in a recent reissue of some older Casals performances in which the keyboard part served pretty much as accompaniment rather than as a two-voice partner to the gamba's one. No such imbalance occurs in Columbia's latest release with Leonard Rose and Glenn Gould. The balance is immaculate (although Gould's humming occasionally threatens to add a fourth voice to the three-part texture), and the playing, though idiomsyncratic, is amazing. There is, first of all, the hair-trigger ensemble. Then there is the refinement and delicacy of the playing, with the cello sounding as close to the gamba in dynamics and affect as I have ever heard. Altogether, this is superb music making, but, it must be admitted, it is not readily played in the style of J.S. Bach. Rather, the exaggeratedly detailed articulation, phrasing, and dynamics smack a bit more of the supersensitive manner of Bach's son, Carl Philipp Emanuel. Some of the deliberately slow trills are not even in C. P. E. Bach's domain. But if you can pass over Gould's manneristic touches and concentrate instead on the careful delineation of the lines and the bouncy, near-dance-like temps of the fast movements, these are rewarding performances. The Columbia reproduction is admirable.


Performance: Rare transcriptions
Recording: Not bad

Béla Bartók was one of the relatively few masters of early twentieth-century modernism who was also a performing pianist (Prokofiev is the only other one who comes readily to mind), and the keyboard played a crucial role throughout his career. His early and path-breaking Bagatelles are among the most original works of the early part of the twentieth century. Later on, the piano, with Bartók himself at the keyboard, became something of a popularizing medium through which folk songs and a more immediately communicative technique come into his music. He spent an increasing amount of his time concertizing and performing his own music, often with his wife, Ditta Pásztory.

Vox does not give any information about the source of the fascinating material on this record other than to say that the "original monaural . . . master" is "licensed from Tape-World." In fact, the material derives from a volume of 78-rpm discs issued by the small and presumably now defunct American company Continental. Bartók himself made more records than one would think, and they have been available at times on the Columbia, Vox, French Pathé, English HMV, and Bartók labels.

This range of material is very wide: from an early Bagatelle of 1908 to his own four-hand transcriptions from Mikrokosmos dating from his last years in America. There is a certain constriiction in these performances, as though the studio and recording limitations weighed on him and prevented him from achieving anything beyond a certain level of excitement and dynamics. On the other hand, his rhythmic playing is a revelation. Everything emerges with a kind of natural, unforced flow, like speech; the folk-song elements appear as poetic jewels in the speaking, prosodic flow of the keyboard. The sound, somewhat variable, is good enough.

E.S.


Performance: Silky
Recording: Very good

The three Karajan recordings of the Bartók Concerto for Orchestra have appeared at intervals of approximately ten years. Beginning in 1954, the last two with his own Berlin Philharmonic Orchestra. I haven't heard the 1966 Deutsche Grammophon disc, and my memo-

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Monophonic recordings are indicated by the symbol M.

The first listing is the one reviewed; other formats, if available, follow it.
ry of the 1954 Philharmonia reading is pretty dim by now, but I can say that if you like Bartók with a luxurious silk-and-satin finish you will find the present Karajan version very much to your taste. If, on the other hand, you want your Bartók bracingly rhythmic and with extraordinary clarity of texture you will find the present Boulez and the New York Philharmonic (Columbia M-32132).

Not that Karajan scants matters of textural clarity; indeed, he and his players are marvels monic (Columbia M-32132). With extraordinary clarity of texture you will want your Bartók bracingly rhythmic and you will find the present Karajan version very dim by now, but I can say that if you like performances of the Bartók Concerto to come this remarkably integrated part-
music is to be able to hear these effects so clearly, however, their very cupiciousness tends to diminish the quality of rhapsodic spontaneity that informs this remarkably integrated partnership. This of course is a matter of extreme-
ly personal reaction. I do find an even more sweeping sense of vitality and excitement—of greater intensity more effortlessly achieved— in the Szeryng/Haitink version on Philips 6500 021. Moreover, Philips includes an additional work, the first of Bartók's two rhapsodies for violin and orchestra, a very sub-
stantial encore. The sound quality of the new Angel recording is several cuts above that label's recent norm, but the surfaces on my review copy are distressingly gritty (side one is noisy enough to be unacceptable). R.F.

**RECORDING OF SPECIAL MERIT**


**Performance:** Good to great

**Recording:** Outstanding

This set constitutes what might be described as a rather remarkable crescendo from the doubtful to the sublime. I expected to be knocked out from the start; instead, I was dis-
appointed by Op. 127. The first movement seemed to me edgy, unbeautiful, and over-
played, and the slow movement never seemed to scale the late-Beethoven heights. Admit-
tedly, the scherzo was striking and the finale quite satisfactory, yet I was ready to express considerable doubts. There are a lot of good things in Op. 130, though. And the Grosse Fuge, while not letter-perfect, is exactly the opposite of a dry, analytical performance and very exciting too. Still, it is oddly placed here—as the sixth movement of the Op. 130 Quartet, with the alternative finale tacked on afterwards! A curious idea: the second finale is utterly impossible after this far-out perfor-
ance of what is to me the ultimate in tragic-hercic musical expression.

And after that? The C-sharp Minor and A Minor Quartets in quintessential perfor-
mances! In certain areas the Juilliard Quartet is literally unsurpassed by any functioning musical organization. They play the sul ponti-
cello—that ghostly effect in the fifth move-
ment of Op. 131—the way it should be played, and they have an incredible dynamic range, from a dead white pianissimo that is positively hair-raising to a cutting sforzando.

Their rhythmic energy and phrasing power is demonic, spanning long Beethovenian periods with powerful structural and dramatic effect.

As the Juilliard’s playing has matured, it has moved away from the rhythmically tight perfor-
ances for which they were once noted to a much freer yet balanced and deeply thought-
out pulse sense. They have actually arrived at the point where—I find this really admirable—they are willing to take chances. It is only through extreme measures that the late Beethoven quartets can be given the full int-
ensity and dimension they have here.

I should add that Op. 135 receives an excellent reading from the Juilliard. But it is Opp. 131 and 132 that, well, knocked me out. I don’t know how to explain the disparity be-
tween these performances and the others, but there it is. And it is worth buying the whole set for those two quartets. They include the most profound and moving Beethoven I’ve ever heard.

E.S.

**BERLIOZ: La Damnation de Faust, Op. 24.**

Edith Mathis (soprano), Marguerite: Stuart Burrows (tenor), Faust: Donald McIntyre (baritone), Mephistophéles: Thomas Paul (bass), Brandr, Tanglewood Festival Chor-
rus: Boston Boys' Choir; Boston Symphony Orchestra, Seiji Ozawa cond. DEUTSCHE GRAMMOPHON 2709 048 three discs $23.94.

**Performance:** Uneven

**Recording:** Very Good

This could have been a remarkable perfor-
manace. Ozawa presides over the massed forces with superb control, and, within the framework of a cohesive and dynamic inter-
pretation, he attends to details with great sen-
sitivity. His handling of the often troublesome Part One is exemplary: momentum never sags in the opening monologue, and the Rákóczi March, which ends this episode, is simply thrilling. The tempo set for Marguerite’s beautiful aria “D’amour l’ardente flamme”...
seems slow at first, but the smoothness with which Ozawa balances its problematic agitato section with the basic melody proves him right. The lyrical elements in which the score abounds are lovingly handled, and the Ride to the Abyss has its appropriate nightmarish quality. From the standpoint of overall leadership, this version need not yield to any other. The singing, on the other hand, leaves much to be desired. Nuture did not intend Stuart Burrows for the role of Faust; much of the music is heavy going for him, although he is always a stylish and musically dependable artist and, thanks to Ozawa's thoughtful leadership, manages the lyrical passages with agreeable tone and moments of real beauty. Likewise, the role of Marguerite calls for the fuller tones of a Janet Baker. Shirley Verrett, or Regine Crespin. Edith Mathis is a fine artist, but her light soprano lacks the well-supported and velvety sound in the low mid-range to give the music its proper sensuous quality. Donald McIntyre lacks neither sonority nor the vivid satanic presence; unfortunately, he lacks tonal strength to such an extent that I find his Mephistophöles totally unappealing, almost a trial to listen to.

The Boston Symphony Orchestra sounds ravishing, the choral contributions are excellent, technically the performance is above reproach, and the packaging of the set is beautiful. As I said before, this could have been a remarkable performance. G.J.


Performance: Terrific schmalitz
Recording: Good 1939 sound

Ernest Bloch is the forgotten man of early twentieth-century music. In my book on the subject, I found every other major figure quite easy to place, but Bloch seemed to fit in nowhere. I finally stuck him in a chapter on "national styles." Reasonable enough, you might think, but there was one small problem. What nation?

Bloch was born in Switzerland in 1880 and died in Portland, Oregon, in 1959, having spent more than half his life in the United States. One thinks of him, of course, as a Jewish composer, but only a certain number of his works use specifically Jewish motifs and his sources were very wide-ranging. His early music belongs to the history of late Romanticism. Later he was touched by neo-Classicism and a Bartokian sort of modernism. His Violin Concerto, completed in 1938, is actually based on material that is said to be American Indian in origin. Nevertheless, there is a passionate, romantic sweep to this music that strikes one immediately as Blochian. The roots really lie deep in Eastern Europe, and the sense of tragedy and pathos is nearly all-pervasive.

The Violin Concerto was written for Joseph Szigeti, who recorded it with Charles Munch not long after its premiere. The music was clearly conceived in terms of a kind of fiddle playing that scarcely exists any more. Szigeti is incredibly rich, fluent, assured, sensuous, and heartbreakingly expressive. Perhaps even elevating the piece to a higher plane than it would reach merely on its own merits. The Conservatoire Orchestra and Munch are a good deal more impressive than I expected, and, except for a few of the orchestral fortissimos, EMI's recorded sound of 1939 holds up extremely well. This is one of Vox's Historical Series that is described as a two-channel re-recording from the "original monaural tapes," which translates out as no difference between the two channels and no artificial monkeying around. E.S.

BRUCH: Violin Concerto No. 1, Op. 26 (see TCHAIKOVSKY)

RECORDING OF SPECIAL MERIT

Performance: Grand
Recording: Rich

To say that Barbosa plays the Chopin scherzos "in the grand manner" would be telling much less than half the story, but that is what is bound to strike the listener at first in these dramatic performances. The stormy fast sections are gigantic in volume and depth; those who felt Vladimir Ashkenazy's way with these works was somewhat beyond life will positively shudder. The piano of Chopin's time, it will be noted, could never have made the thunder Barbosa strikes from his complaisant (and magnificently recorded) Baldwin SD-10. I have to confess that this bothers me not at all; Glenn Gould and Sviatoslav Richter play Bach on the piano instead of the harpsichord, and there is no reason Barbosa and Ashkenazy, using modern instruments, should be restricted by the limitations of those available to Chopin. (Were they really all that limited? What, then, was Liszt using?) In any event, I was enthralled by the Ashkenazy recording (London CS-6562), and now I find even more pleasure in Barbosa's. The thunder is not hollow, nor are the speeds excessive. When Chopin asks for presto con fuoco, that is what Barbosa delivers, and with such apparent ease (one never feels that all stops are pulled out, but that vast reserves of strength are available to him) that the contrasting middle sections can exude genuine poetry at a dignified pace instead of being vulgarized into pietistic treacle by being slowed down to adjust to an already too-slow presto. But it is so

(Continued on page 101)
The group of arias on the reverse side includes some familiar ones from Serse and Joshua as well as a number of more infrequently heard examples of Handel’s masterly vocal writing. Most unusual among them is the scene from Hercules (London, 1744), a piece of the kind dramatic impact. Many years ago, Sir Thomas Beecham wanted to engage Maria Callas for the part of Dejanira in Hercules (“the first music drama written in Europe,” in Sir Thomas’ opinion). He did not succeed in persuading Callas, but Baker’s passionate rendering will persuade us that the late conductor’s judgment about the music’s quality was sound.

Balancing the tension of the Hercules scene are the sustained radiance of Miss Baker’s singing in the Rodelinda and Atalanta arias, the classic simplicity of her treatment of “Ombra mai fu,” and the agility and clear articulation displayed in the airs from Ariodante and Joshua. In short, the disc is a joy to lovers of good singing. The orchestral accompaniments are tastefully embellished by conductor Leppard’s expert work at the harpsichord.

This is not the first recording of Lucrezia. There is a most enjoyable version with soprano Carole Bogard (Cambridge CRS 2773). It is quite unusually sung, if not with the dramatic thrust of Miss Baker’s performance, and accompanied only by a cello and harpsichord. G.J.


Edith Mathis (soprano); Birgit Finnila (alto); Peter Schreier (tenor); Theo Adam (bass); Chorus and Orchestra of the Austrian Radio. Vienna, Charles Mackerras cond. Deutsche Grammophon Archive 2710 016 three discs $23.94.

Performance: Superb singing  
Recording: Excellent

Lucrezia is an early work, dating from Handel’s Italian travels in 1707. Relating the famous episode of Lucretia’s rape by Tarquinius, it consists of four pairs of recitatives and arias, ending with a furioso recitative in which the victim, about to commit suicide, vows revenge on her betrayer from the beyond. It is a long piece but saved from monotony by the sharp contrasts between the arias, the surprising harmonic turns, and, of course, the expressive and technical challenges of the vocal part. Janet Baker handles them triumphantly, with some marvelously executed florid passagework, and she displays considerable dramatic temperament without any impairment of the vocal line.

Baron Gottfried van Swieten  
A patron of Mozart, Haydn, and Beethoven

The Baron Gottfried van Swieten is one of those shadowy, fascinating figures in the drama of history who, while not a creative figure or leading player, nevertheless had an influence on the course of culture. The good Baron, a Viennese diplomat in England and later in Berlin, conceived a passion for the nearly forgotten and out-of-fashion music of an earlier generation. He collected manuscripts assiduously and, back in Vienna, organized what we would call old-music concerts. It was through the Baron and his tireless activity in preserving traditions that Mozart, Haydn, and Beethoven came to know the great Baroque masters and, his influence, which is notable in the later works of all three, becomes a major factor in the evolution of Romantic music. All this only half a century after Handel composed Messiah and another half-century before Mendelssohn’s supposed rediscovery of Bach!

The good Baron commissioned Mozart to arrange four major works of Handel, Actis and Galatea, Messiah, Alexander’s Feast, and Ode for St. Cecilia’s Day. The Baron himself was responsible for the German texts and was very active in the actual productions, which Mozart apparently directed.

In his edition, Mozart left the vocal and string parts largely unchanged-literally transcribed by a copyist—and filled in a new set of wind parts, largely to substitute for an organ continuo. He omitted a few numbers or sections—in one case to be replaced by an original recitative—and reassigned others to different voices. Only one number, “The Trumpet Shall Sound,” was substantially re-...

(Continued on page 104)
There is only one way to play it, and that is loud

Germany's Freiburg Cathedral and (inset) its four organs

Biggs' Four-organ Bach

There is only one way to play Columbia's new "heavy organ" Bach recording by E. Power Biggs, and that is simply loud and on the very best four-channel playback equipment you can get your hands on, for a lucky coincidence of architecture and organ building has enabled Mr. Biggs and Columbia to come up with the four most celebrated of the Bach organ toccatas and fugues in quite legitimate "surround sound."

The recording locale was the Freiburg Cathedral in Germany, completed in 1513. Its vast spaces boast not one but four organs, which can be played either separately or simultaneously from a central console. Biggs & Co. understandably chose the latter option for this album. Although the disposition of the four organ cases in the gallery, nave, and choir areas of the cathedral is such as to make it impossible to properly balance all of them aurally in live performance, the right microphone placement relative to each instrument, plus careful mixing, has resulted in a recording that is not only right for the music, but overwhelmingly spectacular for the listener with good four-channel equipment in a big enough room—and with tolerant neighbors. This, in short, is the best classical quadraphonic disc in terms of exciting and legitimate "surround" that I've heard since Columbia's early "Antiphonal Music for Four Brass Choirs" album (MQ 31289) conducted by Andrew Kazdin, who produced this Freiburg Cathedral recording.

The Biggs performances are among the most rhythmically vital and colorfully exuberant I have ever heard from him—far removed from the strait-laced purism of his early performances for the Technicolor and RCA Victor labels back in the 78-rpm days, yet by no means slopping over into the flamboyancies of a Virgil Fox. If his readings of the famous Toccata and Fugue in D Minor and of the wonderfully sprawling Toccata, Adagio, and Fugue seem more free than the several earlier ones he has done over the years, I ascribe this to the six-second reverberation period of the Freiburg Cathedral interior, which, I believe, enforces a more expansive and freer performance style. Indeed, I find that it helps even in the more severe pieces, the Dorian Toccata and Fugue and the F Major piece, with its inexorably motoric toccata section. In the latter instance, the reverberation period precludes any impulse to simply rattle off the work as a virtuoso exercise and forces upon the player the necessity for clarity of articulation and a truly architectural build-up of phrase groupings toward the climactic conclusion.

From the purely sonic point of view—leaving aside the window-rattling, floor-shaking kinetics of the fugue conclusions, when all four instruments are brought into full play—the most striking aspect of this recording is the handling of echo episodes between the front and back channels, in the fugue stretti in particular. Not only is it extraordinarily dramatic, but it also illumines the music itself, revealing, as no other organ recording I've heard has, the concerto grosso element in Bach's organ writing. This contrast between large and small sound sources is apparent in the live listening situation and in a few of the better two-channel organ recordings, but it has never been so brilliantly revealing as in the added spatial separation afforded by four-channel playback. The first section of the Toccata, Adagio, and Fugue is a prime instance in point.

The two-channel release of this Freiburg Cathedral recording is no negligible affair itself, but, quite frankly, one misses half the fun, and there are already alternative Biggs recordings of all four works in two-channel format which may prove more satisfying in terms of clean sonic texture. But for quadrophonics and for those with the playback equipment that can capture this very exciting Bach, this album of the four most famous toccatas and fugues is an absolute must.

—David Hall

J. S. BACH: Toccata and Fugue in D Minor (BWV 565); Toccata and Fugue in F Major (BWV 540); Toccata and Fugue in D Minor (BWV 538, "Dorian"); Toccata, Adagio, and Fugue in C Major (BWV 564). E. Power Biggs (organ). COLUMBIA MQ 32933 $7.98, M 32933 $6.98, RA MQ 32933 $8.98.
written, obviously because of the decay of the virtuoso trumpet tradition. The few variants in the vocal parts stem from the necessity of fitting the music to the German text (or, in this performance, to Mackerras' spirited use of ornamentation).

Mozart's arrangement of Messiah is not as great a novelty as the Archiv program annotator seems to think, in the English-speaking world at least. It was still in common use in this country within the last quarter-century. And the annotator's argument that this arrangement is comparable to the Baroque arrangements of Schoenberg and Webern (he does not mention Stokowski or Sir Hamilton Harry) is misleading. Baron van Swieten and Mozart were, quite simply, following the normal eighteenth-century practice of arranging the music for available forces and, in the process, updating it a bit. The reason for up-

**RECORDING OF SPECIAL MERIT**

**HOLST: Choral Symphony, Op. 41. Felicity Palmer (soprano); London Philharmonic Choir: London Philharmonic Orchestra, Sir Adrian Boult cond. ANGEL S-37030 $6.98.**

**Performance: Impressive**

**Recording: Excellent**

The Planets was far behind him when Gustav Holst set out to compose his Choral Symphony for the Leeds Festival of 1925. This was to be the first of two choral symphonies, and its text was made up of selections Holst himself put together from the poems of Keats. After he had started writing the symphony, his duties as director of music at St. Paul's Girls' School and later at Morley College in South London proved so exhausting that his doctor ordered him to give up his job and go to live in the country. And there, in his garden, watching his symphony "grow alongside the flowers and vegetables," Holst spent an entire year weaving musical garlands around Keats' poetry. This new Angel recording gives us our first opportunity to hear the work on records and, for most of us, the first opportunity to hear the work at all, for it has been all too rarely performed.

Holst's Choral Symphony (the never wrote the projected second one) is more a musical explication of its text and a work of homage to the lovely language it celebrates than it is a symphony in any conventional sense of the word. The proceedings open with an invitation to the spirit of Pan, a placid, songful prelude of noble Holstian proportions leading to a Song and Bacchanal, reminiscent of the revelries of Jupiter, which ends with a mighty shout. The Ode on a Grecian Urn finds all the lovely language it celebrates than it is a virtuoso trumpet tradition. The few variants in the vocal parts stem from the necessity of fitting the music to the German text (or, in this performance, to Mackerras' spirited use of ornamentation).

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The historical baggage that comes with this recording is of anecdotal interest, but the real value of the recording is in the superb solo singing. The extraordinary, mournful alto sound of Birgit Finnila is perhaps not everyone's idea of a Handel oratorio solo sound, but the sheer beauty of the voice is certainly exceptional. All of the other soloists are outstanding, and the chorus is satisfactory. I find Mackerras' choral tempos and treatment a little fussy, and the orchestral playing, although capable, is occasionally on the loose side. On the other hand, the treatment of the appoggiaturas and other ornaments is excellent, and nearly all of the arias are realized on a fine line between Baroque and Classical style. Indeed, one of the lessons of this recording is that, from a twentieth-century point of view, there may be more similarities than differences between Baroque and Classical performance styles. E.S.

**RECORDING OF SPECIAL MERIT**

**FELICITY PALMER: her clear soprano flashes like some lovely banner in the wind.**

Andre Previn has pretty well demonstrated by now that he is temperamentally incapable of a superficial approach; even to pieces others may regard simply as virtuoso vehicles. This is a very good performance of The Planets, very close in concept and in actual tempos to the uniquely authoritative version of Sir Adrian Boult, whose fourth recording of the work is available on the same label (Angel S-36420; cassette 4XS-36420). Boult remains uniquely authoritative, though, and uniquely persuasive, and the Previn recording does not offer any appreciable sonic superiority; indeed, the bells in Saturn and the percussion in Uranus are clearer in Sir Adrian's recording. Then too, Previn is less comfortable than Boult and than at least two other conductors in grasping the idiomatic lilt of the two big scherzos, Jupiter and Uranus.

In its own right, the Previn version is a satisfying one, but with the Boult available, I can't see that there is a question of choice. Neither of the two Angels is outstanding sonically (though I'd be interested in hearing the respective English pressings). But, oddly enough, the domestic Angel pressing is SQ quadraphonic, and played in that mode it reveals a very decent if conservative four-channel ambience (even the wordless chorus is kept in the front channels). Angel, however, apparently does not wish to publicize this fact: the only clue offered is an SQ master number on the disc around which it also seems that the Angel logo appearing in a circle rather than in the usual rectangular indicates quadraphonic. Readers may take this under advisement concerning other Angel discs, at least until the company decides to drop the other shoe. In any event, Bernard Haitink's version on Philips 6500 072 and

Performance: Excellent
Recording: Good

As with Turnabout’s previous issue from the Swedish Society-Discofoil catalog (Hilding Rosenberg’s Second Symphony and Dag Wirén’s Fourth), the tapings here vary considerably in age. Erland von Koch’s variations were recorded in 1961; the Lars-Erik Larsson and John Fernstroem works were recorded in 1955 and were available in this country shortly thereafter in a London International album. Even so, the overall recorded sound of the Turnabout release is excellent and consistent in its essentially unpretentious character.

The same adjectives suit the music. There are no major masterpieces here, but the Flute Concertino by Chinese-born John Fernstroem (1897-1961) emerges as a delightfully enchanting Oriental study, comparable in its cunning and play of colors to the best things in Carl Nielsen’s Aladdin incidental music. Erland von Koch’s set of sixteen variations on a Dalacarlian march tune is a brilliantly colorful essay in a post-Hindemith style, though less dense in polyphonic texture than much of the work of the late German master.

Lars-Erik Larsson, best-known of the composers here by virtue of his deservedly popular Pastoral Suite, has turned out a fairly complex system into a theme for God), a fairly simple theoretical system for transcribing French words into notes, including grammatical cases and a theme for God), a fairly complex system of manipulating this material musically, and an elaborate, incomprehensible theological scheme. And all of this is explained in three three-column, single-spaced pages of analytical notes (by the composer accompanying the music as performed by the author himself on the grandiose organ of the Church of Sainte Trinité in Paris.

As readers of these pages will be aware, I have many reservations and impatiences concerning Messiaen and his music, but I must

Bernstein’s on Columbia M 31125 (also quadraphonic MQ 31125) are more brilliantly recorded.

R.F.


Performance: Authoritative
Recording: Impressive

Here are nine Méditations on the Mystery of the Holy Trinity, more than an hour and a quarter of music. The two-disc set includes plainsong, Indian rhythmic modes, transcribed bird songs, endless color effects, an obscure system for transcribing French words into notes (including grammatical cases and a theme for God), a fairly complex system of manipulating this material musically, and an elaborate, incomprehensible theological scheme. And all of this is explained in three three-column, single-spaced pages of analytical notes (by the composer accompanying the music as performed by the author himself on the grandiose organ of the Church of Sainte Trinité in Paris.

As readers of these pages will be aware, I have many reservations and impatiences concerning Messiaen and his music, but I must
admit that he is a visionary of a remarkable sort and that the ecstatic, mystical character of his creations is at its most impressive in his organ music, particularly as interpreted by himself on one of the grand old organs of which he is the undisputed master. The curious mixture of antiquity, Victorian bric-a-brac (or its French equivalent), nature mysticism, art-nouveau colorism, and modernity (not to say avant-gardism), all spread over generous lengths of time, is an acquired taste that I have not yet acquired. But this is, no doubt, Super Pipe Organ Everything at its spiritual and sonic zenith.

One virtue of this album is that the recording is extremely well made (the performance is presumably as authentic as could be imagined). An annoying defect is that the sides are labeled incorrectly; what is called side four is certainly the second side in the proper sequence, while two and three should be three and four, respectively. E.S.

**MUSGRAVE: Night Music (see SESSIONS)**

**PROKOFIEV: Piano Concerto No. 2, Op. 16** (see Best of the Month, page 69)

**PROKOFIEV: Violin Concerto No. 1** (see The Basic Repertoire, page 52)

**RIEGGER: Dichotomy (see SESSIONS)**

**SAINT-SAENS: Introduction and Rondo Capriccioso, Op. 28** (see TCHAIKOVSKY)

**SESSIONS: Rhapsody for Orchestra; Symphony No. 8**. New Philharmonia Orchestra, Frederick Prausnitz cond. MUSGRAVE: Night Music (horns); London Sinfonietta; Prausnitz. The same orchestra and conductor, and here it is beautifully played by two of England's great horn players and the excellent London Sinfonietta under Frederick Prausnitz. The same orchestra and conductor, skilled and experienced in new music, do a competent job with the very difficult Riegger. Prausnitz directs the New Philharmonia in large-scale impressive performances of the two Sessions' works.

The recording, part of the Calouste Gulbenkian Foundation series directed by David Drew, is very well recorded and produced, and is accompanied by an extremely helpful booklet. The series, formerly with EMI, has now moved over to Argo, which will make all the earlier releases available. It is one of the outstanding projects of its kind and deserving of support. E.S.

**RECORDING OF SPECIAL MERIT**

**R. STRAUSS: Don Quixote, Op. 35; Walzer from Der Rosenkavalier. Paul Tortelier (cello); Max Rostal (viola); Dresden State Orchestra, Rudolf Kempe cond. ANGEL S-37046 $6.98.**

**Performance:** Top-drawer  
**Recording:** Very good

Over the past year or so, Rudolf Kempe and the Dresden State Orchestra have been doing a survey of the orchestral works of Richard Strauss that has been winning loud huzzahs from critics in England and on the Continent. If this record is any fair sample, these cheers are well deserved. For Kempe's Don Quixote is wonderfully stylish, full of wit, color, and, in the final pages, deep compassion. Tortelier plays a sterling personification of the mad knight, and he is ably abetted by Rostal's viola in the role of Sancho. I would rate this the best recorded Don Quixote since the early stereo versions of Szell and Reiner. Moreover, the Rosenkavalier sequence is done with ample verve and sentiment, and, thank goodness, without a trace of vulgarity. The recording just couldn't be better. D.H.

**R. STRAUSS: Four Last Songs; Tod und Verklärung; Arias** (see Best of the Month, page 70)

**RECORDING OF SPECIAL MERIT**

**STRAVINSKY: Le Sacre du Printemps. Chicago Symphony Orchestra, Sir Georg Solti cond. LONDON CS 6885 $6.98.**

**Performance:** Meticulous  
**Recording:** A-1

Stravinsky's great masterwork has undergone almost every imaginable kind of treatment on records, from the most stark to the most outrageously and unidiomatically sensual. But we do have Stravinsky's own and essentially definitive reading for Columbia as a model. Solti's treatment of Le Sacre hews closely to Stravinsky's own line, so that the real basis for judging this recorded performance centers on the sonic realization of the music. On this level, the London recording is equaled only by the recent Haitink issue on Philips, and Solti's is closer to the criteria set up by Stravinsky's own. The London sonics are as detailed as three-dimensional X-ray. The most striking single instance in point may be heard at bar four before the Dance of the Adolescents: I heard distinctly the glissando harmonic for solo violin, ordinarily covered by a held C in the bass clarinet, for the first time in my experience of dozens of recorded and concert-hall performances.

This is just the most meticulous performance of Le Sacre I have yet to hear. I still prefer the spirit of Stravinsky's own reading to all others, and there are those who lean toward the headiness of Bernstein or the refined sensuousness of the Boulez Cleveland version, but as a realization of Le Sacre combining optimum recording technology, orchestral virtuosity, and virtually flawless conducting, this one is the best yet. D.H.
The AR-LST
‘Now the system against which others must be judged’

Larry Zide, writing in The American Record Guide, went on to say that 'to my ears, [the AR-LST] can reproduce music from recordings with a verity I have never before experienced.'

Accuracy of reproduction
High Fidelity magazine went into some detail in describing the musical accuracy of the AR-LST: 'The LST's sonic accuracy becomes manifest not only in terms of the natural tonal balance it provides for all manner of musical material, but also in the way it reveals subtle differences in the upper midrange and high-end response of different recordings — differences that are often obscured by otherwise fine loudspeakers but which are of importance to the critical listener.'

John Crabbe summed it up for England's Hi Fi News, saying that 'some speakers always sound simply like themselves, but the LST sounds like the signals it is fed.'

Measured response
The AR-LST speaker system was designed for professional and laboratory applications, where repeatability of objective measurements and high power-handling capability are primary considerations. High Fidelity called the objective performance of the AR-LST 'truly prodigious.' Its response was found to be among the most linear yet measured for a loudspeaker. From 50 Hz to 15,000 Hz, the LST was measured as flat within plus or minus 3 dB! Stereo & Hi Fi Times noted that 'measurements indicate flat response to at least 20 kHz.' However, 'the measurement data,' according to Julian Hirsch

in Stereo Review, 'give only a hint of the true quality of the AR-LST... The sound of the LST is as uncolored as any we have ever heard... Heard at normal room levels, the LST soon becomes as 'invisible' to the listener as the power amplifier.'

Power-handling
Stereo Review also called the AR-LST's power-handling ability 'prodigious.' They went on to say that 'few if any speakers of comparable size can absorb peaks of 500 watts without distortion or damage, but we soon learned that the most powerful amplifiers made for home use cannot drive the LST to its limits on musical program material... Fortunately, the AR-LST can also be enjoyed with a good 30-watts-per-channel amplifier.'

The AR-LST, although originally intended primarily for professional use, has found its way into many home systems, especially among the most critical listeners. Julian Hirsch pointed out what is probably the reason: 'Few speakers in our experience are so totally free of irritating qualities as the AR-LST.' He added that 'this no doubt accounts for our generally choosing them from among a good number of fine speakers occupying our listening room when we turn off our test instruments and listen solely for pleasure.'

As with all AR speaker systems, the performance specifications of the AR-LST are guaranteed for five years, including parts, repair labor, and freight costs.
...piano students will swoon at Für Elise....

André Watts At the Piano—Four Times

The extraordinary variety of repertoire set forth on the latest André Watts discs from Columbia and the consistently high quality of musicality and vitality that pervades them are eloquent testimony to the full maturation of this always brilliant artist's powers. It is the two solo discs, one of Beethoven and one of Schubert, that seize the attention most forcibly, for in one way or another every single performance on these records simply demands special consideration. The humor Watts brings to the first movement of Beethoven's Op. 10, No. 3; the deeply expressive and wholly disciplined readings he delivers of the Beethoven Sonata and Wanderer Fantasy slow movements; the almost frighteningly feverish excitement of the finale of the Schubert A Minor Sonata—each in its own way is memorable. And any beginning piano student will swoon with envy at Watts' way with Für Elise, while budding technicians will pale at the way he whips through Rage Over a Lost Penny—and get a good chuckle in the bargain. The recording here is close-miked but full-bodied and very clean.

The two discs with orchestra are more of a mixed bag, at least where matters of taste are concerned. I find the first movement of Tchaikovsky's Concerto a brave attempt at an extremely broad-gauge reading that doesn't quite come off (perhaps the idea was to beat Van Cliburn at his own game—the two pianists' approaches are not dissimilar). More normal pacing is the rule for Watts and Bernstein in the two final movements, and the soloist achieves superb articulation in the scherzando episode of the slow movement. Still, I don't think the performance as a whole is the last word in vitality, at least when compared with Cliburn/Kondrashin (RCA LSC 2252) at one interpretive pole or Horowitz/Toscanini (RCA 1LM 2519, recorded in 1943) at the other. Columbia's sound for the Tchaikovsky Concerto seems a bit "tightly" miked in stereo playback, but when heard in quadraphonic playback the walls open out very nicely, with the apparent listener vantage point being about fifteen feet behind and above the conductor's podium. Side one of my two-channel review disc was troubled by audible flutter—not the case with the quadraphonic pressing.

Watts' Liszt-Franck disc is an unqualified success in every department—pianism, orchestral-conductorial teamwork, and sonics. The opening pages of Liszt's spectacular Todtentanz, here played in the standard edition rather than the Lewenthal expansion-revision, show that Watts has not lost one iota of his razzle-dazzle. And, thank goodness, he does not use the pedal in the opening ostinato march figure, so that this bit comes across with just the pitiless quality that the nature of the music and its subject matter demand. All told, I find this by far the best current recording of the Todtentanz in the standard edition.

The Franck Variations come off even better than the Liszt. Although any first-rate technician can make a fine splash with the Todtentanz, it takes just the right combination of musical intelligence and heart to make Franck's Symphonic Variations a really vital experience. Too much intelligence makes for mere glitter, while too much heart leads into the quagmire of sentimentality. Watts and Leinsdorf find the right combination for the music, though, making the very most of dynamic and coloristic contrast throughout, so that it becomes both arresting and witty, and not just pleasantly bland, as is too often the case. The recording is eminently satisfying in both two and four channels.

—David Hall


LISZT: Todtentanz for Piano and Orchestra. FRANCK: Symphonic Variations for Piano and Orchestra. Andre Watts (piano); London Symphony Orchestra, Erich Leinsdorf cond. COLUMBIA □ MQ 33072 $7.98, M 33072 $6.98.

Performance: Glorious
Recording: Excellent

Waltham Abbey, the oldest re-remaining Romanesque building in England, has distinctions other than architectural. Thomas Tallis worked there until the dissolution of the abbeys other than architectural. Thomas Tallis had directed his own works there, and this recording re-creates the kind of musical liturgy that Tallis composed and directed. Side one consists of music for a solemn Mass: a plainsong Kyrie trope followed by Tallis' beautiful dictus, and Agnus Dei. Side two contains settings of the Gloria, Credo, Sanctus, Benedictus, and Agnus Dei. Side two contains music for one of the lesser offices—plainsong with "verses in falsi bordoni by Tallis"—as well as a plainsong Salve Regina and a so-called Jesus Anthem. This is all strong, passionate music performed and recorded, in the abbey itself, with a sense of the richness and passion that it had for its contemporaries. The Cantores in Ecclesia—literally "Church Singers"—create a beautiful, traditional sound of great clarity, sweetness, and intensity; and the recording, echoing against the ancient stone of this venerable building, is very impressive.

E.S.


Performance: Pleasant
Recording: Good


Performance: Impassioned
Recording: A mite raw

RECORDING OF SPECIAL MERIT


Performance: Ideal
Recording: Superb

Richard Bonynge makes a pleasant and easy-going tearjerker fit for The Nutcracker scenario, faring best in the divertissement numbers that make up most of the familiar concert suite, and London's recording is up to its best standard of full-bodied orchestral sound and wealth of detail. In contrast, Gennady Rozhdestvensky makes far more of the dramatic elements of the score, even though he doesn't use a genuine gunshot to signal the start of the battle with the Mouse King and his minions. Despite its rather coarse recorded sound (overbearing brass and the like), and less than flawless woodwind-string balances, I found myself far more caught up in the color and drama of the Russian reading, beside which the Bonynge began to sound rather pallid. Though I have only my memory to go by, I suspect that the Columbia/Melodiya issue is the same performance as the one issued here by the now defunct Atta label back in 1961—which does not lessen its musical merit, but perhaps does explain why the sound is not up to the standard of, say, Rozhdestvensky's 1970 Swan Lake recording.

But everything I had heard in these two Nutcracker albums went by the board at the very first notes of Seiji Ozawa's recording. His Miniature Overture is a model of crispness and perfect nuance, the familiar sequence of dances sounding freshly minted from start to finish—there is not one bite of the merely routine in this performance of the Suite, not one ounce of the merely vulgar. So too with the Sleeping Beauty excerpts, which include the Introduction, Lilac Fairy, Rose Adagio, Pas-de-Deux, Panorama, and Waltz. Here are ideal playing and flawless recording. Ozawa displays a sharpness of beat and a strength of line and rhythmic pulse far superior to what he gave us in his 1973 recording of Firebird (on Angel) with the same Orchestre de Paris. If this is a fair sample of Ozawa's current conductorial flair and skill, he is certainly ready to record a complete Sleeping Beauty. My appetite has been whetted.

TCHAIKOVSKY: Piano Concerto No. 1 (see Best of the Month, page 69)


Performance: Bold, vigorous
Recording: Very good

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EUGENE FODOR
A bold approach to Tchaikovsky Symphony Orchestra, Theodor Guschlbauer cond. (in Haydn); Jean-François Paillard Chamber Orchestra, Jean-François Paillard cond. (in Vivaldi Concerto in A-flat); Lamoureux Orchestra, Paris, Jean-Baptiste Mari cond. (in Hummel); Die Wiener Solisten (in Torelli, Albinoni, Telemann, and Vivaldi P. 406). RCA CRL 2-7002 two discs $7.98. Performance: Extraordinarily virtuosic Recording: Excellent


It should be no news that Maurice André ranks as one of today's most spectacular practitioners of trumpet playing. For a collection of concertos dating from the late seventeenth century (Torelli, Vivaldi, and Albinoni, in that chronological order) through the end of the eighteenth century (Haydn) and even into the beginning of the nineteenth (Hummel's concerto, with its delightfully cheeky last-movement rondo, dates from 1804), André's new album, which is derived from a variety of discs originally recorded in Europe by Erato, is as good as any. To be sure, not all of this material was originally conceived for trumpet or would have been playable on the valveless instrument of that earlier period: the Albinoni was a concerto for oboe, Vivaldi's B-flat Concerto was originally for oboe and violin, and his A-flat Concerto is an arrangement from a couple of trio sonatas and a movement from one of his Op. 7 concertos. No matter. André handles it all with marvells of dexterity and enormous brilliance. Anyone looking for a first-class recording of Haydn's popular Trumpet Concerto will not have to seek further. The accompaniments are well handled, and the recorded sound is bright and clear. David Hickman, judging from the brilliant sound he produces on the Clarino disc, is somebody to watch with interest. The repeti-

TELEMANN, Sonata in A Minor for Viola da Gamba and Continuo (see BACH)

VON KOCH: Osberg Variations (see LARSON)

COLLECTIONS


It should be no news that Maurice André ranks as one of today's most spectacular practitioners of trumpet playing. For a collection of concertos dating from the late seventeenth century (Torelli, Vivaldi, and Albinoni, in that chronological order) through the end of the eighteenth century (Haydn) and even into the beginning of the nineteenth (Hummel's concerto, with its delightfully cheeky last-movement rondo, dates from 1804), André's new album, which is derived from a variety of discs originally recorded in Europe by Erato, is as good as any. To be sure, not all of this material was originally conceived for trumpet or would have been playable on the valveless instrument of that earlier period: the Albinoni was a concerto for oboe, Vivaldi's B-flat Concerto was originally for oboe and violin, and his A-flat Concerto is an arrangement from a couple of trio sonatas and a movement from one of his Op. 7 concertos. No matter. André handles it all with marvells of dexterity and enormous brilliance. Anyone looking for a first-class recording of Haydn's popular Trumpet Concerto will not have to seek further. The accompaniments are well handled, and the recorded sound is bright and clear. David Hickman, judging from the brilliant sound he produces on the Clarino disc, is somebody to watch with interest. The repeti-

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Here are two new aspirants for fiddling glory, both with outstanding credentials. As everyone should know by now, Eugene Fodor (Colorado-born student of Ivan Galamian and Jascha Heifetz) won the top honors awarded at the 1974 Tchaikovsky competition in Moscow. Mayumi Fujikawa (Japanese, trained in Holland and later a pupil of Leonid Kogan) won second prize there in 1970. Both artists are still in their twenties, and this is the first concerto recording for each. Both display technique in abundance, and both play with an attractive tone quality. Fodor's approach to the Tchaikovsky Concerto is bolder, more extroverted. He favors brisk, propulsive tempos, pays little heed to the composer's con molto espressione markings, and, except for the slow movement, displays no real lyrical involvement. While his playing is impressive in its virtuoso flair, there are minor intonational flaws and also a rather vulgar glissando in the third movement. In contrast, Miss Fujikawa is a model of silken elegance. She treats the music with more affection, applying a more judicious use of rubato. Her rendition of the Bruch Concerto, on the other side of the Philips disc, reveals the same suave tone and impeccable intonation. There are more dashing, more outgoingly virtuosic treatments of this repertoire simply in the catalog, but few can match this one in sensitivity and accuracy.

Technically, RCA has the edge, offering richer sound of keener dynamic contrasts in which the finely wrought details of the orchestral playing under Leinsdorf are clearly spotlighted. The Rotterdam Orchestra's contribution is quite subdued by comparison. Of course, RCA's sonic superiority may be a result of a more economic utilization of the grooves; the companion piece there is the shorter Saint-Saëns work, which Mr. Fodor plays dashing.

The quadraphonic (CD-4) version of the RCA recording arrived somewhat later than the stereo and shows distinct processing problems. The pressing received displays an overbalance in favor of the woodwinds and a very audible distortion almost throughout the recording. Until and unless these problems are cleared up, stick with the stereo version of this disc.

- Mrs. Ed}

TELEMANN, Sonata in A Minor for Viola da Gamba and Continuo (see BACH)

VON KOCH: Osberg Variations (see LARSON)

COLLECTIONS


It should be no news that Maurice André ranks as one of today’s most spectacular practitioners of trumpet playing. For a collection of concertos dating from the late seventeenth century (Torelli, Vivaldi, and Albinoni, in that chronological order) through the end of the eighteenth century (Haydn) and even into the beginning of the nineteenth (Hummel’s concerto, with its delightfully cheeky last-movement rondo, dates from 1804), André’s new album, which is derived from a variety of discs originally recorded in Europe by Erato, is as good as any. To be sure, not all of this material was originally conceived for trumpet or would have been playable on the valveless instrument of that earlier period: the Albinoni was a concerto for oboe, Vivaldi’s B-flat Concerto was originally for oboe and violin, and his A-flat Concerto is an arrangement from a couple of trio sonatas and a movement from one of his Op. 7 concertos. No matter. André handles it all with marvellous dexterity and enormous brilliance. Anyone looking for a first-class recording of Haydn’s popular Trumpet Concerto will not have to seek further. The accompaniments are well handled, and the recorded sound is bright and clear. David Hickman, judging from the brilliant sound he produces on the Clarino disc, is somebody to watch with interest. The repeti-
The Adagio here ascribed to Richard Wagner although it succeeds admirably in showing off toire on the record is not particularly notable, although it succeeds admirably in showing off the technical ability of the soloist. The Telemann Concerto, the same D Major piece André plays on the RCA album, reveals a number of stylistic shortcomings on the soloist’s part as well as that of the accompanying orchestra, but it is otherwise an impressive effort. The two concertos by Johann Melchior Molter (ca. 1695-1765) can be performed on the trumpet, but they were probably originally intended for a clarinet involving a rather high tessitura. The least attractive piece, perhaps because of its conservative writing, is the 1950 concerto by Armenian composer Alexander Arutunian (b. 1920), but it provides an excellent vehicle for Hickman. The accompanying orchestra, the Philharmonic of Evergreen, Colorado, is a summer orchestra made up of conservatory and college students and has an excellent reputation as a training orchestra. It makes a good impression here, especially in the fuller-scored material. The reproduction is satisfactory.


Performance: First-class Recording: Good

Jerome Bunke is a first-class clarinetist, Hidemitsu Hayashi is an excellent pianist, and this is a fine disc of music for clarinet and piano. As usual with wind music, the problems of repertoire loom large, and Bunke has used some imagination in ransacking the near and distant past for usable material. Vanhal (or Vanhal) was a highly regarded contemporary of Haydn, and his sonata is well turned. The Vaughan Williams Studies are attractive smaller works, and the Bernstein sonata, although not a spectacularly impressive piece, is virtually a staple of the clarinet repertoire. The Adagio here ascribed to Richard Wagner strikes me as very dubious stuff. It has been recorded before in a version for clarinet and strings, but even if it is really by Wagner it is juvenilia. Everything is well recorded. E.S.

RECORDING OF SPECIAL MERIT


Performance: Vital, expressive

Recording: Good

The fourteenth century marked the first great flowering of secular music in France and Italy—often known as Ars nova after a famous essay of the period. This collection of music by Machaut and his contemporaries is notable not only for the interest of the music itself but also for the performances of the Waverly Consort. This is ardent, witty, passionate words-and-music, full of sunshine, love, desire, and dance, and these interpretations are full of life and fire—whatever their claims to “authenticity” (maybe that’s a spurious concept, anyway), they have the essential spirit.

The instrumentation is possibly the most striking aspect of these versions. Besides the expected vielle, shawm, lute, and recorder, we have the harp, the psaltery, the kemence (whatever that is), drums, and the oud. The oud adds an authentically Eastern flavor—some of the introductions must be completely improvised—strongly reinforced by the tabla-like drums and other percussion. Can medieval Italian and French music have sounded as Eastern as it does here? Perhaps. Middle Ages may or may not be historically "primitive" art is our fancy, not theirs.

I do not want to give the impression that this recording consists entirely of exotic medieval instrumentals. On the contrary, it has glorious and quite non-exotic singing by Joan Summers, Jan DeGaetani, Constantine Cassolas, and Alan Baker, all in the best contemporary taste. I rather suspect that real fourteenth-century singing would sound as exotic to our ears as the instrumental performance, but, in the absence of that truly unreconstructed tradition, the lively sound of these performers will do very well indeed. E.S.

RECORDING OF SPECIAL MERIT

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EQUIPMENT

WRITE for quotation on any Hi-Fi components. Sound Reproduction Inc., 460 Central Avenue, East Orange, N.J. 07018. 201-331-0600.


COMPONENT CABS: Direct from the factory at low factory prices. Finished-Unfinished-Kits...free brochure. Audio Originals, 546 S. Meridan St., Indianapolis, Ind. 46221.

STEREO SPECTRUM, the money saver for hi-fi buyers, write us, Box 1818, Miami Beach, Florida 33129.

Listen to the SOUTHERN IN STEREO

The TV/FM TELEVISION EASILY CONNECTS TO ANY TV & STEREO SYSTEM. $99.95. Combination Separate & Passive Tone Control. Frequency response maintained to give you best of both. No speaker damage. 100% Satisfaction Guaranteed. Write for full information.

NEW MICRO-LOUDBOOMER $89.95. (.mail order only) $99.95. 100% Satisfaction Guaranteed. Frequency response maintained to give you best of both. No speaker damage.

Build your own SATELLITE DISH at a savings. Members include Advent, Bose, EPI, Pioneer, and others. Home study course also available. Send $1.00 for audio primer and hookup instructions. S16.95 ppd. Guaranteed to make your TV 100%, STEREO SYSTEM. Using our witting and matte cam, teledepter takes the picture and sound and makes it into a stereo show. The complete show. The complete program. The complete stereo system. The complete entertainment system. The complete television. The complete everything. $16.95 ppd. Guaranteed to make your TV 100% STEREO SYSTEM.

CAST. Write, Box 1818, Miami Beach, Florida 33129. (mail order only) $99.95. 100% Satisfaction Guaranteed. Frequency response maintained to give you best of both. No speaker damage.

Diamond NEEDLES and STEREO CARTRIDGES at DISCOUNT PRICES for SHURE, PICKERING, STANTON, EMPIRE, GRADO and ADC. Send for free catalog. LYLE CARTRIDGES, Dept. S, Box 69, Manhattan Station, Brooklyn, New York 11218.

BUILD your OWN SPEAKERS and SAVE UP TO 50%. You can assemble your own high quality, multi-element stereo speaker. Build your own speaker and save hours and save up to half the comparable speakers. Send for our free 32-page catalog of speaker kits, raw speakers and accessories. SPEAKER CONCEPTS, Dept. LB, Lab 5250, 55th Ave, N.E., Washington, D.C. 20018.

Audio COMPONENTS at guaranteed lowest prices. Specializing in Pioneer, Sansui, Dual, MARANTZ, and Sansui. Send for our latest free catalog of over 60 brands, including coin televisions. Discount Sound, P.O. Box 6346, Washington, D.C. 20024.

Audio COMPONENTS at guaranteed lowest prices. Specializing in Pioneer, Sansui, Dual, MARANTZ, and Sansui. Send for our latest free catalog of over 60 brands, including coin televisions. Discount Sound, P.O. Box 6346, Washington, D.C. 20024.


YESTERDAY'S RADIO PROGRAMS on tape. Catalog $1.00 refundable first order. Adventures, 1301 N. Park Ave., Ingleside, California, 90320.


FREE $10 RECORDS! At post office, Box 641, Canton, Ohio 44701.


OLDIES. 45 rpm. Free Catalog. Corny's Record Shop, Box 817, Hendersonville, Tennessee 37075.

BUDGET label prices! Available only by mail. MUSICAL HERITAGE SOCIETY, Box 932 ST, New York, N.Y. 10022.


COLLECTORS' Soundtracks, Mini list 25 cents. Jemm's, P.O. Box 211, Glens Falls, N.Y. 12801.


STERO REVIEW MARKET PLACE

March 1975

115
FREE BOOK "2042 unique proven enterprises." Work Home! Hayling-B, Carlsbad, CA 92016.

PUBLICATIONS


NEW Canadian magazine "ELECTRONICS WORKSHOP." $5.00 yearly. Sample $1.00. Etcrown, Box 741, Montreal "A", Canada.

BUY! SWAP! SELL! Your personal ad placed FREE in Audiomart, the audiophile's classified newsletter. Subscription. $4/yearly. Audiomart, Box 821, Stratford, Conn. 06657.

STAMPS

200 WORLDWIDE STAMPS only 10 cents, inexpensive foreign approvals included. White Company, Box 24211-TC, Indianapolis, Indiana 46224.

PERSONALS

MAKE FRIENDS WORLDWIDE through international correspondence. Illustrated brochure free. Hermes, Berlin 11, Box 11096/20Z, Germany.

MISCELLANEOUS

WINEMAKERS, Free illustrated catalog of yeast, equipment, Semplex, Box 12276, Minneapolis, Minn. 55412.

FREE INTEREST RECORD CATALOG

Spectacular sound! Stereo testing! Background music and sound effects! Special Interest Records available exclusively from Ziff-Davis.

Send for your free Record Catalog—Ziff-Davis Publishing Co., Dept. 23, One Park Ave., New York, N.Y. 10016.

FREE BOOK "2042 unique proven enterprises." Work Home! Hayling-B, Carlsbad, CA 92016.
Marantz Stere o Electrostatic Headphones—
you may never want to take them off.

The benefits of Marantz Electrostatic Headphones are as crystal clear as the sound you get. The Marantz SE-1S performs virtually free from distortion—not just at 1kHz or 10kHz, but consistently throughout the listening range. The result: Sound quality as close to perfect as technologically possible. An unsurpassed frequency response from 20Hz to 20kHz, full dynamic range and the ability to achieve high sound pressure levels with low distortion even at low frequencies.

The SE-1S owes its superiority to an electrostatic transducer diaphragm that's unequalled in its ability to track the audio signals from your amplifier. The diaphragm is six times thinner than the human eardrum and so low in mass that inertia is all but eliminated. The less inertia a diaphragm has, the more accurately and instantaneously it can track audio signals. And the better its tracking ability, the lower its transient distortion. That means you can listen longer without suffering listening fatigue. And the lightweight design incorporating soft ear cushions and accoustical seals lets you wear them comfortably for hours.

Marantz Stere o Electrostatic Headphones are powered by the EE-1 Energizer—a combination that makes the SE-1S the ultimate audio experience.

* The EE-1 needs only .3 watt for a 100dB sound pressure level, so it's at home with any amplifier. If severely overdriven, a protection circuit automatically shuts the energizer off—without an irritating pop.

* Its step-up transformers feature special cores developed by Marantz to provide excellent linearity and low distortion.

* It accepts two SE-1 headphones so you can share the pleasure of private listening. And headphone/speaker switching is built-in.

The Marantz SE-1S Stereo Electrostatic Headphone System costs $129.95. It's the top of the Marantz line that also includes Marantz Dynamic Headphone Systems from $39.95. Get our informative headphone brochure at your Marantz dealer. And try on a pair.


CIRCLE NO. 43 ON READER SERVICE CARD
"Get it on together."

"You know, I've always thought of music as a universal language. In fact, that's probably the reason my daughter Nancy and I get along so well together. So when it's time for some easy listening, we get it on together with Koss Stereophones. Because nothing brings back the excitement of a live performance like the Sound of Koss.

"This year the engineers at Koss have made that sound better than ever, with an all new Dec-lite™ driver assembly. It's the first High Velocity driver element to deliver all 10 audible octaves, and it's featured in the new HV/1a and the HV/1LC Stereophones. Take it from old 'Doc', the new Koss High Velocity Stereophones deliver a fidelity and wide range frequency response unmatched by any other lightweight stereophone.

"So if you'd like to hear some lightweight, hear-through Stereophones that'll curl your toes, slip into the new HV/1a or the HV/1LC with volume-balance controls at your Audio Specialist. Or write for the free Koss full-color catalog, c/o 'Doc and Nancy'. With a pair of the new Koss High Velocity Stereophones and any of the Koss Listening Stations, you can really get it on together."