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What's good? See page 69.



What does all this mean? See page 59.

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Dimensional Praecox (4 channels = 2 dimensions)

With all the hoopla about four-channel sound, some old promotional geometrics have had to be revived and revised. If your memory goes back to the early days of stereo, you may recall that the new process was referred to as "three-dimensional" or "3-D" (to evoke in the American public such glamorous cinematic images as the 3-D B picture *House of Wax*), in opposition to mono, which presumably was only 2-D. Today quadraphonics is being touted as "three-dimensional," implying that stereo was really only two-dimensional all the time. Some quadraphonic equipment is even being advertised as "four-dimensional," of course, which should give the theoretical physicists something to think about. But as anybody with two eyes and/or two ears in his head should realize, four-channel sound provides only two dimensions. Mono sound, emanating from a point, is really nodimensional. Stereo, by stretching the point into a line across a wall, made one's high fidelity system one-dimensional. Now, with quadraphonics, the dimension of depth is added. Depth and breadth—that's two dimensions.

But, you may object, even in mono one certainly did not feel that the music lacked dimension. Just listen to, (you) say. Beethoven's *Leonore* Overture Number Anything; you can tell that the off-stage trumpet is not at the same spot as the orchestra. True—but only because of your experience with what a distant trumpet sounds like. You "hear" that the recorded trumpet is "farther away" in the same sense that you perceive perspective in a two-dimensional painting. However, a mono sound system cannot tell you whether that trumpet is to the right or left. If somebody had taped a distant trumpet call and then played it at the appropriate spot in the overture but directly in front of the orchestra, I doubt that anyone could tell from a mono recording of the performance that the sound was not coming from a trumpet really off stage. The only true dimensionality in mono comes from the reflected acoustics in your listening room—which of course *is* three-dimensional.

This suggests another acoustic/dimensional paradox. When you listen to a good stereo setup, you can pinpoint sound sources not only at the two speakers but anywhere in between. In a quadraphonic setup, if you are in the center of four equidistant speakers, you can pinpoint the sound anywhere along a circumference (theoretically, I suppose, you should be able to detect a point of sound anywhere on a circular plane, though I for one have never heard a four-channel system that could place an oboe at my navel). But here is the paradox. Is it really a circular image? What if your room is square?

I leave you to figure out that one.

At any rate, when you do want three-dimensional sound you will need a system with a minimum of six channels—two emanating from the front, two from the back, one from the floor, and one from the ceiling. Fourchannel sound is still only two-dimensional.

And if you are interested in adding this second dimension to your setup, next month's annual "NEW PRODUCTS ISSUE" will tell you what equipment is being made available this season. Although there will be a big push for quadraphonics, many new standard components are also being introduced, and we will of course cover these too. Also in October you can learn HOW TO UNDERSTAND OUR PREAMP REPORTS, the sequel to an article in this issue. AMERICA'S CHANGING TASTES IN POPU-LAR MUSIC, originally planned for this issue, will appear next month. And a legendary singer will be the subject of an exclusive and rare INTER-VIEW WITH LAURITZ MELCHIOR.

Lonard Karcus

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However, it is important to realize that the research and the reviews are of only academic interest unless the speakers really are audibly superior. It is equally important to realize that YOU are in every sense the ultimate judge, for you are the one who lives with the sound you choose.

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* Copies of the Audio Engineering Society paper, 'ON THE DESIGN, MEASUREMENT AND EVALUA-TION OF LOUDSPEAKERS', by Dr. A, G. Bose, are available from the Bose Corp. for fifty cents.

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letters

High Efficiency

Bravo for the articles on "Loudspeaker Efficiency: Pro and Con" by Larry Phillips and Roy Allison [June 1972]. As loudspeaker manufacturers we continually struggle with the same laws of physics that hamper other manufacturers in their attempts to make the "perfect" loudspeaker. We feel that the more the public knows of these immutable laws and how they affect all designs—no matter what the trade name—the better it is for the future of the industry and the contentment of the people involved.

The "best" loudspeaker is and will remain the large high-efficiency type with the proper bandpass for the music to be reproduced. The point is not whether small models can be as good, but how much of the enormous thrill of music should be sacrificed for sake of size, simplicity of design, and cost.

Every listener should be permitted to make his own decision; and there will always be manufacturers catering to each school of thought. But the manufacturer who makes limited bandpass or small size virtues in themselves is not telling all the truth to the customer. Actually, larger speakers can be constructed with a wider bandpass than contained in most large loudspeakers of today; and small loudspeakers are simply unable to handle the bandpass and dynamic range of today's program sources—for a series of reasons having to do with thermal laws, the laws of defraction, and other esoteric matter properly left to the technical journals.

Thank you in any case for reopening a discussion that is as old as the art of high fidelity.

> Irving M. Fried IMF Products Philadelphia, Pa.

After reading the Phillips/Allison doubleheader in the June issue, my head reeled with ideas. But I know that one should try to be concise. Therefore, I will say only this: Mr. Allison strikes me as being basically a music lover; Mr. Phillips a gadget-happy salesman.

Leonard Auslender West Hollywood, Calif.

Electro-Voice has designed and manufactured loudspeakers of high and low efficiency for a number of years. Since we are more than reasonably familiar with the attributes of both approaches, we were shocked by Larry Phillips' "justification" of high-efficiency transducers. I can understand Mr. Phillips' inclination to dismiss the "technical invective" that has often surrounded the efficiency question. Certainly most listeners are in fact seeking a pleasurable experience quite apart from what goes on inside of their loudspeaker systems. Also justifiable is the idea of duplicating the recording studio playback situation, at least in sonic character if not, for all of us, in raw sound pressure level. We can assume that the recording people have achieved a desired effect during mixdown and would like to transfer this experience to the home with minimum error

It strikes us, however, as absolutely impossible to duplicate the studio experience simply through the home use of high-efficiency loudspeakers. Some other problems aside, high-efficiency does not lead to sameness! Anyone who has spent five minutes evaluating on both a subjective and objective basis the high-efficiency loudspeakers of various manufacturers—including the two or three most widely employed in recording studios—will find gross differences among these systems. These differences are at least as great as the difference between any one of them and a typical low-efficiency design. Whether these differences exist from a lack of design expertise or from carefully worked out differences in design philosophy is of little importance. The fact is that differences exist.

We feel, therefore, that if any standard is sought to first create and then re-create the studio control-room experience, the standard must include wide frequency response, low distortion, flat total power output, faithfulness in live-versus-recorded tests, uniform dispersion, and the like. Reproducing the studio experience in this way will not, of course, occur overnight, since defects of varying degrees exist in all loudspeakers regardless of efficiency or application. Some astute observers will note the gravest defects in some of the older, most popular high-efficiency designs employed in recording studios. However, designs have and will continue to improve in an absolute sense over a time, and each improvement brings us closer to a reproduction of the sound heard in the studio mixdown room.

It boils down, then, to the point of view that a "perfect" low-efficiency speaker will sound the same within its output capabilities as the "perfect" high-efficiency system. The efficiency choice is really dictated by the acoustic nature of the listening environment in conjunction with peak sound pressure level requirements and available amplifier power. We would like to suggest that technical invective really cannot be avoided—even for the pursuit of pleasure.

> Jim Long Electro-Voice Buchanan, Mich.

Department of Amplification

Gene Lees asserts ["Amplification in the Theater," May 1972] that "a voice in amplification is in some ways even more naked than a voice heard 'live.'" Recently I heard a nightclub singer who, to prove her worth, threw aside the microphone she had been clenching all night and let us have her real, true-to-life, naked voice without benefit of amplification. Result: a better, clearer, and-would you believe it-a louder tone, but without the unpleasant stridency and distortion induced by the mike. In fact it was a completely different voice, vastly improved, a pleasure to hearwhich it hadn't been with the aid of a mike. The evil lies not in faulty equipment but in overamplification. A good voice, big or small, will fill a large hall or theater on its own; it sounds better in its natural state and does not need the aid of a loudspeaker.

To sum it all up, like many other commercialized phenomena, amplification promotes worthless wailing on the one hand, and masks the qualities of an intrinsically good voice on the other.

> M. A. Holder London, Ontario

Revising the Russians

Regarding Steven J. Haller's comments con-



Tchaikovsky-a Russian revised.

cerning the so-called "new" Tchaikovsky piano concerto ["Letters," June 1972], I do not believe that performance of this reconstructed" work in the Soviet Union would be a disservice to the composer. It is precisely because of the esteem held for Tchaikovsky in Russia that his most obscure and discarded works are scrutinized and studied.

The first movement of the originally proposed Sixth Symphony was published in 1894 as the Piano Concerto No. 3, Op. 75 and the reconstructed second and third movements in 1897 as the Andante and Finale, Op. 79. It is interesting to note that both publications were posthumous.

Similarly, the symphonic ballad *The Voy-vole*, Op. 78 was printed in 1897 although the composer had destroyed the score after the first performance of the work. This publication, made from orchestral parts, is even nore important since the work is Tchaikovsky's alone. It is a highly dramatic work and was recorded years ago by Concert Hall Society in a limited edition. Hopefully it will be re-recorded in the future.

Charles Marootian Paterson, N.J.

The rearrangement of the overture to Mussorgsky's *The Fair at Sorochinsk* that David Hamilton wonders about in his review of the Melodiya recording [June 1972] is one made by the composer Anatol Liadov in 1904. (A performance was once available on MGM 3030, conducted by Walter Susskind.) Since Mussorgsky not only completed but orchestrated the overture himself, its use in this recording just adds another line to the long list of crimes that have been perpetrated against this great artist.

The much superior Epic performance that Mr. Hamilton mentions was available until this February on Artia S 505.

Greg Audette Hanover, N.H.

Psyching Out Frank, Jr.

In the June 1972 issue, one Morgan Ames (identified on your masthead as a "contributing editor," not a psychoanalyst as we must assume from her comments) reviewed the Frank Sinatra, Jr. Daybreak LP entitled "Spice."

After trying to find out what was disturbing Miss Ames (it would appear to us here at Daybreak that she did not really bother to listen to the entire LP, nor did she read the very informative liner notes), we came to the sad conclu-

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sion that your pseudo psychiatrist really should be sitting in at the Menninger Clinic reviewing people, not records! We cannot believe that HIGH FIDELITY condones such pitiful, harmful, and arsenic-inspired tripe.

Both Frank, Jr. and Daybreak would welcome meaningful criticism about the record itself-not about the person, the manner in which he has his hair cut, not the sweater he wears. What has this to do with the performance on the record?

To support our good feelings about Frank Sinatra, Jr. and his "Spice" LP we could cite reviews from other leading publications including Billhoard. Variety, the Los Angeles Times. and even the Manila Pace. This is a mere sampling of the U.S. and international acclaim given to this recording-constructive criticism, not poison-pen reflections of a would-be critic. Isn't it truly amazing that the critics of these magazines and newspapers can be so positive in their reviews and Morgan Ames can be so completely negative?

> Robert B. Weiss Executive Vice President. Davbreak Records Hollywood. Calif.

Wet Blanket

A few words of caution to Russian and romantic music lovers. Ormandy's new recording of Glière's Ilva Muromet: may sound magnificent to R. D. Darrell, but to these ears RCA has done it again-badly

Back in the early '60s, when they were producing truly awesome sound for Reiner, RCA could have done justice to Glière's score, but since Dynagroove their orchestral recordings have declined in sonic range and presencenot to mention in surface quality

In his review of Ilva Murometz Mr. Darrell praises the "true apotheoses of the brass, horn. and woodwind choirs." He must have quite an imagination. Mr. Darrell says that this recording excels those that Ormandy made in his last years with Columbia. Now Columbia may not have given its orchestras the most realistic reproduction, but at least the sound didn't seem to have a blanket over it. Too bad Columbia didn't record a stereo version of Tha before Ormandy left.

Mr. Darrell's defense of sensuous music like Glière's was the best thing in the June issue. but to extend one of his metaphors a bit. listening to RCA's recording of Ilva Murometz is like making passionate love when one has a cold and one's ears are stuffed.

> Joel Flegler Tenafly, N.J.

Mr. Darrell replies: It's good to learn that Mr. Flegler and I agree on two things: the incomparable merits of the RCA/Reiner recordings and the appeal of sensuous music like Gliere's. But I'm afraid that where our sonic evaluations of the recent Ilya Murometz recording is concerned, we don't talk the same language. I'm sure we both hear very much the same things; how we describe and evaluate them involves such irreconcilable personal tastes and temperaments that debate is futile. All I can say is that I can procure a doctor's certificate to attest that I did not have a cold when I listened to the disc in question-several times and on two completely different playback systems.

In addition, though, I must protest that any blanket-wet or dry-indictment of any one major recording company's technology is impos-

sible to validate due to the different conductorproducer-engineer teams operating in varied locations and with widely varied programmatic materials. Like book publishers, each major recording company has its own proportionate amount of successes and failures.

Missing Harpsichordists

I must write in hi-fi dudgeon to register one complaint with Victor Wolfram's otherwise excellent article on the resurgence of the harpsichord ["Back from the Brink," June 1972]. Mr. Wolfram has, in my opinion, slighted the most exciting harpsichord virtuoso now performing, Fernando Valenti.

Especially when it comes to Scarlatti, no one has approached Valenti's powerful, sculptured, and deeply musical performances of the sonatas. Also his monumental recording project for Westminster in the 1950s (now partially reissued) resulting in thirty-four volumes containing more than 300 Scarlatti sonatas deserved mention if only from a historical standpoint.

Though it was taped several years ago. Valenti's Bach record (Columbia MS 6516) stands with the greatest, including Landowska. I am not as familiar with the work of Marlowe and Leonhardt, but can they be the gods that Mr. Wolfram seems to make them? As for Ralph Kirkpatrick, Valenti himself spoke to me recently of his admiration for the former's enormous scholarship: the fact remains that Valenti plays the Scarlatti sonatas better than anyone, certainly better than Kirkpatrick, whose puny, tinkling efforts are on Odyssey. If the latter's sound is the authentic baroque so admired by Mr. Wolfram, then thank goodness for modern harpsichordists and Valenti's powerful, eagle-taloned technique.

> Richard W. Stiles Pasadena, Calif.

In the recent article by Victor Wolfram on the harpsichord, the author's failure to mention Yella Pessl struck me as bad taste and unfortunate from a historical point of view. Although Madame Pessl did not make any LPs, in the era just before the advent of LP she was a prolific recording artist, and accounted by most discriminating connoisseurs as second only to Madame Landowska.

> Baird Hastings New York, N.Y.

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Straight talk about a stylus



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Selectivity (dB)	20 kHz	60	40		40	_	
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Continuous Power Per	8Ω	60 W @ 0.25	35 W @ 0.25	20 W @ 0.25	15 W @ 0.5	10 W @ 1.0	
Channel @ % THD	4Ω	100 W @ 0.25	35 W @ 0.25	20 W @ 0.25	20₩@0.5	10W@1.0	
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CIRCLE 24 ON READER-SERVICE CARD



A Copland Premiere on Disc

LONDON

How many world premieres have been given in recording studios? The latest came when Aaron Copland with the New Philharmonia Orchestra taped his three Latin American Sketches at the EMI studios for CBS early last June. The following week, Copland explained, André Kostelanetz was due to give the first public performance at the New York Promenade concerts. The composer had been receiving transatlantic cables asking for elucidation of accents marked in the score. Copland seemed quite relieved to get into the studio and work the problems out for himself.

I have rarely seen him so happily relaxed during recording sessions, jaunting back into the studio from a playback humming the catchy rhythmic tune of the first sketch, Estribillo. The score bears the date August 31, 1971, but the inspiration-like those of the other two sketches-came many years ago. For this opening Estribillo and the third equally rambunctious dance, Danza del Jalisco (written in 1959 but not scored until recently), he went back to his memories of wartime Cuba in the early Forties. Just as in Mexico City he had been inspired to write El Salón México, so in Cuba he visited the dance halls, and there he told me he was struck not just by the vibrant noise and clashing rhythms-"a terrific racket," he said-but by the layout of each hall, with the players hoisted up on a balcony and the dancers milling below.

Like El Salon Mexico the three Sketches may provide no musical problems for the listener, but the two dances, with their cross-accents and uneven rhythms, are taxing enough for the players. When I arrived, the session was already half over, but they had reached only the second take of the first dance, the Estribillo. Not even that take was completed before the tea break, and by the time the first piece was safely "in the can" to the satisfaction both of Copland and of the CBS recording manager, Paul Myers, only one hour remained of the three-hour session.

"Never mind," said Myers, "the other two pieces are easy." Certainly that was true of the second piece, a quiet interlude in Copland's purest vein, El Paisaje Mejicano, a musical landscape with soaring string melodies. But even that took a twenty-minute rehearsal-Copland particularly careful about balancing and perfecting one "slow grace note" for the flute. The first take had only minor imperfections, but then the principal bassoon (who has an important solo) was suddenly taken ill. While he was recovering, Copland and the orchestra went on to rehearse the final movement in guapango rhythm, 3/4 alternating with 6/8. It proved to be more difficult than Myers had predicted.

In fact, it began to look as though the session would have an untidy end, unsatisfying to everyone; but such is the professional skill of an orchestra like the New Philharmonia that the bassoonist returned promptly for a second perfecting take, and the tricky Danza del Jalisco was completed after a mere fifteen minutes' overtime. They went on that afternoon-with an hour's break for lunch-to record the five short movements of Copland's Music for the Movies, another tricky task because it always seems more economical timewise to record long movements rather than short. The day previously, Copland had recorded with the same forces both El Salón México and The Red Pony. The day before that he had conducted a public concert of his music with the NPO at the Royal Albert Hall. Not bad for a seventy-one-yearold.

Gentlemen's Agreement. Earlier in the month a long gentlemanly tussle be-

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tween EMI and Decca/London had finally been resolved in favor of the latter, when Daniel Barenboim and Vladimir Ashkenazy recorded Mozart's Double Concerto with the English Chamber Orchestra in Kingsway Hall. It was some years ago that Christopher Nupen, television producer and friend of Barenboim, had directed a prize-winning film of the two pianists preparing this work. Barenboim has always insisted that his only possible partner on record must be Ashkenazy, but Decca refused to give him up so that EMI might include the disc in its integral series of Mozart piano concertos with Barenboim. In the end Decca's nerve proved stronger, and

though this disc (also including Mozart's Triple Concerto with Fou Ts'ong as the third pianist) is not likely to appear for at least three years, it will have a Decca/London label.

The sessions were fascinating. Barenboim, Ashkenazy, and I left the others at lunch, while the two virtuoso friends warmed up. Barenboim sat down at his lidless piano, elbow to elbow with Ashkenazy at a piano facing in the opposite direction. Barenboim was in a smart, very English blazer with brass buttons; but with cigar jutting and chin held high he still managed to look like a miniature tycoon. Then what did he play as soon as his fingers touched the keyboard? Not



As a serious audiophile, you no doubt recognize that the weakest link in the sound reproduction system has long been the speaker. You would not tolerate an amplifier with 4-5% distortion or with response as poor as \pm 4dB or with a bandwidth of only 100-10,000 Hz. And yet, only a very few loudspeakers on the market today are even that *good*! So no matter how fine the rest of the system, the sound has always been limited by the speakers.

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CIRCLE 15 ON READER-SERVICE CARD



Alfred Brendel records Liszt.

Mozart at all but the opening cadenza of Brahms's Second Piano Concerto: and in a mad, heady moment Ashkenazy joined him in the most improbable of synchronized duets. Needless to say they collapsed in laughter, and then went on to serious work with the Mozart. The curious layout for the session—Ashkenazy and later Fou Ts'ong with their backs to the orchestra—was prescribed because Barenboim directed the instrumentalists from the keyboard.

More piano concerto sessions featured Alfred Brendel who, with Bernard Haitink and the London Philharmonic, recorded the two Liszt concertos and *Totentanz* at Walthamstow for Philips. It says much for Brendel's concentration and fantastic technique that a mere three and a half sessions were needed, leaving four and a half hours of recording time to spare at the end. Haitink and the LPO promptly slotted in an impromptu recording of Elgar's *Enigma* Variations, which they had played very impressively earlier in the week at the Royal Festival Hall.

EMI sessions have included André Previn and the London Symphony Orchestra at Kingsway Hall in a series of popular Tchaikovsky works-the complete Nuteracker ballet, 1812 Overture (previously not one of Previn's party pieces), Romeo and Juliet. and Marche Slave. The recording manager, Christopher Bishop, described the nine sessions as being "full of joy." though everyone concerned found that Nutcracker is not as easy as you might think. requiring the full schedule of six sessions. Bishop also promises great things of the Brandenburg Concertos which rather surprisingly Sir Adrian Boult is doing with the full LPO. The sound will be luscious of course. deliberately taking a different course from current fashion: but according to Bishop, there was "no lagging at all" under Boult's command.

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speaking of records

The fall months are traditionally big ones for the record companies: With the impetus of a fresh music season and an eye to Christmas gift-giving, the labels may be generally counted upon to prepare a barrage of major new releases. A glance be-

low at HIGH FIDELITY's annual forecast will show the customary wide-ranging variety of offerings, from the medieval to the latest avant-garde ruminations. Expensive operatic projects are the immediate attention-getters: Angel's new *Tristan* with Karajan, an all-star *Fledermaus*, and the Caballé/Domingo *Manon Lescaut*; Strauss's *Capriccio*, Rossini's *Barber*, and a live *Dutchman* from Bayreuth on DGG; London's two latest Sutherland vehicles (*Rigoletto* and *Hoffmann*) and the Solti *Parsifal*; another entry in the Colin Davis/Philips Berlioz cycle, *Benvenuto Cellini*; the ABC rival *Hoffmann* starring Sills.

In the nonoperatic "superstar" category we find the expected names of Klemperer, De los Angeles, Oistrakh, Previn, Karajan, Solti, Mehta, Davis, Bernstein, Horowitz, Michelangeli, Gilels, Arrau, Haitink, and Ormandy. For added spice there are a few special issues, particularly the long-awaited Furtwängler *Ring*, which competes with a second (!) budget (!!) *Ring* cycle, a dark horse from Westminster; Columbia's second (!!!) go-around on the complete Webern canon, this time with Boulez in charge; and Fischer-Dieskau's fourth (!!!!) version of *Winterreise*. In the curio department we note a highlights disc of *Mefistofele* from London featuring Giuseppe di Stefano: The tenor was to have appeared in the complete 1959 recording instead of Del Monaco, and this disc represents what had been recorded before Di Stefano bowed out.

As in past years, the majority of new material originates from Europe, even in the case of the two local giants, Columbia and RCA, which on the whole continue to hue to the tried and true—big names and standard repertoire. For many collectors, smaller domestic labels such as Nonesuch, Genesis, Cardinal, Candide, Desto. and Turnabout will supply the principal points of interest, at least where fresh repertoire is concerned. Nonesuch offers its usual fascinating blend of the old and the new, while Genesis continues to explore the byways of the romantic piano literature with Burgmüller, Chaminade, Goetz, Hummel, et al. These enterprising companies are expanding horizons with creative record-making, as many majors cut back their activities or, in the case of RCA, indulge in a veritable orgy of "Greatest Hits" repackaging ploys.

Be that as it may, the following compilation should present an ample number of titles to whet the appetite during the months ahead—and not the least in the all-important reissue category (designated below by a \bullet). And for those jaded souls untempted by the prospect ahead, this may be a good time to take stock and perhaps catch up—after all, the Schwann catalogue is already bursting with treasures.

Preview of the Coming Season's Recordings

ABC Audio Treasury

- Donizetti: Lucia di Lammermoor (excerpts). Sills, Bergonzi, Cappuccilli, Diaz: London Symphony Orch., Schippers, cond.
- Massenet: Manon (excerpts). Sills, Gedda, Souzay, Bacquier: New Philharmonia Orch., Rudel, cond.
- Offenbach: Les Contes d'Hoffmann. Sills, Burrows, Treigle: London Symphony Orch., Rudel, cond.



- Bach: Violin Concertos in D minor and G minor; Double Concerto. Perlman and Zukerman; English Chamber Orch., Barenboim, cond.
- Bruckner: Symphony No. 9. New Philharmonia Orch., Klemperer, cond.
- Debussy: Estampes; Pour le piano; Images. Michel Béroff.
- Victoria de los Angeles and Alicia de Larrocha: Hunter College Concert.

English Music for Strings. Works by Holst, Britten, and Walton. Academy of St. Martin-in-lhe-Fields, Marriner, cond.

- Italian Opera Choruses. Works by Verdi, Rossini. Donizetti, Mascagni, and Puccini. Chorus and Orch. of Covent Garden, Gardelli, cond.
- Mozart: Violin Concertos (complete). Oistrakh, violin and cond.; Berlin Philharmonic Orch.
- Puccinis Manon Lescaut. Caballé, Domingo; New Philharmonic Orch., Bartoletti, cond.
- Strauss, J.: Die Fledermaus. Rothenberger, Holm, Gedda. Fischer-Dieskau, Berry; Vienna Symphony Orch., Boskovsky, cond.
- Stravinsky: Capriccio; Concerto for Piano and Winds; Movements. Michel Béroff; Orchestre de Paris, Ozawa, cond.

- Tchaikovsky: Nutcracker (compiete). London Symphony Orch., Previn, cond.
- Tchaikovsky: Symphonies Nos. 4, 5, and 6. Berlin Philharmonic Orch., Karajan, cond.
- Wagner: Overtures: Die Feen; Das Liebesverbot; König Ezio; Christoph Columbus; Huldigungsmarsch; Kaisermarsch. London Symphony Orch., Janowski, cond.
- Wagner: Tristan und Isolde. Dernesch. Ludwig, Vickers. Berry, Ridderbusch; Berlin Philharmonic Orch., Karajan, cond.

ARCHIVE

- Bach: 14 Christmas Cantatas. Mathis, Töpper, Armstrong, Reynolds, Häfliger, Schreier, Fischer-Dieskau, Adam; Munich Bach Choir and Orch., Richter, cond.
- Bach: Cantatus Nos. 51 and 199. Mathis, Thibaud; Munich Bach Orch., Richter, cond.
- Dance Music of the Renaissance Konrad Ragossnig. gaitar: Ulsamer Collegium.
- Handel: Concerti grossi, Op. 3. Munich Bach Orch., Richter, cond.
- Josquin des Prez: Marian Motets. Hamburg Monteverdi Choir, Jürgens, cond.
- Pergolesi: Stabat Mater. Freni, Berganza; Scarlatti Orch. of Naples, Gracis. cond.
- Tallis: Lamentations of Jeremiah. Byrd: Mass for Three Voices. London Pro Cantione Antiqua, Turner, cond.
- Viotti: Violin Concertos Nos. 16 and 24. Andreas Röhn; English Chamber Orch., Mackerras. cond.
- Vivaldi: 11 Pastor fido, Op. 13: Six Sonatas. Various instrumentalists.



- Handel: Ballet Music from Alcina, Il Pastor fido, and Ariodante. Academy of St. Martinin-the-Fields, Marriner, cond.
- Messiaen: Poèmes pour Mi; Chants de terre et de ciel. Barker and Johnson.
- Mozart: Symphonies Nos. 25 and 29. Academy of St. Martin-in-the-Fields, Marriner, cond.
- Palestrina: Missa assumpta Maria; Missa brevis. Choir of St. John's College, Cambridge, Guest. cond.
- Schütz: St. Matthew Passion. Pears; Schütz Choir, Norrington, cond.
- Stravinsky: Capriccio. Shostakovich: Piano Concerto No. 1. Ogdon; Academy of St. Martin-in-the-Fields. Marriner, cond.

CAMBRIDGE RECORDS

- American Concert Songs, 1900-1950. Dale Moore.
- Harpsichord Music of the Couperin Family. Alan Curtis.
- Italian Baroque Organ Recital. Lawrence Moe.
- Weiss: Suites for Lute. William David Rhodes.



- Avant-garde Music from Spain, Vol. 2 Works by Benguerel, Taltabull, J. Soler, Casanovas, and Mestres-Quadreny.
- French Piano Music of Dukas, De Sévérac, and Roussel, Grant Johannessen.
- Gabrieli, A. & G.: Canzonas. Helga Weber Instrumental Group.
- Gottschalk: Symphonies Nos. 1 and 2; Escenas Campéstres. Vienna State Opera Orch., Buketoff, cond.

Joachim: Violin Concerto. Hubay: Hejre Kati. Enesco: Prelude for Solo Violin. Rosand; Radio Luxembourg Orch., De Froment, cond.

Martin: Harpsichord Concerto; Ballade for Trombone and Orch.; Ballade for Piano and Orch. Various soloists; Chamber Orch. of Lausanne, Martin, cond.



- Cantigas de Santa Maria. Waverly Consort, Jaffee, dir.
- Cherubini: Missa Solemnis. Wells, Forrester, Shirley, Diaz; Clarion Concerts Chorus and Orch., Jenkins, cond.
- Handel: Royal Fireworks Music (original scoring). English Chamber Orch., Somary, cond.
- Handel: Semele. Armstrong, Watts, Tear. Diaz; Amor Artis Chorale: English Chamber Orch., Somary, cond.
- Historical Anthology of Music. A new series of recordings including works by Josquin, Tallis, Byrd, Gabrieli, Mönteverdi, Charpentier, Purcell, Vivaldi, Telemann, Bach, Boyce, Haydn, and Mozari.



Beethoven: Late String Quarters. Juilliard Ouartet.

- Beethoven: "Moonlight" Sonata. Chopin: Favorites. Vladimir Horowitz.
- Beethoven: Symphonies Nos. 5' and 8 (from the complete set), Philadelphia Orch., Ormandy, cond.
- Brahms: The Four Symphonies. Philadelphia Orch., Ormandy, cond.
- Copland: Preamble; Symphonic Ode; Orchestral Variations. London Symphony Orch., Copland, cond.
- Copland: El Salón México; Red Pony; Three Latin American Sketches; Music from the Movies. London Symphony Orch., Copland, cond.
- Monster Concert. Works by Gottschalk.

Sousa. Rossini, and J. Strauss. Eugene List and 15 other pianists playing on 8 pianos. *Quiet Night*. Works by Debussy, Fauré, Schu-

- bert, and Chopin. Philadelphia Orch., Ormandy, cond.
- Schubert: Symphonies Nos. 4 and 6. Philadelphia Orch.. Ormandy, cond.
- Scriabin: Piano Music. Horowitz.
- Shostakovich: Symphonies Nos. 1 and 9. New York Philharmonic, Bernstein, cond.
- Stravinsky: Firebird Saite; Petrushka Suite. Philadelphia Orch., Ormandy, cond.
- Vivaldi: Violin Concertos, Op. 8, Nos. 1-12 (including The Seasons). Zukerman, violin and cond.; English Chamber Orch.
- Webern: Complete Works. Under the supervision of Pierre Boulez. Rosen, Piatigorsky; Juilliard Quartet; BBC Symphony, Boulez, cond. others.
- William Tell Overture, Works by Rossini, Wolf-Ferrari, Jarnefelt, Liszt, and Pierné. Philadelphia Orch., Ormandy, cond.



- Bach: Sonata for Violia Solo, No. 1; Partita for Violin Solo, No. 2. Wilkomirska.
- Beethoven: Violin Sonatas Nos. 5 and 9. Wilkomirska, Barbosa.
- Chopin: Etudes Opp. 10 and 25. Vered. Franck: Violin Sonata. Szymanowski: Three
- Myths. Wilkomirska, Barbosa. Scarlatti, D.: 23 Sonatas. Di Bonaventura.

CRI

- Argento: Letters from Composers. Mayer: Brass Quintet; Six Miniatures; Khartoum; Two News Items. Various soloists and instrumentalists. Weisberg, cond. Berry: String Quartet No. 2; Canto lirico; Duo
- Berry: String Quartet No. 2; Canto lirico; Duo for Flute and Piano. Bernard Zaslav, viola: Naomi Zaslav, piano: Composers Quartet; Bryan and Keys Duo.
 Dodge: Folia; Extensions for Trumpet.
- Dodge: Folia; Extensions for Trumpet. Sollberger: Divertimento for Flute, Cello, and Piano; Impromptu for Piano. Various instrumentalists.

DESTO

- Argento: Posicard from Morocco. Center Opera of Minnesota, Brunelle, cond.
- Bach: Cantatas Nos. 3 and 102. Bach Aria Group.
- Flute Plus. The flute n combination with soprano, oboe, harp, cello, clarinet, and double bass; works by Ginastera. Villa Lobos, Persichett, Peterson, Schramm, and Bamert.
- Music for Piano Four Hands. Works by Wuorinen. Spiegelman. Moss, and Sydeman. Jean and Kenneth Wentworth: Contemporary Music Ensemble, Weisberg, cond.
- New American Music for Trumpet. Works by

Brant, Moryl. Whittenberg, and Carter. Gerard Schwarz.

- Scriabin: Preludes for Piano. Laredo.
- Starer: Ariel; Concerto a tre. Various soloists and instrumentalists: Kaplan, cond.
- Trimble: Panels I; String Quartet; Five Episodes for Piano. William Masselos: New Forum Quartet.



- Bach: Concertos for Violin in A minor and E: Double Concerto in D minor. Francescatti and Pasquier: Lucerne Festival Strings, Baumgartner, cond.
- Beethoven: *Piano Concerto No. 3.* Eschenbach: London Symphony Orch., Henze, cond.
- Beethoven: Piano Sonatas Nos. 21 and 28. Gilels.
- Beethoven: Piano Variations. Kempff.
- Chopin: Piano Music. Michelangeli.
- Chopin: Preludes. Eschenbach.
- Debussy: String Quartet. Ravel: String Quartet. LaSalle Quartet.
- Henze: Symphony No. 6. London Symphony Orch., Henze, cond.
- Henze: The Tedious Way to the Place of Natascha Ungeheuer. Various instrumentalists. Henze, cond.
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The name Primus means "First". First in tape quality and performance and is our brand name. The Plus stands for all the extras such as packaging, extra reels and labels that we give our customers. Listed are three new promotions that Wabash Tape is proud to offer you under the heading of Primus Plus.

Offer 1-6 reels Primus 1800 ft., 1 mil Low Noise, High Output tape, frequency range from below 20 hz to beyond 22,000 hz, polyester base, standard bias curve, lubricated coating. Packaged in durable plastic flip-lid containers.

Offer 2—Ten C-60 or C-90 screw type cassettes, also loaded with superb quality Low Noise, High Output, tensilized polyester backed tape. Guaranteed non-jam mechanisms. Each cassette individually packaged and placed in a new, unbreakable carrying/storage container.

Offer 3-3 reels Primus 1800 ft. with same specifications as Offer 1, Plus three empty reels in deluxe flip-lid containers.

Our functional Primus packaging should attract your eye. The sound quality and performance of our product can only be judged by your unbiased (excuse the pun) recorder. So, we simply state this: You select Primus for its Pluses and let your recorder give it the performance test; we guarantee to satisfy you both or your money back. Our current distribution is limited, so if our dealers listed aren't close enough to buy Primus direct, they buy direct from us. Either way, "Get Acquainted" with Primus. We'll make it worth your time and sound.



CIRCLE 70 ON READER-SERVICE CARD

These Primus dealers have been given authorization to honor orders for Primus audio tape at the prices quoted in the three "Get Acquainted" promotions.

CALIFORNIA

Bakersfield Trans Lex 2130 Niles St.

Berkeley Cal Hi Fi 2461 Shattuck Ave

Igor's Stereo 211 Durant St. Davis

Music Machine 330 B "E" St.

Fresno Sun Stereo 3825 N

Blackstone Ave Los Angeles Henry's Radio 11240 W. Olympic

Blvd. Radio Products

1501 S. Hill St **Mountain View**

Cal Hi Fi 1347 El Camino Real

Oakland Cal Hi Fi 2028 Broadway

San Francisco Cal Hi Fi 2298 Filmore St.

San Jose

Century Music 448 S. Winchester Blvd Santa Cruz

Sun Stereo 1549 Pacific Ave.

COLORADO Englewood World of Sound 5102 S. Broadway

GEORGIA

Atlanta Stereo Center 666 Peachtree St.

IOWA Cedar Rapids Discount Stereoland Ltd. 110 Third Ave. S.W.

LOUISIANA

Houma Prol. Erny's Music Co. 821 E. Main

Lafayette

Prof. Erny's Music Co 1508 S. College Rd. Prof. Erny's Music Co. Northgate Mall

MICHIGAN Ecorse Double U Sound 3973-18th St.

MINNESOTA Mankato

Great Sound, Inc 313 N. Front

Minneapolis Great Sound, Inc. 521 Cedar Ave. So. Great Sound, Inc. 901 Washington Ave. S.E.

SEPTEMBER 1972

Great Sound, Inc. 1501 University Ave. S.E. St. Paul Great Sound, Inc. 1681 Grand

MISSISSIPPI

Oxford E'tude 1103 Jefferson Ave.

MISSOURI Independence

Cavern Sound 16400 E. Truman Rd.

NEW JERSEY

Egg Harbor Karl's Electronics 40 Dormstadt Ave. Parsippany F & W Enterprises t480 Rte. 46

NEW YORK

Mineola Mineola Music 162 Jericho Turnpike

Rochester J B Sound 2680 Ridge Rd. West

Syracuse Stereo World 2606 Erie Blvd.

OREGON Ontario Stone's Electronics 2062 S.W. 4th

Portland Hunter Video-Sonic 4059 N.E. Sandy Blvd.

PENNSYLVANIA Pittsburgh **Cassettes Unlimited**

1708 Painters Run Rd.

RHODE ISLAND North Kingston

Pro Sounds 6810 Post Rd

TENNESSEE Knoxville

Southeastern Stereo 7337 Kingston Pike

TEXAS Texarkana Texarkana Sales Co. P. O. Box 2663

WASHINGTON Centralia

Rainier Electronics Co. 309 W. Main

WEST VIRGINIA Charleston

Sodaro's 304 W Washington St Flemish Composers in Renaissance Italy. Boston Camerata, Cohen, dir.

Hummel: Septet, Op. 114. Fesca: Septet, Op. 26. Collegium Con Basso.

Kalkbrenner: Quintetto, Op. 81. Spohr: Quintet, Op. 52. Various instrumentalists.

Mozart: Mass No. 6. Haydn: Mass in F (Missa brevis); Salve regina in E flat; Offertorium, in D minor. Soloists; Orch. of the Vienna Volksoper, Grossmann, cond.; Singkreis Zürich, Gohl, cond.

Mozart: Piano Concertos Nos. 14 and 18. Klien; Mainz Chamber Orch., Kehr, cond.

Mozart: Serenade No. 5, K. 204. Mainz Chamber Orch., Kehr, cond.

Orrego-Salas: Sextet in B flat. Cordero: Quintet. Cremona String Quartet.

Schubert: Impromptus, D. 899. Brendel.

- Schubert: Symphony No. 8. Beethoven: Symphony No. 5. Berlin Philharmonic, Furtwängler, cond.
- Stravinsky: Petrushka; Circus Polka. Orch. de la Suisse Romande, Ansermet, cond.
- Stravinsky: Rite of Spring. Orch. de la Suisse Romande, Ansermet, cond.



- Barber: Violin Concerto. Delius: Violin Concerto. Gerle, violin; Vienna State Opera Orch., Zeller, cond.
- Beethoven: Piano Concerto No. 5. Gilels, piano; Leningrad Philharmonic Orch., Sanderling, cond.
- Beethoven: Octet; 3 Equale. Various instrumentalists
- Beethoven: Piano Trio No. 7. Gilels, Kogan, Rostropovich.
- Bizet: Carmen Suite; L'Arlesienne Suite. Vienna State Opera Orch., Rudel, cond.
- Chinese Folk Songs. Chinese Youth Art Ensemble.
- Glazunov: Violin Concerto, Mendelssohn: Violin Concerto. Oistrakh; U.S.S.R. State Orch., Kondrashin, cond.
- Handel: Judas Maccabaeus. Arroyo, Bumbry; Utah Symphony Orch., Abravanel, cond.
- Handel: Serse. Popp. Forrester, Shirley-Quirk; Vienna State Opera Orch., Priestman. cond.
- Marcello: Oboe Concerto. Vivaldi: Concertos for Viola d'amore, Mandolins, and Oboes. Leningrad Chamber Orch., Gozman, cond. Anna Moffo: Song Recital.
- Prokofiev: Cello Sonata. Shostakovich: Cello Sonata. Rostropovich; Richter.

Stravinsky: Le Baiser de la fée. Moscow Radio Symphony Orch., Rozhdestvensky. cond. Galina Vishnevskaya: Opera Recital.

Wagner: Der Ring des Nibelungen. Soloists: orchestra, Swarowsky. cond.



Lully Thesée. Various soloists and instrumentalists.

- RCA's popular "Greatest Hits" series will be expanded to the Victrola line this fall. Much the same format will be adopted, each release concentrating on well-known works by famous composers, performed by RCA's best-selling musicians.
- RCA will also be making the French Erato line available on Red Seal and/or Victrola. Erato's catalogue is an extensive one, covering French music from baroque to contemporary.



Albéniz: Iberia. Rena Kyriakou, piano.

Bellini: Norma: excerpts. Soloists; Rome Lyric Opera Orch., Vitalini, cond.

French Organ Composers, Vols. 5 and 6.

- German Organ Composers, Vols. 2 and 3.
- Massenet: Werther: excerpts. Soloists; Paris Opera Comique Orch., Sebastian, cond.
- Messiaen: Catalogues d'oiseaux. Jocy de Oliveira, piano.
- Prokofiev: Symphonies (complete). O.R.T.F. Orch., Martinon, cond.
- Schütz: St. Luke Passion; St. Matthew Passion; St. John Passion: Seven Words from the Cross. Various soloists and instrumentalists.
- Strauss, R.: Der Rosenkavalier: excerpts. Munich State Opera Orch., Krauss, cond.
- Tchaikovsky: Serenade for Strings; Waltzes. Hamburg Symphony, Springer, cond.
- Tchaikovsky: Violin Concerto. Mendelssohn: Violin Concerto. Oistrakh: U.S.S.R. National Philharmonic Orch., Kondrashin, cond.
- Telemann: 36 Fantasies for Harpsichord. Joseph Payne.
- Verdi: Il Trovatore: excerpts. Soloists; Rome Lyric Opera Orch., Brizio. cond.
- Wagner: Die Meistersinger: excerpts. Soloists; Saxon State Orch., Kempe. cond.
- Weber: Der Freischütz: excerpts. Soloists; Saxon State Orch., Kempe, cond.

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I own a Sony TC-124 cassette recorder and record off my KLH Model 15. I can't tell any difference between low-noise and standard tape with this setup, and I've tried Sony, TDK, Memorex, BASF, and Agfa tapes. Is standard tape really as good as low noise?-Jennings Glenn, Cody, Nebr. No, but the difference may be hard to hear on the TC-124 because its record/playback response (like that of other portables we have worked with) is not particularly spectacular by comparison to current home decks. Using a cassette deck with a really good high end and biased for lownoise tape, standard tape produces a relatively dull, lifeless sound. If the deck is biased for standard tape (which your TC-124 probably is) the low-noise product may sound a bit peaky at the top. A recorder with poorer high-end response (our sample of the TC-124 dropped off rapidly above 5 kHz in the lab's record / playback tests) will tend to suppress that peakiness. If you can't hear any difference with your Sony you may as well save a little money and buy regular tape, as long as it's a name brand. Cheapie cassettes generally are no real bargain with any recorder of course.

As long ago as May 1967 you discussed the virtues of William Halstead's indoor FM antenna, indicating that a wideband version suitable for home use would be forthcoming from McMartin Industries. I've written several times to McMartin and they say that they've not been able to find the time for the necessary developmental work. Do you know of any other similar antennas actually in production?—Maurice N. Black, Detroit, Mich.

There have been quite a number of "revolutionary new" indoor antennas for FM and TV introduced in the last few years, but every one we tried turned out to be disappointing. How similar they may be to the Halstead in anything but size we can't say. But for solving the two major problems of FM reception-multipath distortion and inadequate RF signal strength-we know of no adequate substitute for the tried-andtrue rooftop models.

The frequency-response curves in your reports on the Tandberg 6000X and the Revox A-77 are 4 to 6 dB poorer on the high end than similar reports in other magazines. I realize that no two samples perform exactly alike, but these discrepancies seem to be more than normal. How come? Is each piece of equipment adjusted to perform at its best when you test it? If not, why not?-James F. Stevens, Bloomington, Ind.

While we can't speak for any test program

but our own, three main factors seem to contribute to differences in test results. First is the testing method. Any frequency run or distortion measurement should show unequivocally (as ours do) the level at which it was measured or the results are meaningless. Our open-reel frequency runs, made at -10 VU, will show the effects of head saturation (which limits high-frequency response), at the slower transport speeds; and the numbers will therefore appear less attractive than those measured at a lower level. The second factor is the variability of tape. On occasion we have made several frequency response tests with different samples of the tape recommended for a given recorder, only to find that no two were alike. In such an event we ignore results from any tape samples that seem to be downright defective and pick a representative one from the remainder. But obviously another magazine, using another tape sample, can come up with different figures. Finally there is the matter of adjustment. In most equipment, the samples coming through a company's quality-control department are quite similar, and will produce similar results in the lab. But when a test sample isn't behaving as it should we make no attempt to "fix" it. If you had bought it, you'd either have to live with its peculiarities or go through the often aggravating process of warranty service; we want to report on the unit you'll be getting, not a special, near-perfect case. So instead of making adjustments ourselves we ask for a second sample and report on the better of the two. If we were to ask for more than two samples, or to doctor the samples we get, the test results would no longer be representative of the quality you're likely to get should you buy the unit.

My Nikko 701-B receiver has two aux inputs, one labeled "high Level," the other "low level." Both of my tape decks (Sony 630D and a Concord eight-track player) sound better through the low-level input or through the regular tape-monitor connection, which sounds about the same to me. In writing about the Marantz 2270 you talk about the aux input as "high level." Does this mean that if I were to use the Marantz my tape equipment would not sound as good as it does now?—Dennis Greven, Bemidji, Minn,

Not at all. We often call aux, tape-monitor, line, and similar inputs "high level" to distinguish them from preamp inputs (magnetic phono or tape head), which are designed to handle much lower signal levels. Nikko rates the low-level aux input at 200 mV, 200,000 ohms impedance—fairly representative figures for what we would call a high-level input, and very close to those for the Marantz. Nikko's high-level input is rated at 500 mV and 1,000,000 ohms, an impedance that suggests use with vacuumtube equipment. Your recorders are both transistorized, of course.

I'm on the brink of buying some equipment, and I'd like to narrow the choice to companies conforming to industry standards. Where can I get a list of the manufacturers who are members of the Institute of High Fidelity?—Westey Snelgrove, Cannon AFB, N.M.

While the Institute has done a lot for high fidelity over the years its members are not duty-bound to meet any specific quality standards. The IHF standards refer to the way performance characteristics are measured and stated, not to the characteristics themselves, and are neither very stringent nor entirely up to date—FM tuner specifications still make no reference to stereo reception, for example. You can get the list from the Institute of High Fidelity, Inc., 516 Fifth Ave., New York, N.Y. 10036.

The quadraphonic Fisher 701 still has an AFC switch in the FM section. I'm told I should leave it off while I tune, and then switch it in once I've got the station. What is the advantage of doing it this way? Is there any harm in leaving it on while I tune?—Richard F. Laxar, West Haven, Conn.

A receiver or tuner will not be harmed by leaving the switch turned on. But if it's on, you'll be hard put to tell when tuning is perfect. If the AFC is struggling to hold onto a poorly tuned station, the result can be audible distortion or a sudden change to another station if signal strength drops—as it often will under multipath conditions. Use the AFC only to correct for the relatively minor "drift" in the receiver—once you've pinpointed the correct tuning manually and you'll avoid these problems.

In your report on the Marantz 2270 receiver in the April issue the picture shows the center-tuning meter at the left and the signal-strength meter just to its right. I've seen this model locally, and the signalstrength meter is always on the left. Am I seeing the same unit, or has your 2270 been replaced by a newer model?—William Ames, Long Beach, Calif.

On Page 44 of the May HIGH FIDELITY, in the report on the Teac 350 cassette deck, there are two pictures. The one at the top of the page shows an oval marking on the righthand piano key. That at the bottom of the page shows the oval marking on the lefthand piano key (the recording interlock). What gives?—Alton Murtag, Newport News, Va.

Do we have sharp-eyed readers! Both the Marantz picture and that at the top of the Teac page were supplied by the manufacturers and presumably were made from preproduction samples that don't quite match the final design. All the 2270s we've seen—including our test sample—have the signal-strength meter on the left. The lower Teac picture was made from our test sample, which actually has two oval indicators of different color. (The second one is beyond the edge of the picture.) "Many professional audio people, including our reviewer, use the AR-3a as a standard by which to judge other speaker systems." *Electronics Illustrated, March 1972*



From the beginning, AR speaker systems have been characterized by independent reviewers as embodying the state of the art in home music reproduction.

Standard of performance

Soon after the AR-1 was introduced, as AR's first "top-of-theline" speaker system, the Audio League Report stated, "We do not specifically know of any other speaker system which is comparable to [the AR-1] from the standpoint of extended low frequency



Frequency response of the AR-3a 12-inch wooter, radiating into a 360° solid angle (hemisphere).

response, flatness of response, and most of ali, low distortion."

Seventeen years later

In a recent review of the AR-3a, published in *Stereo Review*, Hirsch-Houck Laboratories made the following observation:

"For the benefit of newcomers to the audio world, the AR-3a is the direct descendant of the AR-1, the first acoustic suspension speaker system, which AR introduced in 1954. The AR-1 upset many previously held notions about the size required for a speaker to be capable of reproducing the lowest audible frequencies. The 'bookshelf'-size AR speakers set new standards for low distortion, lowfrequency reproduction, and in our view have never been surpassed in this respect."

Durability of accomplishment

AR's research program is aimed at producing the most accurate loudspeaker that the state of the art permits, without regard to size or price. *Consumer Guide* recently confirmed the effectiveness of this approach, stating that "AR is the manufacturer with the best track record in producing consistently high-quality speakers," and summarized their feelings this way: "The AR-3a was judged by our listening panelists to be the ultimate in performance."



FREQUENCY IN CYCLES PER SECOND

Frequency response of AR-3a tweeter: top curve measured on axis, middle and lower curves measured 30° and 60° off axis, respectively.

The AR-3a is the best home speaker system that AR knows how to make. At a price of \$250 (in oiled walnut), the AR-3a represents what *Audio* magazine recently called "a new high standard of performance at what must be considered a bargain price."

Please send detailed information on the AR-3a speaker system to
Name
Address
AR Acoustic Research, Inc.
24 Thorndike St., Cambridge, Massachusetts 02141
HF 9

CIRCLE 1 ON READER-SERVICE CARD

news and views

Revolutions Revisited

Among the "revolutionary" entries in the tape field during the past several years, two that attracted considerable attention—the Newell tape transport and the Cobaloy tape formulation—seem to have been avoiding the limelight recently. Since the claims made for each of these developments were fairly spectacular, readers continue to inquire about them; so we set out to bring ourselves—and you—up to date.

The Newell transport used a stationary head designed to record up to ten tracks of video information on half-inch tape at a tape-to-head speed of 160 ips—or less than half that of the slowest current video cartridge formats. The key to its operation—for either video or audio—was to be a unique mechanical design capable of handling unusually thin tape even at very high speeds with unprecedentedly close tape-to-head contact. Result, according to Newell: a whole LP album, for example, on a roll of tape about the wize of a vanilla wafer. But a video model to have been marketed by Arvin Industries four years ago never made it.

Late last spring the system was shown privately in Germany. When we asked Chester Newell, its developer, about the demonstration he said, "We're keeping a low profile," but refused further comment. He did add, though, that a great deal has been done on the original system and that the project is still "very much alive." Arvin says it's still using the longitudinal track system in commercial and military video equipment, but "... we've gone on to other technology in our consumer machines."

Cobaloy—a metallic, cobalt-based tape coating compound said to be capable of twice the magnetic satura-



This roll of tape, holding equivalent of a 44-min. LP album, was handed out at 1967 press conference publicizing "revolutionary new" Newell tape-transport system.

tion of chromium dioxide and three times that of ferric oxide—was announced in the summer of 1971 by Graham Magnetics of Graham, Texas. The increased recording density attributed to Cobaloy (which is not to be confused with cobalt-doped ferric-oxide tape coatings) quadruples the information that can fit into a given area of tape.

To meet the prospective needs of tape manufacturers, Graham decided to build, "on pure speculation," a Cobaloy plant in Arlington, Texas, where it now exists as Cobaloy Co., a division of Graham. The first batch of raw Cobaloy powder was produced there last May. Plans now call for distributing the powder to tape manufacturers this fall.

Since the changes needed to make the most of Cobaloy's potential are most easily accomplished in home video equipment, tape for that purpose will get priority treatment by Graham. The first samples of audio tape are scheduled before the end of the year, although not in any significant quantity. It's expected that Cobaloy Co. will sell the powder to tape manufacturers and that Graham will market the finished tape.

Another Quadraphonic Broadcast System

Two systems for broadcasting quadraphonic sound (Halstead/Feldman and Dorren—see ''Four-Channel Stereo,'' HF, January 1971) have received substantial coverage over the past two years. General Electric now has announced a third system.

GE's Audio Electronics Products Department filed a technical report with the Federal Communications Commission in April covering the field testing of its system. (Material on the Dorren system was submitted to

the FCC last summer.) The first tests of GE's system were conducted at the company's own FM station, WGFM, in Schenectady, N.Y., during nonbroadcasting hours last fall.

The transmission is said to be compatible with existing monophonic and stereophonic receivers and music systems. Four discrete audio channels, all with full FCC frequency range (30 to 15,000 Hz), are transmitted by adding another subcarrier to the existing stereo-FM subcarrier. According to GE, this addition does not interfere with present stereo FM nor will it interfere with the background music service (SCA) leased by businesses. GE claims that both matrix and discrete fourchannel records and tapes may be broadcast with its proposed system, but cautions: "We have many more tests to go."
Does your favorite music blow your mind or just mess it up?

Koss Stereophones put your favorite music where it belongs. In your head. Not lost forever in the walls of your living room.

After all, who should hear your favorite music? You or the walls of your living room? Not to mention your family or neighbors who'd rather hear something else. Like hearing themselves think. Or their favorite television show.

World all your own

Put on Koss PRO-4AA Stereophones and you're in a world all your own. Immersed in Brahms' First or Beethoven's Fifth . . . or turned on to the Moody Blues. Patented fluidfilled ear cushions seal in the sound and seal out the unwelcome noise. So nobody disturbs you . . . and you don't disturb anybody else.

You hear more with Koss

You'll hear more of Brahms' First the first time you put on Koss Stereophones than you've ever heard with speakers. Because Koss mixes the sound in your head instead of

scrambling it on your walls. The unique Koss acoustical seal around

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your ears produces a rich, deep bass without boominess or distortion. Yet highs are always brilliantly clear and uniform because



they're focused only on your ears . . . not on the walls of your room.

Worth hearing

Why should the Koss PRO-4AA Stereophone be so superior? Because it contains the first driver designed exclusively for Stereophones. A unique diaphragm with 4 square inches of radiating area. And an extra large 1-inch voice coil that's virtuelly "blow out" proof. In other

tually "blow out" proof. In other words, the Koss PRO-4AA was designed from the start to provide the finest sound ever achieved in a dynamic headphone. And it does . . . with a clean, uncolored response 2-full octaves beyond the range of other dynamic headphones on the market. And with a typical frequency range of 10-20,000 Hz. In fact, High Fidelity Magazine rated the PRO-4AA a "superb" headphone. But then, everyone who has heard the Sound of Koss rates it superb.

Enjoy a new music library

Take your favorite tape or record to your Hi-Fi Dealer and listen to it thru a pair of Koss PRO-4AA Stereophones. The extra sound you get in

the Sound of Koss will amaze you. In fact, you'll hear so much more from your music that buying a Koss PRO-



4AA Stereophone is like getting a whole new music library.

Hearing is believing

Hear the Sound of Koss at your local Hi-Fi Dealer or Department store. Or write for our 16-page color catalog, c/o Virginia Lamm, Dept.

HF-272. Once you've heard the Sound of Koss, you'll never want to mess around with anything else. From \$15.95 to \$150.





Quick Glances . . .

A new FM Atlas and Station Directory, listing call letters, frequency, stereo capability, vertical polarization, coverage in miles, and type of programming and including detailed regional maps of the 3,100 FM stations in the U.S., Canada, and Mexico, is available for \$2.50 from FM Atlas Publishing Co., Box 24-HF, Adolph, Minn. 55701.... London Records-one of the labels that at this writing had not yet chosen a four-channel disc format-has entered quadraphonics via tape. Five selections in the Q-8 cartridge format appeared early this summer processed by Ampex.... More than 400 accessories-including mixers, switching units, connectors, adapters, and molded cable assemblies-are listed in Switchcraft's new A-404a catalogue available from Switchcraft, Inc., Sales Dept., 5555 N. Elston Ave., Chicago, III. 60603.

Come on, Fellas!

In case you hadn't noticed, mass-market and console companies have been muttering even louder than usual about moving into "the high-performance audio components field." The cliché varies with the company and with the year, but the sense remains basically the same.

Or rather the nonsense. One product manager told us recently that his new budget receiver had "real hi-fi specs: 10 watts continuous power [total] into 8 ohms at 5% THD." Later in the same conversation, comparing matrixed quadraphonics with discrete, he complained that matrixed sound "has less discretion [sic!] in the back channels." Well, he's not the first to confuse "discreet" with "discrete." And his isn't the first "hi-fi" receiver to deliver 5% distortion. But at 5 watts per channel?

Touch on the Go

Sony/Superscope is following up its Braille equipment instruction manuals of recent years with raised markings on all its cassette tapes. A slightly raised indication letter enables the user to distinguish between the "A" and "B" sides by touch—a development that not only assists the blind, but also lets motorists select the desired side without having to take their eyes off the road.

CIRCLE 150 ON READER-SERVICE CARD

equipment in the news



Dynaco high power amplifier

Dynaco says its new Stereo 400 power amplifier can pack up to 200 watts RMS per channel at 8 ohms into your speakers provided they can take it. For those that can't, the company has included its Dynaguard circuitry that allows the user to select five power settings—20, 40, 80, 120, and 200 watts RMS per channel at 8 ohms—to fit his particular needs. Other features are the two 12-dB-per-octave linear phase filters that can be activated by two push switches on the front panel to remove noise at and beyond the audible limits of the frequency spectrum. The Stereo 400 is available in kit form at \$399.95 or factory assembled at \$499.95.

CIRCLE 148 ON READER-SERVICE CARD

JVC cartridge deck records and plays

Stereo recording and stereo or quadraphonic playback are available in JVC America's Model 4ED-1205 eight-track cartridge deck. The deck has a pause control, time counter, and fast forward. Programming modes include automatic stop at the end of each program, automatic stop at the end of the last program, and continuous play. There are left and right microphone inputs, and front and back stereo headphone outputs. The unit lists at \$179.95.





An acoustic achievement destined to become the universally preferred sound reproduction system.

The citan these days superlatives are used to barnoullage mediodrity. Let s just say, you'll be excited with the magnitude of the achievement of the three new Pioneer series R speaker systems once you hear them. We built in the sound most people prefer when compared with the conventional speakers now available.

Poneer has incorporated many meaningtul refinements to achieve this exceptional sound reproduction.

For example the series R speaker units are flush mounted to the face of the enclosure, rather than recessed. This produces added vitality to the midrange, and wider overall dispersion

Exclusize FB cones assure robust bass, clear mid and high tones, improve damping, while keeping distortion at an absolute minimum.

Another example of Fioneer's meticulcus engineering detail is the unique concave certer pole with a pure copper cap/ring. Not only does this reduce the inductance of the voice coil, it also reduces the dynamic magnetic field generated by the voice coil, for minimum intermodulation distortion and magnificent transient response.

While all three models use long-throw voice coils for greater cone movement and higher excursions, the R700 anc R500 nave sound-absorbing polyurethane foam surrounding their woofers to reduce distortion even further.

By using improved horn tweeters

New Series R Speaker Systems

instead of less costly cone or dometype twesters, you can hear the difference in wider dispersion, lower distortion and high transient response.

The same on-target thinking has been applied to the precisely designed crossovers and the sturdy, accustically pacted enclosures.

We'd be happy to send you complete specifications on the R series. But first make this test. Compare the R700 (\$229.95), R500 (\$159.95), R300 (\$119.95) with similarly priced speaker systems at your Picneer dealer. It's their absolute superiority in sound reproduction that will convince you to buy them

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New tuner from Marantz

Among the features to be found on the new Model 105 AM/FM stereo tuner from Marantz Co. are Gyro-Touch tuning, illuminated tuning meter and dial pointer, blackout dial, and FM muting. The rear panel includes 300-ohm unbalanced input and 75-ohm balanced input, built-in AM ferrite bar antenna, and accessory AC outlet. With a gold anodized front panel to match other Marantz components, the 105 is priced at \$149.95. A walnut cabinet is optional.

CIRCLE 152 ON READER-SERVICE CARD

Radio Shack cassette deck features Dolby

Radio Shack offers the home recordist its Realistic SCT-6 stereo cassette tape deck with Dolby noise-reduction circuitry and a tape bias switch to permit use of either ferric-oxide or chromium-dioxide tape cassettes. Other features include separate record-level controls for each channel, master recording-level control, dual illuminated level meters, keyboard-type pushbutton controls including a "pause" button, push-to-reset digital counter, separate mike and aux inputs, and automatic end-of-tape shutoff. The Realistic SCT-6 comes with an oiled walnut cabinet with brushed aluminum panel and sells for \$199.95.

CIRCLE 153 ON READER-SERVICE CARD





Hartley's Zodiac '72 loudspeaker

The newest addition to the Hartley line of loudspeakers, the Zodiac '72, has a 10-inch woofer with treated cone, flex surround, multilayer voice coil, and a one-inch dome-type tweeter. Claimed response is 30 Hz to 22 kHz, nominal impedance is 8 ohms, and the system is designed for use with amplifiers delivering from 10 to 50 watts RMS. With a hand-rubbed oil-finished cabinet and acoustic front grille of woven mocha, the Zodiac '72 costs \$120.

CIRCLE 149 ON READER-SERVICE CARD

Four-channel decoder from Metrotec

The Model SDW-Q Universal four-channel decoder from Metrotec Electronics decodes both SQ and E-V encoded records as well as synthesizing four-channel sound from any two-channel source. Using a special 300-Hz turnover in the matrix/phase shift, the SDW-Q is said to retain full bass response in the rear channels. Features include a front-to-back balance control, master volume control, tapemonitor switch, source switch, and matrix mode switches. Priced at \$69.95, the SDW-Q is also available in kit form (Model SDK-Q, \$54.95), or with a built-in 10-watt-per-channel rear-channel amplifier (Model SD4A-Q, \$149.95).

CIRCLE 154 ON READER-SERVICE CARD





An illuminating receiver from Magnavox

Magnavox has entered the components field with a line of receivers headed by the Stereo 1500 DTI, Model 8898. The unit's most striking feature is the digital tuning indicator, which operates for both FM and AM. Other lighted indicators show which band is selected, when FM stereo signals are tuned in, which external inputs (phono or auxiliary tape) are in use, and spotlight bass, treble, volume/loudness, and stereo-balance controls. The amplifier section is rated at 50 watts per channel, both channels driven. Price has not yet been announced.

CIRCLE 151 ON READER-SERVICE CARD

If you're going to steal an idea, steal from the best.

"When the Citation components were in their final design phases we had the rare opportunity to see some of the first engineering prototypes and we have never quite gotten over the dedication and enthusiasm exhibited by the highly qualified engineering team that 'gave birth' to those winners. mall wonder, then, that we were

Small wonder, then, that we were elated to find that the Model 930 receiver is the brain-child of that very team. It abounds in Citation features, many of which one would have thought impossible to incorporate in a receiver at this attractive price. Of course, the Citation 12 boasts more power (60 watt rms per channel), but then again the [Citation 11 preamplifier and the Citation 12 power amplifier] combination retails for a cool \$600.00 or so, as opposed to just under \$400.00 for this receiver. The rest of the circuit refinements are there, though, including the twin power supplies (not negative and positive voltages supplied by one power transformer, but actually two complete power supplies including two separate power transformers), super-wide frequency response and power bandwidth, fantastic square wave response and rise time, and conservative and meaningful power ratings that can serve as a model to the rest of the industry. All this plus a superior tuner section make the 930 a receiver that even the died-inthe-wool 'separatists' should take a good look at."

Audio Magazine, June, 1972

FOR THE COMPLETE REVIEW OF THE 930 AND FURTHER INFORMATION ON THE HARMAN/KARDON LINE, WRITE: HARMAN/KARDON, INC., COMMUNICATIONS DEPT., 55 AMES COURT, PLAINVIEW, NEW YORK 11803 Distributed in Canada by Harman/Kardon of Canada, Ltd., 9429 Cote de Liesse Rd., Montreal 760, Quebec.

harman / kardon The Music Company

Our PRO-BV was too good to change. So we improved it.



The new PRO-B VI.

Our PRO-BV has long been regarded by the independent test labs as the best dynamic stereophone on the market.

Audio magazine found it "exceptionally flat over most of the range of importance." Stereo & HiFi Times called it "a superlative phone that will do all that your best equipment can ever ask." FM Guide reported that "The bass of the PRO-BV is a vast improvement over the already impressive bass of the PRO-B. And the consumer labs that we're not permitted to quote were even more impressed.

With all this, we could have left well enough alone. Especially with our separate woofer/tweeter design. But we didn't. We added an inner acoustic chamber to control the woofer excursion and take full advantage of its acoustic suspension design. We developed a new coaxial tweeter. And we further refined the crossover network.

The result: The PRO-BVI. With a frequency response so smooth, from the deepest lows to the highest highs, that it rivals the finest electrostatic stereophones.

The improvements didn't stop with performance. For

greater convenience, we've added a swivel clip to the fifteen foot coil cord. Clip it to your pocket or belt, and you can move around freely without any tug on your head. Oh yes, there is one important feature that we didn't change. The price. It's still only \$59.95.



Our unique woofer/tweeter design. Each earcup has a separate woofer and tweeter and a full crossover network. Just like your speaker system.

Superex Stereophones

Superex Electronics Corp., 151 Ludlow Street, Yonkers, New York In Canada, William Cohen Corp., Montreal. CIRCLE 68 ON READER-SERVICE CARD

THE CONSUMER'S GUIDE **NEW EQUIPMENT** TO HIGH FIDELITY EQUIPMENT **IEDOITS**



Panasonic Receiver an Attractive Value

The Equipment: Panasonic SA-5800, a stereo FM/AM receiver in wood case. Dimensions: 5½ by 16 by 12¼ inches. Price: \$259.95. Manufacturer: Matsushita Electric Industrial Co., Ltd. of Japan; U.S. distributor: Matsushita Electric Corp. of America, 200 Park Avenue, New York, N.Y. 10017.

Comment: Matsushita's engineers have combined an unusually comprehensive array of features and performance capabilities into this Panasonic receiver, considering its moderate price. Particularly notable, perhaps, are the independent connections and switching for two tape recorders (something more than a luxury feature now that many readers own both open-reel and cassette equipment) and—among circuit features—the direct-coupled output, a configuration that until recently was to be found mostly in more expensive equipment. But more of that in a moment.

Two knobs flank the tuning panel. To its left is the speaker switch: phones-only/main/remote/both. The headphone jack is live with this switch in any position. To the right of the dial is the tuning knob. In addition to the dial, the tuning panel contains a meter that shows center tuning for FM, signal strength for AM. Across the bottom of the front panel are the headphone jack; power on/off switch; friction-clutched bass and treble controls; on/off switches for the high filter and loudness compensation; balance and volume controls; lever switches for FM muting, mode (stereo/mono), and the two tape monitors; and the selector (phono, FM auto, FM mono, AM, and aux).

The back panel uses conventional binding posts for the antenna connections (300-ohm FM twinlead, 75ohm FM coax, and AM longwire) and for grounding other equipment such as a turntable. Oversize binding posts are used for the speakers (hot and common connections for left and right speakers in main and remote pairs). Phono-jack pairs are provided for magnetic phono pickup, aux, tape 1, and tape 2 inputs, and for the two tape recording outputs. Input and output for tape 1 also can be connected through a DIN socket. In addition there are preamp-out and main-in pairs that normally are connected by jumpers. With the jumpers removed these jacks can be used to insert a quadraphonic decoder, speaker equalizer, or similar unit into the circuit just ahead of the power amplifier. The back panel also contains two convenience AC outlets, one of which is controlled by the receiver's on/off switch.

Panasonic's 27-watt-per-channel rating for the SA-5800 matches lab figures when one channel only is driven; with both channels driven, output falls to a little under 25 watts per channel into 8 ohms—more than enough for any speakers of conventional design even in fairly large rooms. When CBS Labs measured harmonic distortion at the full 27-watt rated power the figures were well below rated THD at all frequencies except the extreme bass; at other frequencies and power levels, measured THD was typically in the 0.1-per-cent range, a good mark. IM distortion proved to be somewhat higher, but not objectionably so.

The FM section is particularly fine for a mediumpriced receiver. IHF sensitivity figures are absolutely consistent across the dial. This is unusual because some manufacturers try to make a mediocre FM tuner look better than it is by optimizing for the middle of the band—getting a good reading at the "official" 98-MHz frequency and letting sensitivity fall where it will at the

REPORT POLICY

Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Laboratories, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation's leading research organizations. The choice of equipment to be tested rests with the editors of Hick FibELITY. Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested; neither Hick FibELITY nor CBS Laboratories assumes responsibility for product performance or quality. ends of the dial. But not only have Matsushita's engineers eschewed this approach, they have managed the required 30 dB of quieting at only 1.4 microvolts-a figure one might expect only of a premium-priced separate tuner. The quieting curve also descends unusually steeply, meaning that at higher RF input levels noise and distortion are kept exceptionally low. The maximum descent of the curve-to better than -56 dB for all measured input levels above 10 microvolts-is again what one would expect of much more expensive equipment. FM S/N ratio is a whopping 72 dB. Most of the remaining data are fine too. High-frequency distortion in the stereo mode is on the high side at almost 10 per cent, but it should be noted that the true harmonic by-products of the 10-kHz test tone are beyond audibility. This test, then, is more one of electrical performance than of audible quality

And in terms of audible quality the unit is a fine one. The most publicized advantages of the direct-coupled circuit-that is, one that dispenses with the usual coupling capacitors between the output stage of the amplifier itself and the speaker terminals on the amplifier or receiver-are the improved transient response associated with low phase distortion (capacitors inherently introduce a phase shift into signals passing through them) and better bass response (which will be limited if the manufacturer skimps on the coupling capacitors). The sound of this unit does indeed seem, if anything, a shade cleaner and more transparent than that of comparable units. The fine FM performance certainly contributes to this over-all impression; but in playing records as well we were aware of a certain sweetness and liveliness of detail both in big orchestral passages and in the reproduction of solo instruments. Lab data show that the unit does not produce remarkable bass response. While the falling characteristic of the frequency-response curves does not occur at frequencies high enough to affect typical program material, the bass is not as flat as we might have expected with direct coupling.

Cosmetically the receiver is an attractive one. The dial pointer lights up for perfect tuning in both AM and FM. The controls are well differentiated: Panasonic uses two types of switches on the front panel, for example, and intersperses them among the knobs so that with a little familiarity one heads right for the correct control without having to read the labeling. There are lighted function indicators (phono, aux, etc.—as well as the usual stereo light for FM tuning) in the dial panel. Parts are nicely finished and operation smooth. All told, the SA-5800 offers an excellent value in the middle-price field.







Square-wave response

Deck in Kit Form

First Cassette Deck

The Equipment: Heath AD-110, a stereo cassette deck in kit form. Dimensions (in walnut-sided case supplied): 3½ by 13% by 11 inches. Price: \$119.95. Manufacturer: Heath Co., Benton Harbor, Mich. 49022.

Comment: For a non-Dolby cassette deck, the AD-110 sounds surprisingly good when playing a well-made pre-recorded cassette (try the Brahms Second, for instance, on DGG 3300 180) through a high-quality powerful playback system. As such it is a welcome addition for the do-it-yourselfer who can find the nine hours or so required to assemble it. Most of the work involves mounting and soldering parts to a circuit board and then fitting the board, the meters, and the preassembled transport mechanism into the case, a fairly simple job for an experienced kit builder and probably within the ability of a beginner too.

Styling is neat and functional. The deck loads from the top; its cassette well is under a transparent cover that lifts up when you press the eject switch. Across the bottom sloping portion of the unit are the power off/on switch, twin recording-level VU meters, separate recording-level controls for left and right channels, and six piano-type switches for recording interlock, rewind, stop/eject, play/record, fast forward, and pause. The transport stops at the end of the tape but does not disengage the drive or eject the cassette automatically. A three-digit tape counter with reset button is located just above the cassette well. Miniature phone jacks for lowimpedance microphone inputs are at the front; line inputs and outputs are at the rear together with input level controls for each channel. There are no output level controls, so playback volume must be controlled by the system amplifier into which the AD-110 is connected. Transport speed is 1.2 per cent fast, but this would not affect recordings made and played back on the same unit. Prerecorded cassettes, assuming they were recorded at precisely the correct speed, will sound about

a half tone up in pitch. Speed remains constant regardless of changes in supply voltage, however, which attests to the stability of the motor and drive system. The VU meters each read 6 dB high by DIN standards, which means that you have considerable leeway above the meters' 0-VU indication before overload will occur with typical program material.

You can vary the bias (permitting the use of chromium-dioxide tapes), but by an internal adjustment—using a built-in reference signal and the front-panel meter—rather than by an external switch. To change the bias once it's set requires removal of the cover, a somewhat inconvenient process. Actually, by following the instructions as they are given in the construction section of the manual you adjust the deck for use with lownoise ferric-oxide tape (such as the Scotch 203, with which the unit was tested in the lab). Additional instructions farther along in the manual tell you how to adjust the unit for chromium-dioxide tapes.

The accompanying test results tell the story: The AD-110 either meets or exceeds its performance specifications and shapes up as a very desirable unit that—at the price, even considering that you must build most of it yourself—should appeal to a wide number of do-it-yourselfers who want to add a cassette facility to an existing stereo system.

CIRCLE 141 ON READER-SERVICE CARD







The Equipment: Dynaco FM-5 tuner. Dimensions: $13\frac{1}{2}$ by $4\frac{1}{2}$ by $7\frac{1}{2}$ inches. Price: \$149.95 in kit form; \$249.95 wired. Manufacturer: Dynaco, Inc., 3060 Jefferson St., Philadelphia, Pa. 19121.

Comment: Dynaco has been whetting our appetite for some time with preproduction samples of a new FM tuner to replace the FM-4 which, while an excellent performer and an extremely attractive value, lacked a number of features we have come to expect in the years since it first appeared. Repeated delays have prevented delivery of the FM-5, however, and readers have been writing in to ask whether it was worth waiting for.

It was worth waiting for, without question. Dyna has done it again—given us a component that will bear comparison with other companies' top models, but at moderate price. The value it represents is most striking in the kit version; many readers will think the \$100 saving a windfall in view of the unit's simple assembly.

After about an hour and a half of mechanical assembly (mounting switches and other chassis parts) on the front panel, you wire this section in conventional style,

Dynaco's Long-Awaited FM Tuner Kit

soldering leads to lugs and other connecting points. Next you fasten the prewired front end to the mainchassis bottom plate; wiring to the front end itself is via a

TEST REPORT REPRINTS

In response to numerous requests, most of our previously published test reports are now available in reprint form. An index to reports published during any one year appears in that year's December issue. Copies of these indexes are also available. To order, please write, asking for the report on a specific product (or products), or specific index (or indexes), and enclose 25 cents per report or index to cover handling and mailing. Address your request to High Fidelity Magazine, Test Report Reprints, Great Barrington, Massachusetts 01230. Please be sure to include your name, return address, and zip code. series of eyelets not unlike those found on printed-circuit boards. The latter (two are supplied) come fitted with all parts in place, and so the work from here on is mostly mounting the boards onto the chassis and then soldering the leads to and from them. Final assembly consists of installing the tuning dial and its control, stringing the dial cord, and fitting the cover to the set. No alignment at all is required. The instruction steps are clear, and line drawings and photos of the kit help in the work. An experienced kit builder should be able to finish the job in about 6¼ hours; a novice probably will need somewhat more time. Only one chore is tricky: wiring the antenna matching coil, whose leads are very delicate and whose insulation could be damaged by heat from the soldering iron.

The front panel is simplicity itself. Set into the dial area are a signal-strength meter and two indicator lights: one for center tuning, one for stereo reception. The tuning knob is at the right. Across the bottom are a volume control knob with an off position, a mode switch, an aux/FM switch, and a three-position Dynatune switch. The off position on the volume control will not be used if the tuner is plugged into a switched accessory outlet on the preamp. The mode switch has three positions: mono only, automatic mono/stereo switching with channel blend introduced at high audio frequencies to cancel excessive transmission noise in weak stereo broadcasts, and automatic switching without the high blend. The aux position of the next switch turns off the FM audio and chooses the signals arriving via aux connections provided on the back panel for that purpose. The Dynatune switch has three positions: muting off, muting on, and Dynatune itself-Dyna's version of automatic frequency control, using what Dyna describes as a logic circuit to tune for minimum distortion.

On the back panel are phono-jack inputs for the aux connections and output pairs for tape recorder and "audio"—the main feed to your stereo system. It is this output that is controlled by the front-panel volume control, allowing you to match FM levels to those of other system inputs ad lib. Recording levels are, of course, controlled at the recorder. Also on the back panel are the antenna connections for either 75-ohm coaxial or 300-ohm antenna leads, a switched accessory AC outlet, and the fuseholder.

The first performance measurement most readers seem to look at is IHF sensitivity. (This was one respect in which the FM-4 looked unimpressive, though the raw sensitivity figure is far less important in our opinion than the behavior of the unit above that barely minimal input level.) The FM-5 comes in at 1.4 microvolts—a spectacular figure, particularly considering that it is maintained all across the FM dial. From the 30-dB point (where IHF sensitivity is measured) quieting descends rapidly to 45 dB for only 2.5 microvolts—the 30-dB point for many budget tuners. From below 10 microvolts to the limit of the CBS Labs test procedure quieting remains at or near 50 dB, an excellent mark for any tuner regardless of cost.

The remaining lab data all confirm the FM-5's superior performance. The only point on which we might cavil is the frequency response in the extreme bass. The roll-off (which may contribute to the unit's extremely low distortion and noise measurements) reaches -3 dB at about 40 Hz in each curve. But since most speakers roll off sharply at a higher frequency, it would require a program signal with exceptional bass information and extremely wide-range speakers to hear the difference between the FM-5 and a tuner with flatter bass response. In listening to actual programs we can only say that we were delighted. Moreover the operating controls—notably the tuning knob with its elegantly smooth flywheel action—are a joy to work with. The FM-5 looks like a real winner.

CIRCLE 144 ON READER-SERVICE CARD



Dyna FM-5 FM Tuner Additional Data

Capture ra	tio	1.7 dB	
Alternate-c	hannel sele		
		75 dB	
S/N ratio		67 dB	
THD	Mono	L ch	R ch
80 Hz	0.17%	0.23%	0.29%
1 kHz	0.12%	0.15%	0.14%
10 kHz	0.22%	1.1%	0.90%
19-kHz pilot		-63 dB	
38-kHz subcarrier		-67 dB	

Advent 201: Data Up To Date

In January of this year we published our first test report on a Dolby cassette deck with chromium-dioxide tape option—the Advent Model 201. It represented a new departure in several respects. In addition to the Dolby circuitry and the special bias and equalization control for Crolyn, the deck was the first we had come across in which a properly recorded cassette could be made literally indistinguishable from the sound source. In making recordings from disc and FM—both at the time of preparing the original report and in the intervening months —we find that the 201 documents the premise that the sound of state-of-the-art cassette equipment need make no apologies whatever to the better open-reel decks.

Many of our readers asked about the frequency-response results obtained for the 201: down 5 dB at 9 kHz with Crolyn. Surely the curves are wrong if this is to be called a high fidelity unit, they said.

These curves, made at -10 VU, show the effect of tape saturation and represent the actual capability of the tape at that level. All of our tape-recorder record/ playback frequency tests had been made at that level, and it gave our reports the advantage that results could be compared directly no matter what equipment was involved.

The actual capability of slow-speed tape equipment is better than these curves would at first suggest, however, because when high-frequency high-level signals are present (and they seldom are in actual recording) the recording level can be reduced so that this type of signal is not limited by tape saturation. In other words the limiting factor at the high end at -10 VU is the tape and the way it is used rather than the equipment itself.

To shift the emphasis back toward the equipment, we have made a special case of cassette equipment and now test it all at -20 VU since this level is consistent with that used in the DIN playback-response test tapes. For this reason the Advent 201 record/playback curves as originally published are no longer comparable to those for cassette decks we have tested more recently. We have changed procedure in one other respect as well: For our first Dolby recorder test CBS Labs made up its own Dolby test tape and used that tape as the reference in checking (in the playback mode) the unit's Dolby tracking action. In all subsequent reports the lab used a simpler scheme: It ran a second record/playback curve with the Dolby circuit switched on. A comparison between the Dolby-on and Dolby-off curves gives an index of performance in this respect: The more alike they are, the better the tracking.

The curves shown here represent a retest of the 201 (from a different sample, of course) in those areas where we have changed our method. (All other data in the original report still apply, of course.) You'll note that some effect of tape saturation is still visible as a steep roll-off in top-end frequency response. The lower the reference level at which curves are taken on any tape recorder, the less tape saturation will show; but there is a limit to how low the reference level can be before it begins to overstate the practical capabilities of the recorder. Suffice it to say that high-frequency overtones—the "sheen" and "sparkle" of a musical recording—exist at levels well below those of the fundamental tones. And in listening to tapes made on the 201 they're clearly evident.

On paper the chromium-dioxide curve suggests little performance advantage over that for ferric oxide. This is because Advent has chosen to make use of the potential of Crolyn in still further noise reduction (that is, in addition to Dolby; see the S/N data in our original report) rather than in added headroom, which would have postponed" the saturation rolloff to a higher frequency in our -20-VU curves. With normal program material, in which there is little if any high-frequency high-level signal, the Advent equalization yields a greater dynamic range for Crolyn than for ferric oxide, and therefore the 201 is capable of doing an outstanding job in making live recordings where dynamic ranges tend to be extreme. The price you must pay for this capability-less toleration for high-frequency overload-is attacked by Advent in its metering system. Recording pre-emphasis is reflected in the meter action so that when you do encounter high-frequency signals at high enough levels to risk saturation, the meter shows the higher level. This action, together with instructions in the manual, give the user guidelines for the handling of "problem" situations. In effect, you must reduce recording level (trading in some of the added dynamic range for greater high-frequency headroom) to make the most of this type of input. Like all the Advent manuals we have seen, this one is prepared with extreme care and merits careful reading and thorough digestion; it is far more than a quick reference guide just as the 201 is far more than just another well-built convenience tape deck.



REPORTS IN PROGRESS

Infinity 1001 loudspeaker system Pioneer SX-626 stereo receiver JVC CD-1667 ANRS (noise-reduction) cassette deck

The ADC-XLM "... in a class by itself."



That's the way Stereo Review described our XLM. High Fidelity headlined their review, "Superb new pickup from ADC" and went on to say, "...must be counted among the state of the art contenders." And Audio echoed them with, "The ADC-XLM appears to be state of the art."

With the critics so lavish in their praise of the XLM, there's hardly any necessity to add anything. Far better to let the experts continue to speak for us.

Frequency response The CBS STR-100 test record showed less than ± 1.5dB variation up to 20,000Hz. Stereo Review

Frequency response is exceptionally flat. *High Fidelity*

Tracking This is the only cartridge we have seen that is really capable of tracking almost all stereo discs at 0.4 grams. *Stereo Review*

The XLM went through the usual torture test at 0.4 grams (some top models require more than a gram). *High Fidelity*

The XLM is capable of reproducing anything found on a phonograph record. Audio

Distortion Distortion readings...are without exception better than those for any other model we've tested. *High Fidelity*

The XLM has remarkably low distortion in comparison with others. *Audio* At 0.6 grams the distortion was low (under 1.5 per cent). *Stereo Review*

Hum and noise The XLM could be instrumental in lowering the input noise from the first stage of a modern transistor amplifier. Audio The cartridge had very good shielding against induced hum. Stereo Review

Price This would be a very hard cartridge to surpass at any price. *Stereo Review* We found it impossible to attribute superior sound to costlier competing models. *High Fidelity* Priced as it is, it is a real bargain in cartridges. *Audio*

The Pritchard *High Definition* ADC-XLM \$50.

Pickett District Road, New Milford, Connecticut 06776

by W. Rex Isom Chief Engineer, RCA Records

How to Prevent and

IN THE GRAVEYARD of historic Saint John's Church in Richmond, Virginia are many horizontal tombstones—slabs of granite or limestone four to six inches thick with vertical supports at each end so that they resemble park benches. Over the years, some of the stones have become sway-backed by as much as three inches or more. This has happened because of a phenomenon called "coldflow," and it is this same phenomenon that is in large part responsible for most record warpage. Fortunately, deformation is easier to straighten in discs than in tombstones, and proper support in storage can be relied on to prevent it in the first place.

In order to understand how coldflow—plus a number of other factors—dictates the measures that are necessary to prevent or to cure record warping, you should know something of the hows and whys of record design and manufacture. Let's take things in order, from some basic concepts right down to the moment when, having played it, you file a record away in your collection.

The Basics

Coldflow is a physical characteristic that allows material to take on a new shape under stress without cracking or rupturing. Plastics generally are very vulnerable to coldflow. Glass and granite are much less vulnerable. A measure of resistance to coldflow is given by what is known as the glass temperature of the material. This is the temperature at which the material hardens as it is cooled from its molten state. For glass itself, this temperature is very high, and the coldflow is very small. For the vinyl plastic from which records are made, the glass temperature is only about 120° F.

The phenomenon of coldflow is important in the design, manufacture, and distribution of records if they are not to become warped before you ever receive them. Care, even in what appear to be trivial details, is essential.

A record is designed to have its foundation of strength in the label area. To assure continued flat-

ness of the label areas, the labels themselves must be oriented in manufacture so the grain structure of the paper is parallel on the two faces of the record. The paper is stronger with the grain than it is across the grain. The difference is very slight, but it's also relentless. During temperature changes and moisture absorption cycles, this difference is sufficient to cause the label area to warp if the stresses at its two surfaces are not in equilibrium. And since the playing area of a modern record is constructed like a thin cantilever supported by the label area, the warpage can affect—and even be magnified in—the playing area. I have seen records rendered unplayable by carelessly aligned labels.

The record's cross section resembles an airplane in the way that the playing area-like the airplane's wings-is cantilevered from the center. But at the circumference of the record is the so-called bead, which further stiffens the playing area, adds to the over-all strength of the record, and protects the grooves from scuffing when one record is moved across another. Speaking in round numbers, the bead and label areas are some 80 mils (thousandths of an inch) thick, whereas the playing area is no more than about 30 mils thick on many modern records. Without the bead, the outer edge of discs stacked on a record changer would droop and become warped as a consequence of coldflow. The "dish" warping that would result is the kind that causes records to slip on the turntable.

Records are quite warm when they are removed from the press and consequently are particularly vulnerable to deformation. To prevent it they are stacked on spindles with a flat separator between every few records to make certain that "spindle droop" is controlled within very close limits. The records are allowed to cool on this support. Once cool, they will remain flat if not subjected to abnormal stresses or temperatures that approach the softening point.

Modern records are designed with controlled flexibility so that they will flex without warping under stress. This concept is being accepted by the record industry slowly because careful retooling is

Cure Record Warping

necessary to realize the rewards of the development. The rewards are, however, great; they extend not only to the accommodation of stress, but to improved playing surfaces as well and make possible the use of the finest grade of materials for all types of records.

It cannot be stressed too strongly that care is the secret ingredient in making a fine record—meaning, among other things, a record that will be least subject to warping and best able to recover should it become warped. And discs do recover. From time to time discs are sent to me as examples of one sort of warpage problem or another. More often than not they are no longer warped by the time I receive them simply because coldflow is a reversible process and because plastic materials have a physical "memory" that, under correct conditions of packing and storage, helps them return to their original configuration. Before taking up corrective measures, however, let's discuss prevention.

Handle with Care

Record care begins the moment you make your purchase. Irreparable damage can be inflicted on the record simply by leaving it in a parked car. Even if the package is not lying in the sun—which obviously should be avoided under any circumstances—there is a possibility that the temperature of the record itself will exceed its softening point and that the record will assume the shape of whatever surface it happens to be lying on.

The record is packed in a cardboard jacket some 20 to 30 mils thick—what is known in the trade as the chipboard sleeve. It has good insulation properties and can protect a record against the heat of the automobile for an hour or so. It also applies additional stiffening to the record and therefore helps prevent warping. Surrounding the sleeve is the clear plastic shrinkwrap seal.

The best way of opening the shrinkwrap is at one corner, carefully, with a sharp instrument. Using a fingernail can result in a paper cut at or near the quick. Some nonchalant souls impact the record package edge sharply against the palm of the hand, causing the record to lunge against the shrinkwrap and break it. I don't recommend this method because it also breaks the edge of the protective inner envelope.

It is important that you next remove and discard the shrinkwrap. It is there simply to seal the album so you will know that the pressing is unused when you buy it and to protect the artwork from scuffing during handling and transportation. Shrinkwrap materials commonly used in the record industry are plastics that have been rolled into sheets (again making use of coldflow) and that contract into a neat covering because of the plastic "memory" I mentioned earlier. This contraction can produce in the shrinkwrap skin tensions measurable at 500 lbs. per square inch or more using standard materials testing methods. As long as the album is sealed, the stiffness of the chipboard sleeve will counteract this tension and protect the record; but once the wrap is slit the open side of the sleeve is free to bend, and the pull of the shrinkwrap against its upper and lower edges-and therefore the record's edges-is enough to cause warping.

Most records are packed in an inner paper envelope, sometimes with a plastic lining, to help protect them from dust. Some companies fold one or both corners of this envelope at the leading edge as an aid to inserting it into the chipboard sleeve. This is a practice to which 1'm opposed, since the extra thicknesses of paper at the folded corners can press into the record and deform it. The sort of damage that results distorts the outer edge at the bead and often leads to mistracking in playing the outer grooves. If you flatten out any corners that have been folded, your record will have a better chance of survival or of resuming its original shape if some damage already has occurred.

It need hardly be pointed out that no degree of care is excessive in handling a record. Your fingers should never touch the playing surface; the inner envelope should be preserved and the record returned to it before reinsertion into the sleeve. Be sure the open edge of the envelope is not lined up with that in the sleeve; alignment of the openings lets you remove the record from the sleeve and envelope in a single operation, but it also allows dust to enter while the record is stored, and the record itself to roll out unexpectedly when you are taking it off the shelf. Incidentally, avoid the timehonored custom of trying to blow out dust before slipping a record into its sleeve. Your warm moist breath can leave a deposit on the record that will attract, rather than dispel, the dust. Also never leave a record sitting atop the changer spindle for long periods. Let's face it, record care is not only a ritual but a necessity if you are to protect your listening pleasure.

One point in that ritual must be followed religiously if you are to avoid warped discs: careful storage. The usual advice is that the records be kept vertical and not too tightly packed. They must be placed so that one is directly beside another, resting on a horizontal shelf, with the end of the shelf supplying a true vertical with which to align the records. The other end must be supported by a large bookend so that every record on the shelf remains vertical; if they lean over, they will sag and eventually become warped.

If you store records horizontally you will have to take greater care to prevent warping, though the results can be equally successful. The problem is to get one record directly over the other so that all parts of each record are supported equally. Otherwise the unsupported part of the record will droop and warp. Records can be stacked one upon the other in a corner with full assurance that they are correctly aligned. When you remove a record from the group—admittedly a less convenient process if the records are stacked horizontally—be sure to return the remainder to their correct position.

Records may be stored satisfactorily at temperatures most people find comfortable. The ideal temperature is a range from 60 to 90 degrees F., the ideal humidity about 50% or less. The penalty for low temperature is increased brittleness of the vinyl, and therefore susceptibility to breakage. High temperatures will of course increase the disc's susceptibility to warping. The penalty for high humidity is fungus and mildew. At low humidity there is no penalty while the disc is in storage, though when

by Bruce R. Maier President, Discwasher, Inc.

FOR MOST OF US the disc recording remains the primary source of home program material. Yet experience shows that to play a disc is to expose it to many unknown conditions that are destructive of superior sound reproduction. Most of us don't really wish to replace our favorite records biennially, nor to lose playback fidelity gradually as we enjoy these recordings.

i s e s

Many cleaning devices and compounds have been tried by collectors, and extreme skepticism has been the result. I propose to discuss some of the problems, seen and unseen, that we face as patrons of the delicate vinyl grooves. These problems, correctly explored, will demonstrate the need for a record cleaning fluid. I shall also discuss some of the detrimental characteristics that a record-cleaning fluid can possess, and finally approach the integration of record cleaning with record safety in the formulation of a cleaning fluid.

Is a Fluid Necessary?

If a record is on your turntable, it is losing playback fidelity. How? By collecting the extremely fine dust that circulates in all but the most perfect of socalled clean-room environments. Up to 5 milli-

In Search of

grams of dust will collect in one hour on a record exposed in the average living room. These particles are so small and so evenly distributed that they normally remain invisible. If the record is electrostatically charged by handling, the dust will deposit even faster. Tars and associated nicotine from cigarette smoke will, without fail, adhere to the vinyl surface of exposed records. Some playback noise can be introduced by these microdust particles, and the fibers of brush-type removers generally are too widely spaced to remove this haze of matter. In the presence of humidity, either from the air or from deliberate application, the particles resting at the bottom of the grooves convert into a highly caustic, abrasive mixture. This mixture of dust and other room contaminants will markedly shorten the life of both record and stylus. A cleaning fluid can help in removing microparticles by increasing their adhesion to a cleaning device. A truly protective fluid also should be able to neutralize the caustic debris in the grooves.

Fingerprints create the greatest need for a record cleaning solution. Fingerprints are lipide (fat) residues left by body contact. Most of us go through elaborate gyrations to keep from touching the playing surfaces of our discs. But even if you have an electrified fence about your record collection and you play it the record will develop a static electric charge faster, particularly if its vinyl is not especially formulated to prevent static buildup.

In Case of Misadventure

Even assuming the greatest care in manufacture, shipment to the record store, handling in the home, and storage, some records will become warped sooner or later. Usually such a record can be restored to its original flatness by placing it in its sleeve or inner envelope on a flat surface such as a table or desk top, with a large, smooth-surfaced book on top. A dish-warped record should be placed with the concave side down. As many as five records can be treated at a time, but extreme care is needed to see that they are directly on top of each other. A particularly valuable record that is cantankerous about resuming its original flatness can be restored between two pieces of one-quarter-inch plate glass. twelve inches square. An infrared lamp can be used to heat it-for no more than a few minutes-and aid the process. If you add to your record collection

from school bazaars and garage sales, this method can be very useful.

I have used these corrective methods and know that they are effective. Don't wait until a disc is unplayable to apply them. A moderately warped record, though it may be playable, disturbs the normal record-tracking geometry of your cartridge and tone arm and can contribute materially to record wear. As the arm is forced "uphill" along one side of the warp the inertia of its mass tends to add to the effective tracking force at the stylus; as the arm descends, its inertia inhibits it from following the slope of the record surface and threatens mistracking. Should you increase the tracking force in order to prevent mistracking you will, of course, increase the problem—and perhaps the damage on the uphill side.

To my mind the phonograph record is the most precise mass-produced article in the home today. It is truly a marvel, and deserves to be treated as such. Without appropriately protective methods of storage and handling you will reduce both the value of your investment in phonograph records and the enjoyment you can derive from them.

the Perfect Record Cleaner

are the sort who eats popcorn with a fork, fingerprints will occasionally contaminate your records. Lipides are, by definition, insoluble in water. They are sticky and foster the development of both dust pockets and microbial buildup. The sounds these produce when you play the record can easily be mistaken for a pressing defect and may resemble noise caused by scratches, though somewhat more muffled. No dust-removal brush on the cartridge or side arm can successfully remove fingerprints. Some solution—a chemical approach if you will—is required.

One more problem in record care deserves mention: microbial degradation. The microbes known as mold, or fungi, are most important in this process. We know fungi for what they cause around us; bread mold, mildew, athlete's foot, dutch elm disease, and ringworm are all caused by fungal growths. Mold spores are air-borne and found in every home. Given "food" and humidity, these spores can germinate into growing microcolonies. Vinyl records can serve as the food. Biological adaptation has allowed fungi to change over the years to make better use of the synthetic polymers as nutrient material. Nylon, for instance, once was initially mildew proof; now there are dozens of fungal species that attack nylon. Fungal growth can damage almost any type of surface. Microcolonies can literally pit a vinyl record, but even long before permanent damage occurs they will provide tenacious little noisy spots on the record. Many record-cleaning fluids actually encourage mold growth by adding nutrients (usually soaps and glycols) to the record surface. It is true that the threat of mold to a record collection is greatest under conditions of dampness and warm temperatures, but I have observed active mold colonies on the records of fastidious audiophiles in airconditioned apartments. A functional recordcleaning solution would do well to cope with this latent biological threat.

Detrimental Possibilities

There are two classes of cleaning-fluid problems. First is residue. Depending on locality, tap water itself often contains enough residue to layer a crisp deposit of salts into record grooves whenever the disc is washed, rinsed, and dried. Tap water residue can often be heard through a fine audio system and usually will sound very much like the random noise inherent to the disc medium, only at significantly higher levels. Distilled water has virtually no residue but will not act as a cleaning agent to surface contaminants, especially fingerprints and cigarette deposits. Thus, many cleaning fluids contain active ingredients—usually soap or detergents—to dissolve lipides. Soaps themselves are modified fats, whereas detergents are synthetically produced compounds.

Even in normal dilutions these ingredients can coat the plastic surfaces so effectively that removal is extremely difficult by any means other than the use of a more active solvent and copious flushing with water. The large molecular structure of combined soap or detergent molecules can physically coat the groove walls and be worked by the stylus into the concave portions of the modulation, altering its effective contour and reducing dynamic range somewhat-particularly at high frequencies. These deposits may remain unnoticed during playback until a better cleaning fluid or slightly different stylus shape dislodges the coating and brings out the latent obstructions. The coating process of soaps and many detergent compounds will reduce surface static; it also provides a thin, sticky menstruum that collects abrasive dusts and fosters microbial growth.

Perhaps the greatest residue problem arises with the zealous application of some silicone preparations. Silicones may reduce static and lubricate the record surface so that dust can be wiped off more easily, but they are so extremely insoluble that once applied they are almost impossible to remove. (At least one manufacturer of medical equipment voids the consumer warranty if silicone compounds are used on delicate instruments.) The buildup of silicones by liberal or successive applications can severely inhibit high-frequency stylus tracking, damping the sound and reducing its dynamic range as well as its sparkle.

The second major problem with record-cleaning solutions involves the actual plastic of the discs. Vinyl polymers are rigid and brittle unless separated by molecular inserts called plasticizers. These plasticizers render the vinyl more flexible, easier to control in pressing, and more durable. Plasticizers allow the record groove to flex slightly and then recover from the terrific tracking pressures of a tiny stylus articulating at high velocity. Indeed the difference between a cheap record and an expensive disc often is, among other things, the vinyl-plasticizer formulation. Unfortunately, plasticizers are not indissolubly bound into the plastic, but are held there by physical and/or electrostatic forces; the plasticizers can migrate, changing the properties of the plastic surface. Many cleaning fluids will pull plasticizers out of the vinyl record surface, leaving grooves brittle so that modulation peaks can be shaved off by the passing stylus. In effect the loss of resiliency reduces the vinyl's bearing strength, making it subject to immediate, irreversible wear and to increasing background noise as the groove wall further disintegrates.

The compounds most likely to modify the plastic



ASIDE FROM the preceding considerations—dirt and warpage will certainly reduce a record's durability—record wear can be discussed as a related pair of subjects: correct installation of the pickup, and periodic maintenance of the stylus tip.

Pickup Installation

There are several requirements for proper installation of a phonograph cartridge. Perhaps the most obvious one is the tracking force, since it influences what happens at the stylus tip—the point where stylus and record interact. Pickup manufacturers specify a recommended tracking force range as being suitable for a given pickup. This specification is arrived at by determining the vertical force required to hold the stylus tip against the groove walls and permit it to trace the groove modulations while still having sufficient force left over to guide the tone arm across the disc and at the same time operate any associated trip mechanisms. Although the requirements for the pickup alone are readily specified in a fixed number, the requirement for the tone arm presents a variable, so that a tracking force *range* is specified to take into account the needs of the tone arm as well as those of the pickup and encompass the force needed to overcome any bearing friction and mass-related forces resulting from warped or eccentric records.

Within certain limits, the rate of wear of the record surface is directly related to the tracking force as well as to the tip size, since these last two factors will determine the pressure exerted by the stylus on the vinyl of the record. Don't confuse tracking force with stylus pressure; they aren't the

What You

surfaces are the so-called hot (quickly evaporating) solvents, which include various concentrations of short-chain alcohols, aldehydes, or ketones. These compounds will very quickly remove fingerprints and leave a dry surface. They also, very quickly, can pull out surface plasticizers and ruin a record. Harmful plastic-fluid interactions are not, however, limited to plasticizer migration. A unique surface change occurs between the disc vinyl and the coloring compounds found in many cleaning compounds. The mild perfumes in popular cleaning products will similarly bind to. and modify, the molecular structure of phonograph records. These data indicate that familiar household cleaners and many special-purpose fluids are of significant danger to records, especially when used frequently or repeatedly.

An Integrated Approach

A cleaning fluid that meets all the needs of the record collector is possible. Such a fluid must integrate chemistry, microbiology, and the unique desires of the high fidelity community. The ideal fluid must suspend lipides, augment dust removal by an appropriate device, buffer any caustic groove deposits, and protect the disc from biological degradation. At the same time, this fluid must not leave a detectable residue, must not have plastic adhesion properties, and must preserve absolutely the integrity of the vinyl plastic upon which record quality depends. To do this, cleaning agents must be balanced with protective agents in its formulation.

An integrated approach must also consider the danger of moisture in long-term record care. Problems of dust retention, caustic abrasion, and microbial contamination are directly proportional to moisture on the record. The one benefit of humidity is the equilibration (but not elimination) of surface static charges. If fluid distribution over the entire disc surface can be combined with the controlled removal of fluid and surface debris, then an integrated system is achieved. The capillary action of an appropriately designed cleaning brush is perhaps the most economical approach to an integrated system. Vacuum removal is also effective, but it is much more costly and requires ancillary devices for fluid distribution.

Is the perfect record-cleaning fluid available? No, not yet. A great deal of research has gone toward the development of a fluid that, with tiny amounts of several reagents, delicately balances the parameters of long-term record integrity against cleaning speed and evaporation characteristics. There is, however, much room for future development. As phonograph discs begin to take on an aura of the irreplaceable, their scientific preservation becomes a priority concern of the high fidelity enthusiast. Within this context, a safe and functional cleaning fluid is essential to the care of phonograph discs.

Can Do to Minimize Record Wear

same thing at all, the widespread misuse of the latter term notwithstanding. In record-playing equipment tracking force is measured in grams, yet so small is the area over which these minute forces are distributed that the pressures encountered are monumental. If you are tracking at, say, 2 grams with a 0.5-mil spherical stylus, the actual static pressure to which the vinyl will be subjected works out to some five tons per square inch! (A 0.7-mil spherical offers twice the bearing surface of a 0.5mil and thus, at 2 grams, pressure will run in the neighborhood of 2.5 tons per square inch. A 1.0-mil spherical has about twice the bearing surface of the 0.7-mil, an elliptical measuring 0.2 by 0.7 mils about 40% of the 0.7-mil's area. Ellipticals, which generally present the smallest area, would tend to create the greatest pressure-and record wearwere it not that they are designed for use only with the better playback equipment, capable of operating at low tracking forces.)

When you consider that the elastic limit of vinyl is roughly in the range of five tons per square inch, you can see at once the importance of the relationship between tracking force and tip size if the record is not to be ruined. Exceed the elastic limit and the plastic material literally can crumble. Modern pickups are designed and specified to operate well within this upper limit, but it is important that the tracking force specified for the pickup not be exceeded. If there is any doubt as to the tracking force actually produced by your equipment, it should be checked with a separate stylus gauge or scale: several designs are available.

Tone arms are vulnerable to progressively greater friction as bearings become contaminated either from outside dirt or from grease that hardens



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with age. Since the force needed to move the tone arm must come from the record groove, acting on the pickup stylus, increasing friction in the arm itself eventually will require increased tracking force; if friction becomes excessive the system limits may be exceeded. Unless you are skilled at cleaning and adjusting small mechanical assemblies, maintenance of the arm bearings is best left to a specialist.

Next in importance is the actual mounting of the pickup. The mounting surface should be parallel to the record surface when the pickup is in the playing position if the ideal positioning of the stylus within the groove is to be maintained. Since pickup cartridges may vary in height, tone arm manufacturers often provide auxiliary mounting devices to correct the discrepancy and maintain the necessary relationship between stylus tip and tone arm. Also, in some changers there is an increase in tracking force as the record-stack height is increased. A tracking force gauge can be used to determine that the maximum tracking force is not exceeded even for the top record in the stack. It is a better idea to limit the stack height than to run the risk of overloading the stylus. If the stylus cantilever (the little moving member that extends from the cartridge body and holds the diamond tip) is bent, the geometry of the system will be disturbed. A bent cantilever calls for immediate stylus replacement.

The antiskating adjustment found on many of today's tone arms is calibrated by the arm's manufacturer. Antiskating is intended to overcome the inward radial thrust caused by the geometric design of a pivoted tone arm and by the frictional force between the stylus tip and the record surface. Properly adjusted, this feature will neutralize the inward force so that the tracking force will be equally distributed between the two groove walls. Not only does this make for more accurate playback, but any groove wear will then similarly be divided between the two groove walls. A severely misadjusted antiskating control may actually degrade the sound and also decrease record life.

Stylus Wear Means Record Wear

It goes without saying that to minimize record wear you need a good stylus tip. Diamond tips are extremely hard—diamond is one of the hardest materials known—though they also are brittle. As in any sliding system, there will be gradual wearing of both surfaces—the disc's and the stylus tip's. The originally smooth surface of the stylus tip develops worn spots, or "flats"—slightly curved, polished planes with abrupt edges at the intersection between the spherical surface and the flat.

It is this discontinuous nature of the tip geometry in a worn stylus that damages groove modulations. When a badly worn stylus is used to play high-frequency, high-level recorded passages, the flat area can no longer get around the sharp "corners" in the groove and tends to deform the modulations into new shapes. This "wiping" action breaks down the groove walls. The damage is permanent; even during subsequent plays with a new, well-formed stylus tip, the groove damage will be heard as distortion. (Since the groove wall is physically distorted, the signal it produces will be too.) If the worn tip continues to be used, it will continue to wear. It becomes increasingly V-shaped and reaches further and further down into the groove, attacking an ever larger area of the groove walls as it goes.

Record wear, like many phenomena that appear gradually, is something to which we can easily adapt, accepting for a time the distortion and noise it generates. As a result it is impossible to say just when stylus wear becomes perceptible, and its prevention is a matter much like tooth decay: It requires expert inspection following a regular schedule, and maintenance as dictated by the inspection. Visual examination of the stylus by competent personnel with good optical equipment will tell you in short order whether you need a replacement.

How long should you expect a stylus to last? It would be convenient to have a known, fixed number with which to reply to this question, but no such absolute exists. Stylus life will vary with the kind of usage, the quality of the diamond, the finish of the diamond tip, the cleanliness of the record groove, and even the quality of the records. In general terms it would probably be a waste of time to inspect the stylus before 150 hours, while at 1,000 hours the stylus likely would exhibit considerable wear even under almost ideal conditions. A good time for the first inspection might be after 250 hours of use; if only negligible wear is seen then, reinspect within another 100 hours of use.

There is another kind of stylus damage that generally results from rough handling. As I mentioned earlier, diamond is a brittle material. If it is struck a sharp blow, it can shatter. The resultant tip will be irregular and sharp—a cutting tool rather than a bearing surface. The chipped tip generally is easy to identify. It will produce a loud, continuous hissing or tearing sound when playing a record. At the same time, the color of the groove will change from shiny black to dull grey. This color can be seen with the naked eye in normal lighting. The obvious remedy is immediate replacement of the stylus.

In discussing record wear I have talked almost exclusively about pickups and pickup maintenance. Record durability is in fact directly related to how well the stylus tip treats the record surface and is in essence a product of the thought and care that go into the use of the phonograph pickup. There is no substitute for fastidious installation and maintenance of the phonograph pickup and arm. Correct tracking force, a freely moving tone arm, correctly applied antiskating, an effective stylus tip inspection program, careful handling of the pickup, and a clean environment all are vital considerations in reducing record wear.

How to Understand Our Amplifier Reports

IN THE February 1972 issue I detailed the ways in which the graphs and charts used in HIGH FIDEL-ITY'S FM test reports can help you to distinguish between the spectacular and the pedestrian, between the wonderful and the woeful. Amplifier test reports contain even more graphs and charts, and understanding them can give you a new insight into that portion of your stereo system.

A high fidelity amplifier, whether it is built into a receiver or sold as a separate unit, usually is what we call an integrated amp—that is, a combination of preamplifier/control unit with the power amplifier itself. In this installment I'll be talking about the three graphs that refer to the power amp section.

Power Output Data

The basic graph in HF's amplifier reports documents the output capability of the unit under test. Just examine the sample graph and follow the letters A to F as we go. The horizontal markings of this graph show ...

A. Frequency in Hz-but not just the 20-to-20,000-Hz range normally considered as the maximum extent of human hearing. Since we are dealing with the over-all capability of the amplifier, we need a scale that will show how it behaves down to 10 Hz and up to 100.000 Hz (100 kHz). The vertical axis of the graph is labeled ...

B. Response in dB. Decibel measurements always are relative to a fixed reference. Thus one cannot say that an amplifier has "10 dB of power," though one can state that amp A produces "10 dB more power" than amp B or that an amplifier's hum and residual noise is "60 dB below" its rated output, which is designated as zero decibels (0 dB). The bottom curve shown in this graph tells us about ...

C. Frequency response at the 1-watt output level. A good unit will amplify all audible frequencies by the same proportion, relative to their input levels. To test this ability, a signal of uniform



level but varying frequency (that is, a "flat" signal) is fed into the amplifier. If we arbitrarily assign the 0-dB reference value to a 1-watt output with a 1kHz input signal, the rest of the plot shows how far the amplitude departs from this reference point at other frequencies for the same input level. Ideally this plot should be a straight line, which would indicate that the amplifier has perfectly uniform response throughout, and perhaps beyond, the audible spectrum. In our example we see that the response tends to droop a bit at extremely low frequencies and rises a bit at the high-frequency end, ultimately falling off in the inaudible region above 20 kHz. The statement below the curve spells out the limits of useful response and its deviation from the 0-dB point within those limits. In a modern amplifier, good frequency response is fairly easy to achieve and—as in our example-the response remains relatively uniform from below the lowest audible frequency to well above the highest one. The other curve in this graph is known as ...

D. Power bandwidth. Again, a reference 0-dB level is established, but this time it corresponds to the rated power output of the amp (in this example, 40 watts per channel), and the curve shows power output at rated total harmonic distortion-a term I'll explain in more detail when we come to the second chart. The lab measures the maximum power output that can be obtained across the frequency spectrum without driving distortion higher than the rated value: in this example, 0.5% THD. As you can see, at mid-frequencies this value actually goes above the 0-dB line, indicating that 0.5% THD is not reached until after power output has exceeded the nominal 40 watts per channel. Conversely, at the frequency extremes, the curve tends to fall below the 0-dB line, which indicates that the full 40 watts per channel is no longer attainable at less than 0.5% harmonic distortion. The end points of the curve arbitrarily correspond to the point at which maximum power output attainable within rated harmonic distortion is 3 dB below full power output. The dB scale is logarithmic in nature and a decrease of 3 dB in power corresponds to exactly half the 0-dB reference power-in our example, 20 watts per channel. Additional data are summarized numerically under the heading ...

E. Channels individually. Here the lab indicates what power level can be measured from one channel of the amp when the reproduced tone (displayed visually on the screen of an oscilloscope) shows the barest trace of "clipping" or flattening of the top and bottom of the otherwise smooth waveform—a definite indication of overload in the amplifier circuit. Data are stated for both the left and the right channel, as are data to show how much power the amplifier can deliver at rated harmonic distortion (0.5% in our example). All of these measurements are conducted with a single channel

operating. In actual musical listening, of course, both channels are called upon to deliver power at the same time, so the final data presented in this chart are measured by the lab while driving both ...

F. Channels simultaneously. When both are operating, a typical amp will not deliver quite as much per-channel power without clipping as it will when each channel is driven singly. The limiting factor is the amplifier's built-in power supply section. In our example maximum power per channel at clipping is approximately 40 watts with both channels driven, as opposed to more than 45 watts when each was driven alone.

Harmonic Distortion Curves

This important graph tells much about the power output capability and the fidelity of reproduction of a given amplifier. You will note that distortion is plotted against...

A. Frequency in Hz. When you read that an amplifier, for example, is rated at 0.5% total harmonic distortion (often abbreviated THD), the usual implication is that this much distortion was measured in reproducing a signal frequency of 1 kHz (1,000 Hz). The high fidelity component industry has always taken the position that human hearing (and hence, sound-reproducing equipment) extends over the range from 20 Hz to 20 kHz. Most people cannot hear all of these frequencies of course. Usually age reduces the ability to perceive the extremely high frequencies. Statistically, women perceive higher frequencies than men of the same age. Whatever your hearing range, you need to know how distortion at the extreme frequencies compares with distortion in the midrange-that is, around 1 kHz. It is, in fact, easier to achieve low distortion at mid-frequencies than it is at the extremes. So we must be able to tell what happens at different audio frequencies as we plot

B. The percentage of THD. Distortion consists of signal components or tones that were not present in the original sound. There are many forms of distortion possible in electronic reproduction. Harmonic distortion contributes false overtones to the original program content. The distortion is expressed as a percentage—that is, the ratio of unwanted tones to desired tone, multiplied by 100. Two separate scales are shown in the vertical axis, because we are plotting two separate distortion curves for this amplifier. The first represents ...

C. THD at rated power output—in this example 40 watts per channel. It takes more watts of electrical power to produce louder sounds, since sound itself is a form of power and can be measured in acoustic watts. In all of HF's graphic presentations power is discussed with reference to a single chan-



nel of a given amp and, unless otherwise specified, for an assumed load (to simulate performance when the amplifier is driving a loudspeaker) of 8 ohms. Under these conditions our sample amp is rated at 40 watts per channel, so distortion measurements are made at this output. Note that in this sample, although the curve shows a distortion of about 0.1% at 1 kHz, it rises significantly at...

D. The extreme frequencies, especially in the high treble. Great amounts of distortion are just as annoying (some people say even more annoying) in very low bass tones and high treble tones as they are at mid-frequencies. Here, distortion rises to over 0.5% at about 15 kHz and to about 0.2% at 20 Hz. All things being equal, the distortion characteristics of each channel of a stereo amp should be identical, since the same basic circuitry is used for both ...

E. Left and right channels. But individual circuit components often are not quite equal in their values, and the differences have a way of piling up.

... AND MORE TO COME

Leonard Feldman's explanation of our test graphs reflects the data as we have been presenting them, for the most part, over a number of years. We—and CBS Labs, of course—are always seeking to plug any potential "loopholes" in the test procedure however; and from time to time we add more data when we think the information can be of use to our readers in selecting or using components.

For some time the lab has actually been making three sets of harmonic-distortion measurements: the two discussed by Mr. Feldman plus another at a mere 1 per cent of rated power. In his example, therefore, the third curve would represent THD at 0.4 watts (400 milliwatts) output. Though the curves have not been published, the information they contain has. Such expressions as "low disHence separate distortion tests are made for each channel. Left channel results are plotted using a solid line, while the right channel is plotted as a dotted line. As you can see the right-channel distortion at the high frequencies is considerably greater than that in the left channel for this sample. But now look at . . .

F. The half-power distortion rating. A well designed amp should not reach rated distortion before achieving its rated power output. At all operating power levels below rated output the distortion also should be lower than the rated amount. The lab makes a second set of distortion measurements at half the rated power—in this example, 20 watts per channel. Again, both channels are measured, but now we find that...

G. Distortion is lower and also is virtually the same in both channels. Note that it approaches 0.5% at the high-frequency end of the spectrum. At mid-frequencies—around 1 kHz or so—the distortion is so low that it is virtually impossible to read

tortion even at very low power levels" have appeared regularly in our reports and are based on the 1 per cent output measurements.

The original intent of the measurement was to seek out a type of harmonic distortion, characteristic in solid-state (as opposed to tubed) circuits, that becomes evident only at very low output levels. While we have encountered no equipment that we would rate as substandard for its price class in this respect since the 1 per cent power measurements began, typical power ratings have been growing ever higher during that period. As a result, there is greater likelihood than ever that modern amplifiers will often be used far below rated output. Poor harmonic distortion at these levels will therefore be particularly important; and beginning in our October issue we will be publishing the third curve as an aid to evaluating amplifier performance.

the values from the graph. When this happens, as it frequently does with better equipment, the vertical scale may have to be expanded to show divisions at halves or even tenths of a per cent. Sometimes distortion is so low as to approach that inherent in the measuring equipment. In that event the curve may be discontinuous in the area where no definite numerical distortion values can be assigned.

IM Characteristics

As I mentioned earlier, harmonic distortion is just one of the forms of distortion that can be present in an amplifier. Another form of annoying distortion is intermodulation—usually abbreviated as IM distortion. Again, following the letters from A to G, let's first define what we mean by the term ...

A. Intermodulation. Musical programming consists not of single tones (such as were used in measuring THD), but of a complex of tones that usually occur simultaneously in the low, middle, and high portions of the audible frequency spectrum. In an amplifier they can interact with (or "beat" against) each other to produce new, undesirable tones at the sum and difference frequencies of the original tones. For example the simultaneous presence of 60 Hz and 7,000 Hz may produce minute amounts of 6,930 Hz and 7,060 Hz. The presence of such extraneous signals has been named intermodulation distortion, and the two frequencies cited are in fact the very ones used to test for IM distortion. The lab mixes the input signals in the ratio of 4:1; that is, a 60-Hz signal is fed to the amplifier together with a 7,000-Hz signal that is four times weaker in amplitude. An instrument sensitive only to the sum and difference frequencies is used to detect IM distortion. Like THD, IM varies with ...

B. Power output in watts. We therefore plot this form of distortion as a function of power output per channel (rather than of frequency) along the horizontal axis of the graph. The vertical axis of the graph expresses . . .

C. Per cent IM distortion. In tube amplifiers, IM

distortion typically runs higher than THD, although in modern solid-state amplifiers it often is no higher, and sometimes even lower, than THD. In our example, percentages are quite low until we approach the maximum power output capability of the amplifier. Most solid-state amps have varying power output capabilities depending upon the impedance of the loudspeakers with which they are used. Most high fidelity loudspeaker systems are rated at a nominal impedance of 8 ohms, although there are some very popular 4-ohm and 16-ohm models. Moreover, the load impedance may change if multiple speakers are connected to the same output taps (e.g., two 8-ohm speakers in parallel across the same terminals create a 4-ohm load; in series, a 16-ohm load). For all this, the graph presents IM characteristics when using an . .

D. 8-ohm load (the solid line), as well as IM characteristics when using a . . .

E. 4-ohm load (dashed line) and a ...

F. 16-ohm load (shown as a dot-dashed line). In our example the amplifier exhibited highest power output at low IM when tested with an 8-ohm load a common situation, though many amplifiers will deliver more power to 4 ohms than to 8 ohms without producing excessive IM distortion. Using a 16ohm load reduced the power output capability per channel considerably, which is typical of modern amplifiers. Note that each distortion curve rises steeply as power is increased above the working maximum for the given load. This phenomenon is typical, as is ...

G. Slightly rising distortion at low power output. The rise here is much gentler, though distortion measurements continue to rise as output is reduced below the 1-watt level at the left of the graph.

In the next installment I'll take up the control/ preamp section of integrated amplifiers and receivers. Only one graph represents the performance of this circuitry—which can be found in separate preamps as well of course—but it is a rather complex one. [We've scheduled Part 2 for the October issue.—Ed.]

Mr. Feldman, an audio consultant, last appeared in these pages with How to Pick FM Antennas in April.



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Schubert Explorations

Badura-Skoda's complete edition of the Piano Sonatas

by Harris Goldsmith

RECORDING the complete cycle of thirty-two Beethoven piano sonatas has come to be a very "in" thing to do these days-a sort of bar mizvah for scholarly interpreters wishing to make their mark in a highly competitive world. In contrast, Schubert's parallel works continue to be looked upon as Cinderellas of the piano repertory. Most pianists play one or two (usually the "little" A major, D. 664 or the posthumous B flat, D. 960) and are content to let the lesser known works gather dust. There are, admittedly, problems in Schubert's piano style that demand a specialized sympathy and understanding. It is not enough merely to play the notes clearly and literally-in addition to such scrupulous attention to detail, a certain unpressured quality is needed, the ability to be rhythmically free without causing the often discursive music to disintegrate on the one hand or become rigidly perfunctory on the other. Moreover, after all is said and done, Schubert's piano sonatas require a certain type of listener who will-in the earlier, experimental works particularly-be patient with certain gaucheries while focusing on the beauty and originality of the concept.

For me, Deutsche Grammophon's nine-disc Wilhelm Kempff edition released last year was, if not perfect, as close to that ideal as is possible. No pianist is going to play every one of these pieces equally well. Indeed, it is highly unlikely that the lesser ones are even a part of his active repertoire. Yet whatever reservations one may have about Kempff's slow tempo in the first movement of one sonata or about his angular treatment of detail in the third movement of another, the totality of his playing projects a clear and unmistakable image of an artist and supreme stylist, a player who not only understands Schubert's often misunderstood style, but who is able to infuse the music with a profound, granitic beauty and lofty instrumental finesse.

Badura-Skoda comes to the project with decided qualifications of his own. Steeped in the Viennese tradition, he clearly loves this music and feels much of it. I have, in the past, taken issue with this player, particularly in Beethoven where his approach seemed lacking in firmness and cumulative grandeur. Although, as Kempff proves, a Beethovenian cragginess is not out of place in Schubert; it is possible to get along without it. Badura-Skoda's lyrical impulses are all to the good in this music, and his expansive, colorful, supple pianism is likewise appropriate. 1 like his clear voicing, his scrupulous (but not overly literal) attention to details and agogic marks. The smaller compositions come off especially well in these simple, sympathetic, tonally lustrous readings.

But if Beethovenian drama is not always a prerequisite in Schubert, a firm sense of rhythm most certainly is. This, alas, is an area in which I have always found Badura-Skoda deficient. When he is playing with straightforward, four-square solidity, he is able to manage an excellent, clear exposition of the music. But often stylization demands that a *Ländter* rhythm be pointed with exaggerated emphasis and Badura-Skoda, with no inner metronome to guide him, falls right into the trap. In instances like these, his playing becomes mannered, and your guess is as good as mine as to where the down-

Schubert



beats are. I also find that this fundamentally lyric, smallscaled player tends to overinterpret when he comes to music that demands more than he has to give. In such unfortunate circumstances, his natural charm vanishes and one is left instead with a petulant, rather tightfisted calculation.

Before delving too deeply into the quality of the playing, however, it must be pointed out that Badura-Skoda's Schubert edition is not strictly competitive with Kempff's. There is the problem of just what constitutes "completeness." Schubert was notorious for leaving works in an unfinished state. It would seem that ideas came to him too fast and that he was simply unable to get them all onto paper. The fact that most of Schubert's unfinished sonatas break off just at the point of recapitulation would seem to add fuel to the contention that he would come back to them later. We know from his finished pieces that, unlike Beethoven who liked surprises, "recapitulation" was, for him, mostly a pro forma operation. Thus it also follows that all a restorer need do is see that the exposition is suitably altered so that the restated material stays in the home key. On the other hand, it is more than plausible that Schubert discontinued working on some of his ideas because either he got into structural difficulties with a particularly daring modulation, or he found the material itself at fault. Obviously, the task of restoring a movement such as the last of D. 840 which breaks off in, rather than after, the development is far more hazardous.

Kempff is mostly a purist in his recorded cycle. In one instance he uses a completion printed in the Universal Edition, but in all others he presents only those movements which are capable of standing just as the composer left them. (This was essentially the tack that Friederich Wührer took in his pioneering and now superseded integral recording for Vox.) Badura-Skoda, on the other hand, not only completes the fragment movements (usually very well, I must say), he also recruits (detractors will say "shanghaies"!) extra movements from isolated individual pieces written around the same time as the sonatas to which they are added. The justification here is that Schubert had the habit of breaking up his sonatas so that he might better sell them to his publishers. It will be up to you to determine whether such hybrids "work" as integral units. Most of them, to my mind, are feasible, although at least one strikes me as a dismal failure. If you want to hear a lot of music you can't find elsewhere, you might as well stop reading at this point and get Volumes Two through Four of Badura-Skoda.

Those not hell-bent on having every last scrap of Schubert they can get their hands on (there are two fragments which are even beyond salvation for the tenacious and resourceful Badura-Skoda—a fragment in C sharp minor which exists only up to the exposition's end and thirty-eight bars of an E minor *Satz*) will want to weigh the merits of completeness and interpretation and draw their own conclusions. Here is a brief rundown on these problematical works:

E major, D. 157. This three-movement work of 1815 is listed as a fragment in the Kempff set. Both artists refrain from adding to the torso, if indeed it is one. The music is somewhat analogous to the first symphony and B-S romps through it in high-spirited fashion. K is a bit more manicured, less exuberant but full of delicacy. I prefer the more vernal, untrammeled B-S.

C major, D. 279. Going on the logical assumption that Schubert wouldn't have ended this 1815 work with a minuetto, B-S adds an Allegretto D. 346 composed a year after. This is one of the more remarkable early pieces—a first movement that is rather Mozartean but at the same time full of zany key relationships, and a *maggiore* trio section of the utmost poignance in the minuetto. K is clearly preferable to the spasmodic B-S. He has firmer rhythm and his slower tempo for the Minuet is stronger, clearer. Moreover the extra movement B-S adds is less attractive than the others.

E major, D. 459. This 1816 work has long been available in a Breitkopf & Härtel edition under the title *Fünf Stücke.* The first two movements, however, have subsequently turned up in mss. form as a sonata. Since there is no surviving autograph for the remaining three movements, we know that Schubert broke up this work, but can only guess as to whether the original sonata had two minuets. Badura-Skoda, Kempfl, and virtually everyone else play all five movements, call it a sonata, and ask no questions. There is no contest between K and B-S, although the new Haebler reviewed below gives K a good run for his money and almost unseats him. This is, incidentally, one of Schubert's most irresistible youthful efforts.

A flat, D. 557. Schubert scholar Erwin Ratz is pretty dogmatic about this piece: He dismisses it entirely and Universal's edition doesn't even include it. The piece is, to be sure, rather lightweight, but certainly deserves an occasional hearing. (It is, for piano teachers in quest of new material, certainly preferable to the banal Clementi sonatinas and probably not that much more difficult.) B-S. like his predecessors, plays the work in its arguably incomplete three-movement form. K is a bit faster in the No. 2 *Alla marcia* and plays No. 1 with more point and pomp. B-S has greater lightness in No. 3, but it's fairly close. K gets the nod because his rhythm throughout is better sprung.

E minor, D. 566. B-S adds a Scherzo and an Allegretto molto, D. 506 composed in 1816, a year before the standard two movements. It's not a good solution, and the disparity between keys from the end of movement two to the added movement three makes my stomach drop. In any case, I much prefer K's Weberish, beautifully controlled playing to B-S's fidgety, contorted "interpretation."

F sharp minor, D. 571/570. Both K and Wührer omit this three-movement work, but Frederick Marvin once recorded it for Vernon Duke's Society of Forgotten Music. B-S adds a slow movement that was written in 1818, a year after the others. I prefer his more songful, less percussive approach, and draw particular attention to the Scherzo, which resembles that of the E flat Sonata. D. 568.

F minor, D. 625. The first movement of this threemovement work is incomplete. K uses the more or less standard reconstruction printed in the Universal Edition; B-S uses his own, which is much more resourceful. In addition he adds an Adagio, D. 505 since the work really has no slow movement. It's B-S all the way here. He brings out all the wild key relations and contradictions in this fascinating piece. Sometimes the music foreshadows the great romantic keyboard essays like Schumann's F sharp minor Sonata and Chopin's B minor. At the same time, it also harks back to the age of classicism (there is a decided likeness to the finale of Beethoven's C minor Trio, Op. 1, No. 3). K, though competent, is rather square and dutiful—far below his best.

C major, D. 613/612. B-S completes the fragmentary first and third movements of this charming, albeit florid, work and adds a central Adagio, D. 612. The others omit it entirely.

C major, D. 840. The last and unarguably the greatest of the unfinished sonatas, this work consists of two magnificent, entirely completed movements: a Scherzo, which though without an end has a complete trio section and a rather trivial finale that breaks off at midpoint in the development. K plays only the first two sections incomparably well. Wührer used the completion by Ernst Krenek, and Richter-taking the oddest tack of all in his old Monitor recording-plays the standard two movements plus the two fragments, stopping dead in his tracks exactly as Schubert did (he also drags the tempos to distraction). B-S uses his own version here and turns in his most ambitious composing project. He ingeniously brings the theme of the first movement back twice in the finale-once in the development and once in the coda. (He has ample precedent for so doing in the posthumous A major Sonata. D. 959.) He plays the opening movements admirably enough, but by no means as well as K.

The remaining sonatas are all complete, and it would be futile to discuss every last one. On the whole, I would definitely advise against Volume 1 of B-S which contains segmented, rambling, woefully deficient accounts of the three great posthumous sonatas. K is supreme in the C minor; Michele Bogner (Musical Heritage Society) has the best currently available disc of the B flat; and Seraphim should reissue Artur Schnabel's incomparable account of the A major. (K is a bit too square in D. 959 and too restrained in D. 960.) I would also advise against Volume 4, which contains in addition to B-S's possibly useful completion of the D. 840, his feeble, petulantly phrased, desperate account of the D major, D. 850, and heavy, sprawling accounts of the big A minor, D. 845 and the G major Fantasy Sonata, D. 894. Quite surprisingly, B-S turns in a reading of the "little" A major that is quite superior to even such excellent accounts as Richter (Angel) and Kempff, while his account of the superb B major, D. 575 gives K a good run for his money (both could have taken a livelier, rowdier tempo in the final rondo). In the others, B-S is usually sane and dependable, but no match for K. The Kempff achievement with the A minor, D. 784 is, for instance, one of the most illuminating discoveries the phonograph can offer-a truly revelatory, grand interpretation.

Badura-Skoda deserves praise for this undertaking, and while he hardly emerges from its fires unscathed, he nevertheless wins not only grudging respect but a modicum of admiration. RCA's sound is mostly deep and resonant.

Ingrid Haebler has been working away quietly on her own Schubert cycle for Philips. Her latest installment features a lovely, spirited account of the early E major Sonata, D. 459. She gives special cogency to the second minuet by taking it very briskly, and her fingerwork has real style and snap throughout. This reading surpasses Badura-Skoda's and closely rivals the Kempff which I, nevertheless, continue to prefer for its greater satirical point. In the C minor posthumous Sonata, D. 958, Haebler's tasteful musicality is completely in evidence. So, unfortunately, is her almost painstaking avoidance of drama and gravity. Often, as in the passage at measure 27 of the first movement, she lapses into a perfunctory détaché, and both the Adagio (uncomfortably small and brisk) and finale (which here sounds like a poor man's Op. 31, No. 3) lack sinister breadth. The reproduction is wonderful, and there are none of the annoying preechoes that mar Badura-Skoda's D. 459.

Karl Ulrich Schnabel, son of the great Artur, is an artist who ought to be much better known than he is. A modest, retiring man, he has spent much of his career giving master classes, but he is a first-class musician. His account of the A minor Sonata, D. 845 is highly personalized without being overly subjective. In other words, though there is a goodly amount of tempo shifting and rubato in order to delineate structure, meter, and harmony, an over-all consummate tastefulness and proportion are always in evidence. I find the playing of the Scherzo especially subtle and winning, but in all four movements the pianism is of the highest order. There are so many impishly turned, twinkling phrases and yet a sublime seriousness of intent. This A minor easily competes with the myriad available interpretations: Kempff's, though similar, is a mite more objective. Richter's (on an old Monitor disc) is entirely too much so, and Kraus (Cardinal) takes an altogether bleaker, grimmer view. The Moments musicaux are lovingly played, but here I find the approach a bit overly solemn. Knowing and sympathetic as K.U. Schnabel's re-creations are, I find a more elemental, outspoken enjoyment in the recent, incomparable Clifford Curzon account (London). Certainly No. 2 of these pieces needn't sound so lethargic and doom-laden as Schnabel plays it here. The sound (a product of Kiwi of New Zealand) is vivid, but its astringency may take some getting used to. I rather like it.

SCHUBERT: Sonatas for Piano (complete). Paul Badura-Skoda, piano. RCA Victrola VICS 6128/31, \$8.94 each (four boxed sets, three discs each set).

In C minor, D. 958; in A, D. 959; in B flat, D. 960 (in VICS 6128); in E, D. 157; in C, D. 279/346; in E, D. 459; in A minor, D. 537; in A flat, D. 557; in E minor, D. 566/506; in E flat, D. 568 (in VICS 6129); in F sharp minor, D. 571/604/570; in B, D. 575; in C, D. 613/612; in F minor, D. 625/505; in A, D. 664; in A minor, D. 784 (in VICS 6130); in A minor, D. 845; in C, D. 840; In D, D. 850; in G, D. 894 (in VICS 6131).

SCHUBERT: Sonatas for Piano: in E, D. 459; in C minor, D. 958. Ingrid Haebler, piano. Philips 6500 082, \$6.98.

SCHUBERT: Sonata for Piano in A minor, D. 845; Moments Musicaux, D. 780. Karl Ulrich Schnabel, piano. Musical Heritage MHS 1245, \$2.79 (Musical Heritage Society, 1991 Broadway, New York, N.Y. 10023).
Selected comparisons:

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Sir Adrian Boult and his forces at Kingsway Hall-rescuing The Pilgrim's Progress from obscurity.

Vaughan Williams and His Pilgrim's Progress

An opera illuminates its composer

by Patrick J. Smith

IT IS NOT SURPRISING that Ralph Vaughan Williams should have written an opera (which he called a "Morality") based on John Bunyan's *Pilgrim's Progress*, given this composer's lifelong interest in things English and religious music. He worked on the project off and on for most of his life, from as early as 1904; rigorously after the First World War (one episode, *The Shepherds of the Delectable Mountains*, was published in 1922), and finally finished it for a Covent Garden production in 1951. The work was received politely, had a more positive Cambridge revival in 1954, and has lain largely dormant since. The present recording was made in connection with the hundredth anniversary celebration of his birth.

The opera will not rank in the forefront of his worksthat is, I doubt whether it will appeal to one not already a Vaughan Williams admirer, if not enthusiast-yet in a strange way it lies at the heart of the man and the composer, for it articulates a view of life which he must have felt strongly to have kept working on the opera for as long as he did (his progress being thus analogous to Pilgrim's). The problems with the opera are obvious. It is a "tableau" opera-that is, a series of vivid scenes linked by the figure of the questing Pilgrim seeking salvation from his burden of worldliness and guilt. Although the theme itself is generally related to "pilgrim" works such as Parsifal, it is here treated far less dramatically and more episodically. Yet I would agree with the composer that it is withal a stage work and not something to be put on in Church. Certainly developments in stage lighting and projections could enliven the scenes and compensate for the lack of development of the central character or the fuzziness of many of the subordinate ones. The text, taken by the composer from Bunyan and the Bible, is refreshing in its richness of language.

Another problem is the story itself. Pilgrim's search for salvation through the thorns of life is largely alien to today's approach to religion. Bunyan's view of life was not only continually sober and didactic, but militantly Puritan in orientation. Vaughan Williams made a minor attempt to universalize the religious implications by calling his hero "Pilgrim" instead of "Christian," but the structure and language are still Christian in inspiration (Christ is never specifically mentioned, but often referred to), and the overcoming of materialistic snares through decisive action and right thinking is completely Puritan in outlook. Even Parsifal, which is hardly "today's" opera, is more in tune with whatever religious revival is taking place now than is The Pilgrim's Progress, simply because Wagner himself fudged the specifics of his hero's religion. Certainly the young who seek a religious experience today base it more on mysticism and ineffability, so that Bunyan's constant harping on "duty," however much it may accord with their own ethical standards, will smack entirely too much of what remains in the churches that they have been spoon-fed from their parents.

Paradoxically, however, the easy melodiousness of much of the music mitigates a good deal of the Puritanism of the text. Not only are the scenes strongly presented, but there are in addition lovely settings of Psalms 23 and 121. Vaughan Williams' music is basically emotional in its content, which divorces it from much of the music of its time (his English counterpart would be Tippett rather than Britten), and its very ear- and heartpleasing qualities have led it to be dismissed as facile. His music is not a little simplistic in its tonality, its modality, and (in the present work) a fondness for the minor second to depict Evil and a general miasma of Anglican litany patterns and church cadences. It is easy music to sneer at, but it is also hard to obliterate, and its range is larger than one would suppose. Vaughan Williams' astringent Fourth Symphony has found more favor than his pastoral Fifth (which by the way contains several themes from the opera), but both are representative of the composer at his most characteristic, and there is no doubt that he was a master at being able to convey a type of music largely unwritten today: that which portrays a state of rapt, joyous, and almost limitless calm. The sections of the opera which reflect this-House Beautiful, the aforementioned Shepherds. and the Allelulia close in Heaven-are indeed beautiful, and are moreover contrasted with such sections as the Battle with Apollyon or the scene in Vanity Fair. Vaughan Williams' works are generally more unified in that they present a single side of his musical thought; in this sense Pilgrim's Progress contains all of them and illumines the composer whole.

The key to the opera-and, perhaps, to its final failure-is the scene of *Pilgrim in Prison*. Here is the only place in which the hero has doubts, and his monologue is central to the opera in that it must convey the anguish and importance of Pilgrim's quest. To me, the scene goes a long way to doing just this-aided by the performance of John Noble, who is fully part of the role-but with all its sincerity and nobility the leap to identification is not made. Part of this is doubtless musical, for Vaughan Williams abandons the anguish when Pilgrim finds the key to unlock the gates, and the rest of the scene is on his home grounds of wonder in the Lord. But there is also a nagging need to posit a prior acceptance of the Christian (or whatever) way of life, and that is what sets this opera apart from, say, a Christian work such as the St. Matthew Passion of Bach, which is universal.

The recording, by that old Vaughan Williams hand Sir Adrian Boult, is the only one (long ago Westminster recorded some of the songs), and is very fine, although a bit bass-heavy and confined in the choral scenes. The large cast is almost without exception excellent, and John Noble, as the Pilgrim, has long acquaintance with the role (he appeared in the Cambridge production) and, one imagines, could not be bettered. The final side is taken up with excerpts from the rehearsal sessions, and may be of interest to those who (a) are Boult admirers or (b) have never attended rehearsals.

The Pilgrim's Progress does not deserve obscurity: It is on the whole faithful to Bunyan and certainly faithful to the best in Vaughan Williams. The opera will never become a repertory piece, nor should it; but on the other hand it should not be relegated to church productions. Vaughan Williams said: "They don't like it, they won't like it, and perhaps they never will like it, but it's the sort of opera I wanted to write, and there it is." So be it, but "they" do not include me.

VAUGHAN WILLIAMS: The Pilgrim's Progress. John Noble (b), The Pilgrim; Raimund Herincx (b), John Bunyan and Lord Hate-Good; John Carol Case (b), Evangelist; Wynford Evans (t), Pliable and a Shepherd; Christopher Keyte (bs), Obstinate, Judas Iscariot, and Pontius Pilate; Geoffrey Shaw (b), Mistrust and Demas; Bernard Dickerson (t), Timorous and Usher; Sheila Armstrong (s), A Shining One and Voice of a Bird; Marie Hayward (s), A Shining One and Madam Wanton; Gloria Jennings (c), A Shining One and Madam By-Ends; Ian Partridge (t), Interpreter and Superstition; John Shirley-Quirk (b), Watchful, the Porter; Terence Sharpe (b), Herald and a Shepherd; Robert Lloyd (bs), Apollyon and a Shepherd; Norma Burrowes (s), Branchbearer and Malice; Alfreda Hodgson (c), Cupbearer and Pickthank; Joseph Ward (t), Lord Lechery; Richard Angas (bs), Simon Magus and Envy; John Elwes (t), Worldly Glory and Celestial Messenger; Delia Wallis (ms), Madam Bubble; Wendy Eathorne (s), A Woodcutter's Boy; Gerald English (t), Mr. By-Ends; Doreen Price (s), Jean Temperley (ms), and Kenneth Woolam (t), Voices from Heaven; London Philharmonic Chorus and Orchestra, Sir Adrian Boult, cond. Angel SCL 3785, \$17.94 (three discs).

by Susan T. Sommer

The Sun-Drenched Genius of Monteverdi

A cornucopia of madrigals from Raymond Leppard via Philips

FOR THIS HANDSOME boxed set of five discs containing almost fifty of Monteverdi's mature chamber works, Philips has assembled an all-star cast conducted by the energetic Raymond Leppard. Leppard's sumptuous realizations of 300-year-old baroque operas have led the Monteverdi/Cavalli revival and sent enthusiastic audiences flocking to opera houses. Now, thanks to Philips' path-breaking venture, the same audience can hear another facet of Monteverdi's genius in their own homes.

Even though I have known and admired individual pieces from these collections for years, I found it a revelation to experience the entire scope of Monteverdi's monumental Eighth Book of Madrigals. Pablo Picasso once described creative talent as a sun with a thousand rays extending in all directions. Perhaps no single publication of Monteverdi's illustrates the many-sided bril-



Raymond Leppard-at home with Monteverdi.

liance of the composer's creative genius better than this extraordinary publication.

The first six books of Monteverdi's *Madrigali* are firmly rooted in the tradition of the sixteenth century; but in his Seventh Book published in 1619, a superb collection of chamber duets and trios with continuo accompaniment, the composer dove enthusiastically into the baroque era. Twenty years elapsed before another major publication appeared.

The Eighth Book of Madrigals came out in 1638 when Monteverdi was seventy-one years old. At first glance it appears to have been carefully planned. The subtitle, "Madrigals of Love and War," its arrangement into two clear halves each headed with a parallel text (Marino's Altri canti di Marte and an anonymous parody Altri canti d'amor), and the composer's own long and rambling preface which contains his famous description of the stile concitato and how he came to use it, all suggests that the compositions were planned around a central theme. But a closer inspection reveals that the collection was more probably the inspiration of Alessandro Vincenti, the most prominent music publisher of his time. Vincenti, despite a distinguished list of composers, had never published anything of Monteverdi's and the undertaking of Book Eight was clearly a prestige move. There are nine separate part books and enough music for a full opera, much of which was far too specifically tied to particular occasions-the many encomiums to Ferdinand III, for example-to appeal to the general buyer. As a money-maker the publication was not a success, but after Monteverdi's death Vincenti salvaged the more popular duets and incorporated them into another anthology with a few similar reprints and a group of unpretentious canzonette for three voices which he published as Book Nine of Monteverdi's Madrigali. There was no Tenth Book at the time, but Monteverdi's twentieth-century editor, Gian Francesco Malipiero, gathered up the solo songs and madrigals which had been preserved in other sources as the tenth volume of his edition of the composer's works. Philips' decision to record these books complete (including even three solo songs discovered since Malipiero's edition. Perché se m'odiavi, Piu lieto il guardo, and Su pastorelli vezzosi), is as courageous and praiseworthy as Vincenti's publication in the seventeenth century. Sad to say, commercial commitment to find music is as unusual today as it was then.

The contents of Books Eight, Nine, and Ten range from the Ballo delle ingrate of 1608 to works from presumably the composer's final years. The breadth of Monteverdi's musical intelligence revealed here is staggering. The dramatic composer shows his hand in the long extended scenes. Il Combattimento di Tancredi e Clorinda, first performed in 1624, is a justly acclaimed masterpiece and tour de force. Monteverdi has chosen sixteen eight-line stanzas of Tasso's epic Gerusalemme liberata which tells the story of the tragic meeting of the disguised lovers on the battlefield. There is some dialogue-Clorinda's refusal to disclose her identity, for instance, or her dying words of forgiveness-but for the most part this is an exercise in recitative, and what a brilliant one it is. The excitement of the battle re-created in machinegun delivery, the exhaustion of the spent warriors, the bystander's bitter lament, and finally the anguished moment of belated recognition are brought vividly alive without benefit of aria or orchestra. In a more formal

vein the exquisite Lamento della Ninfa with its drooping expressive melody over a ground bass sung by three male voices, sympathetic bystanders who frame the scene with a little prelude and postlude, is a perfect jewel. On an even smaller scale the delicious Bel pastor from Book Nine raises the duet madrigal and the dialogue to the highest degree in this scene between the shepherdess and her swain. This is one of the few glimpses we have of how delightful Monteverdi's lost comic pastoral operas like La finta pazza Licori must have been.

Word-painting and its subtle integration into the musical texture is a hallmark of Monteverdi's style. In the large choral frescoes, Monteverdi shows he can extend techniques of the five-voice madrigal to larger forms without sacrificing expressivity or sensitivity. Texts like Guarini's *Mentra vaga Angioletta* ("it hesitates, now flows rapidly, murmuring in low moving sounds, and alternating runs, rests, and gentle breaths," etc.) are most obvious, but Monteverdi can be more subtle as in the clever musical portrayal of the chromatic worm of jealousy, which having worked its way to the heart assaults it boldly in battering repeated notes and pounding rhythms. The Verdi of *Otello* would surely have admired *Gira il nemico*.

In the field of the chamber duet, the vocal precursor of the trio sonata, Monteverdi was unexcelled. The rolling swinging lines of Zefiro torna bound forward over the irresistible impulse of the infectious ground bass. The dramatic anguish, desperately dissonant suspensions, and final halting plea of Ardo, e scopir are all one could ask for in the deeper realms of the heart. In addition to the frothy charm of the three-voice canzonette. Malipiero in Book Ten brings us some of Monteverdi's rare solo songs. They range from the exquisitely simple Si dolce è il tormento (beautifully sung by Sheila Armstrong), which demonstrates what wonders a great composer can work with as little as a descending scale, to the extraordinary, expressive Et è pur dunque vero, a lament surely in the style if not actually from one of the other lost operas, Armida or perhaps Andromeda.

Even in the masque, that curiously static form which is so hard to appreciate without the visual element, Monteverdi demonstrates the extraordinary range of his talents. Listening to the formal patterns of the two *Balli*, one (*delle ingrate*) for Mantua, one for Ferdinand III, and the masquelike competition of Love and Mars in *Ogni amante è guerrier*. I was constantly reminded of the last act of *The Tempest* and was filled with regret that Monteverdi who responded so magnificently to great poetry lacked a Shakespeare in this form—and for that matter that Shakespeare lacked a Monteverdi.

At first glance it seems strange that Philips should start what appears to be intended as a complete set of Monteverdi's "madrigals" with these miscellaneous collections published at the end of his life. But actually it is quite fitting for Raymond Leppard, the moving force behind this recording, whose abilities and talents are directed toward broad operatic lines rather than the intimate ensemble detail demanded by the earlier works. The pieces from Books Eight to Ten are closer to the style in which he feels at home. Leppard is especially fine in binding together the rather diffuse *Balli* and in the multipartite trios and strophic *canzonette* which require a conductor with an over-all sense of form and style. His continuo re-

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Comment: With its new Model 810, the firm of BSR—said to be the largest record-player manufacturer in the world—makes an impressive entry into the top-quality automatic turntable market. A two-speed (33 and 45 rom) model, the 810 is driven by a hightorque synchronous motor via a sophisticated sequential carm system that replaces the conventional carm gear and swinging plate customarily found under the chassis of an automatic turntable. In addition to eliminating the number of small parts required curing manufacture, the new carm system s credited with providing smoother and quieter <u>operation than in past models</u>. The die-cast, ron-ferrous, 12-inch platter is machine

balanced and covered with a ribbed rubber mat. At CBS Labs it weighed in at 7 pounds, 11 ounces-fairly heavy for an automatic. Speed accuracy is assured by the inherently low error of the motor/drive system combined with the vernier (or "variable pitch") adjustment that can vary the speed (-10%)to +2% at 33 rpm; -2% to +4% at 45 rpm) to match the markings on the strobe disc. (Two are supplied, for 50-Hz and 60-Hz ine frequencies.) Alternately, of course, this adjustment will change speed, and thus musical pitch, within its operating range for special applications. Once the adjustment was made (at 33 rpm) in our test sample, speed remained constant regardless of changes in line voltage and was 0.2% slow at the 45-rpm setting-negligible error and one easily corrected by using the vernier adjustment and strobe disc. <u>Average flutter</u> was very low at 0.05%; total audible rumble by the CBS-ARLL method was -52 dB, a good average figure for automatics, which-combined with the low arm resonance (an 8-dB rise at 6.6 Hz when tested with the Shure V-15 Type II Improve cartridge)-helps contribute to the unit's quiet operation.

The tone arm is a low-mass, 3/8-inchsquare metal type fitted with an offset head at one end and a movable counterweight at the rear. The head accepts a slide-in carrier onto which the cartridge is installed. A slide arrangement permits locating the cartridge for optimum stylus overhang in conjunction with a removable gauge mounted topside of the platter chassis. When the overhang is set, the gauge may be replaced by a stylus cleaning brush (also supplied) so that the stylus gets a gentle whisking each time the arm moves from its rest to the disc and back again. While grateful for the brush, we fuss pots opted to leave it off since we prefer a stylus to be brushed from rear to front rather than sideways,

The arm is initially balanced by adjusting the rear counterweight; stylus force then is set by a dial fitted into one element of the gimbal-style mount. The scale on this dial was found to be accurate to within 0.1 gram. Antiskating force is applied by dialing the stylus force in use on another knob adjustment just below and to the right of the arm pivot; this knob has two scales, the outer one for use with spherical styli, the inner one for ellipticals. The arm has negligible friction laterally and vertically, by the way, and requires a 0.3-gram stylus force for automatic trip.

Other adjustments permit you boptimize the stylus' set-down point on the ecord and its height above the record during the change cycle. Both these adjustments were preset and accurate on our test sample. The arm has a built-in viscous-damped cueing control that you can use in either manual or automatic mode; when used as a bause control to interrupt a record during play it shows no side drift. The arm rest has an automatic latch that ergages the arm whenever the drive system s turned off.

The speed selector is a rocker switch mounted inside the circular pitch control at the left of the platter, while the main turntable controls are at the right. The latter group contains five pushbuttons (selectors for 7-, 10-, and 12-inch records; a stop control; and a manual play concrol) and a matching knob-switch with positions marked "single" and "auto." These controls permit you to use the 810 in a number cf ways, depending on whether the long or short spindle is inserted into the platter. The short spindle rotates with the record to minimize centerhole wear and friction When it s used and the knob turned to "single," the 810 becomes a manual, single-play machine; you may cue or re-cue marually, with or without the aid of the arm-lift device. Either the "stop" button or the end of the record will return the arm to its rest and shut off the motor. The short spindle can also be used in automatic play: Press the appropriate size button and the arm will cue itself onto the record and return to rest at the end, shutting off the motor. For continuous repeat of a single record, the procedure s the same except that the control knob must be set to "auto." With the long spindle in place, the 810 will stack up to six records of the same diameter and play them in sequence. Total cycling time is 17 seconds, comparatively slow but a small price to pay for the gentle way the records are handled.

Taking it all togetter—performance, features, styling—the BSR 810 moves into ranking place among the best automatics we know of. And at its price, the others may well be in for a real contest.

This is not an extract, but the complete tex: of High Fidelity Magazine's technical review of the BSR McDonald 810 automatic turntable.

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BSR MCDONALD

alizations in particular are marvels of discreet yet telling invention. The singers and instrumentalists are from the Glyndebourne Opera whom Leppard has worked with so successfully in productions of Monteverdi and Cavalli operas. The women in particular are very fine. I might single out Heather Harper's Clorinda and the combination of Harper, Lillian Watson, and bass Stafford Dean (whom Monteverdi calls upon to perform marvels of range and agility in the Ballo delle ingrate). I am less happy about the tenors, especially Luigi Alva and Ryland Davies, who handle most of the duet work. They have an irritating mannerism of creeping into each phrase from slightly below the pitch and crescendoing into it. The interpretative range throughout leaves something to be desired, but with the gift of all this magnificent music, it seems petty to quibble over details.

The music on these five discs lasts as long as *Götter-dämmerung* but it is far more concentrated. I certainly would not recommend listening to it at one sitting—in fact one side generally makes a satisfactory portion. If \$29.88 seems a little steep for your purse but you would like a taste of this side on Monteverdi, I highly recommend the single disc conducted by Gustav Leonhardt and put out on Telefunken's *Das alte Werk* Series. It includes the complete

Combattimento in what is for my money the best recorded version to date. In fact I doubt that I shall ever hear the narrator's part sung with greater sensitivity, beauty, and skill than by Max von Egmond. In addition you get a nice performance of the Lamento della Ninfa; a dramatic chamber duet Interotte speranze; Tempro la cetra, a declamatory aria well sung by Nigel Rogers in the style of the masques or balli; and two delightful small concerted works for three and four voices, Tu dormi and Eccomi pronta ai baci.

MONTEVERDI: Madrigals: Books Eight, Nine, and Ten (complete). Sheila Armstrong, Angela Bostock, Yvonne Fuller, Heather Harper, Anne Howells, and Lillian Watson, sopranos; Alfreda Hodgson, Anne Collins, and Helen Watts, altos; Luigi Alva, Ryland Davies, Bernard Dickerson, Alexander Oliver, Robert Tear, and John Wakefield, tenors; Stafford Dean and Clifford Grant, basses; Robert Spencer, lute; Osian Ellis, harp; Raymond Leppard, Leslie Pearson, Henry Ward, Joy Hall, Kenneth Heath, and Adrian Beers, continuo; Raymond Leppard, cond. Philips 6799 006, \$29.88 (five discs).

MONTEVERDI: Il Combattimento di Tancredi e Clorinda; Madrigals from Books 7 and 8. Nelly van der Speek, soprano; Nigel Rogers and Marius van Altena, tenors; Max von Egmond, baritone; Dmitri Nabokov, bass; Leonhardt Consort, Gustav Leonhardt, cond. Telefunken SAWT 9577, \$5.98.

classical

reviewed by ROYAL S. BROWN R. D. DARRELL PETER G. DAVIS SHIRLEY FLEMING ALFRED FRANKENSTEIN CLIFFORD F. GILMORE HARRIS GOLDSMITH DAVID HAMILTON DALE S. HARRIS PHILIP HART DONAL J. HENAHAN PAUL HENRY LANG ANDREA MCMAHON ROBERT C. MARSH **ROBERT P. MORGAN** H. C. ROBBINS LANDON SUSAN THIEMANN SOMMER

BACH: Cantata No. 202: Weichet nur, betrübte Schatten. HANDEL: Motetto: Silete, venti. Carole Bogard, soprano; Raymond Dusté, oboe; Chamber Orchestra of Copenhagen, John Moriarty, cond. Cambridge CC 2772, \$5.98.

Carole Bogard is unquestionably one of the most musically and vocally gifted sopranos around today, and here's another record from Cambridge of music ideally suited to her special qualities. Bogard's Bach cantata enters a field already crowded with excellent versions. Elly Ameling, Agnes Giebel, and Maria Stader, among others, have already made firstrate recordings of the work, but even if you own those three, you should hear how playfully Miss Bogard sings the "Sich üben im lieben" aria, or how effortlessly she sails through the second aria, "Phöbus eilt mit schnellen Pferden" (Bach has marked it Allegro assai and Bogard takes him at his word). A mediocre solo violin and some occasionally slack and insecure conducting are the only blemishes in this otherwise superb performance.

The Handel *motetto* is perhaps the more interesting repertoire here because of its relative obscurity, and because of the greater opportunity for the soprano to show off her complete arsenal of stylistic and interpretive tricks. Just listening to the rousing final Alleluia left me breathless, but Miss Bogard sounded as if she would be delighted to sing it again, even faster; one has the feeling there is simply no limit to the vocal fireworks she is ready to unleash. In fact, everybody involved on the Handel side of the disc deserves high praise, but I was especially impressed by Raymond Dusté's exquisitely and elaborately (but not excessively) ornamented oboe lines in both the Bach and the Handel. He and Miss Bogard are admirably matched. Cambridge's recording and disc surfaces are, as usual, perfect. C.F.G.

BACH, J. C.: Symphonies for Wind (6). London Wind Soloists, Jack Brymer, cond. Stereo Treasury STS 15079, \$2.98.

Johann Christian Bach, the youngest son of Johann Sebastian, was born in 1735, just fifteen years before his father died. He was first sent off to Berlin to live and study with his older half brother, Carl Philipp Emanuel, for a few years, then to Italy to study with Padre Martini. While in the south he converted to Roman Catholicism and became organist of Milan Cathedral: but meanwhile the attraction of the opera house began to be irresistible, a circumstance which soon made life around the cathedral rather tense (there were complaints of neglected duty and suspicions of Christian's "frivolous character"). Fortunately, at about this time (1762) he was invited

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to London to write an opera for the King's Theatre and was soon afterward appointed Music Master to Queen Charlotte, the young German wife of George III. London and Johann Christian pleased one another greatly and he remained there until his death on New Year's Day, 1782.

His output includes a large number of church works, dating mainly from his stay in Italy, quite a few Italian operas. English and Italian cantatas and songs, and a very large body of symphonies and chamber works which remained popular in London long after his death. Erik Smith's notes for this new record, by the way, include a lengthy quotation from a letter of Leopold Mozart describing his visits to London's fashionable pleasure gardens, Ranelagh and Vauxhall, where Christian's orchestral and chamber music was frequently performed. Leopold's description is charming in itself, but also perfectly sets the scene for the music on this record. You must imagine these large, beautiful, and casually elegant establishments where thousands of people sat at small tables eating and drinking or strolling the aisles greeting acquaintances while this also casually elegant music was being performed from a band-box area in the center. Certainly profound pronouncements were the last thing these audiences wanted to hear in the Vauxhall Gardens.

Jack Brymer's London Wind Soloists are immensely skilled and play superbly with just the right balance of light-hearted wit, charm, elegance, and delicacy that this delightful music requires; just a dash too much

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Monteverdi:

Madrigals, Books 8-9-10– English Chamber Orch.; Glyndebourne Opera Group/ Leppard 6799.006 (5-record set)



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seriousness would destroy the whole effect.

BRITTEN: Concerto for Piano and Orchestra, Op. 13; Concerto for Violin and Orchestra, Op. 15. Sviatoslav Richter, piano (in Op. 13); Mark Lubotsky, violin (in Op. 15); English Chamber Orchestra, Benjamin Britten, cond. London CS 6723, \$5.98.

These two early works, from 1938 and 1939, share certain stylistic characteristics, especially the juxtaposition of romantic emotionalism and sardonic humor that in Britten's music has always recalled both Mahler and Shostakovich. However, the emphasis is different, for the Piano Concerto is much more an explicitly virtuoso affair, perhaps reflecting the composer's own special relation to the instrument. The parodistic element is most prominent in the second movement (a waltz) and the finale (a grotesque march), while in the first movement an explicit antithesis is developed between the percussive keyboard figuration of the opening material and the softer second subject-resolved after the cadenza by the piano's statement of that second theme in somewhat Rachmaninovian terms. The third movement, a set of variations, was composed in 1945 to replace an earlier Recitative and Aria-very atmospheric, this, and certainly the most successful single movement in the work, although throughout, the brilliant writing for keyboard and the invention of the scoring easily retain one's interest.

The Violin Concerto seems to me less successful, but this may be partly due to the playing of the soloist, which is splashy but insecure of rhythm, phrasing, and occasionally pitch; the piece doesn't need any extra "romanticism," certainly not of the Russian-violinschool type. Formally more adventurous, with the three movements linked and a single cadenza leading from the scherzo to the finale, this work too is at its best when coping with variation technique in the final passacaglia, although the grandiosity of the coda somewhat undercuts the earlier, subtler effects. There are a few orchestral devices that don't seem to come off, certainly not in this recording, where the overresonance of the low percussion is a frequent problem; the repeated fiddle chords in ensemble with the timpani simply don't "sound" together, although they may well have been played together.

Aside from this reservation, the orchestral performances are superior, and Richter's playing is-expectably-of a noteworthy virtuosity. D.H.

COPLAND: Piano Sonata; Passacaglia; Four Piano Blues; Cat and the Mouse. Robert Silverman, piano. Orion ORS 7280, \$5.98.

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recordings in years of the Four Piano Blues and the very early (1920) The Cat and the Mouse, an engaging exercise in Dukasian tone-painting. The Piano Blues, written over the period 1926-48, are dedicated to four noted pianists: Leo Smit (1947), Andor Foldes (1934), William Kapell (1948), and John Kirkpatrick (1926).

Most important of all, however, is the Sonata, a work of 1941 that for the first time incorporated into a "traditional" concert work the lyrical aspects of the style that Copland had been developing in his "American" works of the Thirties. Particularly noteworthy are the final pages, with their exceptional sense of spaciousness and repose, and I am happy to find that Mr. Silverman realizes these qualities with great security. At a few places I miss the dynamic force that is called for, but this-and, indeed, the other performances on the record as well-is clearly a very thoughtful and carefully worked-out reading, delivered with ample technical command and recorded in a most natural acoustic. Along with the Masselos record of the Variations and Fantasy (Odvssey 32 16 0040). it gives us an eminently satisfactory representation on records of Copland's piano music. DH

DvoŘák: Quintet for Piano and Strings, in A, Op. 81. Artur Rubinstein, piano; Guarneri Quartet. RCA Red Seal LSC 3252, \$5.98. Selected comparisons: Serkin, A. Schneider, et al. Van. 288 Lateiner, Heifetz, Piatigorsky, et al. RCA 2985



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The Dvořák piano quintet is, to my way of thinking, a wonderfully lopsided work. The movement that makes the piece is the Andante con moto-the Dumka that passes through so many lights and shadows, so many colors and moods, without having to justify itself to anybody. It seems here to be shaped by an inner logic, and its dance character evolves into as highly sophisticated an exercise in complex rhythmic relationships as you will find in any student's notebook. But it all came naturally to the forty-six-year-old Dvořák. The movement's somber inwardness, so pronounced at the beginning, turns inside out into sections of light texture and high spirits, and it goes on from there to the furious kind of physical workout that is the Dumka's traditional culmination. But Dvořák was not afraid to end the movement quietly, and the piano's very bottom F sharp in the last measure seems to look back to some of the serious and thoughtful things that have transpired. For the rest of the work, it is full of the singing and sentiment, and the developmental strain and turmoil characteristic of the composer, with the piano essential both as underpinning and as a strong melodic personality.

The only difficulty this record poses is one of choice. The performance is beautifully balanced between the gentleman at the keyboard and the gentlemen with strings, and the sense of give and take comes from the experience of many collaborations. The disc's close rival is the Vanguard issue by Peter Serkin with two of the same string players-violist Michael Tree and cellist David Soyer. (1 must note in passing that the Lateiner/Heifetz/Piatigorsky performance sounds rather perfunctory in comparison with either of the newer discs.) The Serkin & Co. approach is more overt, more elastic in dynamics, more virtuosic than the generally mellower, less highly inflected Rubinstein/Guarneri collaboration. By the same token, Rubinstein has a way of letting a melodic line simply spin out with an unhindered naturalness that makes Peter Serkin sound as if he's trying too hard. The choice is a hard one, and each listener is going to have to make his own. But if you are a Guarneri Quartet collector, you won't want to miss this release. SE

Dvořák: Quintet for Strings, in G, Op. 77. Boston Symphony Chamber Players. Deutsche Grammophon 2530 214, \$6.98. Selected comparison: Berlin Phil. Octet Phi. 802851

Dvořák's Quintet with double bass is an earlier work than the opus number would indicate: The Berlin publisher Simrock took it upon himself to affix Op. 77 to the piece when chronologically it should have been Op. 18. A product of 1875 (the composer was thirtyfour), it is typically engaging-plenty of melodious sweep, certain bumptious moments of country dance character. respectable "classic" development passages, some beautiful writing for first violin, and a movement of hymnal nobility. No wonder the judges of the Artistic Circle of Prague competition, for which Dvořák wrote the piece, gave it first prize.

This recording by the BSO Chamber Players includes a curiosity: the Intermezzo movement that Dvořák adapted from his E minor Quartet, Op. 10 and used as the second movement in his competition entry, bringing the number of movements to five. This Inter-

CIRCLE 50 ON READER-SERVICE CARD

mezzo was deleted before publication and became the Nocturne for Strings, Op. 40. Perhaps Simrock thought five movements too unconventional; perhaps the decision stemmed from the fact that the fourth movement (as published) really accomplishes the same thing, which is to create an oasis of rest and reflection amidst the vigorous goings-on. But the Intermezzo is a beautiful piece, and I like it here!

The performance is a beautiful accomplishment too. It runs neck and neck with that of the Berlin Philharmonic Octet members, and places the reviewer in a dilemma. The Boston is just a bit less highly inflected in the first movement (a possible minus), but it makes the rhythmic limp of the Scherzo movement more cohesive (a plus). I prefer by just a hair the Berliners' faster tempo in the Poco andante. but I wouldn't make a fuss about this. The DGG sound is somewhat less bright and immediate than Philips'. But you will do well with either recording. S.F.

Dvořák: Symphony No. 1, in C minor, Op. 3. London Symphony Orchestra, Witold Rowicki, cond. Philips 6500 122, \$6.98.

Dvořák's earliest surviving orchestral work (it was composed in 1865 and lost until 1923) is sometimes known as The Bells of Zlonice, probably because of the chimelike figures from the brass at the end of the last movement. Zlonice was, of course, where the composer lived in adolescence, and it was there that he served his first professional apprenticeship-in a butcher's shop. If the great D minor Symphony (No. 7, formerly known as No. 2) can be said to exhibit the influences of Wagner and Brahms, the First, at least in its scoring, has a kinship with Bruckner. Obviously it is not derivative, for Bruckner's work followed Dvořák; but nonetheless one is struck by the massive sonority of brass, the cloudy chromaticism, the willingness to stray from the beaten path, and above all the discursive grandeur. Folk elements are present too, and in that respect this early symphony foreshadows the late orchestral Dvořák (I am thinking particularly of the Midday Witch).

Rowicki delivers an impassioned performance and has the members of the LSO playing like demons. They throw customary British reserve to the winds here, but in so doing never lose control or lapse into coarseness. Philips' sonics are of demonstration caliber: Rarely have such huge masses of orchestral sound been captured with such ease, range, and impact. A heart-warming disc. H.G.

ELGAR: Enigma Variations, Op. 36; Cockaigne Overture, Op. 40. VAUGHAN WIL-LIAMS: Fantasia on a Theme by Tallis. Philadelphia Orchestra, Eugene Ormandy, cond. Columbia M 31074, \$5.98. Selected comparisons (Elgar): Boult Ang. 36799

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Though the Philadelphia Orchestra has not made records for Columbia in some four years, these recordings are nonetheless vintage examples of the collaboration of that orchestra, Eugene Ormandy, and the Columbia producers at their most opulent. No orchestra, not even the Philadelphia, sounds like this "in the flesh," and this record illustrates the way in

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which recording has become an art in itself. The acoustics of the recording room—not a concert hall—the type and placement of many microphones, and the mixing of balance from multichannel tapes combine to produce a performance quite unlike what one would hear in the Academy of Music.

Of course this by no means eliminates consideration of the artistry that goes into the process—especially on the part of Ormandy who, after all these years in the recording studio, approaches his tasks with an expertise second to none. Given the technological expertise of a modern production crew and Ormandy's long experience and artistic control, such a recording must inevitably embody his conception of what he wants us to hear from the record as opposed to a live performance.

Musically, Ormandy's Elgar is much like his Brahms—fluid in phrasing, rich in sonority, and rather bland rhythmically. In the Variations we hear little of the sharp contrast, the energy, or rhythmic bite that so enlivened Colin Davis' imaginative performance. Nor is it a question of Ormandy's taking a more mellow or romantic approach than Boult: Expressively, Ormandy is quite neutral, rather impersonal, projecting this score more as sheer orchestral sound than as a source of personal expression. The *Cockaigne* Overture receives the kind of rousing performance that emphasizes the score's beefy vulgarity.

The performance of the Vaughan Williams

fantasy is equally opulent, with possibly less relevance to the music. Effective as the vivid juxtaposition of two antiphonal string choirs is here, the very richness of tone and Ormandy's rather too plastic shaping of the phrase seem quite to overwhelm this expressive score. But one cannot fault the extraordinary playing of such beautifully matched players nor their response to Ormandy's direction. P.H.



To the best of my knowledge, this is the first

Sutherland's New Lucia– Still Sensational After Ten Years by Dale Harris

Lucia was the opera that launched Joan Sutherland's international career. It was at Covent Garden in 1959 that Sutherland, aided by Tullio Serafin's musical wisdom and Franco Zetfirelli's sensitive eye, sang the role for the first time and earned a triumph that quickly carried her to every major theater in the world. Her celebrated London recording of Lucia was made in 1961, the year of her Metropolitan debut. This set helped both to consolidate Sutherland's fame and to confirm the shift in musical taste initiated some ten years before by Maria Callas, who first taught the postwar world to listen seriously to the bel canto repertory. Callas remade our operatic sensibilities. Her interpretive genius as a singer and an actress gave Sutherland's phenomenal vocal skill an emotional world to inherit. You have only to compare the vacuous facility of Lily Pons's old Victor Mad Scene with Sutherland's original Lucia to understand the change wrought during this period. From the start, Sutherland's performance aimed at romantic expressivity as well as vocal brilliance. Eleven years and innumerable Lucias later she has re-recorded her initiatory role. The results are fascinating,

The vocalism is more assured than ever. The immediacy of her first vocal splendor has yielded to a better-equalized scale, greater firmness of tone in soft, sustained passages. and a sharper sense of attack. The years have diminished only minimally the freshness of her sound. Some of the notes in alt are a bit pressed. At odd moments (the opening of "Verranno a te," for example) the line falters. But the voice is still one of the wonders of the operatic world, supple, powerful and true (the vocalized reprise of "Verranno a te" in the Mad Scene is ravishing and so is much of the love duet, now sung a whole tone higher than previously). Moreover, the voice is as capable as ever of astonishing flights of virtuosity: like "Quando rapita in estasi," or "Perdonar ti possa Iddio...." in the Lucia-Enrico duet. But Sutherland's vocal maturation does not consist simply of holding her own. She still negotiates such things as wide upward intervals with supreme confidence; however, in general

the tone is more forward than it used to be, and therefore rather less plummy. Her enunciation of the text is consequently more engaging. This Lucia moons less than her somewhat lugubrious predecessor. She is a stronger, more womanly character, with a bolder vocal style. She shows a new and darker sense of her destiny. "*Regnava nel silenzio*" reveals cour-

age, "Soffriva nel mio pianto" an awareness that she has been wronged, and in the duet with Edgardo she now demands, rather than merely sighs for, a share of his love. This is a Lucia with strength enough to go mad murderously.

The other artists do not need to challenge their earlier selves. Luciano Pavarotti is a worthy partner for Sutherland. His voice is at its most refulgent here. The sound is so full and easy, the style so impetuously vivid, the manner so disarming that he easily eclipses his forerunner (Renato Cioni) in this role. Only the final scene is a shade unsatisfying. "Tu che a Dio spiegasti l'ali" calls for a more direct and resolute lyricism. Otherwise Pavarotti is unapproachable in this field. He sings with unfailing artistry and musical refinement: His blazing sound is always at the service of the music.

Sherrill Milnes's Enrico is less vocally well endowed than Robert Merrill's (in the older London edition) and in the end proves disappointing. This talented baritone doesn't seem quite able to find himself as a performer. Though he can produce a fine top A flat at the conclusion of Scene 1, he is not quite a virtuoso. Though capable of some exquisite lyrical singing, he is not really a bel canto stylist. Though forceful in manner, he is not convincingly dramatic. He is a good singer (even if the voice is a trifle restricted at either end), but next to the stars he seems indeterminate.

Ghiaurov has a superb. if short, voice. He makes far less of the text than Siepi (though more of the vowels, since these are often impure), but compensates by the smooth deployment of his resources. Ryland Davies contributes a vivid cameo of Arturo, and Huguette Tourangeau delivers herself of some odd sounds as Alisa.

Richard Bonynge is now at the helm instead of John Pritchard. The latter's performance has many virtues, but they are all negative ones. He doesn't hamper the singers; he doesn't impede the melodic flow; he doesn't meander. On the other hand, he is certainly dull. His melodic notions are four-square (e.g., the final section of the soprano-baritone duet), the big tunes go by equably, without either lift or climax (e.g., Enrico's aria; the love duet), and there is a general want of animation. In all these matters Richard Bonynge is a vast improvement. From first to last he hardly lets the tension slacken. Tempos are brisk (excessively so at least once-in the big ensemble that succeeds the Sextet), rhythms are pointed, the tunes are launched with buoyancy. This is conducting by someone who knows Donizetti's melodic world and early nineteenthcentury vocal style. Bonynge is very responsive to the singers' expressive needs: he knows how to guide and to support. The bolder view of Lucia's character which Sutherland displays is matched by the forcefulness of his conception. Indeed, there are times when I could wish for more relaxation, like a larger rallentando at the climax of the Sextet. However, this is no pastel Lucia but a real drama.

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DONIZETTI: Lucia di Lammermoor.

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Edgardo	Luciano Pavarotti (1)
Enrico	Sherrill Milnes (b)
Raimondo	Nicolai Ghiaurov (bs)
Alisa	Huguette Tourangeau (ms)
Arturo	Ryland Davies(t)
Normanno	Pier Francesco Poli (t)
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representation of Josef Bohuslav Foerster's music on records in this country. In fact, only one of his orchestral compositions has ever been played by a major orchestra here, a symphonic suite, *Cyrano de Bergerac*, programmed by Frederick Stock in Chicago in 1907.

A native of Prague, Foerster was a descendent of several generations of village organists. Born in 1859, he was roughly four years younger than Janáček and a year older than Mahler. His wife, Berta Lauterer-Foerster, was an important opera singer and Mahler engaged her both in Hamburg and Vienna. Through this association. Foerster and Mahler became good friends and some critics detect Mahler's influence on the Czech composer's music.

Foerster composed prolifically during his long life of ninety-two years: he was eighty-six when he wrote a cantata in 1945 to celebrate the liberation of Czechoslovakia. In addition to operas, church music, chamber works, and a great variety of orchestral music, he wrote five symphonies between 1888 and 1929. In his memoirs Foerster recalled beginning this symphony on Good Friday in 1904. Each movement depicts some aspect of the Easter experience: the first. Easter as viewed by an adult: the second, a child's Easter as Foerster recalls holiday visits to his grandfather in the country: the third, a mystical praver; and finally a celebration of the Resurrection in fugal treatment of three authentic religious melodies.

Though the symphony may reveal at certain moments the influence of Mahler, especially in its religious mysticism. Foerster's music stays basically in the tradition of Dvořák, and, through him, of Brahms and Wagner. Such Mahlerian touches as the long dissonant crescendo in the finale seem more imposed on the music than a natural part of its evolution. Certainly the Scherzo and Trios hark back directly to the Czechoslovakian dancers of Dvořák.

This recording of a good performance by the Prague Symphony Orchestra is an interesting addition to the late Romantic orchestral repertory. Foerster may be of importance primarily to his fellow Czechs, but on the basis of this symphony, his music deserves wider currency. P.H.

GOTTSCHALK: "A Gottschalk Festival." Eugene List, piano (with Cary Lewis and Brady Millican in the fourhand piano works); Vienna State Opera Orchestra, Igor Buketoff, cond.; Berlin Symphony Orchestra, Samuel Adler, cond. Turnabout S 34440/2, \$8.94 (three discs).

Grande Tarantelle; A Montevldeo; Variations on the Portuguese National Anthen; Escenas Compestres; The Union; Marche solennelle; A Night in the Tropics; Grande Fantaisie trlomphale sur l'hymne national bréslilen; Marcha Triunfal y Final de Opera; Radieuse; Ses yeux; La Gallina; Ojos criollos; Pasquinade.

This one confirms an old saying: "I can take care of my enemies, but God save me from my friends."

Eugene List, having played much of Gottschalk's piano music with great success, has had some of the Creole composer's most bombastic crowd-pleasers arranged for piano and orchestra, and these things are the heart of this recording. The *Grande Tarantelle*, was "reconstructed and orchestrated by Hershy Kay," while the *Fantaisie* and Brazilian anthem were "arranged for piano and orchestra by Samuel Adler." In addition, the set contains a work of Gottschalk's own for piano and orchestra, the Variations on the Portuguese National Hymn. List, of course, is soloist in all four. He plays one hell of a lot of piano, but the music is so inflated, so meretricious, so uninventive, so obvious, and ultimately so tedious that one resents the time spent in listening to it.

In the same vein are two pomp-and-circumstance marches: the Marche solonnelle for orchestra and band with cannon, and the Marcha Triunfal y Final de Opera for the same, minus cannon. Ho-hum.

The set also contains five of Gottschalk's piano solo pieces as arranged by the composer for four hands and played by List with Cary Lewis or Brady Millican. Like the above-mentioned arrangements for piano and orchestra, these transcriptions, even though they are the composer's own, kill such charm as the music may possess as keyboard solos and add nothing of interest by way of compensation.

The set contains one really first-rate work, the symphony called La Nuit de tropiques, played by Buketoff and the Vienna orchestra. The first of the two movements here is pure Berlioz, the Berlioz of the marvelous lyrical adagios, and nearly as good; the second is a delightful folk-dance piece.

The so-called opera in the set, the *Escenas Campestras*—sung by Trinidad Paniagua, soprano; Jose Alberto Esteves, tenor; and Pablo Garcia, baritone—is also delightful in the folksy vein. It is no opera at all but a few little songs and instrumental pieces and lasts thirteen minutes. The set also provides another nice little folk piece for orchestra entitled *A Montevideo*.

The curse of exploration in the history of American music is the resurrection of secondrate works because they are American, not because they are good. The best of Gottschalk lies in his piano solo pieces in folk vein, and in his sentimental fantasies like *Morte!* and *The Dying Poet*. To cannonade the audience with shallow, showy, shoddy nonsense, as is done throughout much of this set, is the surest way to kill the revival of interest in Gottschalk. And to place on the cover of the box containing the records the statement that it includes "the complete works for piano and orchestra" is shamelessly misleading. A.F.

IVES: Orchestral Set, No. 2. **MESSIAEN:** L'Ascension. London Symphony Chorus and Orchestra, Leopold Stokowski, cond. London Phase 4, SPC 21060, \$5.98.

lves and Messiaen on the same disc? An apparently bizarre coupling until you consider how many techniques the cosmically oriented American pioneer and the ornithologist French Christian mystic share—even if they produced totally different results—and how far apart both stand from the mainstream of traditional Western music. Each composer has attacked in his own way the feeling of temporality inherent to classical forms and tonality. Of course this type of temporality has been destroyed, systematically and haphazardly, by any number of composers and techniques. But



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in both Messiaen and Ives, the creation of a cosmic time becomes one of the prime aesthetic and philosophical goals through the use of simultaneity (frequent juxtaposition of several harmonically and rhythmically unrelated elements), cyclism (constant, hypnotic repetitions of various themes, motives, and configurations), and jolting incongruities (the seemingly arbitrary superimposition of certain elements from the "real" world, especially the bird calls in Messiaen and the American folksongs, hymns, etc. in Ives).

With that said, I should immediately point out that Messiaen's L'Ascension, one of the composer's earliest published works, bears fewer of those typical earmarks that one notices in the composer's better-known later compositions. Of course one hears the obsessive repetitions, such as in the first movement; certain familiar melodic patterns (including, in the first movement, a theme apparently associated with Christ and often used by Messiaen in other works); parallel blocks of dissonant chords that easily but unexpectedly resolve into opulent tonic chords and their inversions (first and fourth movements); the plainchant rhythms (second movement). On the other hand, the Dukas-cum-Debussy third movement (and parts of the second) is almost unrecognizable as Messiaen (this section was replaced by a second version in the organ arrangement of L'Ascension which, in spite of London's liner notes, came after the orchestral score, the latter having been composed in 1933 and premiered in 1934.).

But L'Ascension, for all its stylistic inconsistencies, has immense appeal, particularly in its stunning range of orchestral color, which has been perfectly reproduced by the Phase 4 engineers. This is absolutely one of the best recorded discs I have ever heard, in spite of the somewhat extreme stereo separation: in the last movement, for instance, the sonics for the lush series of loud chords in the strings defy belief. Stokowski's interpretation (his second recording of the work, the first being one of Columbia's earliest LPs) will raise many eyebrows, particularly in the last movement which Messiaen apparently intended to be a dreamy, hypnotic string of purely chordal phrases-as heard in the composer-supervised recording by Marius Constant and the French National R.T.F. Orchestra for Erato (available in Europe). Here, Stokowski uses a tempo that is more than twice as fast as Constant's while also milking the upper strings for all they are worth. The result is a typically Stokowskian lyrical flow that cannot help but bring tingling chills-unidiomatic as the effect may be. Throughout, Stokowski elicits superb playing from the London Symphony and shows his usual flair for bringing out instramental nuances, both hidden and obvious: his mellow performance furthermore stands in sharp contrast to Constant's (and, one supposes, Messiaen's) brashness. This is Messiaen-for-people-who-don't-like-Messiaen. but I cannot see any but the most diehard aficionados not being captivated by this performance.

Ives fans, on the other hand, should have no quarrel with Stokowski's rendition of the Second Orchestral Set-save perhaps for the addition of a wordless chorus in the second movement. One of Ives's last completed works, the Second Set is also one of the most difficult (rather in the vein of the Fourth Symphony), one of the darkest, most mysterious, and to me one of the most beautiful. Nothing in this work is stated directly: Even in the more overt second movement, with its ragtime rhythms and more blatantly presented hymn themes, lves maintains a subtlety in the juxtaposition of the disparate elements that produces a feeling of almost dreamy nostalgia-a quality even more marked in the first and third movements. The orchestral writing in the first movement, for instance, creates an almost constant blur of ostinato figures and static chords against which the fleeting folk themes seem to lose their familiarity. The third movement, on the other hand (inspired by the sinking of the Lusitania), reaches a tragic, overwhelming climax that grows powerfully out of the surrounding musical chaos and then returns quietly to a quasi niente state.

The staggering complexity of this music and the nonlogical, nonformalized manner in which certain patterns and climaxes develop should make it a nightmare to conduct. But Stokowski has always seemed to have good, if not unfailing, instincts vis-à-vis what a composer would or would not like (or secretly approve), and the shape he has given to the Second Set seems to grow inevitably from the many disparate musical phrases, whose contours are highlighted and balanced against one another. The combination of London's brilliant sonics and this remarkable interpretation make the lves a near definitive recording (and the only one currently available on discs): add Stokowski's deliciously unorthodox rendition of Messiaen's L'Ascension and you have one of the year's outstanding releases. R.S.B.

JANÁČEK: Diary of One Who Disappeared. Elizabeth Gale, soprano; Elizabeth Bainbridge, mezzo: Rosanne Creffield, mezzo; Marjorie Biggar, contralto; Robert Tear, tenor; Philip Ledger, piano. Argo ZRG 692, \$3.98. Selected comparison:

Selected comparisor. Häfliger

DGG 138904

Any performance of a Janáček vocal work in translation must necessarily cope with very special textual problems. Although Bernard Keefe's English words used in this recording are as idiomatic as one might reasonably expect given the composer's characteristically faithful tracing of Czech stress and inflection. the results nonetheless sound rather artificial. The trouble is not so much a falsification of the vocal line (Keefe actually keeps closer to the original than the German used by Häfliger on DGG), but something more intangible-1 simply find it difficult to believe a simple, upright Moravian peasant lad and his gypsy seducer would express themselves with words that stand in a bland no-man's-land between straightforward conversation and badly stylized poetry. I do not understand Czech, but with a translation in hand to suggest the mood and language; Beno Blachut's magnificent Artia version (ALP 102, deleted-find it if you can) provides just the shattering experience that Janáček intended.

Another problem is the performance itself. Musical and conscientious though it may be, there is little hint of the earthy vitality and gnawing eroticism that Janáček virtually burned into every note. Robert Tear sounds amazingly like a young Peter Pears and uses his dependable if somewhat dry voice to make some very sensitive points (understandably,

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though, he seems to quail visibly when faced with those exposed high Cs in the final song). Yet the complete lack of spontaneous passion puts this Janáček squarely in Shropshire rather than a Moravian field. Elizabeth Bainbridge's sexless, oratoriolike Zefka is even more inhibited. Philip Ledger plays the tricky accompaniments very neatly, handling rhythms with incisive if rather bloodless precision

Both singers and pianist have been given too close miking for comfort-surely the three female voices that describe the actual seduction (an inspired stroke on Janáček's part) should have more distance to achieve the scarcely audible effect that the composer asks for. All things being equal, Häfliger's version is still preferable; at least he digs into the notes and his warm, plangent tenor sounds most affecting. But for a revelation of this masterpiece, hunt down the Blachut recording, a really searing performance. P.G.D.

LISZT: Symphonic Poems. London Philharmonic Orchestra, Bernard Haitink, cond. Philips 6500 189, \$5,98

Ce qu'on entend sur la montagne; Hunnenschlacht; Von der Wiege bls zum Grabe

This entry in the Haitink's on-going series of Liszt's symphonic poems offers an interesting perspective: It contains the first poem, What One Hears on the Mountain, and the last. From the Cradle to the Grave, plus Battle of the Huns.

All three are interesting pieces, although Mountain is somewhat less than gripping. Liszt obviously was not yet in stylistic control in this first effort: It lacks a sense of shape and direction, and the extended framework is not sufficiently supported by the musical ideas. And one gets the impression that the piece will go on forever. It is easy to understand why Hunnenschlacht is somewhat better known, for it contains some really rousing battle music. Once the battle is over the music is less interesting, but even a slight sense of anticlimax does not detract from the over-all strength of the piece.

Haitink has some trouble here, as he did in Mountain, making the music sound sufficiently dramatic. The playing is sure and controlled yet lacks excitement. Ernest Ansermet and Hermann Scherchen both recorded Hunnenschlacht and although their performances are careless and nowhere near as polished as Haitink's they infuse the work with a rousing liveliness. A combination of the two approaches-the restrained and the headlong-would be effective.

From the Cradle to the Grave is by far the best music on the record, and is also the best played. The sense of overrestraint has disappeared. In the middle section especially, the orchestra brings an intensity of romantic feeling that for the first time really brings the playing to life. Haitink is clearly determined not to exaggerate this superromantic "program" mu-sic. But a piece entitled Battle of the Huns could certainly sound a little fiercer.

Zubin Mehta's Liszt record, which also contains the battling Huns, has not been released at this writing. It will be interesting to see what he does with it. The Haitink disc is to be recommended chiefly because of From the Cradle to the Grave, unless one is an ardent fan of understated romanticism. A.M.

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Reader Service 72 P.O. Box 14306 Annex Station Cincinnati, Ohio 45214 MAHLER: Symphony No. 8, in E flat. Heather Harper, Lucia Popp, and Arleen Auger, sopranos; Yvonne Minton, mezzo; Helen Watts, contralto; René Kollo, tenor; John Shirley-Quirk, baritone; Martti Talvela, bass; Chorus of the Vienna State Opera; Vienna Singverein; Vienna Boys Choir; Chicago Symphony Orchestra, Georg Solti, cond. London OSA 1295, \$11.96 (two discs).

Selected comparisons:	
Bernstein	Col. M2S 751
Haitink	Phi. 6700 049
Kubelik	DGG 2720 033

Although both the New York Philharmonic and the Cleveland Orchestra have recorded in Europe, the logistics of taking the Chicago Symphony to Vienna to tape the Mahler Eighth between August 30 and September 1 last year was surely the most complex overseas recording project by any American orchestra to date. The arrival of the finished album climaxes what must be regarded as the season of Mahler Eighths, a score that is now represented in the catalogue by three new editions.

Either of the two which immediately preceded the Solti set, Rafael K ubelik's recording with the Bavarian Radio Orchestra (shortly to be made available apart from the integral set) or Bernard Haitink's with the Amsterdam Concertgebouw, took precedence over all previous efforts to record this work. We are again presented with a situation where the idea of one "best" recording cannot be defended. All three conductors are dedicated to Mahler and play his music with the deepest sympathy and insight: but these are three individual artists, and each responds to the composer in his own way. Haitink represents solid musicianship with a touch of reserve. Kubelik, on the other hand, takes a more romantic view and finds many felicities in color and nuance as a result. And Solti? He brings to this music the most sustained intensity of the three and carries it to the highest pitch of exaltation and excitement.

Three recording philosophies are at work as well, and you become most aware of them if you play these records through an SQ decoder and four channels. The Kubelik in these lights is an orthodox. well-engineered stereo record that defines a good concert hall of moderate size and places the orchestra and vocal forces before you with the approximate perspective of a main-floor center seat. Even with back channels playing, the hall never really opens up. Obviously it's a little dry acoustically.

The Haitink, on the other hand, places you in the balcony of the Concertgebouw and creates the rather uncanny illusion of a very large and resonant hall with the chorus spread widely across a panorama in the front of the room, but with all sorts of sound reflections coming at you from the sides and rear, especially when the extra brass is heard. The Haitink suffers the inevitable loss of presence on soloists and solo woodwinds that a balcony seat implies, but when it bursts forth with the organ, the extra brass, and the full array of performers, there is the sense of vast resonant space which 1 find highly effective and which neither of the other sets can supply.

The Solti is another example of London's skill in making use of the Sofiensaal. In terms of cubic content, it may in fact be the smallest of the three halls used in recording these albums, but it sounds somewhere between Kubelik's hall and the Concertgebouw. I presume that in the other sets everything is actually happening in the one place, but for the Solti the extra brass was supplied by the regular Chicago Symphony section in another room, at a special session, and dubbed in. And since the Sofiensaal has no organ suitable for this work, the organ heard. I am told, is the Bruckner at St. Florian. It too was dubbed in, most effectively I must add, and offers precisely the right tone color for this music.

The Solti, like the Haitink, sounds fine through conventional stereo playback, although Solti provides a much greater sense of immediacy and presence. Through SQ decoding the Solti reveals the multimicrophone effects that can be found in most London orchestral and operatic recording of the past decade or so. You are not so much at the performance as *in* it. All sorts of interesting frontback relationships appear, and the viewpoint is quite different from any normally heard in a concert hall.

Since this is basically a work for voices and instruments, with the voices in the majority, the quality of the singing is a major consideration. Taken as a whole. Kubelik has the best soloists and matches them with choirs of comparable strength. Dietrich Fischer-Dieskau's performance as Pater Ecstaticus and Martina Arroyo's solos as Magna Peccatrix are unsurpassed. Solti has choral forces of approximately equal strength (probably the best of the boy choirs) but his soloists as a group are the weakest of the three-because of vocal factors, and because English singers have distinct limitations in projecting German texts. Haitink of-

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fers a strong group of soloists (Hermann Prey. for example, is a real rival to Fischer-Dieskau. while Shirley-Quirk is not) and good choruses, but the native language of these singers is Dutch, and they cannot always project the German text in the manner of their Munich or Vienna counterparts.

So, the listener who wants this music for superlative singing will be wise to choose Kubelik, and the one who is after big-hall effects will choose Haitink, and both ought to be delighted with the result. Those whose interests are less specialized probably will be happiest with the Solti simply because of the enormous sonic impact it provides.

Solti does not subscribe to the Bruno Walter view that the Ninth is the greatest of the Mahler symphonies, but with the pragmatism of an old theater conductor, he gives first place to the symphony which he feels received the greatest acclaim from the public in its first performance. This one. And, as a conductor with a most refined and highly developed sense of the dramatic. Solti plays the work in a manner that makes you regret that Mahler never wrote an opera.

Solti, moreover, has the finest orchestra of the three and it is totally responsive to his leadership. None of these sets is without passages that present momentary problems of balance, but Solti provides more than any other the sense of direct interplay between a large orchestra, a large chorus, and solo instruments and voices, and to have all this swirling around you from the four corners of the room (as SQ provides) can be deliciously exciting. Even without SQ, it's thrilling.

If you want a Mahler Eighth that will lift you right out of your chair, this is it. R.C.M.

MESSIAEN: L'Ascension-See lves: Orchestral Set, No. 2.

MONTEVERDI: Il Combattimento di Tancredi e Clorinda; Madrigals from Books 7 and 8. Soloists and instrumentalists, Gustav Leonhardt, cond. For a feature review of this recording, see page 69.

MONTEVERDI: Madrigals: Books 8, 9, and 10 (complete). Soloists and instrumentalists, Raymond Leppard, cond. For a feature review of this recording, see page 69

MOZART: Concerto for Oboe and Orchestra, in C, K. 314. STRAUSS, R.: Concerto for Oboe and Orchestra, in D. Heinz Holliger, oboe; New Philharmonia Orchestra, Edo de Waart, cond. Philips 6500 174, \$6.98

If you have been familiar with Richard Strauss's Oboe Concerto before now you are one ahead of this reviewer, who never heard it before playing this superb recording by the remarkable oboist Heinz Holliger. If you are not familiar with it, now is the time to make its acquaintance. It was written when the composer was eighty-one, and it is fresh. lovely, and idiomatic to the last degree. The first movement is happy and robust, and is characterized by a burbling stream of unquenchable melody; the middle movement is a gentle elegy: the finale varies from Wizard-of-Oz spirits to moments of great mellowness, and bits of Rosenkavalier slip in all along the way.

The art of thirty-three-year-old Heinz Holliger is so fine that one is scarcely aware of itso naturally is the music created on the spot. His finger facility seems boundless, as does his breath: His phrases are seamless and fluid. Mozart, of course, benefits by all this as much as Strauss, and two qualities stand out: Holliger's ability to let a long crescendo on a held note open out like a flower blooming in fastmotion photography, and his knack for uniting one phrase with the next, creating an unbreakable continuity even in the slow movement where it is most difficult to do. His thoughts are matched with perfect accord by the New Philharmonia and its young conductor, who has proved his feeling for Mozart before now. S.F.

SATIE: Socrate; Mercure. Danielle Millet, Andréa Guiot, Andrée Esposito, and Mady Mesplé, sopranos (in Socrate); Orchestre de Paris, Pierre Dervaux, cond. Angel S 36846, \$5.98

Selected comparison (Socrate):	
Cerha	Can. 31024
Selected comparison (Mercure):	
Abravanel	Van. 10037/8

"Perhaps he [Socrates] will think I'm trying to joke," sings Alcibiades at the opening of Satie's Socrate, "but nothing could be more serious." And thus the tone is set for a kind of three-actanti-opera: The composer apparently used the texts of Plato as a pretext for weaving a musical tapestry whose basic raison d'être simply lies in the beauty of the sounds produced. Why else would Satie have given the four male parts to four sopranos if it were not for the fact that the French language almost inevitably sounds more beautiful when sung by a female voice rather than a male one (Francis Poulenc is another composer to have discovered this fact)? Why else would Satie have chosen one of the least dramatic texts possible unless he wished to make it quite obvious that he had no intention of playing upon the listeners' emotions, in the tradition of grand opera, either with his music or with the text. It is almost as if Satie could have dispensed entirely with the text in order to present his hypnotic, diaphanous, and hauntingly melancholic music as a kind of "abstract" opera. There is certainly no question of the music-some of the most beautiful that has ever been written-being completely subordinated to the words: if the music does not impose its presence with great pomp and circumstance, it is because there is a whole new aesthetic concept involved here.

And yet the three Plato texts used-and this is the first recording of Socrate to supply them-reveal definite intentions on Satie's part. Satie surely must have had himself in mind when Alcibiades compares Socrates and the satyr Marsyas, who was able to "charm men by the beautiful things his mouth drew from his instruments....?' For the second movement, there is certainly a strong link between the pastoral music and the serene joy and love of beauty expressed in the text. The third text, in which Phaedo tells of the death of Socrates, offers a much stronger emotional element than the preceding two, and here the music. while constantly avoiding anything resembling dramatic development, does move, as Socrates dies, into a more dissonant style and eventually just stops on an inconclusive open fifth.



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The present recording fortunately offers the best performance of Socrate currently available, although it is not without drawbacks. The most serious of these lies in the excessive reverberation; for while the recorded sound is striking in its warmth and depth, the reverberation level gives the small orchestra a symphonic quality that effectively destroys the chamber quality of the work. Dervaux's tempos also seem a bit languid at times, but the slowness of pace here does not exclude that essential lightness of touch so flagrantly absent from the Die Reihe Ensemble performance on Candide. Dervaux's singers likewise outdistance those of the latter group, particularly Mady Mesplé, whose extraordinary control and perfect phrasing are a marvel-although her voice, for some reason, always sounds thinner on recordings than in live performances.

Dervaux's slow tempos do not serve him as well in Satie's ballet Mercure, a perfect example of cubist music with its collage of various popular elements and its constant instrumental shifts. Here Abravanel's witty and much less serious approach is to be preferred, although Vanguard's sonics are not quite up to RSR Angel's.

SCHUBERT: Sonatas for Piano (complete). Paul Badura-Skoda, piano. For a feature review of this recording, see page 65.

SCHUBERT: Sonatas for Piano: in E, D. 459; in Cminor, D. 958. Ingrid Haebler, piano. For a feature review of this recording, see page 65

SCHUBERT: Sonata for Piano in A minor, D. 845; Moments musicaux, D. 780. Karl Ulrich Schnabel, piano. For a feature review of this recording, see page 65

Sousa: Marches. Czechoslovak Brass Orchestra, Rudolf Urbanec, cond. Nonesuch H 71266, \$2.98.

The Stars and Stripes Forever; El Capitan; The Gladiator; George Washington's Blcentennial; Esprit du Corps; The Liberty Bell; The Washington Post; King Cotton; Nobles of the Mystic Shrine; The Thunderer; Semper Fidelis; Riders for the Flag.

How far the musical world has turned since John Philip Sousa was its most authentic and honored American spokesman is indicated by the depth of his fall from onetime phonographic supremacy. (Perhaps that's the punishment for the contempt he often heaped on what he was the first to call "canned music.") The last American all-Sousa program I encountered was the September 1969 Everest reissue of some 78-rpm acoustical and early electrical recordings by the March King's own band-the historical value of that release was largely negated by the total lack of datings and other background information, which neglected to mention that Sousa himself disdainfully skipped the recording sessions. Since then the only all-Sousa program of any kind that has come to my attention was a December 1969 Scots Guards' collection on the British Fontana label-a release notable for its inclusion of a considerable number of littleknown (nowadays) selections, but unfortunately also notable for downright ugly per-

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formance and recording qualities. Now the latest example comes from even farther offfrom Czech bandsmen in Supraphon's Prague studios.

This one, however, warrants not boos but at least two and a half cheers. First of all it is properly and informatively annotated (by Robert Opfergeld). Secondly, the programming includes not only eight of the bestknown marches of the 1880s and '90s but the earlier Esprit du Corps of 1878, and the later Nobles of the Mystic Shrine (1923), Riders for the Flag (1927), and George Washington's Bicentennial (1930)-all less likely to be familiar to today's younger listeners. The half-cheeronly penalty is for the performances (which are coarser-toned and heavier-handed than Sousa fans are accustomed to) and the recorded sonics (the somewhat hard qualities of which perhaps should be blamed on the fiftyman band itself rather than on the Supraphon engineers). The half-cheer award is for the same performances' and recordings' compensating merits: One is their sonic solidity (distinctly more effective than the same band's recent collection of "Old Austrian Marches" on Supraphon 1 14 1020); the other is the steadiness, precise control of inner details, and vitality of Urbanec's readings: While they are not idiomatically "American," they nevertheless capture much of the music's unique spirit. RDD

STRAUSS, R.: Concerto for Oboe and Orchestra, in D-See Mozart: Concerto for Oboe and Orchestra, in C, K, 314,



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VAUGHAN WILLAMS: Fantasia on a Theme by Tallis-See Elgar: Enigma Variations.

VAUGHAN WILLIAMS: The Pilgrim's Progress. Soloists; London Philharmonic Chorus and Orchestra, Sir Adrian Boult, cond. For a feature review of this recording, see page 68.

VERDI: Luisa Mi	
Luisa Miller	Maria Cebotari (s)
Miller	Josef Herrmann (b)
Conte Walter	Kurt Böhme (bs)
Rodolfo	Hans Hopf (t)
Federica	Helena Rott (c)
Wurm	Georg Hann (bs)
Laura	Elfriede Trötschel (s)
Saxon State Orc	hestra, Dresden State
Opera Chorus, I	Karl Elmendorff, cond.
Preiser LM 1,	\$11.96 (mono; two
discs).	

Selected comparison: Moffo, Cleva

BCA 6168

This is not a performance for the average Verdi lover. Anyone wanting Luisa Miller on discs would be better advised to go straight for the RCA set; though hardly definitive, it is at least well recorded, musically complete, and sung in Italian. The present album is none of these. At its infrequent best the sound is acceptable, though cramped, rather strident and lacking in depth; at its frequent worst, however, it is so overloaded and indistinct you get the feeling you are deciphering the performance rather than listening to it. The music is severely cut. Most repeats and second verses have disappeared, along with a lot of the choral sections and a whole series of random passages, some substantial, some only a bar or two in length. Finally, the opera is sung in German.

This venture is reminiscent of those Urania albums, which, whatever their musical and acoustical drawbacks, did greatly expand the recorded repertory in the 1950s with such rarely heard works as Fra Diavolo, Der Corregidor and Der Widerspenstigen Zämung-all of them, like this Luisa Miller, derived from Dresden broadcasts under Karl Elmendorff. But nowadays Luisa Miller is not unfamiliar, and it seems clear that the principal reason for the present release is, quite simply, Maria Cebotari.

Cebotari, a touching and intelligent singer, had a highly successful career, first in Dresden (where in 1935 she sang Aminta in the world premiere of Die schweigsame Frau), then in Berlin, and finally in Vienna. A beautiful woman and a fine actress, she appeared to great advantage in several musical films during the 1930s. Cebotari's career was tragically terminated by cancer in 1949, when she was only thirty-nine. Although her artistry is well represented on 78s (a recent two-LP collection of these on the Da Capo label is available now as an import). Cebotari continues to intrigue vocal collectors, and tapes of her broadcasts are much in demand. Cebotari is one of those singers whose individuality lingers in the listener's memory. For her many admirers everything she performed holds interest. However, though she was a famous Butterfly, she is not at her best in Italian music. She is hardly troubled by the formidable demands of Luisa's music-the high tessitura, the bursts of fioriture, the large-scale lyricism-yet what is missing here is a true grasp of the Verdian

idiom. Above all, she seems unable to mold the line with the right kind of sensuousness. Moreover, the timbre of the voice is really too cool; it never has quite the warmth or the color that this music requires.

All the other singers are similarly at odds with Verdi's stylistic requirements. Josef Herrmann, the Miller. sings with expressivity and tact, but as a Heldenbariton he finds Verdian cantabile hard to negotiate. He is undeniably powerful, but passages like the cadenza to Miller's big aria are very crude. Crude also is the word for Kurt Böhme, who sounds thoroughly ill at ease from start to finish, and for Hans Hopf, then in the early stages of what turned out to be disappointing career. Though Hopf's basic vocal gifts were outstanding, his technique never enabled him to sing with either ease or smoothness: here he wreaks havoc on the delicate lyricism of "Quando le sere al placido." Apart from Cebotari the best singing comes from Elfriede Trötschel, a lyric soprano who also died too young, and Georg Hann, an estimable and versatile bass-baritone who specialized in character and buffo roles and died in 1950. Karl Elmendorff, who conducted Toscanini's Bavreuth cast for Tannhäuser on 78s during the late '20s. was a routine Kappellmeister, efficient, sometimes exciting (he whips up the finales here with commendable brio), but never poetic.

A better memorial to the art of Maria Cebotari than this *Luisa Miller* would be properly engineered versions of two performances circulating in the tape underground at the moment: the complete *Salome* under Clemens Krauss and the substantial excerpts from *Ariadne auf Naxos* under Beecham, both dating from 1947 and both luminously exciting. D.S.H.

WEISGALL: The Stronger; Fancies and Inventions. Johanna Meier, soprano (in *The Stronger*); Julian Patrick, baritone (in *Fancies and Inventions*); Aeolian Chamber Players, Hugo Weisgall, cond. Composers Recordings CRI SD 273, \$5.95.

Hugo Weisgall is one of the few American composers of his generation who have concentrated their creative efforts on opera. He has now written a total of six operas, of which *The Stronger*, a one-act chamber work written in 1952, is chronologically the second. In one sense *The Stronger* has been very successful: It has been staged with remarkable frequency for a modern opera (having received more performances than any of Weisgall's other stage works) and has met with considerable critical acclaim. Yet to me the work seems problematic and fails to solve the admittedly knotty task it sets for itself.

Weisgall himself describes the opera as an "experiment." Based on a play by Strindberg. the cast contains only two characters, one of whom is silent throughout. The two, who are old friends, meet in a bar and the vocal one, Estelle, bombards her friend with a long, eventually hysterical monologue while the other sits in stony, infuriating silence. The opera's problems arise from the text for this monologue, which is extremely fragmentary and at times virtually incoherent. There is consequently little possibility for the creation of sustained musical numbers within the work, and the composer must solve the problem of bridging the violent contrasts so as to establish a sense of larger continuity. It is this which Weisgall has failed to do. His primary technique for moving from one short segment to the next is the fermata, a procedure which creates a series of short-breathed musical fragments that fail to cohere into more extended rhythmic units. It is admittedly an interesting experiment, to borrow the composer's own word, but I think it is ultimately an unsuccessful one. (One should compare the way Schoenberg handles the transitions in *Erwartung*, which like *The Stronger* is also a monodrama, and one with an even more hysterical and disjointed text. There, despite the unprecedented musical variety, there is a truly incredible degree of rhythmic continuity.)

Fancies and Inventions, a more recent work (1970), strikes me as much more successful. It is a setting of nine poems by Robert Herrick

for baritone and five instruments lasting some twenty-five minutes. Here the over-all span of the piece is neatly articulated by the natural divisions of the nine songs: and variety is achieved by the use of different instrumental combinations for several of the songs (for example, three-all dealing with flowers-are accompanied only by duets), as well as the widely varying character of the various settings. As in the opera, there is the problem of having only one voice-and thus essentially only one vocal sound-to work with throughout an extended piece, but this is mitigated by a judicious use of short instrumental interludes. It is an impressive piece, though one whose general character is rather austere.

The performance of Fancies and Inventions is obviously well rehearsed and carefully put



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together, and despite a few rough spots baritone Julian Patrick sings the difficult vocal part with assurance. *The Stronger* is unfortunately not so well realized. Soprano Johanna Meier sounds strained and edgy, and she has pitch problems throughout, particularly a tendency to be sharp. The accompaniment is also not always as secure as one would like. Texts for both works are included. R.P.M.

recitals and miscellany

COLUMBIA-PRINCETON ELECTRONIC MUSIC CENTER TENTH ANNIVERSARY ALBUM. Bethany Beardslee, soprano (in the Babbitt); Group for Contemporary Music at Columbia University, Charles Wuorinen, cond. (in the Varèse); Harvey Sollberger, cond. (in the Davidovsky). Composers Recordings CRI SD 268, \$11.90 (two discs).

Varèse: Déserts. Luening: Theater Piece No. 2: In the Beginning. Babeitt: Vision and Prayer. UsSa-CHEVSKY: Computer Piece No. 1; Two Sketches for a Computer Piece. SMILEY: Kolyosa. SHIELES: The Transformation of Ani. AREL: Stereo Electronic Music No. 2. DAVIDØVSKY: Synchronisms No. 5.

This is a disappointing set. The most important thing in it, and the only one of the eight compositions that fill an entire side, is Deserts by Edgard Varèse, which was written before the Columbia-Princeton Electronic Music Center was established and represents the genius of a composer who never had even the faintest recognition from the academic establishment. The recording of it offered here was made by the Columbia University Group for Contemporary Music well after Varèse was safely dead. In all fairness, one should add that, according to the record notes, the electronic parts of the score were "revised with the assistance of Bülent Arel in 1961 at the Columbia-Princeton Electronic Music Center."

In the Fifties, when Deserts was written, to present electronic music all by itself was inconceivable; Déserts is for the usual Varèse orchestra of wind and percussion instruments with three interpolations of electronic sound. At no time are the instruments and tape heard simultaneously, and the work has been performed without the tape, although some sounds from the instrumental portions are used in the electronic as well, thereby conferring unity on the whole. The score exploits the stridency, brilliance, and emotional high pressure one expects of Varèse, and the contrast between the fixed pitch and familiar tone colors of the instruments and the indefinite pitch and unique timbres of the electronic sections is magnificently handled.

Nowadays composers of electronic music are using conventional instruments along with electronic sound rather than alternating the two; this, if the present album can be believed, is the main difference, aesthetically speaking, between the Fifties and the Seventies in the field. They have also been using computers recently, largely with computerlike results.

There are marvelous new sonorities here in the works of Luening and Ussachevsky (founders of the Center) and Arel and Davidovsky (two younger composers trained at Columbia), but there is not much else. These works exploit fascinating, unprecedented tone colors, but their rhythmic struc-

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ture is generally quite conventional and their texture, apart from timbre, offers little interest. Perhaps the effort to present a sampler resulted in the recording of minor works. At all events, there is nothing major here except the Varèse

Miss Smiley's seems to me the best of the lesser pieces because it has some drive, passion, and grit to it: Varèse himself would have been the first to applaud her achievement. Babbitt's contribution is a song for soprano and tape based on a brilliant poem by Dylan Thomas. Alice Shields' The Transformation of Ani also uses a voice-her own. These two pieces seem to me the most sterile of all, and the stanzas of the Babbitt sung in the Sprechstimme style of Pierrot Lunaire are altogether ludicrous, even if they are performed by Bethany Beardslee.

For universities to be mixed up with the musical avant-garde is a phenomenon only of the last quarter of a century. When it began, 1 remarked it proved one of two things: the academies were going modern or the moderns were going academic. This set of records sadly underlines the second of these two propositions. A.F.

DUETS FOR GUITAR AND HARPSICHORD. John Williams, guitar; Rafael Puyana, harpsichord; Jordi Savall, viola da gamba, Columbia M 31194, \$5.98.

STRAUBE: Three Sonatas for Guitar. Ponce: Pre-Iudio. Dobgson: Duo Concertante

The prize winner here (in the literal sense: It won joint honors in the 1970 Concours Internationale de Guitare in Paris) is Stephen



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Dodgson's Duo Concertante-a work which. along with some by Benjamin Britten, assures us that there is indeed a future for the guitar beyond its role as a resurrecter of eighteenthand nineteenth-century music. Dodgson's fourteen-minute work is rugged and interesting-besides being tonal and diatonic and attractive to listen to. Its expressive means include big rhetorical flourishes, driving passages of free counterpoint, purposeful interaction, and bullheaded assertions of independence on the part of each participant. It is sometimes massive in its sonority, and makes much of the contrasting timbres of harpsichord and guitar. Its profile, in short, is strong and vital, and let us hope the piece will get an airing on American concert stages with these two superb performers.

Rudolf Straube, whose "Three Sonatas for the Guitar with Accompaniments for the Harpsichord or Violon-cello" were published in 1768, was a keyboard pupil of Bach's and an expert lutenist and guitarist. The sonatas, especially No. 1. are quite engaging-though one gathers. from Stephen Dodgson's album notes on the subject, that Rafael Puyana's realization of the continuo part has much to do with their allure. For the harpsichord is far more than mere accompanist; it joins in a close canon with the guitar, for instance, in the Largo of No. 1, and engages in important imitation elsewhere. The differences in timbre here (as contrasted with the Dodgson work) create a division rather than a unity, for the harpsichord ornamentation emerges with a much more cutting edge of tone than similar figuration on the guitar. I'm not complainingthe dichotomy is part of the fun. A superb recording. S.F.



VLADIMIR HOROWITZ: "Great Romantic Piano Favorites." Vladimir Horowitz, piano. RCA Victrola VICS 1649. \$2.98 (electronic stereo; from various RCA Victor originals, recorded between 1946-55)

BRAHMS: Intermezzo in B flat minor, Op. 117, No. 2; Waltz in A flat, Op. 39, No. 15. CHOPIN: Mazurka in F minor, Op. 7, No. 3; Nocturne in F sharp, Op. 15, No. 2; Nocturne in E minor, Op. 72, No. 1. LISZT: Funé-rallles; Valse Oubliée No. 1. MENDELSSOHN: Elegy, Op. 85, No. 4; Spring Song, Op. 62, No. 6; Shepherd's Complaint, Op. 67, No. 5. Schubert: Impromptu In G flat, D. 899, No. 3. SCHUMANN: Träumerel, Op. 15, No. 7

More Horowitz culled from his preretirement phase. These performances dating from the late Forties and early Fifties have been given the electronic stereo treatment, but the process has been administered judiciously (in contrast to the deleterious recent reissue of the Horowitz/Reiner Emperor Concerto). I didn't have the originals of all these pieces available for comparison, but an A/B test of the Funerailles revealed that the mono had a bit more solidity and impact, while the new pressing is more tilted toward the high frequencies. The original is perhaps preferable, but the basic quality is quite similar.

The Liszt and Mendelssohn are dealt with most appropriately here: Horowitz drives the Funérailles, with its sardonic quote from Chopin's A flat Polonaise, home with awesome intensity, and deals with the mild-mannered Songs Without Words in chaste, pure fashion, The other pieces are more debatable. If you like your Brahms waltzes to sound like porce-



lain figurines and Schumann's *Träumerei* with an oozy chocolate coating (how differently he plays the latter work today!), Horowitz ought to be just what you are looking for. Similarly, the Schubert impromptu is played in a corrupt, bowdlerized text with treacly, altered harmonies, and Chopin's nocturnes and mazurka with teasing little distortions and neuroticisms.

In short, a record mainly for piano buffs.

H.G.

MUSIC FOR Two HARPSICHORDS. Thurston Dart and Igor Kipnis, harpsichords (built by Thomas Goff and Robert Goble & Sons). Columbia M 31240, \$5.98.

HANDEL: Suite à deux Clavecins, in C minor (arr. Dart). TOMKINS: Fancy for Two to Play. BYRD: Ut Re Mi Fa Soi La. FARNABY: For Two Virginals. Le ROUX: Suite in G minor. COUPERIN, F.: Allemande à deux Clavecins (IX⁻ Ordre); La Julliet (XIV⁻ Ordre); La Létiville (XVI⁻ Ordre); Musète de Choisi (XV⁻ Ordre); Musète de Taverni (XV⁻ Ordre). MOZART: Sonata for Harpsichord Four Hands, in C. K. 19d (Ed. Ferguson); Fugue in C minor, K. 426.

The sessions that produced this amiable disc turned out to be the last for the well-known and sometimes controversial English musicologist/harpsichordist Thurston Dart, who died a year ago at the age of forty-nine. It is altogether fitting and characteristic that he appears here in a dual role. The first part of the Handel suite for two harpsichords, for instance, has been known for some time and was published in the Handel Gesellschaft, but the second part never turned up. Dart "reconstructed" it himself for his own edition published in 1950 and plays it on this recording. It's really a remarkably effective piece with a busy Allemande positively brimming with Handelian joy and a quite moving Sarabande. Dart was joined for these sessions by a truly kindred spirit and equally skilled harpsichordist, Igor Kipnis. In this Handel suite, as in many of the other pieces, Dart plays the first part and Kipnis the second, and they reverse roles for the repeats; this struck me as an excellent procedure, giving us not only a contrasting treatment in the repeats, but also the contrasting sounds of the two nicely differentiated instruments

The Tomkins, Byrd, and Farnaby pieces are delightful little gems, as are the six Le Roux pieces for two harpsichords, arranged as a suite here with three of the movements transposed to the prevailing key of G minor. Again, it is Dart's edition, prepared from the original of 1705, that is used here.

Couperin's several two-harpsichord pieces are scattered through his various *ordres*, and the five played by Dart and Kipnis are wonderfully entertaining.

The Mozart four-hand sonata, written when the *Wunderkind* was nine years old, is a harmless and pleasant enough piece, but the real meat of the entire program is the late C minor fugue, which is perhaps better known in its later string version prefaced by an Adagio.

How can one praise highly enough the work of these two artists, as individuals or as a perfectly matched team? For the fascinating repertoire (and a full hour's worth of it is included here), for the excellent recording of the two harpsichords, but especially for the superbly alive performances, you simply must hear this one for yourself. C.F.G.

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SEPTEMBER 1972

in brief

DONIZETTI: Arias from Roberto Devereux, L'Elisir d'amore, La Favorita, Lucia di Lammermoor, and Don Pasquale. Barry Morell, tenor; Vienna Volksoper Orchestra, Argeo Quadri, cond. RCA Red Seal LSC 3221, \$5.98.	Dependable pinch-hit singers are necessary and valuable within the sort of repertory system that operates at the Met. Barry Morell's sturdy tenor has given the company good service over the years in that thankless capacity, but it seems futile to star him in a recorded recital—aside from the <i>Roberto Devereux</i> excerpt (the complete Tower Scene, not especially distinguished Donizetti in any case) all these arias are available in versions by far more gifted interpreters. Morell's voice is well schooled and the treatment of the music is idiomatic; but such pallid and unimaginative singing amounts to little more than a collection of nonperformances. P.G.D.
HAYDN: Symphonies: No. 52, in C minor; No. 53, In D (L'Impériale"). Academy of St. Martin-in-the- Fields, Neville Marriner, cond. Philips 6500 114, \$5.98.	Both works are major, middle-period Haydn (with No. 53 a very grand work, written one as- sumes for some festive occasion), and the performances are exceedingly good. Musically the main competition comes from Dorati in Stereo Treasury STS 15121/30. In No. 53 he and Mar- riner are just about equal in skill, although Marriner has a lighter touch in the Menuetto. In No. 52 Marriner's approach is more subtle throughout, and his recorded sound lacks some of the formidable bass that makes the Dorati here sound a little bottom-heavy. The unrestrained Haydn collector will want this Philips disc simple because it's so good. But the tightfisted Haydn collector will stick with Dorati, because he does give you a lot of music for your inflated dollar. R.C.M.
HOVHANESS: Fra Angelico; Requiem and Resur- rection. Royal Philharmonic Orchestra (in Fra Angelico); North Jersey Wind Symphony (in the Requiem), Alan Hovhaness, cond. Poseidon Soci- ety 1002, \$5.98.	<i>Fra Angelico</i> contains much angel music in the strings, and it forms a proper tribute to the gentle Florentine painter. The solemn chants of the brass also play their role very well; unfortunately there is an aleatory passage which is so corny and vulgar that it spoils the whole thing. Solemn chant with bells is also characteristic of <i>Requiem and Resurrection</i> ; the writing for the brass is magnificent; the "wild chaos" is merely that and is not transmuted by the artistic imagination. A.F.
PORTER: New England Episodes. WARD: Concerto for Piano and Orchestra. Polish National Radio Or- chestra, Vohdan Wodiczko, cond. (in the Porter); Marjorie Mitchell, piano; Stuttgart Radio Orchestra, William Strickland, cond. (in the Ward). Desto DC 7123, \$5.98.	Quincy Porter's <i>New England Episodes</i> is a beautiful work, based on old tunes, or new tunes that sound like old ones, out of the meeting houses and public squares of rural New England; it is all handled in a genuinely creative and evocative way. The Ward concerto is mostly warmed-over Prokofiev. Both recordings are weak. A.F.
POULENC: Cinq Poèmes de Paul Eluard (1935); Huit Chansons polonaises (1934); Le Travail du peintre (1956); Airs chantés: Air romantique (1928); Deux mélodies: Nuages (1956); La Grenouillère (1938); Quatre Poèmes d'Apollinaire: Avant le cinéma (1931). Rose Dercourt, soprano; Francis Poulenc, pi- ano. Turnabout TV 4489, \$2.98 (mono).	Rose Dercourt, evidently one of Poulenc's favored interpreters during his later years, may well be a delightful lady and a charming after-supper <i>chanteuse</i> , but this disc is pretty excruciating when heard in the chill light of day. Mme. Dercourt's technical insecurity and chancy intonation are simply too much in evidence for comfortable listening—all the style in the world cannot erase the necessity for a healthy instrument and complete vocal control in this precisely written, exposed music. Poulenc's poised, rhythmically supple accompaniments provide the chief historical interest here and the repertoire is unusual. (I know of no other recording of the <i>Huit Chansons polonaises</i> , which Mme. Dercourt sings in her native Polish.) The sound, presumably originating from tapes made in the mid-1950s, is clean and forward. French/Polish texts and English précis are provided. P.G.D.
SUPPE: Overtures: Light Cavalry; Poet and Peasant; Morning, Noon, and Night in Vienna; Pique Dame. London Festival Orchestra, Robert Sharples, cond. London SPC 21069, \$5.98.	Sharples, a hitherto <i>routinier</i> house conductor for English Decca, demonstrates considerably more in both interpretative personality and executant control than I've ever heard from him before, and the Phase 4 recording is big, solid, and vivid—so this familiar warhorse program well may become a best seller. But listeners won't realize what they're still missing, in both lyrical eloquence and high-intensity vivacity, until they hear the early-stereo-era Suppé overture collection by Henry Krips for Angel and dig up the now out-of-print 1961 collection by Paray for Mercury. R.D.D.
ANTONIO DE ALMEIDA: "Almeida in the Underworld: Great French Overtures," OFFENBACH: Orphée aux Enfers. HEROLD: Zampa. AUBER: Le Cheval de Bronze. THOMAS: Mignon. GOUNOD: Faust Ballet Music. New Philharmonia Orchestra, Antonio de Al- meida, cond. RCA Red Seal LSC 3193, \$5.98. Tape: •• RK 1232, \$6.95; • R8S 1232, \$6.95.	Since Almeida's recorded debut, a year or so ago, ventured into unfamiliar corners of the French repertory (Schmitt's <i>Salomé</i> , Chausson's <i>Viviane</i> , Duparc's <i>Lénore</i>), he scarcely can be chided for the present warhorse programming—at least if he hadn't given the impression that it was his free choice rather than an onerous chore. His performances are professionally competent, mixing vigor and sentiment in well-controlled proportions, and they are recorded with a robust so-nority lacking only a bit in high-end brilliance. To realize what's lacking interpretatively, you just have to listen to Bernstein's far more infectiously enthusiastic and dazzlingly bravura Columbia versions (1965–68–70) of all but the Auber overture. R.D.D.
KAREN ERWIN: Percussion Recital. KRAFT: Morris Dance. SIFLER: Marimba Suite. SCHMIDT: Ludus Americanus. PILLIN: Duo. Karen Erwin, percussion; Sharon Davis, piano (in the Pillin); Edmund F. Pen- ney, reader (in the Schmidt). WIM WIMR 5, \$5.98.	Young Ms. Erwin is billed here as this country's foremost woman percussionist-surely a quali- fication unwelcome by Women's Lib. She certainly proves herself to be-by unisex standards- both competent and versatile in a batch of first recordings of contemporary works all given con- cert premieres in which she participated. Of these, Kraft's Morris Dance for various drums alone is a short but distinctively imaginative study, and Sifler's four-movement Marimba Suite is a mildly exotic, mildly pleasant divertissement. But Schmidt's Ludus Americanus (comprising two William Pillin poems, Gunslinger and American Housewife, recited by Edmund F. Penney to a varied but musically inane percussive background) is downright silly; while the more pretentious duo for percussion and piano by Boris Pillin is arbitrarily contrived at best and merely slapdash at worst. Even these last selections, however, also enjoy the benefit of the extremely clear, ungim- micked recording that seems to be the hallmark of musician-engineer Lester Remsen. R.D.D.

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David Hall and Sam Sanders discuss a fine point

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4-channel discs/tapes by ROBERT LONG

Vanguard, the company that released the first quadraphonic recordings almost three years ago, has by now covered-via commercially available samplers-more four-channel formats than any other company. The original open-reel Surround Stereo Sampler is still available (Vanguard VSS 1, \$14.98). A similar sampler is available in Q-8 cartridge form (Ampex/Vanguard L 71, \$7.95). There is a disc prepared by the Dynaquad matrixing process (Vanguard SPV 7, \$2.95 postpaid from Dynaco in Philadelphia or through Dyna dealers). And there are four discs (Vanguard VSQ 1X/ 4X, \$6.95 each) using the Columbia SQ matrixing process.

The two tape issues contain tracks to help you set up your speakers, the Tuba mirum from the Berlioz Requiem, the Sinfonia from Handel's Jeptha, excerpts from the Mahler Third Symphony, and numbers by Joan Baez, Buffy Sainte-Marie, and moogist (if that's the word for someone who performs on a Moog synthesizer) Jean-Jacques Perry. The Dynaquad disc has the inevitable Tuba mirum plus the "Hallelujah" Chorus, part of a Mozart divertimento, the finale of the Tchaikovsky Fourth, different numbers by Buffy Sainte-Marie and Jean-Jacques Perry, and cuts by Ian and Sylvia, and Country Joe and the Fish. The first of the SQ Quadraphonic Demonstration Albums (VSQ 1X) repeats all but the Tchaikovsky from the Dyna disc, plus the Lachrymosa from the Berlioz Requiem. VSQ 2X repeats the contents of the tape program, with the addition of a second Jean-Jacques Perry cut and one by Clean Living.

So far, the fare is varied and some of the juxtapositions jarring, as they often are in samplers (though all of it profits in one way or another from the quadraphonic effect). VSQ 3X and VSQ 4X, which use material derived from King Records in Japan, have more unity. The first side of VSQ 3X contains sound effects and light music; Side 2 consists of three Bach organ works: the D minor Toccata and Fugue, the Little G minor Fugue, and the G minor Fantasia and Fugue. VSQ 4X, actually titled "Aquarius," is all show music.

I've been playing the Vanguards in my living room with a setup that includes a BIC/Lux stereo receiver in the front channels, a Rotel or a Galactron amplifier in the back channels, the Sony SQD-1000 SQ decoder, a Dyna Quadaptor, a Toyo CRH-730 quadraphonic receiver/ Q-8 player, and a Sony/Superscope TC-854-4S discrete quadraphonic open-reel tape deck. This is admittedly a pretty elaborate system, and for proper A/B comparisons it also requires one other element: the Russound SWB-2, a speaker switching box that I'm using to permit the back speakers to be driven either from the receiver via the Quadaptor or directly from the back-channel amp.

As most readers should know by now, the tape formats are described as discrete-quadraphonic media; that is, they preserve the four signals independently without the matrixing that is normally used to combine signals into the two of all stereo discs except RCA's Quadradiscs. So the open-reel and Q-8 tapes are discrete; the Dyna and SQ discs are matrixed. And I know what you're going to ask: Which sounds best when the four are compared? I'll get to that. But what is striking in this kind of comparative listening are the similarities, not the differences; and what it proves is not which technique is the winner, but how nearly interchangeable the various techniques are

Take the Tuba mirum from the Berlioz Requiem. There are slight differences when each version is played "correctly," but they are extremely subtle. Play the Dyna version through the SQ decoder or the SQ version through the Quadaptor, and the differences are somewhat less subtle. But if I were to cover the label and let you play one of these records through any decoder-including the E-V or the Sansui-in your own living room I'll bet you couldn't tell which version it was. Even if you moved to a different location in my living room you probably couldn't tell. With almost any reasonable combination of control settings, and with any of the discs or tapes, the sound is strikingly opened up by quadraphonics, evoking the vast chiaroscuro of Berlioz' concept (if not the precise dimensions of Les Invalides, where it was first performed) in a way that is simply beyond the capabilities of stereo reproduction.

Much the same can be said of the other "big" pieces—particularly the "Hallelujah" Chorus and the bits of the Mahler Third Symphony. The space and solidity of the music are altogether becoming. And anyone used to hearing the organ in its natural habitat—a church will appreciate immediately the quantum-leap forward that four-channel sound offers to the Bach.

The performances—as performances are somewhat variable, but generally good to excellent. The one regrettable element (to me) in all this is the welter of fussy effects that surround Buffy Sainte-Marie. In such a sonic hodgepodge there's no opportunity for the sort of compelling simplicity that made her early albums so galvanizing.

But I promised to compare the formats. The open-reel tape strikes me as the best by a hair: The sound is slightly more distinct-more open and free-than that from the other versions, but the differences are subtle. The Q-8 cartridge suffers somewhat from greater noise and less crispness in the high frequencies. (And Ampex has added its name in raised lettering to the Q-8 cartridge case design. The spring-loaded door on the Toyo's cartridge slot catches on this lettering so that the cartridge can be fished out of the slot only with the aid of a letter opener or kitchen knife.) The SQ discs come closer to the sound of the open reel than the cartridge does. The Dyna disc is similar to the SQ, the most noticeable differences being traceable to my rather gritty-sounding sample, which is not up to the excellent standard of the SQ test pressings or the usual store-bought Vanguard stereo product.

I've also compared some of the Joan Baez SQ material with its stereo counterparts. In these "live" recordings it's hard to tell the difference between the two when the discs are played as ordinary stereo, and even when all four channels of the system are switched on. For instance, using all four channels the audience sounds are separated into the back channels in very much the same way no matter which disc is playing. And the effect is likewise comparable when the discs are played in stereo. Indeed the effect is identical; there may be details that one could jump on to distinguish the one from the other-particularly in quadraphonic listening-but the over-all impression of sonic balances and space is the same.

The most impressive thing about the Vanguard quadraphonic releases is that they make sonic sense in almost every cut-more than can be said for many other quadraphonic releases. From the chugging of steam trains on the soundeffects cuts, to the frenetic *Flight of the Bumble Bee* (piloted by Jean-Jacques Perry), to the splendors of Handel, Mahler, and Berlioz, the sound is given space in which it can breathe. Vanguard consequently demonstrates that quadraphonics are worth pursuing, but not that one avenue of pursuit is better than another.

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the lighter side

reviewed by MORGAN AMES R. D. D'ARRELL HENRY EDWARDS MIKE JAHN JOHN S. WILSON

symbol denotes an exceptional recording

"AMAZING GRACE." Pipes & Drums and Military Band of the Royal Scots Dragoon Guards, C. I. Herbert, dir. Amazing Grace; Fanfare: Jubilant; Trot and Canter; Keel Row and Bonnie Dundee; eleven more. RCA LSP 4744, \$5.98.

Amazing, indeed, that a traditional hymn favorite of the Old South, played in an arrangement for (of all things) bagpipes and military band, should become a best-selling hit, first in England and Germany and now in this country, where it has risen (as I write) to No. 19 on *Billboard's* "Hot 100" listings. The reasons for so fantastic a success probably lie partly in the undying appeal of the old hymn tune itself, partly in the astringently taste-puckering tonal qualities of its pipe scoring, and to some extent in the insatiable craving of today's youngsters for everything stimulatingly "different."

I'm sure they would also relish a "straight" version of *Amazing Grace* with its Rev. John Newton text, but unfortunately the best one I've ever come across is out of print. That is contained in the Robert Shaw Chorale's collection of old American hymns ("What Wondrous Grace," RCA LSC 2403, of 1960) which well warrants rediscovery—and I just hope that the hullabaloo over the present disc will prompt the reissue of Shaw's.

There's a question, though, whether the best-selling single Amazing Grace (and its Cornet Carillon coupling in RCA 74-0709) will remain potent enough to make an equal success of the present album release. A few of the other selections (the similarly sonorous, organlike settings of Lvov's Imperial Russian Hymn and the familiar Abide With Me for band alone), and especially the comparably piquant bagpipes-and-band setting of the Dvořák-Fisher Goin' Home, will be well liked, I'm sure. But what even the most rock-toughened ears will make of the march-strathspeyreel-jig medleys for squealing pipes and hardplugging snare drums only, I couldn't say. If these pipe-and-drum examples do interest you, it's only fair to suggest that there have been a good number of others, by the Scots Guards in particular, which are even more snappily played and brilliantly recorded. But none of these discs ever had the inspiration to include anything like the present truly *Amazing Grace*. R.D.D.

*

ELTON JOHN: Honky Chateau. Elton John, vocals and piano; Dee Murray, bass; Nigel Olsson, drums; Davey Johnstone, guitar. Honky Cat; Mellow; Think I'm Gonna Kill Myself; Susie (Dramas); Rocket Man; Salvation; Slave; Amy; Mona Lisa and Mad Hatters; Hercules.Uni 93135, \$4.98.

An excellent collection of new songs, alike in some ways to John's second LP "Tumbleweed Connection." It opens with a funky rocker accenting bass and drums, *Honky Cat*, which in its pounding arrangement reminds me of *Ballad of a Well-Known Gun*. That after-hours rhythm section is something few pop groups, other than John, the Stones, and Dr. John, have tried.

Think I'm Gonna Kill Myself is a believable hard rocker, as is Suzie, a breezy little dancer. Rocket Man, the single from this LP, is a melodic ballad about an astronaut, one that works much better than might be expected for such a difficult topic. Amy is a lively love song rendered fascinating by Jean-Luc Ponty's violin. Mona Lisa and Mad Hatters is about New York, nothing new at all, but interesting in the way it plays with the old Phil Spector rock



Elton John-excellent new collection.

theme: "... and now I know Spanish Harlem are not just pretty words to say." *Hercules*, which closes the album, is an old-style rockand-roll song employing a bop-shoo-wop backup chorus as well as an Arp synthesizer. Of the ten songs presented here, I prefer the uptempo ones, *Honky Cat* and *Hercules*, but several of the ballads strike me as being exceptional. M.J.

RANDY NEWMAN: Sail Away. Randy Newman, piano and vocals; strings and rhythm accompaniment. Sail Away; Lonely at the Top; He Gives Us All His Love; nine more. Reprise MS 2064, \$5.98.

Randy Newman is the most subtle and interesting pop composer working today and "Sail Away" is a triumph. Newman is capable of evoking a feeling for almost everything he chooses to write about. *Burn On* is an ode to the Cuyahoga River and Newman makes the river come alive for the zillions who have probably never seen it. In *Dayton, Ohio-1903,* it takes him twenty-one lines to create not only Dayton, but also to make a powerful comment about how much simpler life was then. In *Simon Smith and the Amazing Dancing Bear,* he creates another of his Edwin Arlington Robinson-ish characters and also, as he usually does, reveals a perception about people. He writes: "Oh, who could think that a boy and a bear/ Could be well accepted everywhere/It's just amazing how fair people can be."

Newman obviously has an accurate, tart point of view. He understands and can relate the foibles of mankind. His gravelly voice can play against anything he happens to be singing and he adds another level of perception to his work. In Sail Away, a song about coming to America, he succinctly summarizes his vision of the New World: "You'll just sing about Jesus and drink wine all day/lt's great to be an American." Old Man, a song about death, offers the following sympathetic comment to an old man on his death bed: "Everybody dies." In a Kurt Weill-like tune. Lonely at the Top. Newman picks apart his success. His hardhats number. Political Science, is a gleeful plea to drop the bomb on our enemies. In God's Song. God is a malevolent figure, a destroyer and murderer who gloats that people need him even though he is so ruinous: "You all must be crazy to put your faith in me/ That's why I love mankind/You really need me."

Randy Newman is needed. Does any other pop album sound as rich as this one does? H.E.

ARTHUR FIEDLER: Burt Bacharach-Hal David Songbook. Boston Pops Orchestra, Arthur Fiedler, cond. Bond Street; The Look of Love; Promises, Promises; eight more. Polydor PD 5019, \$5.98. Tape: ● CF 5019, \$6.98; ● 8F 5019; \$6.98.

If you like your Bacharach favorites richly romanticized as well as symphonically blown up, you'll get that here-as well as a number of them hoked-up into concertos for percussion. Arrangers Richard Hayman and Eric Knight, and the virtuosos of the Pops Orchestra's kitchenware department, let it all bang out. So if you can take their din in quantities and intensities most rock bands would need extra amplification to match, you'll have a ball. What bothers me far more than the loudness levels and the uninhibitedly over-fancy scorings is the embarrassing (for me) inclusion of a selection which first appeared a year ago in Fiedler's "Encore" program, Bacharach's Do You Know the Way to San Jose? For in my review of that, I really lost my way-winding up, a disoriented as well as effete Easterner, some 900 miles short, in Santa Fe. R.D.D.

CHUCK RAINEY COALITION. Chuck Rainey, electric bass; rhythm accompaniment; Selwart Clarke, cond. Genuine John; Rain Song; Got It Together; five more. Cobblestone 9008, \$5.98.

Chuck Rainey has no problem as a musician, for there is no finer electric bass player anywhere. He has no problem working, for everyone in music in New York and Los Angeles knows how good he is and uses him whenever they can get him.

Rainey's problem is simply this: How do you become a star playing an instrument that refuses to lend itself to feature work? The bass, electric or acoustic, is patently a rhythm instrument. To be effective it must be integrally united with other rhythm instruments—drums, percussion, guitar, keyboard, or all. Certainly there is room for bass solos, and one can feature the instrument's sound and style within many orchestral groupings, as is often done. But none of this solves the inherent problem of group momentum, without which even the world's best bassist would be unable to sustain interest.

None of this is news and Chuck Rainey is not the first great bass player to look for a way around or out of it.

This album was produced by Rainey and the late Gary McFarland, both musicians of great taste. They did what they could: Rainey is surrounded by several excellent New York musicians, most of them rhythm players, and a group of strings. They also included several tunes written by Rainey, many bass solos, and many of the unique rhythm patterns for which Rainey is famous.

It's a good album, firmly played and honestly felt. While Rainey could not have done more on his own behalf, I wish that it had more of a feature feeling. The only possible solution I can imagine would have been to dream up some new and sizzling album concept, and this Rainey and McFarland did not do. They handled things pretty conventionally. But within that framework this album is an honorable statement from a remarkable artist. M.A.

*

THE ROLLING STONES: Exile on Main Street. Mick Jagger, vocals, guitar, and harmonica; Keith Richard, guitar; Mick Taylor, guitar; Bill Wyman, bass; Charlie Watts, drums; vocal and instrumental accompaniment. Rocks Off; Rip This Joint; Hip Shake; Casino Boogie; Tumbling Dice; Loving Cup; Just Wanna See His Face; Let It Loose; Stop Breaking Down; Soul Survivor; eight more. Rolling Stones COC 2-2900, \$11.96 (two discs).

A two-LP set of new songs from the Rolling Stones, who can be brilliant or mediocre and shift from one to the other in the space of three microgrooves. Any two-LP set, particularly one that features all new songs, is liable to contain a lot of chaff. This one does, but not enough to tarnish the over-all excellence.

It opens with a solid rock-and-roll display on Side 1, ranging from a guitar boogie like Hip Shake to a Little Richard-style rock-androller like Rip This Joint-reminiscent of Long Tall Sally-to Tumbling Dice. a sultry, medium-tempo rock song with prominent female chorus, rather like Gimme Shelter. Rip This Joint and Tumbling Dice have the most immediacy. The others take longer to be absorbed, though I doubt whether some of the numbers on Sides 2 and 3 will ever stand out. On Side 3, Just Wanna See His Face is interesting because the recording has an artificial livingroom informality. Stop Breaking Down and Soul Survivor on Side 4 are worthy hard rockers

The Rolling Stones need high energy requirements. They have to keep tight and tensile, even on the slow songs (which means blues). The Stones are best when up, a description I think they would agree with. Had "Exile on Main Street" been condensed to two sides of one disc it would be the album of the year. Now it's just a very good one. M.J.

VAN DYKE PARKS: Discover America. Van Dyke Parks, vocals; Esso Trinidad Steelband, vocal and rhythm accompaniment; thirtyeight other musicians and singers; rhythm, vocal, and strings accompaniment. Jack Palance; Introduction; Bing Crosby; thirteen more. Warner Bros. BS 2589, \$5.98.

Van Dyke Parks's first album, "Song Cycle," was greeted ecstatically by almost everyone but the public, who refused to respond to Parks's musical eclecticism. Four years later, Parks is back with a new LP. Here he performs the works of a number of calypso composers and relies upon the talents of the Esso Trinidad Steelband to bring off a series of charming calypso songs. These numbers deal with Jack Palance, Bing Crosby, the Mills Brothers, FDR, and J. Edgar Hoover. They also touch on the joys of Trinidad and Tobago.

Even when they make fun, it's gentle fun. One selection, written by the Mighty Duke, *Be Careful*, seems to have been plucked whole from a Romberg operetta. Two others, Lowell George's *Sailin' Shoes* and Allen Toussaint's *Riverboat* are especially charming. "Song Cycle" wound up on almost everybody's Best Ten lists; "Discover America" is a diverting novelty. H.E.

JOHN HURLEY: John Hurley Delivers One More Hallelujah. John Hurley, vocals; vocal and instrumental accompaniment. You Got the Right; Salvation Lady; The Family; Bring Me; Heavy Burdens Me Down; Lullabyes of Jesus; Sleepin' with Love; Gettin' It Free; Sweetwater; One More Hallelujah. Bell 6075, \$5.98.

The author of Son of a Preacher Man, Hurley is backed here by a chorus and by the band that travels with Elvis Presley. The result is a masterful and exciting collection of songs in a soul/gospel manner. Hurley has a good voice for this, one of the few white men who can make the claim. He sounds a bit like Felix Cavaliere of the Rascals, always one of the best white soul singers.

The album is programmed well, adding up to far more than the thrown-together collection of songs that soul albums are usually inclined to be. It goes through a fast yet exquisite dance song, a tender ballad, changing to another mood entirely and back up again, all leading up to the title track—a fine blend of soul, rhythm, and gospel lightness. Hurley is a good man to watch. Operating quietly and with little fanfare he has produced an album of high value. M.J.

CHUCK BERRY: The London Chuck Berry Sessions. Chuck Berry, vocals and guitar; rhythm and keyboard accompaniment. *Let's Boogie; Mean Old World; I Will Not Let You Go;* five more. Chess CH 60020, \$6.98.

Fourteen years after his first recording sessions, there isn't a soul alive who doesn't acknowledge Chuck Berry as one of the great



CIRCLE 20 ON READER-SERVICE CARD



CIRCLE 62 ON READER-SERVICE CARD

kings of rock-and-roll. Berry has amazing durability as a performer; he's been able to cram a startling amount of joy into the uncomplicated tunes that comprise the major portion of his songbook. Some of that joy has found its way onto this disc, half of which consists of a studio session in which Berry performs some of his new songs backed by English musicians. The other half consists of a live recording of the conclusion of a performance Berry gave at England's Lancaster Pop Festival.

On Side 1, Berry is more reserved and mellow than usual. Those familiar chords are still there, but the living legend seems to concentrate more on the blues than on maintaining his much-beloved Fifties' sound. Cuts like *Let's Boogie* and Walter Jacobs' *Mean Old World* are interesting because they display Berry's skillful phrasing and present him as an authentic exponent of the blues. It is an accomplished performance but so out of character that it does not satisfy. The *London Berry Blues*, a five-and-one-half-minute instrumental, does not excite either.

Side 2's live selections will be memorable for all of those who have seen Berry in person. Novices (if indeed there are any) will not get a true sense of the excitement the master can generate because this LP is just one of those live recordings that doesn't quite work. Berry performs *Reelin' and Rockin'*, *My Ding-a-Ling*, and *Johnny B. Goode (& Closing). My Ding-a-Ling*, one of Chuck's raunchier sing-alongs, was probably truly risqué in the Fifties but in these more liberated times it is a bit tiresome.



CIRCLE 32 ON READER-SERVICE CARD

This disc only comes to total life during the & Closing segment. Berry has left the stage; a frantic MC is trying to persuade the audience to leave; the audience chants hysterically. "We want Chuck! We want Chuck! We want Chuck!" People who have seen Berry perform in concert will probably join in the cheer. Others may not find this LP the best introduction. H.E.



JETHRO TULL: Thick as a Brick. Jethro Tull, vocals and instrumentals. Warner Bros. 2072, \$5.98.

The feature ingredient of the group called Jethro Tull is a British musician named Ian Anderson, who plays acoustic guitar and flute. and provides vocals as well. The title tune. *Thick as a Brick*, has become a hit single. Consider the album a hit because of it.

Along with Anderson, group members include Martin Barre (electric guitar and lute): John Evan (keyboards); Jeffrey Hammond-Hammond (electric bass); and Barriemore Barlow (drums and percussion). All four are excellent musicians. While the album often gives the illusion of full orchestration, nearly all the music is provided by these four alone.

For me, the true appeal of Jethro Tull lies in its inventive use of rhythms. Over-all, the title tune has a delicate Elizabethan effect. Yet its rhythm flows fascinatingly from one "tempo" to another. Are we in 3/4 or 4/4 or 6/8 or 2/4? In truth it can be counted any number of ways in order to come out properly. Any musician knows that behind such apparent ease is a great deal of thought and expertise.

The album is structured as one long piece with several connecting passages between main segments. In all it is a sophisticated statement from one of pop music's most provocative groups. M.A.

DAVID BOWIE: The Rise and Fall of Ziggy Stardust and the Spiders from Mars. David Bowie, guitar, sax, and vocals; Mick Ronson, guitar, piano, and vocals; Trevor Bolder, bass; Mick Woodmansey, drums. *Five Years; Soul Love; Moonage Daydream;* eight more. RCA LSP 4702, \$5.98.

David Bowie may be the Ezra Pound of rockand-roll. RCA has seen fit to send out an explication of Bowie's impossibly titled, brand new "concept" album. RCA informs us that this disc "... is a kind of temporal autobiography (but clearly no ego trip) cast in a mythic mold Perhaps by becoming a fantasy David Bowie is able to make fantasy into reality (are we really so sure of that separation anyway?), and to take the idea further, to the conclusion it arrives at with this album, the fantasy becomes tangible, and reality, by its sheer outrage. slips into fantasy."

No matter! Bowie is an original. He can write a fresh, unusual song. He has a distinctive, listenable voice. He is interested in musical values and can write a compelling melody. Rock-and-roll scholars will probably offer elaborate interpretations of "The Rise and Fall of Ziggy Stardust and the Spiders from Mars," but it is not too difficult to determine that Bowie is dealing with an eventual apocalypse, the fruition of rock-and-roll culture, the current crop of Dadaist rock-and-roll



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Illus. Bibl. List of Compositions. Index.

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THE REAL ISADORA. Victor Seroff. Illus. Photos (some never before publ.). Bibl. Index.

There has been only praise from critics for this biography of Isadora Duncan, certainly a great artist but also an extraordinary woman. It is hard to believe that almost a century has passed since her birth (1878-1927) as so much she fought for—and was maligned for—is relevant to 1972. She **lived** a rebellion against restrictions in her art and life. Seroff, her last lover, is noted for his biographies of musicians.

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AND MUSIC AT THE CLOSE: STRAVINSKY'S LAST YEARS. A Personal Memoir. Lillian Libman. Photos.

Most of the music world has been waiting for the publication of this book, known a half year ago because of the extensive press coverage of the controversy its announcement created. So here it is, another view of a great man in contrast to his public image created by other books of the last decade. Certain to be one of the most hotly discussed books of the season, it is also an intimate, affectionate and moving portrait.

BOB DYLAN. A Retrospective. Edited by Craig McGregor. Illus. incl. Dylan's album covers.

Here are nearly all of the significant major and minor writings concerning the music and the musician. The contributors include Robert Christgau, Nik Cohn, Ralph Gleason, Richard Goldstein, Nat Hentoff, Jon Landau, Wilfrid Mellers, Lillian Roxon, Robert Shelton, A. J. Weberman, and Ellen Willis.

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COMBO: U.S.A. Eight Lives in Jazz. Rudi Blesh. Photos. Discog. Bibl.

In his introduction, Blesh writes: "I don't pretend to be objective ... These are people who have brought me joy ... people I love. I knew most of them. I wish I had known them all." The eight who live in these pages: Armstrong, Bechet, Teagarden, Young, Holiday, Krupa, Christian, Blake. Their vices, virtues, triumphs, and troubles are told with tender candor. No. 296...\$6.95 NORMAN ROCKWELL ILLUSTRATOR. Deluxe slipcased edition.

It can be conjectured that the success of this splendidly produced book is based on a need to recapture for a time at least Rockwell's uniquely benign and humorous view of American life. Dorothy Canfield Fisher (in her preface): "In a period when wormwood and vinegar are the fashionable flavorings, it is genuine originality for Rockwell to dip his brush into the honey-pot of lovableness and zest in living." 437 Illustrations, 43 in color, plus 30 years of Saturday Evening Post covers. A gift to warm your or a friend's heart. No. 297...\$20.00

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CONNECTICUT STEREO DISCOUNT, INC. 18 Raymond Road, West Hartford, Conn. 06107 Telephone: (203) 233-1787 CIRCLE 64 ON READER-SERVICE CARD stars, the relationship of rock-and-roll to violence, and the failure of rock-and-roll to create a totally satisfying way of life.

One can be both cryptic and musical about these subjects and Bowie succeeds admirably in both areas. In *Moonage Daydream*, he creates a picture of futuristic lovemaking: "Keep your 'lectric eye on me babe/Put your ray gun to my head/Press your space face close to mine, love/Freak out in a moonage daydream oh! yea!" In *Lady Stardust*, he describes a persona much like himself: "People stared at the makeup on his face/Laughed at his long black hair, his animal grace/ *Femmes fatales* emerged from the shadows/To watch this creature fair/... And lady stardust sang his songs/Of darkness and dismay."

One of Bowie's most frightening songs of darkness and dismay. Zigg: Stardust. tells of what happens to a rock-and-roll star who offers the public something out of the ordinary: "Making love with his ego Ziggy sucked up into his mind/Like a leper Messiah/When the kids had killed the man I had to break up the band." One trusts that Bowie's thoughts of rock-and-roll assassination are just as fanciful as all of his other conceptions. H.E.

jazz

BILLIE HOLIDAY: Gallant Lady. Billie Holiday, vocals; unlisted accompanists. Ain't Nobody's Business If I Do; Lover Man; Them There Eyes; I Loves You, Porgy; Miss Brown to You; I Cover the Waterfront; Crazy He Calls Me; Lover Come Back to Me; Detour Ahead; All of Me; My Man; You're Driving Me Crazy; Strange Fruit; Billie's Blues. Monmouth 7046, \$5,98.

So many of Billie Holiday's recordings during the last, despairing years of her life are such dismally hollow representations of the singer she really was (and *still* was in her better moments of those years), that it is disturbing to find that, as time passes, these performances have come to represent her art to many collectors. The agony cult may find pleasure in them but to those who remember Billie down through the years—from the Teddy Wilson recordings of the mid-'30s on through the troubled '40s and into those agonized '50s most of those latter-day recordings put a sadly misplaced emphasis on her singing.

She was not always as limited, as worn, as tired as those last records suggest. Right up to the end, her basic qualities could still shine through. And now here is a set, recorded live in the Fifties in the Boston night club. Storyville, that shows not only how much of the early Billie Holiday still remained but also how that early style had matured. These performances were issued back in the Sixties on the RIC label but received little distribution then. The recording, muddy on that first release, has been cleaned up remarkably and, as a result, we are now able to hear Miss Holiday at her peak-mature but in good voice-and well recorded.

Everything on this record is part of her basic repertory, songs she sang and recorded innumerable times. But scarcely any of them have been recorded in the exceptional performances she gives them here. I Cover the Waterfront, for instance, and I Loves You, Porgy are marvelously expressive versions in which the fascinating texture of her voice with its dancing lights and shadows are an integral part of a projection that was the definitive Billie Holiday. If you only have one Billie Holiday record, this should be it. It tells you more about her and about her art than any other single record I know. J.S.W.



ERIC KLOSS: Doors. Eric Kloss, alto and tenor saxophones; Neal Creque, piano; Gene Taylor, bass; Ron Krasinski, drums. Doors; Waves; Ouasar; Sweatin' It Out; Love; Libra. Cobblestone 9006, \$5.98.

Eric Kloss, at twenty-three, is one of the most fascinating young saxophonists playing today. He has been recording for six years, since he was seventeen, and this set shows the scope and maturity at which he has already arrived. He plays both alto and tenor with a strong singing tone and a keen ear (implemented. possibly, by the fact that he is blind) for subtle and exotic shadings of tone and rhythm. His solos are beautifully constructed lines that seek out the unexpected without simply reaching for the unusual. He can be brightly, boppishly brisk as he tears through Quasar or warmly romantic on Waves, an evocation of the island of St. Thomas. And for straightahead but educated funk, there is a piece called Sweatin' It Out.

Kloss is backed by an excellent young drummer from Pittsburgh. Ron Krasinski, who manages to give the group a tremendous sense of drive but in a light and airy fashion so that he creates a constant feeling of buoyancy. Gene Taylor's bass provides a powerful rhythmic core, particularly on *Sweatin' It Out*, but Neal Creque, who has been building a name in New York as an arranger for Latin jazz groups, gets relatively little out of his electric piano solos. J.S.W.



COUNT BASIE: Super Chief. Count Basie and His Orchestra; Jones-Smith, Inc.; Mildred Bailey; Harry James and His Orchestra; Glenn Hardman and His Hammond Five; Teddy Wilson and His Orchestra. Shoe Shine Boy; Shout and Feel It; Upright Organ Blues; twenty-five more. Columbia G 31224, \$5.98 (two discs).

What a refreshingly different reissue package this is! Instead of the batch of familiar Basie band recordings that one might expect, producer Michael Brooks has put together an imaginative collection of small group records. air shots, accompaniments to vocalists by Basie sidemen as well as some of the less familiar big band sides. The result is a musical cornucopia: the 1936 Jones-Smith. Inc. sides with Jimmy Rushing singing: the band broadcasting from the Savoy ballroom in Harlem with Billie Holiday (then the Basie girl singer) shouting encouragement behind the Count's piano; Mildred Bailey and Billie Holiday backed by Basie sidemen; Lester Young bringing a breath of life to a couple of pieces by Glenn Hardman, the organist: a pair of selections with vocals by the too rarely recorded Helen Humes: that marvelous tour de force, Miss Thing, which was Basie's double-sided follow-up to his original two-sided disc.

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Cherokee. Also included are tunes that you may have forgotten or might never have realized that the Basie band played: *Ir's the Same Old South, Let's Make Hey While the Moon Shines. Where Shall I Go?. Love Jumped Out.* Of the four sides, only the last one, devoted to a pair of small-group sessions in 1939 and 1942, is less than consistently interesting. J.S.W.

DAVE BRUBECK QUARTET: The Last Set at Newport. Dave Brubeck, piano; Gerry Mulligan, baritone saxophone; Jack Six, bass; Alan Dawson, drums. *Blues for Newport; Take Five; Open the Gates.* Atlantic 1607, \$5.98.

Nothing could better illustrate the freshness that Gerry Mulligan and Alan Dawson have brought to the Dave Brubeck Quartet than the version of *Take Five* that the group plays here (recorded in 1971 at the Newport Jazz Festival). Even though it was the most popular piece the old quartet played when Paul Desmond (who wrote *Take Five*) was still with Brubeck. Gerry Mulligan, with the help of Dawson, brings a wondrous new sense of warmth and grace to the piece during his far too short solo–especially so in view of the lengthy clobbering that Brubeck gives it after Mulligan steps back.

So far as Brubeck is concerned, this is a disastrous record. Even worse than his contribution to Take Five is the sixteen-minute treatment of Blues for Newport on the entire first side of the disc-here is a summation of all the most sterile aspects in his playing. If one is to believe the rationalization of George Wein in the liner notes (Brubeck was intimidated by the volume of electronic sound produced by Bill Chase's group which had preceded him on-stage: but Wein told Brubeck not to worry-just go out and wail) the banality of his performance could be attributed to desperation. Certainly over the years Brubeck's playing has always been best when he felt it unnecessary to prove anything: he always appeared at his worst when he had trouble milking applause during a solo. But on this collection Mulligan is always just around the corner. ready to pick up the pieces and give the overall performance such a masterful polish that one can almost overlook Brubeck's intrusions. J S W

WALLY ROSE: On Piano. Wally Rose, piano. Cannonball Rag; St. Louis Tickle; Junk Man Rag; seven more. Blackbird S 12007, \$4.98 (Lakco Record Co., 607 West Deming, Chicago, III. 60614).

Wally Rose, who used to tickle the ivories -to exhume a phrase-for Lu Watters' Yerba Buena Jazz Band in the 1940s and was one of the ground-breakers for the ragtime revival then, has not been heard from much of late. According to the notes on this disc, he has been teaching in San Francisco and making occasional public appearances. This set of rags was recorded in 1968 and shows Rose much as he was in his Yerba Buena days-a neat, precise, but somewhat dry pianist. Some of his performances have a rather staid, anonymous quality, but he puts a becoming lift in Tom Turpin's St. Louis Rag and finds an evocatively Fosterian flavor (Stephen, that is) in Scott Joplin's Elite Syncopation. There's you're shopping discounts because you want the most system for your money.



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a bluesy quality in his *Pastime Rag* #4 (Artie Mathews) and a stately charm in *Pickles and Peppers*.

Rose has avoided the more overplayed rags, choosing those that are less familiar and a few that may not have been recorded before— Egbert Van Alstyne's *Jamaica Jinger Rag*, for instance, and a pair of James Scott's postwar rags, *Peace and Plenty* and *New Era*, neither particularly notable. It is a pleasant and, because of the unfamiliar material, valuable collection, but it lacks the verve that might make its appeal extend beyond the dedicated ragtimer. J.S.W.

in brief

THE SIDEWINDERS. RCA LSP 4696, \$5.98. The Sidewinders is a rock-and-roll quintet from Cambridge, Massachusetts. The quintet's debut disc has been produced by Lenny Kaye, a well-known, respected rock critic who has been documenting the pop scene for the past couple of years. Critics usually love to pan the musical creations of other critics. Kaye need not fear. The Sidewinders is a lively band that makes rhythmic, danceable music, and the LP is a thoroughly enjoyable album. Kaye's production values are exemplary. H.E.

AMERICA. Warner Bros. BS 2576, \$5.98. Tape: IM M82576, \$6.95; IM M52576, \$6.95

Three Americans living in London (Dewey Bunnell, Gerry Beckley, and Dan Peek), America came up with this year's hit *A Horse With No Name.* The balance of this, their debut LP, is in the same genre: tight vocal harmonies and a slightly magnified folk accompaniment—over-all not unlike Neil Young's work. It's generally pleasant. M.J.

JIM CROCE: You Don't Mess Around With Jim. ABC ABCX 756, \$5.98.

Croce has a keen eye for the verities of ordinary life. His songs are perceptive and carefully constructed. He accompanies himself on six-string guitar most professionally. This LP should make him plenty of friends. H.E. SHA NA NA: The Night Is Still Young. Kama Sutra KSBS 2050, \$5.98.

Here, Sha Na Na revives some more of the Golden Oldies from the Fabulous Fifties and mixes them up with some new material. Alas, the new songs lack the peerless wit and extraordinary energy that these twelve characters bring to their first love. If Sha Na Na ever found the formula to create Seventies music with as much style as their Fifties music, the world would be theirs. H.E.

ARLO GUTHRIE: Hobo's Lullaby. Warner Bros. MS 2060, \$5.98.

This set may please Arlo's fans but 1 find it a thoroughly undistinguished collection of songs with a vocal performance to match. Only two of the numbers are written by Guthrie. One of them, however, the instrumental *Mapleview (20%) Rag* does possess a sunny vitality. H.E.

WHITE CLOUD. Good Medicine GM 3500, \$5.98.

The debut album by a solid country and rock band. Note particularly the singing of Mr. Kaye and Miss Vent. Her slow version of *Hound Dog* is the first nonhysterical interpretation of that song in years. M.J.

AUDIENCE: Lunch. Elektra 75026, \$5.98. A versatile four-man band from England with plenty of talent and a sense of humor, Audience is still hungering for an American audience. Those who hear the delightful *Hula Girl* will, no doubt, be converted to Audience's cause. H.E.

MAMA LION. Family FPS 2702, \$5.98. Tape: ● M82702, \$6.95; ● M52702, \$6.95. A hard-rock and blues band formed around the duo who used to be called Merryweather & Carey, Mama Lion plays a credible version of Janis Joplin with *Full Tilt Boogie*. Lynn Carey screams a bit much perhaps, but the energy is high and the large color photo showing her breast-feeding a lion cub is also nice.

M.J.

EAGLES. Asylum SD 5054, \$5.98 This country-rock band consists of four members and each of them sings. Naturally, some very pleasant harmonies are created. With more exciting material, Eagle is bound to take off. H.E.



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> ADVERTISING INDEX is on page 84. READER SERVICE CARDS appear on pages 27 and 85.



CIRCLE 37 ON READER-SERVICE CARD.

the tape deck by R.D. DARRELL

Great Original II. Just within the last century and a half, the galaxy of great composers has revealed no less than four strange "pulsars" which, unlike the steady constellations, follow eccentric orbits and fluctuate unpredictably in intensity. First, in magnitude perhaps as well as in order of discovery, was of course Mussorgsky. More recently Satie and Ives have had a sudden stargazers' vogue. But the second of the truly Great Originals has been slower to emerge from the double obscurities of oddity and strictly parochial fame.

He is the distinctive Czech genius, Leoš Janáček, whose creative achievements are characterized by a breadth and depth that to date have been far too inadequately represented outside his native country. Hence the special significance of a major addition to his catalogue: Rudolf Firkusny's authoritative performances of his compatriot's (and onetime teacher's) works for solo and concerted piano (DGG/Ampex D 2055, two 7½-ips reels, \$14.95).

There's no need for me to repeat the unanimous praise disc reviewers have given performances and recording, except to note that the reel processing is (apart from a few very faint pre-echos) of the same caliber. And no reader familiar with my unconcealed bias for Czech music in general will be surprised to learn that I have been absolutely fascinated by this music, which I'm ashamed to say is brand new to me. (It was practically unknown in this country back when I used to play the piano myself, and somehow I've missed the earlier recordings of some of these pieces.) But what I hope I can do here is to stress the rare combination of fresh appeal and substantial reward which makes this release exceptionally valuable to the considerable number of connoisseur listeners always on the lookout for music both arrestingly new and piquantly comprehensible.

I suggest approaching these compositions in chronological order: beginning with the endearing Zdenka Variations of 1880, and ending with the more individual 1925 Concertino and 1926 Capriccio for Left Hand and Wind Instruments, in both of which Firkusny is accompanied by Bavarian Radio Symphony members under Kubelik. Interesting as these are, however, it probably will be the in-between solo pieces that will reverberate most hauntingly in your mind long after their last notes have faded away: the eloquent Sonata (October 1, 1905), the rhapsodic In the Mist, and above all the long series of poignant soliloquies which Janáček published under the over-all title On an Overgrown Path.

Paying Penance with Tannhäuser. No. I'm not embarking on a penitential pilgrimage to Rome, but I do have to swallow my pride and humbly eat some of my own words. They were published exactly two years ago when I concluded my damning-with-faint-praise review of the Gerdes/DGG Tannhäuser with the assertion that "this is, to my personal taste, the most static, indeed the dullest, opera in the entire standard repertory." Well, I've always thought so, before and since then-until our era's finest Wagnerian spokesman, Georg Solti, has somehow miraculously achieved not merely a resuscitation but a complete rejuvenation of the work (London/Ampex R 90199, two 71/2-ips reels, \$21.95; including notes-and-texts booklet).

Even the extraordinary Solti couldn't have pulled off such a miracle all by himself of course: He's aided by the choice of the Paris edition of the score, by what well may be the most thrilling (yet unsensationalized) sonic triumph to date of the British Decca engineers, by first-rate tape processing, first-rate Viennese choral and orchestral performances, but perhaps most of all by the vitally fresh and zestful singing and acting of a mostly young cast. Except for Christa Ludwig, as a seductive if not uninhibitedly voluptuous Venus, the other artists are either relatively little known or completely unknown (at least to me): René Kollo in the title role, Helga Dernesch (Elisabeth), Victor Braun (Wolfram), Hans Sotin (the Landgrave), et al., not excluding an anonymous Vienna Choir Boy member as the Shepherd. They're all wonderful-and so, I now at last reluctantly have to admit, is Tannhäuser when performed as animatedly and eloquently as it is here.

Wingèd-Chariot Traveling Companions.

The double standard I've long invoked to justify my carborne relish of music and performances I might not tolerate in more attentive home audition is now extended to cover transcriptions I'd disapprove of, theoretically anyway, in other circumstances. I'm not entirely puritanical where transcriptions are concerned, but my tolerance would normally be stretched by military-band rescorings of Bach and two-guitar arrangements of well-known piano and orchestral pieces. Yet in both instances infectious performance gusto not only makes the new "Bach for Band" and "Julian and John" programs sheer delight in on-the-road 8track cartridge listening but their cassette

versions also offer persuasive attractions in more critical home audition (Bach: Columbia MA/MT 31126, \$6.98 each; Guitar Duo: RCA Red Seal R8S/RK 1230, \$6.95 each).

Gerallt Leslie Williams leads the London Symphonic Band in his own ingenious if often overfancy Bach transcriptions, robustly played and recorded but sometimes so rushed as to seem slapdash. Some selections are quite unsuitable (Badinerie and Air from the orchestral suites); most of the organ works (including the inevitable Toccata and Fugue in D minor) gain little if anything; but those that do come off (including the three-part Invention in D, the tuneful Fugue from the E minor clavier toccata and fugue, and two cantata sinfonias) are great fun indeed.

Julian and John (Messrs. Bream and Williams) are vividly miked in stereoistically separated close-ups that don't spare us extraneous performance noises. Their three "original" guitar (or lute) duos (by Carulli, Sor, and Lawes) are pleasant if old-fashioned; the rescorings of familiar pieces by Albéniz (*Córdoba*), Falla (Spanish Dance No. 1), Granados (*Goyescas* Intermezzo), and Ravel (*Pavane pour une Infante défunte*) scarcely do justice to the originals-yet they become delectably irresistible when played with such contagious relish and humor by Julian and John.

Bread and [but the Very Best] Butter Conductor. RCA's loss of Fiedler and the Bostonians to DGG/Polydor seems to have stepped up rather than curtailed the former label's Boston Pops release activity. The recordings themselves aren't new, obviously, but many haven't been available before in cassette format; and a considerable number of others have been regrouped under new program rubrics in simultaneously released disc, cassette, and cartridge editions.

In the first category are two doublelength anthologies of typical Pops fare: "Opera's Greatest Hits" and "Fiedler's Favorite Marches" (RK 5069 and 5071 \$9.95 each). In the latter category are n less than six regrouped collections c long popular light classics and pop-h apotheoses, of which I've heard so faonly the cassette editions, priced (like th cartridge versions) at \$6.95 each. Best 1 "Fiedler Olé" (RK 1266) in which Cha brier, Falla, and Granados are agreeabl combined with lighter Iberian dance an march materials. The natures of the reare well indicated by their titles: "Reerie" (RK 1227). "A Taste of Honey (RK 1228), "Great Music for Gre Lovers" (RK 1240, a Fiedlerian "mus if only for its cover illustration), "The Were the Days" (RK 1241), and "Ame can Salute" (RK 1265).

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