G JUNE 1972 75¢ 08398

6 SPEAKER LAB TESTS

Wharfedale's updated W60 **Empire's latest Grenadier** Fisher's omni WS-80 Marantz's Imperial 7 ESS's Trans-Static I

Denmark's B&O 5700

SPECIAL SPEAKER ISSUE 10 Spectacular Records to Judge

Speakers By













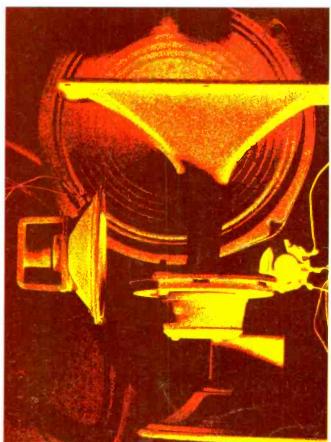


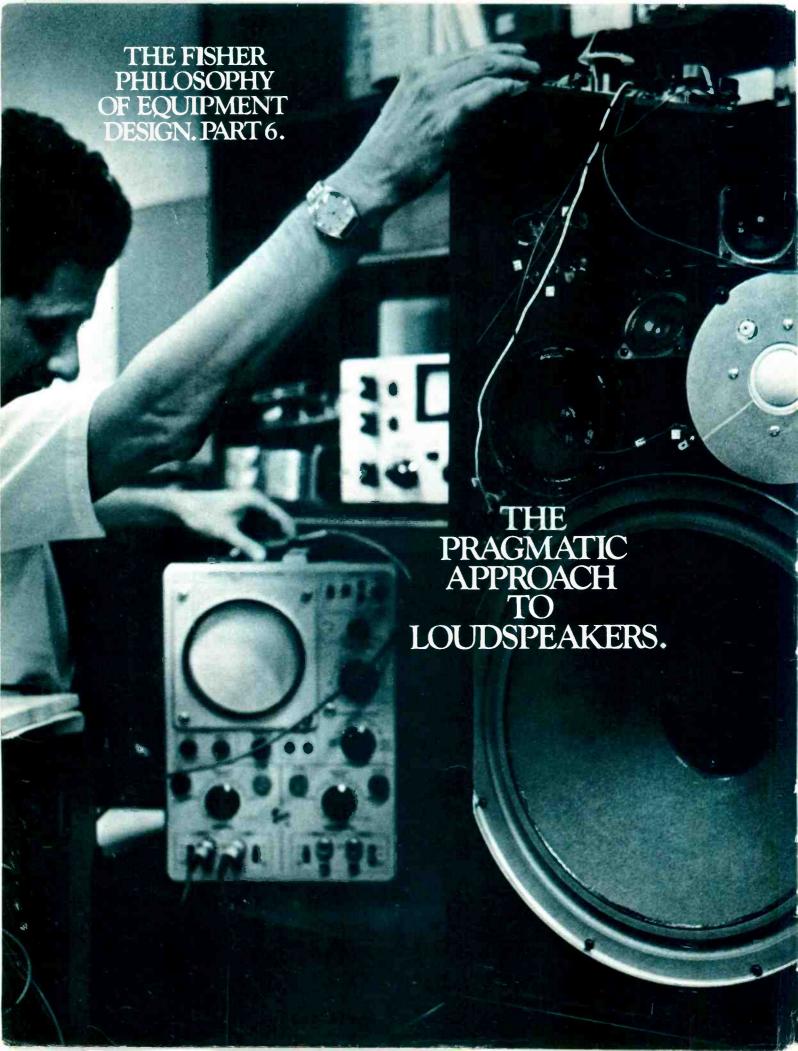






High Efficiency Or Low? 1 to Choose peakers for . idraphonics





This is the sixth of a new series of ads about the major conceptual differences between Fisher components and other makes. It is not necessary to have read the first five ads before reading this one, but see footnote in italics below.

Loudspeakers are fundamentally different from all other high-fidelity components. All the others are designed to produce an electrical output signal. Loudspeakers are designed to produce sound waves.

This fundamental difference necessitates a modification of the Fisher philosophy of the "balanced component" when applied to speaker systems. A receiver, for example, raises the question of how the money should be split among a number of costly electrical performance requirements to achieve an optimally balanced design at a given price. A speaker presents a completely different problem because there is really only one performance requirement: fidelity of sound. Fisher would never consider a trade-off in fidelity against other costs in speaker design.

It must not be automatically assumed, however, that there is a direct relationship between speaker fidelity and engineering cost. Theoretically, the ideal loudspeaker should be an exceedingly simple device. The physicist's mathematical model of the perfect loudspeaker is a pulsating sphere, with every point on its surface moving simultaneously, in or out, in exact phase with the input. If no response is required directly above or below the speaker, as in a listening room, the model could change to a pulsating cylinder. In either case, there would be only a single, continuous diaphragm, producing a coherent, "seamless," one-to-one sonic replica of the input signal. Certainly not a complex ideal to strive for.

In real life, of course, things are not so simple. Real-life materials have mass and limited stiffness. Real-life

rooms are reverberant. Reallife cabinets must be sensible in size and shape. And so on. Despite all theoretical striving toward simplicity, the flattest response and lowest distortion in real life have always been obtained with relatively intricate multidriver systems having several highly specialized diaphragms. It is, at best, a rather ambiguous business, with little room for dogmatism or oversimplification.

For these reasons,
Fisher tries to be pragmatic
and maintain an attitude of
the utmost flexibility in approaching the problems of speaker design.
We say yes to anything that makes a speaker sound
better within the allotted budget. We say no to any

better within the allotted budget. We say no to anything that only makes a speaker read better. When you buy a Fisher speaker, you are buying sound, not an academic

exercise in loudspeaker theory.

Are there any fixed principles or practices at all, then, that apply across the board to all Fisher speaker designs?

There are a few:

1. The acoustic suspension principle is used in all systems, regardless of size or price. (See Fig. 1.) Woofers are tightly sealed in heavily braced enclosures and air leaks are stringently controlled in production. We believe that no other method results in equally deep and flat bass response nor in comparable bass transients.

2. All woofers have extremely compliant surrounds as well as unusually long voice coils. (Fig. 2). Nothing is allowed to interfere with completely linear piston excursions.

3. Every effort is made to make Fisher speakers more





Fig. 2. Cross section of a typical Fisher woofer, showing the massive magnet structure, long voice coil and compliant cone surround.

Fig. 3. The patented Fisher soft-dome tweeter, with its highly damped, impregnated cotton dome.

efficient than comparable models in competitive lines. Although efficiency is unrelated to fidelity, it can mean the difference between marginal and adequate volume where amplifier power is limited. Fisher achieves increased efficiency the expensive way, with huge magnets, rather than by narrowing the gap widths to the point of unreliability.

4. Dome-type tweeters are used wherever possible because of their superior dispersion characteristics. The patented Fisher soft-dome construction (Fig. 3) eliminates

all possibility of resonances and the resultant coloration of high frequencies.

5. Crossover networks are designed with sharp-cutoff bandpass filters to keep woofers from tweeting and tweeters from woofing.

6. Step-type midrange and tweeter controls are used wherever possible, to make 3 to 4 dB level changes precisely resettable at all times.

Other than these guidelines, which are basically nothing more than engineering common sense, we have no set rules, no "party line" when it comes to designing a new speaker. After we have a certain size and a certain cost in mind, we keep experimenting with a number of approaches until we believe we have something better than anybody else.

Sometimes we don't stop even then.

Fig. 1. The Fisher XP-9C, at \$219.95, represents typical Fisher value in the top bracket of bookshelf speakers. It is an acoustic suspension design with 15-inch woofer, four other drivers and four-way crossover network.

FISHER We invented high fidelity.







Choosing the wrong cartridge for a record player is like putting the wrong motor in these cars.

Each of these cars has its own fine motor.

But, it would be unwise to expect the lower horsepower engine to efficiently drive the larger vehicle. And, it would be silly to use the higher horsepower engine for the smaller car.

It's the same with cartridges. In fact, a cartridge that's great for one record player *could be disastrons* for another. How then can you be certain you are playing your records with the right cartridge? The answer is simple.

There is a Pickering XV-15 DCF-Rated Cartridge for the most simple to the most complex playback equipment! We have taken virtually every high fidelity record player and pre-analyzed the vital engineering variables affecting cartridge design, so that no matter what equipment you own or plan to

purchase, you can get an XV-15 cartridge exactly right for it.

If you're concerned about improving your reproduction, we refer you to our handy DCF guide shown below. (Why not clip it out for handy reference?)

Every Pickering XV-15 cartridge features the exclusive DUSTAMATIC® brush that sweeps record grooves clean to insure cleanest sound.

If you'd like a DCF guide for a friend or additional information on Pickering cartridges, write Pickering & Company, Inc., 101 Sunnyside Boulevard, Plainview, N.Y. 11803.



"for those who can hear the difference

	s handy DCF Guide.	Use a Pickering XV-15 cartridge with this DCF Number		
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Benjamin Miracord	50H, 750, 770H 40H, 40A, 40, 630, 620, 610, 18H, 10, 10F, 10H	750 400	350	
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pr. 1		200	150	
Fisher	502, 402 302	750, 400 200	350 150	
Garrard (British Industries)	SL95B, SL95, SL75B, Zero 100	750, 400	350	
	SL75, LAB80MK11, LAB80	400	350	
	SL72B, 70MK11, A70, 60MK11, SL65B, SL65, SL55B, SL55, SP20B, SP20, A, AT60, AT6 40, 40B, 50MK11, 50, 40MK11	200	150	
T .		140	100	
Lenco	L-75	750, 400	350	
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Sony	TTS 3000, PS 1800A	750, 400	350	
Thorens	TD 125 TD 150AB, TD 124	750 400	350	

<u>All</u> Pickering cartridges are designed for use with <u>all</u> two and four-channel matrix derived compatible systems.

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Do Americans Prefer Distortion?

A few months ago a group of American audio dealers and writers visited a European speaker manufacturer's plant. The manufacturer demonstrated his new bookshelf speaker, the essentially flat bass response of which was the pride of his engineering department. One Los Angeles dealer was unimpressed. The speaker simply wouldn't do for his rock-oriented customers. The bass didn't have enough "zonk." "Come back after lunch and we'll show you something," said the manufacturer. Two hours later the group returned for a second demonstration. This time the Southern California gentleman beamed. "I don't know how they did it, but the bass really has it now! This is among the best-sounding speakers I've ever heard for rock."

What had the engineers done to "improve" the speaker? They had spent their lunch hour adding distortion by increasing the system's resonance to produce a bass peak. The manufacturer explained that this certainly lowered the quality of the speaker. "But if that's what you Americans want, we can make it."

Do Americans want distorted sound from their speakers? Do we want boomy bass or bleating highs, because they have more "zonk"? During the early days of high fidelity, a great many people preferred their old distortion-producing systems to the new technology because that is what they had been used to. One joke of the time had a record collector attending his first live concert and complaining that the cellos and double basses were producing too much distortion. A cartoon showed a conductor asking his flutes to produce "more highs." But hasn't there been enough high-quality sound reproduction over the past generation for anyone's ears to have gotten used to decent recorded music in the home?

Apparently not, for during the past decade there has been a proliferation of "live" concerts, primarily of rock music, where the sounds in a hall are predominantly those generated through speakers. And as often as not, those speakers are *LOUD*, and attached to electric musical instruments and amplifiers that have been designed to add the "zonk" of distortion. But here we come to the paradox. In the home, if you want the distortion to be reproduced as the musician has added it, you need a system without its own distortion. On the other hand, if the recording does not feature distortion, a cheap system can give you the same experience you may have had at a rock concert, while a good system will be "too faithful" to the sound of the recording.

I'm sure that most readers of HIGH FIDELITY have tastes that differ from those of that Los Angeles dealer's customers. After all, who wants distorted distortion?

Next month we will have a special issue devoted to "MOVIE MUSIC." Included will be two articles by our new contributing editor Miles K reuger: THE BIRTH OF THE AMERICAN FILM MUSICAL, in which you will learn that Jolson's *The Jazz Singer* was not the first talkie, and THE DUBBERS BEHIND THE STARS, which reveals the names of all those anonymous singers whose million-seller albums implied they were Natalie Wood or Christopher Plummer. Academy Award-winning film composer Elmer Bernstein will discuss THE DECLINE OF THE ART OF BACKGROUND MUSIC, a Hollywood sound engineer will tell you WHY SOUNDTRACK ALBUMS DON'T SOUND SO GOOD, a soundtrack album collector will expose which of your SOUNDTRACK ALBUMS MAY BE WORTH OVER \$200, and Gene Lees will polemicize—as usual—on the film composers' recent strike in THE DAY THE MUSIC STOPPED.

Tronand Prancus

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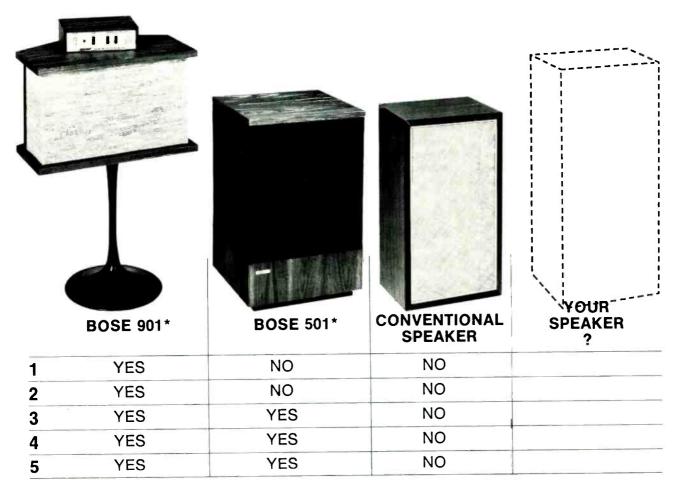
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- 1 The use of a multiplicity of acoustically coupled full-range speakers to provide a clarity and definition of musical instrument sounds that can not, to our knowledge, be obtained with the conventional technology of woofers, tweeters and crossovers.
- 2 The use of active equalization in combination with the multiplicity of full-range speakers to provide an accuracy of musical timbre that can not, to our knowledge, be achieved with speakers alone.
- **3** The use of an optimum combination of direct and reflected sound to provide the spatial fullness characteristic of live music.

- 4 The use of flat power response instead of the conventional flat frequency response to produce the full balance of high frequencies without the shrillness usually associated with Hi-Fi.
- **5** Acoustical coupling to the room designed quantitatively to take advantage of adjacent wall and floor surfaces to balance the spectrum of radiated sounds.

To appreciate the benefits of these five design factors, simply place the BOSE 901 directly on top of the largest and most expensive speakers your dealer carries and listen to the comparison.

You can hear the difference now.

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* Patents issued and applied for † Copies of the Audio Engineering Society paper, 'ON THE DESIGN, MEASUREMENT AND EVALUATION OF LOUDSPEAKERS', by Dr. A. G. Bose, are available from Bose Corp. for fifty cents.

letters

Artistic Defiance

In your March issue, I was most interested to read your reply to the letter from Garry Margolis regarding Bartók's resolution to UMZE on the necessity for freedom in the arts, to the exclusion of government interference; also, the *Musical America* review by Royal S. Brown in regard to the tremendous ovation given Mstislav Rostropovich after his Paris concert with the Orchestre de Paris.

Last May my husband and I visited the Soviet Union, and while in Moscow attended a concert at Tchaikovsky Hall where Tortelier performed the Saint-Saëns cello concerto. He received such a tremendous ovation after his performance that he returned to play an encore which he announced would be a work written by his great friend, the artist whom he considered today's finest living cellist, Rostropovich! (During this period, Rostropovich was still in great disfavor with his government because of his open friendship and support for Solzhenitsyn.)

There was a moment's silence, after which the audience, composed mostly of Russians, rose to their feet and spontaneously broke into the rhythmic applause that is traditional in Russia when hearty approval is manifested. Much electricity was in the air as Tortelier played a lovely, lyrical aria, and when he finished, Tchaikovsky Hall resounded with another tremendous burst of applause—for his performance—but especially for Rostropovich. We could only interpret this response as a moment's defiance sparking an audience in an environment where art should be, but is not, free.

Incidentally, while in Russia, we inquired at several record shops for recordings of either Rostropovich or his wife, Galina Vishnevskaya, Russia's great soprano. While there are huge stocks of recordings of all the "acceptable" artists in the Soviet Union, the answer was simply *Nyet*.

Susan Gilman Peekskill, N.Y.

The "New" Tchaikovsky Concerto

I found Michael Ponti's discussion [March 1972] of the "new" Tchaikovsky piano concerto interesting and yet in some respects confusing, since it appears to be inconsistent with what was said on the subject by Peter G. Davis in the May 1965 issue ["Notes From Our Correspondents"]. In a discussion of the then soon-to-be-released recording of the Third Concerto by Graffman and Ormandy, Davis questioned Graffman on the subject of the Andante and Finale but found that the pianist was equally mystified concerning its status. Mr. Davis then went on to say. "Unexpectedly, a solution to the problem was not long in coming. Visiting the Graffmans that very evening was their close friend Russian pianist Yakov Zak. As I heard later, Mr. Zak settled the matter by explaining that the Andante and Finale was an arrangement by Sergei Taneyev of Tchaikovsky's discarded sketches for the concerto. More Taneyev than Tchaikovsky, these two movements are never played in Russia" (italies mine). Mr. Davis later noted that



Vishnevskaya and Rostropovich Nyet for the soprano's recordings, applause for the absent cellist.

Tchaikovsky himself "was satisfied with the Third Concerto as it stood; he thought of it as a one-movement Konzertstück." Both of these points appear to be negated in Ponti's discussion, wherein he writes "this work, which Tchaikovsky himself was not completely satisfied with." (italics mine).

We can let Ponti and Davis argue over whether Tchaikovsky was or was not satisfied with the Third Concerto in its one-movement form. The more serious contradiction, to my mind, is implied by Ponti's comment that the Soviet conductor Kondrashin "mentioned . . . that he thought the Tchaikovsky Third Concerto, in its three-movement form, was even better than the Second." The clear implication is that the three-movement version-far from going unplayed in the Soviet Union-has now been accepted as valid, and the composer's wishes be damned. I used to think that Tchaikovsky was venerated as a god in Russia. but if this revelation is any criterion (not to mention the recent sacrilege in which the Soviet anthem was substituted for the Tsarist anthem in a performance of the 1812 Overture on Melodiya), this impression is no longer an accurate description of Tchaikovsky's status among the Soviets. I hope that someone can authoritatively state at this time whether the Third Concerto is really in one or three movements as far as current Soviet musicology is concerned.

Please inform reviewer Harris Goldsmith that Graffman's recording of the Second Piano Concerto is based on the Siloti revision only in the middle movement, which is really a triple concerto with extended passages for solo violin and cello as well. In the outer movements, Graffman plays Tchaikovsky's original score. Personally, I feel this is inconsistent. It would have been better if Graffman had stuck to the original version throughout, but Columbia probably felt that they would not have been able to get the Third Concerto on the disc if he had! (In Davis' article cited earlier, Graffman noted that he was prepared to play either version, so I assume the decision was in fact Columbia's).

> Steven J. Haller Detroit, Mich.

In writing about his rediscovery and performance of the Tchaikovsky Third Concerto,

Russian Musical Gaps



Ponti Was Tchaikovsky's "new" concerto played in the U.S.S.R.?

Michael Ponti suffered a memory slip as he has never, to my knowledge, committed on the concert stage. The conductor for his first public performance of the work in Seoul, Korea was not David Epstein but David Shapiro. I reviewed this concert and can testify that there was no one named Epstein involved.

Mr. Shapiro was on a five-month visit to Korea as a Fulbright lecturer, his fourth visit to this country, where he has directed a number of operatic, symphonic, and chamber performances and taught widely. His Seoul Philharmonic concert with Ponti as soloist took place late last October.

James Wade Seoul, Korea

Mr. Wade is correct, and our apologies to Mr. Shapiro. The error was not made by Pontibut by a Boston-reared typist.

Wanted: Repairs By Mail

Repairs of quality equipment seem to be unavailable at any price. Ask a repairman to produce 0.1% THD from an amplifier capable of it and he will tell you, "No one can hear distortion under 2 or 3%." plus suggestions that you are a crank. Yet why buy equipment capable of low distortion and not be able to get it?

I suggest that someone, somewhere, open a repair service for national repairs by mail where one may obtain quality work and performance verification tests (distortion, power, etc.) as well as the reconditioning of old or discontinued equipment. It's a service that is desperately needed.

Donald Bisbee Columbus, Ohio

The service industry does often seem disastrously unsatisfactory from the high fidelity point of view. One standard complaint, however, is that most warranty agreements require shipping defective equipment to an authorized serv-

HERE IS THE WORLD'S ENTIRE SELECTION OF AUTOMATIC TURNTABLES WITH ZERO TRACKING ERROR.

There they are. All one of them. Garrard's Zero 100, the only automatic turntable with Zero Tracking Error.

Not that there haven't been attempts by other turntable makers. Many have tried. This is the first to succeed. And it has succeeded brilliantly. Expert reviewers say it's the first time they've been able to hear the difference in the performance of a record player...that the Zero 100 actually sounds better.

It's all because of a simple but superbly engineered tone arm. An articulating auxiliary arm, with critically precise pivots, makes a continuous adjustment of the cartridge angle as it moves from the outside grooves toward the center of the record.

This keeps the stylus at a 90° tangent to the grooves. Consequently tracking error is reduced to virtual zero. (Independent test labs have found the test instruments they use are incapable of measuring the tracking error of the Zero 100.) Theoretical calculations of the Zero 100's tracking error indicate that it is as low as 1/160 that of conventional tone arms.

Zero tracking error may be the most dramatic aspect of Zero 100, but it has other features of genuine value and significance. Variable speed control; illuminated strobe; magnetic anti-skating;

viscous-damped cueing; 15° vertical tracking adjustment; the patented Garrard Synchro-Lab synchronous motor; and exclusive two-point record support in automatic play.

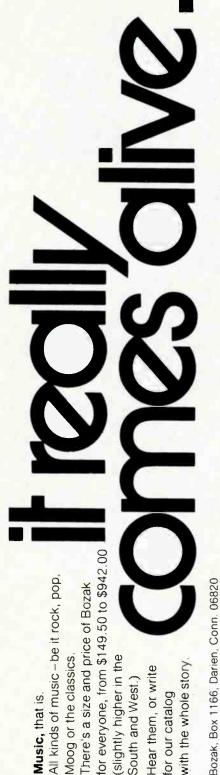
The reviewers have done exhaustive reports on Zero 100. We believe they are worth reading, so we'd be happy to send them to you along with a 12-page brochure on the Zero 100. Write to us at: British Industries Co., Dept. F22, Westbury, N.Y. 11590.

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Music, that is.

ice center-a process a great many readers seem to find objectionable. Other than that, we would welcome any truly crackerjack repair service. although overhead being what it is in the service industry, we suspect that charges for the kind of in-depth bench work envisioned by Mr. Bisbee could be discouragingly high.

Super Sills

After reading Dale Harris' review of the Sills Traviata [March 1972]. I was once again disappointed by the misplaced criticism that I have found to be prevalent in many recent reviews of operatic recordings. Mr. Harris implies that Sills's supposed lack of "amplitude" for "Verdi's grand melodic arcs" are a problem totally unique with her and her alone. This is hardly the case. There has never been a Violetta, in my memory, who has handled all of the part's varied and complex demands with equal brilliance and comfort. Some sopranos are splendid once "Sempre libera" is over, while others achieve distinction only in the role's coloratura pyrotechnics. Perfection eludes all recorded Violettas, and were this not so, the joy of this opera, the joy derived from comparing the myriad facets of personality and voice that each performer individually imparts to the role would be gone.

Why condemn Sills's Violetta just because of her supposedly inadequate rendition of "Amami, Alfredo?" That phrase may be a second-act climax, but the whole opera doesn't depend on it, and there is not a phrase of similar difficulty for a voice like Sills's anywhere else in the opera. The rest of the performers may have their flaws, but Violetta is what really matters, and I feel that not only Sills but other singers as well should have better and more just representation in reviews of their operatic performances

> George Dansker West Palm Beach, Fla.

In reviewing the Sills recording of Maria Stuarda [March 1972] Dale Harris states: "But in this Maria Stuarda she sings with greater security than she has commanded for some time. On the whole her line is fairly taut and her upper register is free and firm. After so many recent disappointments from Sills, it is a pleasure to hear her intelligence once again matched by vocal control of this sort."

I would appreciate it if Mr. Harris would elaborate on these many recent disappointments from Sills. Contrary to Mr. Harris, I have found each Sills recording to be an example of consummate vocal artistry.

Geraldine Segal Baltimore, Md.

Mr. Harris replies: With reference to Miss Segal's question, what I was referring to is the kind of slapdash effort to be heard on Sills's Mozart/ Strauss recital and "Welcome to Vienna" albums. In both of these the voice palpably tiresespecially when judged by Miss Sills's own standards. Moreover, the artistic preparation sounds negligible. The atmosphere of carelessness can be discerned on almost every band.

With reference to Mr. Dansker's letter, La Traviata is a different matter. It has obviously been scrupulously prepared, and in my opinion falls short because Sills is not vocally equipped to create a successful characterization. Anyone who heard Maria Callas at La Scala in the mid-

1950s (with Di Stefano and Bastianini, under Giulini) will know that a great Violetta is not incompatible with serious vocal imperfections. At that stage of her career, however, Callas held voice and artistry in a marvelously effective balance, and succeeded in creating an unforgettable portrait of Violetta. She was vivid, vulnerable, and extraordinarity moving. Sills, in my opinion, is not. In the recent Angel album she is at the mercy of her vocal limitations, not, as Callas was, the mistress of them.

Test Reports Reviewed

Your equipment articles and reports are excellent except for the omission of certain information that should be made available to the consumer. The reports on speaker systems, for example, rarely discuss the driver units employed, wiring diagrams, or features inside the cabinet if of unusual design.

The report in the February 1972 issue on the Harman-Kardon Citation Thirteen, one of the best available assembled speaker systems, is an example. The cabinet contains an adaptation of the double-tuned enclosure used by the BBC and Quad, among others, years back, and was thoroughly described by George Augspurger [until recently] of J. B. Lansing in an article published in Electronics World. December 1961. This system contains something that may be considered new. It employs the high fidelity speaker units made by Philips in Holland, except for the midrange driver. Three high-performance Philips speakers have been available in midcontinent U.S.A. for approximately two years and they are very reasonably priced.

In an equipment report, credit should be given where credit is due. It is assumed that the evaluator had knowledge of the above and should have included them. If not, he should have been more inquisitive and opened the box to see what made it tick

Herman F. Johnson Alamo, Calif.

If the test reports on new equipment are meant only for electronics engineers, hi-fi freaks, and those with a background of technical knowledge, then I am out of line. But I do not want to have to go back to school in order to interpret the test reports.

Bernard Reiser Winter Park, Fla.

These letters illustrate the extremes between which we try to steer: the Scylla of in-group technicalia, and the Charybdis of oversimplification. In preparing our test reports we attempt to answer two questions in particular. First, what is the product-what will it do, and how well will it do it? Second, what technical or practical considerations will influence the way it fulfills its functions, either alone or in combination with other equipment? The means employed to make it do its job are distinctly less important to us (and to readers like Mr. Reiser), and therefore we would answer Mr. Johnson's point about giving credit where credit is due by saying that the specifics chosen by Harman-Kardon in producing the Citation Thirteen are less important in this respect than their relationship as embodied in the final design. Hence it is H-K that deserves (and was given) the credit. On the other hand, our reports can't attempt to explain the practical importance of each mea-

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surement to Mr. Reiser. To do so requires extended discussion of the type that we regularly put into our feature articles. Readers who wish to understand more of the significance of our test reports should, in a sense, "go back to school" by reading those features.

A Critical Disease

On page 96 of the March 1972 issue, Harris Goldsmith praises a young conductor for avoiding what he (Goldsmith) calls "the Furtwängler virus.

I strongly object to such criticism, and to your letting it pass, on three grounds. One, slandering and name-calling do not constitute valid criticism, and never less so than when one is trying to build somebody up by tearing somebody else down. Two. I object to referring to any great artist as if he were a disease. One of your critics-Goldsmith again, I think-was recently taken to task for using the phrase "the Bruno Walter syndrome" in this way. Such tactics are cheap, crude, and undignified. If Goldsmith insists on using them, he belongs on the staff of Time or The National Enquirer, not HIGH FIDELITY.

Finally, and what is even more unprofessional, this kind of criticism is noncommunicative. I, who have collected a big majority of all the records Furtwängler ever made, can at least see what Goldsmith is getting at: Furtwängler's way of "launching" rather than hitting an attack, which then seems to come a fraction after the metronomic beat. I think any Furtwängler recording of the Beethoven Third or Fifth will show that Furtwängler knew what sforzando meant as well as any man: Goldsmith of course is entitled to his opinion. The point, though, is that I suspect a large percentage of HIGH FIDELITY's readers will be unacquainted with Furtwängler and therefore have no idea what Goldsmith is talking about. All they will get from his remark is a vaguely negative feeling about Furtwängler. For them, Goldsmith's review will be the making of a prejudice.

The reputations of Furtwängler and Walter of course have nothing to fear from such critical fleabites. But I am afraid I can't say the same for the reputation of HIGH FIDELITY as a serious critical journal.

> Harry Wells McCraw Hattiesburg, Miss.

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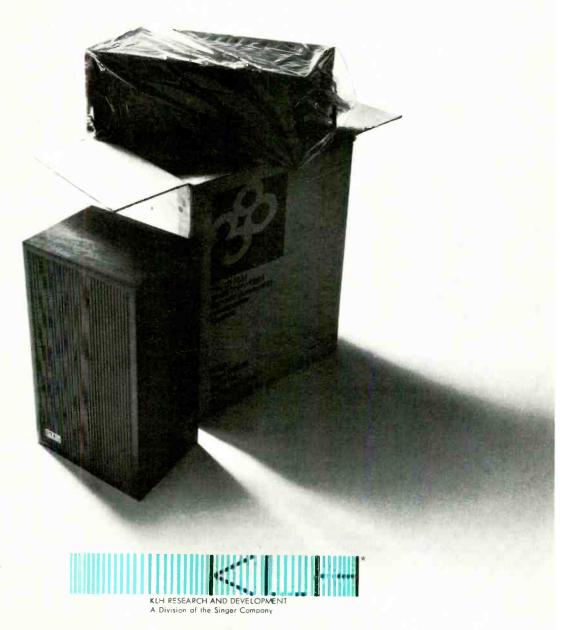
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speaking of records



by Michael Tilson Thomas

Exploring the Offbeat

ENOUGH HAS BEEN SAID about the difficulties in getting the musical worldwhatever that is-to listen to music of great complexity. But there's another kind of limitation people impose upon themselves, one that goes to the other extreme, a kind of snobbery that insists on a minimal level of complexity and seriousness. People will listen to, say, a medieval motet, then dismiss it as uncomplicated and hence unimportant. The same kind of thinking is used against today's composers of minimal music, people like Steve Reich. It's interesting that in the visual arts we don't have such arbitrary strictures. A schematization system employed in the Middle Ages may seem adolescent by today's standards, but this doesn't prevent us from looking at something created within that system and responding to it as something sophisticated and exquisite and enjoyable.

Why then should we deny ourselves the pleasures of old music? Of Dufay, of Josquin, of Machaut? Even of Gregorian Chant: I have always thought that the Liber usualis, with its one-line writing, contains some of the greatest music ever written. And why should we deny ourselves the music of other cultures-Bulgarian folk music, for instance, or types of Asiatic music? Once attuned to their simplicity of organization, we perceive their great variety in terms of rhythmic possibility, the breathtaking extent of

improvisation.

To some extent we seem to be breaking away from our narrowed notions of acceptable music. This is due partly to the greater availability of more materials-through publication and recordings. Among vounger listeners especially, it now seems possible to enjoy listening to Gregorian chant or Jimi Hendrix or Stockhausen-but without the implication that you can't equally love a Brahms sextet.

There are fine recordings of old music, especially on Telefunken's Das alte Werk series. But I'd like to draw special

attention to something more out of the way-the ethnomusicological series put out by UNESCO. My favorites among these are the ones of gagaku, and the music of the No theater. Both demand disciplined listening-and in return offer an incredible sensuousness. This is especially true of a piece called Ryoo, which is on one of the gagaku records. The performance is of the most transcendent virtuosity; but what is much more important, it demonstrates the point I've made above: that with simple means, much can be done. It uses only four notes, but then goes on to achieve infinite ideas of expression and infinite ideas of organization (including four- and fivevoice canons).

Right now I'm on a Bulgarian folk music kick, and have taken great pleasure in the recordings of it on Nonesuch, particularly the album "Village Music of Bulgaria" (H 72034). One of the woman singers is named Balkanska, who's a Bulgarian Grace Slick. Another of my favorite Nonesuch albums is one of Balinese music called "Golden Rain" (H 72028). There are some very beautiful gamelan pieces on Side 1, but on Side 2 there is something I particularly cherish-the Ketjak, or Balinese Monkey Chant. It's an astounding piece-rhythmically, conceptually, and from the standpoint of the performance: bear in mind that this very complex music is being played not by professional musicians, but by villagers who are staging a play. There's a great deal more to be got out of the piece: At first hearing, it may seem like a continuous rhythmical texture, but gradually things emerge from the background. Also, you can follow it as a play. It's a very happy record; it always leaves me in a state of jubilation.

For anyone interested in expanding his musical horizons, I would also recommend the many records that Ali Akbar Khan has made for Connoisseur. They include some very beautiful impro-

If I were putting together a desert-is-

land collection of records, I would certainly include some by James Brown, one of my favorite performers. During my college years, I used to hear his singles on the radio. I was always impressed. There were even some I thought Stravinsky should hear, especially one called I Got a Feeling. When I first heard that one-with all its lack of inhibition, both rhythmically and tonally-it left me in a state of shock. As a result, I got his album "Live at the Apollo, Vol. 2" (King 71022), and that really sold me. After that I began trying to find out where he was performing, and I became one of his regular attenders. The Apollo album has a routine called There Was a Time, which is a twenty-minute-long musical experience, sociological rap, and everything else. It's Brown at his most dazzling. Another of his albums, "Sex Machine" (King S 71115), would also have to go into my desert-island collection.

And I would have to take some other rock performers. Smokey Robinson, certainly-especially his recording of the tune Baby, Baby, Don't Cry. He is probably the closest singer today to a seventeenth-century bravura tenor-though his style is more expressive. Nor could 1 do without the "Jimi Hendrix Experience" album (Reprise S 6261) which has Foxy Lady on it: From the standpoint of playing, composition and singing, it is a very powerful piece. I would have to include the Rolling Stones too: "Through the Past Darkly, Big Hits," NPS 3 has a lot of wonderful tunes like Jumpin' Jack Flash, Honky-Tonk Women, and Street Fighting Man—although it doesn't have In Sympathy With the Devil, which is among the ones I feel closest to. Finally, in the pop department, one of my favorite ladies and probably one of the three greatest living masters of rubato (the other two being Heifetz and Piatigorsky) is Peggy Lee. Her record "Things Are Swinging" shows her at her best (Capitol T 1049, deleted).

I almost never listen to recordings of the standard classics now, but I do cherish the memories of those I heard during my childhood. There was the Bach D minor Piano Concerto, played by Eugene Istomin and conducted by Busch, a set of 78s. I would put it on, then play it on the piano at the same time. And there were other discs that I played to the point of ruination: the Prokofiev G minor Violin Concerto with Heifetz; Stravinsky conducting his Rite of Spring; and two others-I've forgotten who the performers were-the Brahms Haydn Variations and the Mozart G minor Symphony.

In my teenage years there were other records I played by ear on the piano while the disc spun; but there was another innovation as well. I made up words-complicated verses and narra-



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tives-to go along with them (none of which I remember). At that time, the record that probably meant most to me was the Ferrier/Patzak/Walter recording of Das Lied von der Erde (London A 4212, deleted). It had vitality and roughness, a concern for the agony of the music, rather than a concern for simply making it continuously beautiful (in contrast to Walter's later recording. where everything is more lyrical and sonically lovely). Patzak's reading of that part has never been equaled, even though vocally he was past his prime. More than anyone else, he projects the drama of that text, the beauty of it, the horror. He's the only one who makes you believe the scene at the graveyard, with the ape howling. Ferrier has some pitch problems, but there's a warm spinningout of tone, and a sensuousness that is irresistible. Das Lied is just about my favorite work of music; and this performance of it is one of the few I still enjoy coming back to.

Another revelation to me during my teens was Sviatoslav Richter's early recordings on the Artia label. Such astounding musical conceptions! A marvelous Prokofiev Seventh Sonata was one of them; but he was just as marvelous in such slight pieces as the Prokofiev First Piano Concerto. Sonically, they were very crude: They had been done in one take. But the technical crudity was what made them even more exciting. You knew these were for real: no splic-

ing or gimmickry here!

Should the whole concert business ever go bust, I would take a few recorded mementos to my island retreat. Certainly some Stravinsky. I think I'd prefer Stravinsky conducting one of his slow pieces-Persephone (Columbia MS 6919, deleted), maybe, or the Symphony of Psalms (Columbia MS 6548). First of all, I think that Stravinsky was an excellent conductor of his own music: and I think that in those slow pieces he achieved a unique blend of smoothness, singingness, and incredible architectonic feeling. The final quality is one of his trademarks: those beats, moving so slowly; that sense of something barely moving. It's interesting that the Symphony of Psalms was something he conducted at a slower and slower pace as he grew older. I remember being fascinated by a Canadian film showing Stravinsky conducting that piece. He didn't connect the beats by making a continuous motion with his arm; he just lashed outwham! It's an almost impossible feat to make an orchestra follow that kind of beat, but it's a spectacular effect when it works.

Finally, I would take Stockhausen's Hymnen (DGG 2707 039). Again we have a work that makes great demands on the listener. But what else is one to do all day on that desert isle? I'll need exercise of some sort.



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The Making of a Film Composer

I MET HIM the night he joined Dizzy Gillespie's quintet as pianist and arranger, a man of dazzling intelligence and scholarship. We started talking immediately and eagerly of writing something together. Now, these ten years later, we are writing a Broadway musical for Joshua Logan, based on Henry Fielding's novel Jonathan Wild, with a book by Edward Mann, Maurice Scofield, and Joshua Logan. Through all those years, Lalo Schifrin has remained one of my closest friends. When you write lyrics for a man's music, or watch him set music to your lyrics, you learn an awful lot about him, and Lalo Schifrin is, flatly, one of the most versatile, skillful, and intelligent musicians I have ever known.

He now lives in a palatial home in Beverly Hills—a far distance from the small apartment he had in Queens when he was struggling along on the road salary of a jazz player. Of those years with Dizzy Gillespie, he has no regrets; indeed, when he's had enough of grinding out too many notes per month for films and television, he likes to slip away, find Dizzy somewhere out on the road, and sit in to play some jazz for a couple of nights. "I need it for my soul," he says.

Schifrin is one of those people who has combined the techniques of jazz and classical music in motion picture scoring over the past decade or so. But if Schifrin's father had had his way, the theme for Mission Impossible would never have been written, nor the score to Mannix, nor that lovely theme from The Fox, nor the music for Cool-Hand Luke and Bullit, nor the music for The Helstrom Chronicle, nor the Canons for String Quartet, nor *Pulsations*, the symphonic work which Zubin Mehta commissioned for the Los Angeles Philharmonic, nor the recently completed Madrigals for the Space Age with a text by Ray Bradbury, nor the Jazz Suite on the Mass Texts, which was recorded with flutist Paul Horn. Schifrin's father, concertmaster of the Buenos Aires Symphony (now retired), wanted him to be a lawyer.

"He wanted me to have an academic career," Lalo says. "Music was not taught in the universities in Argentina then, and he wanted me to get a degree. At that time I considered music a hobby." Lalo dutifully put in four years of law study; he had two more to go for a degree. "But I couldn't see myself as a lawyer," he says. And he hadn't given up studying music. He was a composition student of Juan-Carlos Paz, and studied piano with Andreas Karalis, who had been director of the Kiev Conservatory. He credits the exercises Karalis assigned him for his piano technique, which can be blazing when it is in condition. "Because of Karalis," he says, "I can get my chops up in two weeks of practice." Chops are what jazz musicians call tech-

Unable to face law, he applied for entry to the Paris Conservatory. He won first prizes in harmony, counterpoint, and orchestration during his years there. His teachers included Charles Koechlin and Olivier Messiaen.

Schifrin got interested in jazz when he was about sixteen. One of his heroes was Dizzy Gillespie. When he returned to his native Buenos Aires from Paris in 1956, at the age of twenty-four, he formed a big jazz band. Gillespie turned up there in concert, heard Schifrin's band and the writing he had done for it, and urged him to move to the United States.

He made the move for the first time in 1958. "When I got to New York, I was frightened. I became insecure. I thought I wouldn't make it. I started playing piano in a Mexican restaurant, El Rancho Grande, on Forty-fourth Street for seventy bucks a week and tips. I was so depressed I was thinking of going back to Argentina where I had concerts and television and all kinds of things waiting for me.

"After a few weeks, Xavier Cugat called me to write arrangements for his show. Then, when I went to the rehearsals, he asked me to come and play on tour with him. The money was incredible, so I went with him to Tahoe, Miami, places like that. Then he said we were going on a South American tour. I decided to go and leave the band when we got to Argentina."

In Buenos Aires he was offered his own television show with Coca-Cola as sponsor. "They wanted to bring in jazz stars like Dizzy—he's a big name in Argentina. So I flew up to New York with the agent to hire Dizzy. We went to Birdland. Dizzy said to me, 'Hey, man, where've you been? I heard you were in New York. Why didn't you call me? Have you written anything for me?' I sat down immediately and went to work on the Gillespiana Suite."

Gillespie arranged a rehearsal. But then he called Schifrin to say he had no pianist. "Haven't you even got anybody in mind?" Lalo asked. Dizzy said, "I was sort of thinking of you." Schifrin went to the rehearsal. He had been studying Gillespie's records for years, and he knew all his harmonies. "Not the approximate changes, but the exact changes. At the end of the rehearsal Dizzy handed me a W-2 form. I thought about it for a minute, then called Argentina and canceled the TV show. I lost a lot of money, but it didn't matter. To play with Dizzy! It had been my dream."

Schifrin's sojourn with Gillespie seems, in retrospect, quite short. The reason was simple: Gillespie began buttonholing everybody he could find to tell him about Schifrin's writing. I remember him telling me (I was then the editor of *Down Beat*), "Wait till you hear his string writing. He's incredible."

As a result of all this promotion, Gillespie lost himself a piano player. Schifrin began doing albums of his own, then got a shot at an African film called *Rhino*. He left New York supposedly for a trial run at Hollywood; he never returned.

Immensely successful now, he has aroused a certain envy among a number of Hollywood composers, particularly those who work slowly and resent his proficiency. Some have suggested he doesn't write all his own music. He does, I can assure you. I have sat in rooms with him hour after hour, watching it pour out.

At forty, Schifrin has grown a little weary of the Hollywood grind. He is anxious to devote more of his time to concert music and jazz. And he is, in fact, doing just that.

"It would be so nice to sit somewhere on the Riviera and write only what you want to write, when you want to write it," he says.

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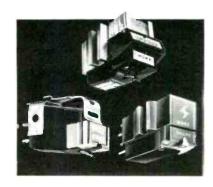
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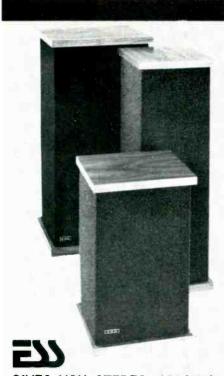


Not everybody needs a concert grand piano, nor does everybody need the best cartridge Shure makes to enjoy his kind of music on his kind of hi-fi system. Eventually, you'll want the renowned V-15 Type II Improved, the peerless cartridge for advanced systems and ample budgets. But, if your exchequer is a little tight, consider the M91E, widely acclaimed as the second best cartridge in the world. With a sharply circumscribed budget, all is far from lost. Choose any of the four models in the M44 Series, built for optimum performance in the easy-to-take \$18-25 price range. Write for a complete catalog:

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those were the days

A nostalgic romp through the pages of High Fidelity and Musical America

60 Years Ago

Camille Saint-Saëns, the French composer, is disgusted with the theater and will no longer write for it. A Paris newspaper quoted Mr. Saint-Saëns as saving: . be sure you will never hear of a new opera by Saint-Saëns. The theater is so ungrateful, so treacherous! In my youth I was treated as a revolutionary musician. Today the press employs in my case the most extraordinary methods. tentious aristarchs, they praised in Dejanire only the manner of composition . . . as if my work were barren of expression. But enough! Let us leave the frogs to croak in the mud in which they are mired! Always the public is like the shark that follows the boats and swallows the bait and the harpoon. The day of my departure from Cairo, Aida was presented at the Pyramids. What a sacrilege! In the face of these eternal stones they stupidly materialized a work of the theater! ... If this fashion is approved. The Flying Dutchman will be played out at sea and Orphee-in hell!"

Harry Patterson Hopkins, a young American musician and student of Antonin Dvořák, comments on the atmosphere of lessons in the Czech composer's home: "His children were permitted to invade his studio at all times...my daily lessons were usually taken with the accompaniment of grimacing boys and girls hidden behind articles of furniture or appearing at unexpected moments... Dvořák's high silk hat often played a comical part on the tousled head of one of the younger boys."

40 Years Ago

An unusual honor was conferred on famous tenor John McCormack when he was recently invited to act as Private Chamberlain to His Holiness, Pope Pius XI, at the Papal Palace in the Vatican in Rome. Mr. McCormack officiated in the capacity of chamberlain for a week. During this time his duty was to introduce all visitors to the Pope, and as a special honor he himself was received in private audience later. Mr. McCormack is also a papal count of the church.

During the recent visit of Richard Strauss to Berlin, he conducted the Berlin Broadcasting Orehestra in a program of Mozart's Jupiter Symphony and his own Don Juan. Among those present during the rehearsals were Erich Kleiber and Otto Klemperer, each with score in hand. After the Andante of the Jupiter, both rushed up to Strauss exclaiming: "Herr Doktor! At the second beat, second quarter, the cellos and double basses played a C!" "Well, what of it?" replied Strauss. "But the score says G." retorted the two disciples and they attempted to prove their point but to no avail. Strauss simply found "the C more beautiful and more logical"! Kleiber, upon inspecting the original at the State Library, found, much to his surprise, that Mozart had actually written C, and the much-argued G was merely a caprice of the publishers!

20 Years Ago

As television networks are extended across the country, the medium is assuming increasing importance in the eyes of serious music critics says the recent MU-SICAL AMERICA ninth radio poll of Serious Music on the Air. Of the 850 music critics and editors of the daily newspapers in the United States and Canada who received ballots many reported that television has not yet appeared in their areas, but most expressed themselves vigorously about video music. They want more opera, they want it in English, and they would like to see it composed expressly for the television medium.

Laszlo Halasz, dismissed last December as musical director of the New York City Opera Company which he had founded. won a verdict for \$15.324 of his \$37.000 suit against the New York City Center for Music and Drama, which operates the company. He was charged with being "a threat to the prosperity and advance-ment of the City Center." The City Center attorney brought some members of the company, including Joseph Rosenstock, now general director, to the stand to testify in an attempt to prove that Mr. Halasz was "petulant, temperamental, and insubordinate to a degree no employer could tolerate." Mr. Halasz' attorney, after more than fifteen singers and officials of the company testified in the conductor's behalf, won the case as the jury unanimously agreed in Halasz' fa-

Think of everything you've ever wanted in a stereo receiver.

The new SX-828 and SX-727 are Pioneer's top two entries in a new, dynam c line-up of four AM-FM stereo receivers with increased performance, greater power, unsurpassed precision and a wide range of features for total versatility.

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full range of connections for turntables, tape cecks, headphones, microphones, speakers — and even 4-channel connections, when you're ready.

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RCA Gives Green Light to Discrete Quadraphonic Discs

By the time you read this, RCA expects to be selling "discrete" quadraphonic LPs made by the process that JVC has been calling CD-4. That process, as you may remember, produces a groove similar to that in a conventional stereo record except that it contains a highfrequency subcarrier in addition to the conventional two-channel audio information. The use of this subcarrier allows recovery of all four channels with minimum loss in separation between them. (Theoretically, infinite separation is possible in the discrete system; in all socalled matrixed quadraphonic systems such as SQ and Stereo-4 it is limited by the matrixing principle itself.)

According to RCA the discs are compatible in two senses: They will produce normal stereo sound without loss of program information when played on stereo equipment, and they can be played on conventional equipment without significant damage-either in terms of record wear or with respect to subsequent quadraphonic playback. In support of this last claim RCA states that the combination of a new record compound (which includes antistatic and lubricating ingredients) and a more sensitive demodulator "enables four-channel playback with satisfactory separation and signal-tonoise ratios after the product has been played at least 100 times on a conventional, inexpensive stereo player with a conical stylus and 5 grams of pressure.

We heard an RCA four-channel disc that had been played 500 times under otherwise similar conditions, and although the record naturally sounded terrible by then, the quadraphonic effect was still evident. In listening to a demonstration disc that had been played perhaps a half-dozen times for other auditors and using the JVC cartridge with the specially formed Shibata stylus (described in this column in the January 1972 issue), we were impressed by both the sound and the four-channel effect.

Both JVC and Panasonic have announced CD-4 playback equipment, as detailed in this column last February. The first disc release was scheduled for May, with regular but selective issues to begin in the fall. Prices will be the same as those for conventional stereo LPs. and RCA says it plans to avoid double inventory—that is, separate stereo and quadraphonic issues of the same recording. Just which recordings will be made available in the first CD-4 release is undecided at this eleventhhour writing. Even the name by which the discs will be called is undecided since RCA does not plan to use the CD-4 designation.



news and



Fig. 2

Fig. 3

Photomicrograph No. 1 made at 2500X magnification shows configuration of discrete-quadraphonic groove walls. Ripples are subcarrier, which contains "difference" information used in separating front signals from back. The slight curve of the groove outline is the highly magnified stereo modulation. Line through center of left wall is imperfection in experimental sample. View No. 2, also at 2500X magnification, shows groove after more than 100 plays with a cartridge equipped with Shibata stylus. Wear can be seen as a smoothed stripe just to the right of-and partially obscuring-the cuttling imperfection; wear is almost invisible in right wall. A magnification of 5000X (No. 3) takes us deeper into the groove. Wear, which here can be seen on both groove walls near the edges of the picture, was produced by 500 plays with a conical stylus tracking at 5 grams. The subcarrier ripples are still quite evident, although 'smeared.

topics The Big Picture

Industries have their hangups just as people do. Take home video for example. Three concepts keep popping up like dandelions: cartridge-type recorders, flat screens, and movie-size screens. All three, we have repeatedly been told over the last few years, are just around the corner; but they all (pace Avco's Cartrivision, which Sears is expected to introduce in the Chicago area this month, and Sony's U-Matic Videocassette for which equipment appeared early last spring) seem to remain beyond commercial reach. Each project is beset by a series of similar problems: high

projected selling prices, technical roadblocks, the expense of tool-up and initial distribution, sometimes irksome government rules, want of technical standardization, dubious data about the potential market, and so on. But still the hard core of hope-or of hangup -remains

These ruminations were triggered by two recent demonstrations of large-screen projection television systems that, their sponsors say, will be offered first to in-

Continued on page 26





There's a lot of performance capability locked up inside chromium dioxide, but it takes the right know-how to liberate it. There is the basic tape, there is the accuracy in slitting, there are the dozens of little cassette-housing construction details and the over-all skill of a world renowned company like TDK that make the difference; after all, it was TDK that created the famous Super-Dynamic cassette. Yes, not all chromium dioxide cassettes are alike.

Of course the KROM-O₂ is the cassette that gives you the widest frequency response, the wide dynamic range and the complete reliability for which TDK is already famous. However, all these advantages will only truly benefit you if you have a cassette machine that can properly be biased for chromium dioxide. If your equipment has only standard bias you may be better off using one of the other TDK superior tapes and cassettes, either the Low-Noise or the Super-Dynamic.

Remember, TDK cassettes are just a little more equal than the others.

Purity in sound.

World's leader in tape technology.

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The 4-channel Sansui MQ2000 is not a second-class component system.

It's a first-class compact.







Sansui has never made anything but components until now. So our engineers just couldn't break the old habit when we asked them to come up with a four-channel compact. They took the ingredients of a state-of-the-art component system and packed them into a single housing, then crowned them with an acclaimed, first-line automatic turntable and magnetic cartridge.

The MQ2000 complete four-channel music center. It's an AM/FM receiver. A decoder for all compatibly matrixed four-channel recordings and broadcasts. A four-channel synthesizer for your entire collection of conventional stereo records, as well as for regular stereo broadcasts. It can handle any discrete four-channel source, taped or otherwise, and can take any adapter for any future four-channel medium that might come along.

Total IHF music power: 74 watts. FM sensitivity: 5 microvolts IHF. Normal-level response: 30 to 30,000 Hz ± 2 db, with harmonic or IM distortion below 1% at rated output.

The automatic turntable is Perpetuum Ebner's Model 2032 with calibrated stylus-force adjustment, variable-speed control, damped cuing, anti-skating and a host of other features. The cartridge is Shure's M75-6, specially recommended for four-channel discs.

The speakers are Sansui's exciting new AS100 two-way acoustic-suspension designs. Not scaled-down performers made just to go along with a package, but full-fledged performers in their own right—regular members of Sansui's new AS speaker line. Two of them come as part of the package, because most people already have a stereo pair, but you can match up another pair of Sansui's regular line, if you wish, for a perfectly balanced system. Wait till you hear this at your franchised Sansui dealer!



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It sounds like reel-to-reel. It looks like cassette. It is. It is the new Sansui SC700.

Close your eyes and your ears tell you you're listening to a reel-to-reel deck of the highest caliber. Open your eyes and you know that cassette recording has finally made the grade.

The performance-packed, feature-packed SC700 Stereo Cassette Deck incorporates Dolby noise reduction, adjustable bias for either chromium dioxide or ferric oxide tapes, three-microphone mixing and specs that will make your eyes—as long as they're open—pop even wider.

Undistorted response is 40 to 16,000 Hz with chromium dioxde tape and close to that with standard ferric oxide tape. Record/playback signal-to-noise ratio is better than 56 to 58 db with Dolby in—and commendably better than 50 db even with Dolby out! Wow and flutter are below 0.12% weighted RMS.

A DC servo motor (solid-state controlled) assures rock-steady speed. The tape-selector adjusts both bias and equalization for ferric-oxide or chromium-dioxide formulations. The large, slant-panel VU meters are softly illuminated. Contourless heads keep response smooth, and a head gap one micron narrow brings high-frequency output right up to reel-to-reel standards.

With so much in its favor, Sansui engineers decided it deserved all the features of a first-rank open-reel deck, and more: Pause/edit control. 3-digit tape counter. Separate record/playback level controls (independent but friction-coupled). Automatic end-of-tape shut-off with full disengagement and capstan retraction . . . and much, much more.

The SC700 is practically a self-contained recording studio. Which makes it quite a bargain at \$299.95.





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dustry and then to the home viewer. Think of it: Glorious color spread across a picture area measured in feet, rather than inches, and glittering with every speck of detail that a TV signal can convey. The first kid on the block to con his parents into acquiring one of these gadgets can pick up a dandy collection of bubble-gum cards by way of admissions.

The big hurdle (aside from present nonavailability) that the budding con artist will face is the price: \$2,000 and up according to present guesses. But the pictures we saw do represent pretty spectacular televiewing. The first demonstration, of the Color Beam System, was in a back room at Advent Corporation in Cambridge, Massachusetts. On a screen some six feet wide appeared an afternoon show (which itself lent no distinction to the demonstration) in natural, soft colors. A couple of weeks later we watched Sony demonstrate its new Color Video Projection System on a screen four feet wide—a demonstration in which color saturation was pushed to the limits.

No valid comparisons can be made between the two systems on the basis of the demonstrations. That at Advent was no more than a look-see into the workshop; Sony's was a formal press party. At Advent we saw an experimental standby lashup (the preferred system had been shut down for further work); Sony's two projectors were carefully prepared prototypes. Advent's work area had plenty of light for note-taking or similar chores; Sony's room was darkened to near-theatrical murk.

This last point is particularly significant. Both systems—like all projection systems we have seen or read about to date—require that the room be darkened much as it would have to be to view movies. These are not, in other words, devices for casual viewing. Nor are they devices that can simply be folded up and put into a

closet when the viewing is over. In both systems the projector-screen alignment is critical; disturb the relative placement of these elements and picture quality is lost. The Advent equipment in particular is meant to be built into the viewing room, rather than just set up as whim suggests.

While Sony leaned heavily on taped images with vivid purples, reds, blues, and greens for demonstration purposes, the off-the-air pictures came in with fine natural color (at least until a well-meaning Sony executive adjusted them for "maximum effect"). In both demonstrations the raster (the striped pattern of horizontal scan lines on the screen) was notable for its absence; only on close-up inspection did it become evident.

Operating principles differ somewhat, however. Sony is keeping mum about many technical details of its system, but basically it has a single conventional 12-inch color tube and uses an optical system similar to that in an "overhead projector" to form the image on a massive concave screen. Advent uses three special tubes (one per primary color), each of which forms a very small image internally and also contains the necessary mirror and lens elements for projection onto its relatively conventional flat screen. Advent's color convergence is therefore adjusted by physically positioning the three projector tubes; Sony's is electronic and is accomplished within the tube.

Sony presently says it plans to market its system this fall, but we must admit to a certain skepticism about such timetables. We had previously reported that Advent planned to have its Color Beam system "on the market by the end of this year; if all goes well, the consumer model—with a reduced price tag—may follow some time next year." We wrote that over two years ago.



equipment in the news

Many-sided first offering from Design Acoustics

Add to the proliferating variety of speaker-system shapes the dodecahedron. The twelve-sided form of the D-12, the first product from Design Acoustics of California, is said to offer uniform sound dispersion over the entire listening area—particularly in the high frequencies—without regard to speaker placement. The sound is reproduced by nine tweeters, a single 5-inch enclosed direct radiator for the midrange, and a 10-inch high-compliance woofer. Available in a variety of finishes and grille colors, the D-12 costs \$325 per speaker.

CIRCLE 146 ON READER-SERVICE CARD

BGW's powerhouse amplifier

BGW Systems' Model 1000 combines very high power output with a "fail-safe" system to protect speakers and amplifier output stages in case of overload or shorted output, and so on. The amplifier's output is rated at 200 watts continuous power per channel into 8 ohms, for total harmonic distortion of less than 0.2% at all audio frequencies. In addition to the fail-safe circuitry, the model incorporates a three-position current limiter to control power output, light-emitting diodes to show when limiting is activated, a rocker-style circuit-breaker power-switch assembly instead of fuses, and thermostatically controlled forced-air cooling. Priced at \$1,200, the Model 1000 is designed for large home installations and professional use.

CIRCLE 147 ON READER-SERVICE CARD





Continued on page 29

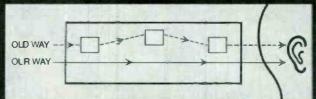
We've shortened the distance between you and the music.

Now you can really snuggle up to Schumann. When you get next to our new stereo receiver, the SA-6500.

Because we cut down the distortion. By cutting out the input transformer, the output transformer and the output capacitor. So instead of putting your music through a whole electronic maze, we put it right through. Via direct compling. With less than 0.5% distortion. And an amplifier frequency response of 10 to 100,000 Hz—1dB.

And because the signal doesn't get capacitored and transformered to death, you get something else. Full 200 watts of power (IHF) all the time.

The music is more than just



close, it's sharp. Because we've got 1.8 µV sensitivity on FM from two 4-pole MOS FET's that can pull in your favorite station. So it sounds like it's being broadcast next door. Even if it's coming from the next state.

We also have selectivity. Because of two RF stages, a foursection tuning capacitor, four tuned circuits and an IF stage with a crystal filter and integrated circuit.

Having brought you closer to the music, we also bring you closer to absolute control. With linear sliding controls for bass and treble. Low Filter, High

Filter, and Loudness switches to shape the sound. An FM Muting switch to eliminate annoying inter-station noise.

And pushbutton audio controls.

There's even more. Like a linear FM dial scale with maximum station separation, for easier tuning And dual tuning meters to measure FM/ AM signal strength and pinpoint FM stations. Plus Lumina-Band tuning to Eght them up. A full range of input and output jacks. Even a rich walnut cabinet.

Now that our \$A-6500 has shortened the distance between you and the music, all you have to co is shorten the distance between you and your nearest Panasonic Hi-Fi dealer.



Our very remarkable crowd pleaser.

The ADC 303AX.

Without a doubt, the most popular speaker we've ever made.

Time and again, enthusiastic owners have written to tell us how very pleased they were with the 303AX. Fantastic... outstanding... beautiful... and remarkable were among the more commonplace accolades we received.

As for the experts, they expressed their pleasure in more measured phrases such as, superb transient response, excellent high frequency dispersion, exceptionally smooth frequency response and unusually free of coloration.

Obviously, a speaker like the ADC 303AX

doesn't just happen.

It is the result of continually designing and redesigning. Measuring and remeasuring. Improving and then improving on the improvements. All with only one goal in mind . . .

To create a speaker system that produces a completely convincing illusion of reality.

And we believe that the key to this most desirable illusion is a speaker that has no characteristic sound of its own.

We've even coined an expression to describe this unique quality . . . we call it, "high transparency".

It's what makes listening to music with the ADC 303AX like listening back through the speaker to a live performance.

And it is this very same quality that has made our very remarkable crowd pleaser the choice of leading audio testing organizations.

Finally, a pleasing word about price. Thanks to steadily increasing demand and improved manufacturing techniques, we've been able to reduce the already low price of the very remarkable ADC 303AX to an irresistible \$90*.

That could make it the most crowd pleasing buy in high fidelity today.

*Other ADC high transparency speaker systems available from \$45 to \$150.

No a M. A V. Landson Street St

Norman equalizer evens bass response

Norman Laboratories of Norman, Oklahoma says its Acoustic Equalizer Model Five will extend the flat bass response in many of the best-selling bookshelf speakers by an octave or more. Bass equalization curves for each of ten speaker models have been designed into the equalizer, allowing the user to program the particular curve he wants. In addition, five-position bass, midrange, and treble controls are provided to accommodate personal listening preference. The price is \$87.

CIRCLE 148 ON READER-SERVICE CARD

JVC's four-channel headphones

The introduction of four-channel equipment continues to move apace, with the latest quadraphonic headset coming from JVC. Model 5944 uses the dual-plug system consisting of separate front and back stereo connectors that seems to be the *de facto* standard for quadraphonic headphones. An unusual feature is the phase-reverse switch visible on the right earcup. Price: \$49.95.

CIRCLE 149 ON READER-SERVICE CARD



7 , 9 9 9 0000 y.

Versatile budget receiver from Pioneer

U.S. Pioneer's Model SX-525 stereo FM/AM receiver, priced at \$239.95, offers a full choice of program sources at modest cost. It accommodates two tape decks, microphone, and auxiliary sound sources and can operate up to two pairs of speakers individually or simultaneously. It is rated at 17 watts per channel continuous power into 8-ohm speakers with both channels driven.

Concord compact cassette portable

Although it weighs in at only three pounds, the Concord F-21 monaural cassette tape recorder from Benjamin Electronic Sound Corp. still has some of the features of its bigger brothers. Standard equipment includes pushbutton controls, remote-control microphone, auxiliary input jack, automatic level control, and a 2¼-inch speaker. The F-21 operates from batteries or, via adapter, from house, car, boat, or trailer current. It costs about \$35.

CIRCLE 150 ON READER-SERVICE CARD





Toshiba unveils three speaker systems

Toshiba's entries in the loudspeaker market include the SS-840, the SS-26, and the SS-36 (shown here). The first two are three-way systems. The SS-840 is a floor-standing model with a louvered high-frequency diffuser. The SS-26 and SS-36 are acoustic-suspension designs in walnut enclosures. The SS-36 is a four-way system with front-panel controls. Prices of the three models are, respectively, \$199.50 a pair, \$114.50 each, and \$174.50 each.

CIRCLE 151 ON READER-SERVICE CARD

The experts talk about a new



"...The tuner which may well prove to be the 'classic' of the 1970's is Heath's new AJ-1510 Digital FM Stereo Tuner."

- Leonard Feldman, AUDIO MAGAZINE

"... When it comes to using the AJ-1510, we find ourselves almost at a loss for words. It is probably as near to the ideal FM tuner as we have ever encountered."

- Julian Hirsch, STEREO REVIEW

Mr. Feldman goes on to say: "The 'ultimate' tuner? Well, if it isn't it'll do until someone comes up with something better!... There is NO tuning knob and there is NO tuning dial or pointer, since all frequency indications are read from digital read-out tubes... At the left are ten keyboard buttons, numbered '1' through '0', as well as a re-set button (punched when you wish to 'punch up' a new station frequency) and a button labeled BY-PASS (used to initiate the 'auto-sweep' action which causes the tuner to sweep downward in frequency, automatically locking in on every available signal in your area)... three more buttons, labeled A, B and C ... are used to select three predetermined favorite stations... and there are additional buttons for SQUELCH DEFEAT and STEREO ONLY reception...

"...a tiny test switch button when depressed, lights up all the elements of the digital readout tubes to insure that they are operative. There is also a rotary control which determines the speed at which the AUTO-TUNE action takes place, a noise squelch adjustment control, and an AGC squelch control. A slide switch changes the meter function from signal strength indication to multi-path indication and a second, three-position slide switch selects automatic stereo, partial stereo blend (for reduced noise in weak-signal stereo reception situations with some sacrifice in overall stereo separation), and mono-mix. The right section behind the trap door contains three horizontal slots, labeled A, B and C. These slots correspond to the three PREPROGRAM selection buttons described earlier and, upon inserting three plastic cards no larger than a standard credit card, the buttons can be used to tune in your favorite station which you easily program onto the cards yourself...

"...The rear panel of the AJ-1510...contains antenna terminals for 300 ohm or 75 ohm transmission lines, a dual pair of output jacks as well as horizontal and vertical output jacks for connection to an oscilloscope for observing the nature and extent of any local multipath problems beyond what you can read on the dual purpose self-contained signal meter...

"...we were able to appreciate the amount of thoughtful engineering that went into this unit, both in terms of its performance as well as its kit feasibility. Recent Heathkits have increasingly

stressed the modular approach and the AJ-1510 has carried this concept to its ultimate. There is a 'master' or 'mother' board into which are plugged seven circuit boards. Connectors are used throughout, which means that boards can be removed without having to unsolder or unwire a single connection.

"...The heart of the non-mechanical tuning aspect of this unit lies in the voltage-tuned FM front-end, which is of the varactor-tuned type and contains no moving variable capacitor. Instead, a suitable d.c. voltage applied to the varactor diodes determines their effective capacitance. The keyboard, pre-programmed cards, or automatic sweep tuning methods all program a divider circuit. The divider circuit divides the tuner's local oscillator frequency and compares it to a crystal controlled reference frequency and the result of this comparison is the tuning voltage. Changing the divide ratio of the divider circuit changes the d.c. voltage applied to the tuner and a different station is tuned in. Simultaneously, a visual display of the station frequency is provided by the readout circuitry. Because of the crystal controlled reference frequency and the phase-lock-loop circuitry, however, the accuracy of the frequency tuned in is no longer dependent upon the drift-free characteristics of the FM front-end but will be as accurate as the reference crystal frequency and, in the case of the AJ-1510, that means at least 0.005% accuracy!...

"...Do not confuse this 'digital readout' tuner with some units which have recently appeared on the market and simply replace the tuning dial with numeric readout devices. The latter variety guarantee no more tuning accuracy than their 'dial pointer' counterparts. The Heath AJ-1510 is tuned **exactly** to 101.5 MHz when those readout tubes READ 101.5 — and not to 101.54 or 101.47!...

"...There is no doubt that the elaborate 'computer' type circuitry incorporated in the Heath AJ-1510 must represent a fair percentage of its selling price, but even if you ignored it completely (or considered it as a welcome bonus), the tuner's performance as a tuner would justify its total price and then some.

"...Almost as if to reprimand us, when we punched up 87.9 MHz on the keyboard, a light lit up on the front panel and read RE-PROGRAM. (It could have said 'please'...) Realizing that we weren't about to fool this unit, we settled for 88.3, 98.9 and 106.1. These

Heathkit 'classic'

chosen frequencies, together with our not-too-perfect 'screen room' enabled us to read a sensitivity of 1.6 uV. Impressed, we decided that we weren't going to let this one get off so easily, so we tried to measure alternate channel selectivity and, as near as we could figure, it was just about 100 dB!...[With] the total quieting curve, you can interpolate the THD (mono) down to an incredible 0.18% for 100% modulation (as opposed to 0.3% claimed). Ultimate S/N is a very respectable 66 dB....quieting reaches a very usable 56 dB with a mere 5 uV of signal input. In the stereo mode, we remeasured the THD and found that it was only 0.25% for 100% modulation (as against 0.35% claimed) and that, to us, represents a real breakthrough, since stereo THD is usually much higher than mono THD on most tuners and receivers we have measured in the past...

"...Here's a tuner that maintains at least 30 dB of separation from 50 Hz to 14 KHz and hits a mid-band separation figure of 46 dB! Both SCA and 19 and 38 kHz suppression were in excess of 60 dB, which means that SCA interference was absolutely inaudible. Capture ratio measured 1.35 dB as against 1.5 dB claimed... In short, every space was easily met or exceeded and if you compare published specs with the best of the 'ready mades' you're not likely to come up with a finer set of readings anywhere...

"... After spending several hours playing with the keyboard, the automatic sweep, and the dozen or so cards which I prepared with the aid of a small pair of scissors, I got down to the serious business of logging stations... Would you believe 63, without having to rotate my antenna?...

"...We enjoyed the crystal-clear, distortion-free reception we obtained in using the Heath AJ-1510...[it] has got to be the way all tuners of the future will be made. It's very nice to know that Heath has just brought that future into the present..."

Mr. Hirsch comments further: "... the Heath AJ-1510 digital Stereo FM tuner kit is new, with a fresh and imaginative design approach ... and we know of nothing else on the market with comparable features...

"...It is quite impossible, in the available space, to give an adequate description of this remarkable tuner. Anyone familiar with the inside of a typical FM tuner will not recognize this as belonging to the same family. It more closely resembles a small digital computer. There are no moving parts (the tuning is entirely electronic), and almost nothing resembling r.f. circuit components... The i.f. selectivity is provided by sealed multipole inductance-capacitance filters. Not only do they give outstanding alternate-channel selectivity (the kind most of us are concerned with), but it is also easy to separate adjacent-channel signals only 200 kHz apart...

"...our measured performance data on the AJ-1510 met or exceeded Heath's published specifications...The IHF sensitivity was 1.6 microvolts...The 89-dB image-rejection figure was very good, and we confirmed Heath's alternate-channel selectivity rating of 95 dB...The FM frequency response was well within ± 1 dB from 30 to 15,000 Hz. Stereo channel separation was exceptionally good -40 dB at middle frequencies...suppression of 19 and 38 kHz components of stereo FM signals was the best we have yet encountered...

"...tuning the AJ-1510, in any of its modes, is a unique experience. No matter how you go about it, the output is always a clean signal or nothing — not a hint of a thump, hiss, or squawk at any time...for anyone who wants a tuner that is most certainly representative of the present state of the art, and which is not likely to be surpassed in any important respect for the foreseeable future, his search can stop at the AJ-1510."



New versatility in 4-channel sound the Heathkit AA-2004 Integrated Amplifier

improves what you already own. Thanks to built-in matrix circuitry that decodes matrixed 4-channel recordings and 4-channel broadcasts, the AA-2004 lets you use your present turntable, tape equipment or tuner. Also, the decoder enhances your present record & tape library, and conventional 2-channel FM broadcasts by feeding the "hidden presence" to rear speaker for an extremely satisfying 4-channel effect. Puts you ahead of tomorrow's developments. As discrete 4-channel media becomes more prevalent, the AA-2004 is ready. Four conservatively rated and fully protected amplifiers produce 260 watts into 4 ohms (4x65), 200 watts into 8 ohms (4x50), 120 watts into 16 ohms (4x30). Controls are provided for every source, mode and installation. Amplifier sections are controlled in pairs with one complete stereo system for left & right front speakers and another for left & right rear - so your AA-2004 can be used to power two separate stereo systems if desired. With outputs for both main and remote speaker systems, it can be used to power two 4-channel systems (up to 8 speakers). Duplicate controls are provided for front and rear bass, treble, balance and volume; phono, tuner, aux, tape & tape monitor inputs. Mode switches select mono, stereo, matrixed 4-channel or discrete 4-channel. And 20 input level adjustments — enough for five separate 4-channel sources - can be reached from the bottom of the chassis. Separate rear-panel jacks give direct access to preamp outputs & power amp inputs, permitting biamplification by simply adding a crossover network

Performance specs you'd expect from Heath. Make your own comparison of the AA-2004's impressive specifications. Power bandwidth on all channels from less than 5 Hz to more than 45 kHz for 0.25% total harmonic distortion. IM distortion less than 0.2%. Damping factor greater than 100. Hum amd noise — 65 dB for phono, —75 dB for tape and aux.

Goes together with traditional Heathkit simplicity. Plug-in circuit boards and preassembled wiring harnesses reduce point-to-point wiring — make the AA-2004 as much fun to build as it is to use. Add the preassembled, prefinished pecan cabinet — and you have the most attractive, as well as the most practical approach yet, to the fascinating new world of 4-channel sound. Get with it...today.

Discover the Heathkit audio 'classics' at your nearest Heathkit Electronic Center...or send for FREE catalog!

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From any place in the room, the versatile Achromatic W35 is a top performer... built to take power and give it all back... with ease! The unique shape permits shelf use in two ways: either straight-on; or at the acoustically desirable but frequently wasted corners. And, with an optional corner mounting bracket, suspension in room corners becomes both simple and decorative.

The robust, extraordinary performance of the W35, despite its modest size (15" x 15" x 8" deep), is a result of its being a full 3-way speaker system and of its professional quality components. The 8" woofer is a heavy duty, long-throw assembly with oversized, four layer-wound voice coil for maximum heat dissipation and fully controlled transient response. A 3¼" acoustically isolated midrange unit



covers this important spectrum with clarity and definition; while a $2\frac{1}{2}$ " ultra-curvilinear tweeter with low mass aluminum voice coil provides treble tones that faithfully image the original. A multi-element LCR network reduces electrical and acoustical distortion. Cabinet buzzes and resonances are avoided by sturdy, "unitized" construction.

One of six Wharfedale speaker systems engineered to satisfy every budget, space and performance requirement, the W35 is compellingly priced at \$82.00 list.

For catalog, write Wharfedale Division, British Industries Co., Dept. R-22, Westbury, New York 11590.

Wharfedale ACHROMATIC SPEAKER SYSTEMS

The new W35 is built for power... and takes corners with ease.



...Ideal for 4-channel too!

High Fidelity Lab Reports On 6 New Speakers



New Hybrid Is High Performer

The Equipment: Trans-Static I, a full-range speaker system in enclosure. Dimensions: 42 by 18 by 15 inches. Price: \$599 in oiled walnut; \$619 in rosewood. Manufacturer: Electrostatic Sound Systems, Inc., 1823 20th St., Sacramento, Calif. 95814.

Comment: This high-performing speaker system from a new California firm blends electrostatic and dynamic reproducer elements to form a top-quality unit of interest to stereo perfectionists. A floor-standing model, it is a three-way system containing three push/pull electrostatic cells for the highs (above 1,350 Hz), a plastic-diaphragm 5-inch cone speaker for the midrange (300 to 1,350 Hz), and a 12 inch by 8 inch oval-shaped highcompliance woofer for the bass. The woofer uses a flat. aluminum-stressed, plastic diaphragm driven by a very heavy magnet and loaded with a transmission-line enclosure that permits, during manufacture, individual tuning of the cabinet-speaker system for optimum bass response. The cones and electrostatics are mounted on a front baffle board hidden behind a wrap-around grille. When sold in pairs, each TS-I is a mirror image of the other so that the two systems may be positioned for optimum stereo spread in a given room with the treble dispersion normally toward the center. In addition to "front-firing," the electrostatics radiate their rear sound energy against an angled board behind the grille, so that a modified doublet effect is created that minimizes any beaming tendency and helps to achieve a broadangle, natural dispersion of sound. The midrange speaker has its own transmission line terminating in a round opening at the rear of the enclosure. The enclosure itself has a raised underside on which the woofer's transmission line terminates, so that the bass actually is

loaded to the room via slots around the bottom in addition to the direct radiation off the diaphragm above.

The system uses a complex crossover network composed of precision circuit parts and fitted with two level controls (for midrange and highs). It may be modified, on order, to suit the system for biamplifier use. The TS-l is protected by two fuses; rear input terminals are color-coded binding posts. Also at the rear is the power cord that must be plugged into an AC outlet to energize the electrostatics. Workmanship and construction are first-rate throughout.

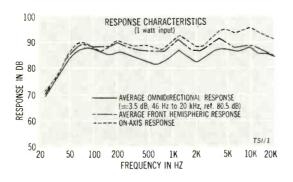
Laboratory and listening tests show the Trans-Static I to be a superb performer that takes a ranking place among the top speaker systems available today. Response, clocked at CBS Labs, ran within plus or minus 3.5 dB from 46 Hz to 20,000 Hz, outstandingly wide and linear for a speaker. In audible test-tone tests, the low end rolled off smoothly with fundamental bass still evident down to 20 Hz. Doubling in this area was distinctly lower than average. Throughout the entire range of the speaker, response seemed exemplary—well balanced, clear, and with excellent dispersion of treble. Tones as high as 12,000 Hz were clearly audible well off axis; at 14,000 Hz the response was fainter and more directive but still audible off axis; at 17,000 Hz the signal was audible only on axis.

Definitely in the low-efficiency class, the Trans-Static I needed at least 20 watts to produce the standard test output level of 94 dB at 1 meter on axis. Indeed, the manufacturer recommends using it with the highest-powered amplifiers available (and certainly nothing less than 30 watts per channel) if you are to realize optimum performance. The system could not be driven into significant distortion with steady-state power input of 100

watts, and it could handle peaks of up to 654.5 watts—which attests to its ruggedness of construction and, with an output at that wattage level of 110.7 dB, its excellent dynamic range too. Lab measurements show the Trans-Static I to be essentially a 4-ohm system, and so the usual cautions about running two of them (or one of them with any other system) from the same output taps of a solid-state amplifier apply.

All the theory and verbal explanation in the world cannot adequately describe the sound of a great loudspeaker driven by an ample amplifier fed with highgrade program material. The experience is exhilarating, and it rather defines "high fidelity" at any given state of the art. The Trans-Static I is such a loudspeaker. Its upper range has all the advantages of clarity and definition of electrostatics, with none of the "overetched" quality of some; the midrange is smooth and very amply dispersed; the low end is solid and clean. The total effect is one of effortless and accurate reproduction of the kind that almost lets you "see" the glint of the brass or the drawing of bows across strings. In common with a few other very fine reproducers we have had the pleasure of testing, we would say that the Trans-Static I could serve as a professional monitor as well as the mouthpiece of the finest of home music systems.

CIRCLE 139 ON READER-SERVICE CARD





With grille cloth removed, Trans-Static I looks like this from the front. Note unusual flat, oval woofer.

Trans-Static I Speaker Harmonic Distortion*

Output		Er.	equency	
Level		80 Hz		00 Hz
(dB)	% 2nd	% 3rd	% 2nd	% 3rd
70	.12	.21	.10	.20
75	.15	.30	.09	.20
80	.28	.38	.12	.25
85	.50	.45	.11	.27
90	1.0	.60	.20	.35
95	1.9	1.1	.33	.40
100	5.0	1.5	.65	.40
102.5			1.0	.25

*Distortion data are taken on all tested speakers until distortion exceeds the 10 per cent level or the speaker produces the spurious output known as buzzing, whichever occurs first.

Wharfedale's Updated W60



The Equipment: Wharfedale W60E, a three-way bookshelf-size loudspeaker system. Dimensions: 24 by 15 by 12 inches. Price: \$153. Manufacturer: Rank Wharfedale, Ltd., England; U.S. Distributor: British Industries Co., Westbury, N.Y. 11590.

Comment: The W60 is the top of the Wharfedale bookshelf-speaker line—though Wharfedale also makes two higher-priced (and basically floor-standing) models. The W60 designation has been with us for about a decade; the latest "E" version contains three drivers (a 12½-inch woofer, a 5-inch midrange driver, and a 1-inch Mylar domed tweeter), plus crossover network. Two rotary controls on the back panel allow attenuation of midband and highs. Also on the back panel are binding post connections marked for polarity.

The W60E is rated at 8 ohms impedance. In CBS Labs' tests, the impedance measured 6.9 ohms following the characteristic bass rise, and averaged 6 ohms out to 20 kHz, so the usual cautions apply here about connecting two such systems across the same outputs of a solid-state amplifier or receiver unless the owner's

manual for the set states that it is safe to drive combined loads of less than 4 ohms in that manner.

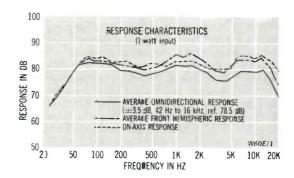
The frequency response graphs show the W60E to be quite linear (±3.5 dB is a relatively small spread for a loudspeaker) with very wide-angle dispersion (as indicated by the similarity between the three curves). In the bass end, little doubling can be heard in the octave below the 60-Hz roll-off point; below about 30 Hz the output is mostly doubling. At the high end the dispersion is indeed excellent, with 15 Hz clearly audible at 90 degrees off axis of the system. The midrange control attenuates (by an amount up to about 6 dB) the response between about 2 kHz and 4 kHz. The control has little effect below 400 Hz or above 5 kHz, and none below 250 Hz or above 15 kHz. The treble control has slight effect from just below 1 kHz to 4 kHz; above that frequency it has increasing effect and, at its "minimum" position, reduces treble response by about 12 dB per octave. Both controls are considered "flat" in their maximum positions. We chose to keep the midrange control in that position, but backed off slightly on the treble since the room in which we did most of the listening is a bit on the bright side.

The W60E required 17.7 watts for a 94-dB output at 1 meter in the lab's broadband noise test—indicating that 15 to 20 watts per channel would be a desirable minimum for driving the amplifier in most rooms. The speaker handled up to 100 watts before buzzing began, and took 300-Hz pulses to 261.5 watts (523 watts peak)—the limits of the test setup—in its stride, with an output of 110 dB for that input. These figures indicate not only that it is ruggedly built, but that it has a fine dynamic range.

The over-all sound of the W60E may at first seem somewhat understated and withdrawn but its cleanliness becomes evident on careful listening. The deep bass is clean rather than prominent, and the midrange is without the peak that gives some competing models a sense of forwardness and "presence." It handles complex orchestral material with fine detail and trans-

parency, and reproduces smaller instrumental combinations with exceptional definition and without a hint of the bigger-than-life quality that many speakers introduce.

CIRCLE 141 ON READER-SERVICE CARD



Wharfedale W60E Harmonic Distortion*

Output		Frequ	uency	
Level	80	Hz	300	Hz
(dB)	% 2nd	% 3rd	% 2nd	% 3rd
7C	0.087	0.20	0.09	0.085
75	0.10	0.26	0.10	0.095
80	0.18	0.30	0.12	0.19
85	0.30	D.35	0.23	0.14
90	0.56	D.45	0.39	0.24
95	0.95	D.35	0.68	0.45
100	2.5	0.90	1.3	0.62
102.8			2.0	0.78

^o Distortion data are taken on all tested speakers until distortion exceeds the 10 per cent level or the speaker produces the spurious output known as buzzing, whichever occurs first.

The Equipment: Fisher WS-80, a floor-standing indirect-radiator loudspeaker system. Dimensions: 11 by 18 by 18¾ (high) inches. Price: \$99.95. Manufacturer: Fisher Radio Corp., 11-40 49th Rd., Long Island City, N.Y. 11101.

Comment: Fisher has brought out the WS ("Wide Surround") series of speaker systems for those who want the feature of omnidirectional sound in "budget" stereo systems—the WS-80, for instance, is offered as standard equipment in the Fisher 3580 compact and also is available on its own for use in any stereo system.

A three-way reproducer, the WS-80 achieves its omnidirectional dispersion by having all drivers mounted vertically so that they radiate in an up-and-over pattern. An 8-inch woofer and a 5¾-inch midrange speaker both work into deflector cones that project their sound out through the slot that runs around the enclosure near the top. A 3-inch cone tweeter is mounted above the midrange driver and projects upward through the top grillecloth panel. Crossover frequencies are 400 Hz and 1,500 Hz. The sound spread achieved by this system is,

Fisher's Mini-Omni



as Fisher claims, truly omnidirectional as that term generally is understood in loudspeakers. Only close to 15 kHz can you discern anything like traditional "beaming"; that frequency can be heard somewhat more clearly by standing directly over the unit (since the beaming is aimed upward of course), but even so, the change in audibility is minimal as you move off axis.

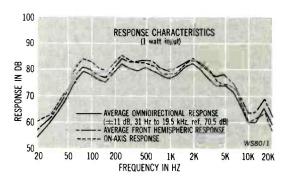
Over-all response, while showing an obvious roll-off at the high end (see graph), is balanced and smooth enough to provide adequate and clean reproduction of the musical spectrum. By way of a removable link on the screwdriver lead connections on the bottom surface of the unit, Fisher has provided a "brilliance-reduction" option. In the lab, removing this link reduced by a few dB the response in the range from about 3,000 to 6,000 Hz; the audible difference was very slight, and we opted to leave the link in place for maximum upper-end response. Be that as it may, the very wide, multiplane dispersion of the WS-80 does make for an easy, natural sort of presentation that avoids the boxed-in sonic side effect of coloration often encountered in a low-priced direct-radiating system. At the bass end, response remains clean and firm down to about 80 Hz. There is noticeable doubling below this frequency, but the fundamental can be discerned down to about 30 Hz.

Fisher rates the WS-80 for 8 ohms impedance, and that's what lab tests showed it to be. At no frequency across the audio band did the impedance fall below 8 ohms, which means of course that the speaker can be safely connected in pairs simultaneously across the same output taps of a solid-state receiver or amplifier. Of low efficiency, the WS-80 required 20 watts of input power to produce the standard test output level of 94 dB at 1 meter on axis. While 20 watts of continuous power per channel may sound like a lot to expect of a compact system or modestly priced receiver, we would judge that the type of installation in which WS-80s would typically be used would not require terribly high output levels. Specifically the WS-80 seems best suited for smaller rooms in which a normal listening level would not call for all of a 20-watt-per-channel amplifier. In such an installation, the pair (on stereo or on mono) presents a surprisingly large and open sonic image. At that, the WS-80 does stand up well to high-power inputs; it could handle

peaks of up to 450 watts without distorting significantly. Its output level at that point was 111.6 dB, attesting to a fair dynamic range and robust construction.

Within its response range, then, the WS-80 merits consideration primarily for use in a moderately priced stereo system, and especially where a small or awkwardly shaped room would tend to produce a sense of constricted sound or an unbalanced stereo image with conventional direct radiators.

CIRCLE 143 ON READER-SERVICE CARD



Fisher WS-80 Speaker Harmonic Distortion*

Output			Frequency		
Level	80	Hz	30	0 Hz	
(dB)	% 2nd	% 3rd	% 2nd	% 3rd	
70	0.8	0.30	0.18	0.12	
75	1.5	0.33	0.27	0.14	
80	3.3	0.80	0.55	0.23	
85	7.0	1.0	1.1	0.27	
90	10.0	0.35	2.4	0.10	
95			4.3	0.50	
100			6.2	0.85	
105			8.9	1.1	

^{*}Distortion data are taken on all tested speakers until distortion exceeds the 10 per cent level or the speaker produces the spurious output known as buzzing, whichever occurs first.



Marantz Builds a Better

Soundtrap

The Equipment: Marantz Imperial 7, a bookshelf loud-speaker system. Dimensions: 22½ by 14¼ by 11¾ inches. Price: \$179. Manufacturer: Marantz Co., Inc., 8150 Vineland Ave., Sun Valley, Calif. 91352.

Comment: This is the second Marantz speaker we have tested. Like the Imperial III, it is a two-cubic-foot system for under \$200. But the Imperial 7 represents a genuine improvement, to our way of thinking. It is a three-way ducted-port system with a formed plastic-foam grille. Connections are made via color-coded spring clips to the back panel. Also on this panel are two three-position switches, one for midrange, the other for highs. Both are marked decrease, normal, and increase. For all of the lab testing and much of our listening both switches

were kept at "normal"; in a fairly bright room we preferred the "decrease" position in the treble.

The Imperial 7 is an unusually linear system whose efficiency is well above average for a bookshelf model. Only 1.8 watts were required to drive it to 94 dB at 1 meter in the CBS Labs broadband noise test. In the face of such a reading, considerations of "minimum power" requirements for home use become almost meaningless. Any modern amplifier of sufficiently high quality in other respects to be appropriate for use with the Imperial 7 will deliver more than enough power for the purpose. In pulse testing the speaker handled up to about 70 watts (139 watts peak) with aplomb. Any really good amplifier delivering between, say, 10 and 30 watts of continuous power per channel should be well mated to the Imperial

Driven by such a unit the speakers produce widerange sound at low distortion. The average omnidirectional response curve is unusually flat, being within ± 2 dB over much of the range. Nominal impedance (the level to which the impedance curve descends following its characteristic bass rise) measures 4.5 ohms, and the curve averages about 6 ohms across the audio band. If you plan to parallel speakers across the same speaker taps of a solid-state amplifier or receiver, check the instruction manual for some word on running the unit into combined loads of less than 4 ohms.

In checking out the bass, we found some evidence of doubling at 70 Hz, but it increases only gradually as the frequency is lowered to about 35 Hz, the practical limit of good fundamental tone. The upper bass and midrange, both on these pure-tone tests and in listening to music, is unusually smooth. At the high end, some evidence of beaming begins to show up at about 10 kHz, but remains minimal to 14 kHz. Beyond that point, it increases progressively as the response drops toward inaudibility.

The over-all sound of the Imperial 7 is free, alive, and transparent. Even in listening monophonically (as we had to for this report since only one sample of the new model was available to us for testing) we were struck by the sense of space and detail it provides. The sound is on the bright side, though it is never harsh or brittle.

The three-position switches on the back panel make relatively subtle adjustments to the sonic balance of the speaker. That for the treble has most influence in the range between 10 and 17 kHz, adding or subtracting about 2 dB of response by comparison to its "normal"

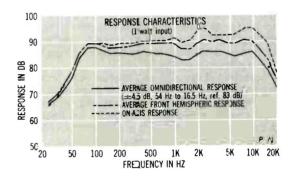
The Equipment: Empire Grenadier 7500M, a columnar-style floor-standing loudspeaker system. Dimensions: 20 inches (diameter) by 26¾ inches (high). Price: \$184.95 with marble top; \$169.95 in all-walnut finish. Manufacturer: Empire Scientific Corp., 1055 Stewart Ave., Garden City, N.Y. 11530.

Comment: The basic Grenadier style should by now be thoroughly familiar to our readers: It consists of a vertical barrel or column that suggests the appearance of a high tambour table with a bronze panel in the front and a slot or series of ports running around the bottom. The midrange driver and tweeter are set into the bronze panel; the woofer fires downward so that its sound emanates from the slot or ports and is reinforced by their

position. The midrange switch has most effect around 4 kHz, where it will either add 1.5 or subtract 4.5 dB; it produces less change in the remainder of its effective range, from about 2.5 to 10 kHz.

Marantz tells us that one of its design objectives was to build a speaker that would produce wide-range sound at high acoustic levels even with amplifiers of relatively low per-channel power—the sort that are likely to be common in quadraphonic equipment. It certainly has met that objective, and at the same time has given us a welcome addition to the catalogue of speakers available for more conventional purposes.

CIRCLE 140 ON READER-SERVICE CARD



Marantz Imperial 7 Harmonic Distortion*

Output	Frequency				
Level	80 Hz		300 Hz		
(dB)	% 2nd	% 3rd	% 2nd	% 3rd	
70	0.13	0.70	0.13	0.53	
75	0.12	1.0	0.13	0.64	
80	0.25	1.2	0.17	0.70	
85	0.35	1.4	0.24	0.75	
90	0.50	1.9	0.62	0.89	
95	0.95	2.5	1.4	1.2	
100	2.3	3.0	3.0	1.7	
105			4.7	2.5	
109			5.6	3.2	

*Distortion data are taken on all tested speakers until distortion exceeds the 10 per cent level or the speaker produces the spurious output known as buzzing, whichever occurs first.



Empire's Latest Grenadier

proximity to the floor. This latest Grenadier is simpler and more contemporary in appearance than the first models. The body is made of eight flat vertical panels (rather than being fluted or cylindrical) and the recessed base has an oval opening in each face with no metal grille or other decoration. The walnut finish harmonizes nicely with the warm tawniness of the marble top.

Connections are made to the bottom of the case, using binding posts marked for polarity. Also on the connection panel is a three-position treble switch marked increase, normal, and decrease. These positions have little influence on response below about 3 kHz. Around 8 or 9 kHz they have most effect, raising or lowering response by some 5 dB with respect to the "normal" setting. Lab tests were run with this switch at "normal"; in listening tests we tended to leave it on "increase," though the audible difference between these two positions is not pronounced.

Dispersion at the high end is good. A 15-kHz test signal can be heard well off axis, and dispersion becomes progressively broader as the frequency is decreased; below about 6 kHz directional effects are negligible. At the bass end some doubling is audible below 60 Hz, but the fundamental remains well defined down to 30 or 35 Hz.

The over-all sound is rich, wide-range, and well balanced. Its precise qualities—particularly in the bass—do depend on its position in the room and the surface on which the 7500M is placed (carpeting as opposed to bare floor, for example). And because of its styling, it allows an unusual flexibility of placement. (The ease with which it can be integrated into a room's décor should make it particularly attractive in quadraphonic systems.) With the 7500M on a bare wood floor and away from heavily upholstered furniture the bass was particularly full, and we found a slight treble boost at the amplifier to be desirable for balance.

Nominal impedance was measured in the lab at 6.5 ohms (at 100 Hz), and the impedance curve averages approximately 8 ohms across the audio band, never dropping below 4 ohms at any frequency. Normal caution should be observed in paralleling two speakers across the output taps of transistorized amplifiers.

The 7500M is both fairly efficient and wide in dynamic range. Only 3.2 watts was needed to drive it to 94 dB (at 1 meter) in the CBS Labs broadband noise test, indicating that amplifiers rated at only 5 watts continuous power per channel should be enough to drive the 7500Ms in average rooms. The speaker will take as much as 70 watts steady-state power (for a 110-dB output) without buzzing, and handles pulses of over 275

TEST REPORT REPRINTS

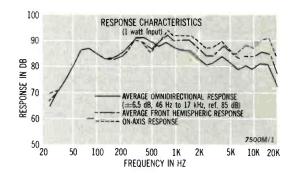
In response to numerous requests, most of our previously published test reports are now available in reprint form. To order, please write, asking for the report on a specific product (or products) and enclose 25 cents per report to cover handling and mailing. Address your request to HIGH FIDELITY Magazine, Test Report Reprints, Great Barrington, Massachusetts 01230. Please be sure to include your name, return address, and zip code.

watts continuous or 550 watts peak power for an output level of 117 dB.

One note if you plan to buy a pair of 7500Ms. In the fancier version the marble top is of course subject to natural variations in color, so it might be a good idea to check the tops for color match before you take them home. Empire simplifies the process by packing the marble discs at the top of the cartons.

As we've said, the design of the 7500M—like that of other Grenadier models—lends itself to a wide variety of placements in your listening room. Aside from this fact, the attractiveness of these speakers lies particularly in the spaciousness and solidity of the sound image they produce. In orchestral material they are perhaps at their best; but since their sound is basically transparent, uncolored, and well balanced, they are fine reproducers for any program material. The 7500M strikes us moreover as the most attractive Grenadier to date in terms of sound quality versus cost.

CIRCLE 142 ON READER-SERVICE CARD



Empire 7500M Speaker Harmonic Distortion*

Output		Freq	uency	
Level	80 Hz		300 Hz	
(dB)	% 2nd	% 3rd	% 2nd	% 3rd
70	0.11	0.15	0.10	0.10
75	0.13	0.13	0.07	0.08
80	0.18	0.13	0.06	0.08
85	0.30	0.20	0.12	0.10
90	0.63	0.15	0.11	0.14
95	1.0	0.28	0.15	0.19
100	1.4	0.35	0.19	0.18
105			0.20	0.15

*Distortion data are taken on all tested speakers until distortion exceeds the 10 per cent level or the speaker produces the spurious output known as buzzlng, whichever occurs first.

REPORTS IN PROGRESS

ADC XLM pickup cartridge BIC/Lux 71/3R receiver JVC 1660-2 cassette deck

Sony's new chromium dioxide cassette tape is hungrier for high frequencies.



Sony chromium dioxide CRO-60 tape will record up to 50% more volume before you encounter distortion on playback. CRO-60 is hungrier than other tapes for high frequencies.

This means more recorded sound than standard cassette tapes before distortion sets in.

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Far less distortion, a smoother frequency response, and a greater dynamic range than standard tape. Every aspect of the sound, especially the higher ranges, comes through with sparkling fidelity.

Sony CRO-60 gets it all together from bottom bass lows to high howlin' highs. And everything in between.

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The new Sony CRO-60 cassette tape becomes a member of a highly advanced line of tapes for every recording requirement.

In addition to standard open reel, cassette, and 8-track cartridge tapes, Sony also offers the finest in high performance tape: SLH-180 Low-Noise High Output tape on 7" and 101/2" reels, plus Ultra-High Fidelity Cassettes.

These high-performance tape configurations take advantage of the added performance of today's highly sophisticated recorders by providing wider dynamic range, greatly improved signal-to-noise ratio, extended frequency response, and reduced tape hiss.

How's your appetite?

Now if your appetite has been whetted and you're hungry for more information or a demonstration of CRO-60 or any other Sony

tapes, get on down to your nearest Sony/Superscope dealer (he's listed in the yellow pages) and get an earful.



You never heard it so good.®

The Equipment: Beovox 5700, a full-range speaker system in enclosure. Dimensions: 26 by 14 by 12 inches. Price: \$570 per pair. Manufacturer: Bang & Olufsen of Denmark; U.S. distributor: Bang & Olufsen of America, Inc., 525 E. Montrose, Wood Dale, III. 60191.

Comment: The Danish high fidelity manufacturer best known in the U.S. as "B&O" has introduced a new series of high-quality speaker systems of which the Model 5700 is the top of the line. Although approximately the same over-all dimensions as the familiar twocubic-foot "bookshelf" systems, the new B&O is not an air-suspension system; rather it is described as a "further development of the bass-reflex cabinet"-the further development being the use of a passive or auxiliary bass radiator (ABR) in place of the conventional portopening. According to B&O this design feature enables the use of a smaller enclosure than would otherwise be required in a reflex-type system. The passive element, which also is credited with smoothing the response, is a 10-inch-diameter flat diaphragm mounted on the front baffle board (behind the grille). The woofer itself is a 10inch cone speaker also mounted on the front baffle. Situated between these two large elements are a 21/4-inch dome midrange speaker and a 4-inch dome tweeter. Approximate crossover frequencies are 700 Hz (from woofer to midrange) and 8,000 Hz (from midrange to tweeter). No level controls are provided. In place of hookup terminals, B&O provides a long twin wire that emerges from the rear of the cabinet and terminates in a DIN (European standard) speaker plug. For most U.S. users this means simply snipping off the DIN plug and connecting the wires to one's amplifier or receiver. The cabinet itself is unusually handsome, finished in richly grained rosewood on five sides and fronted with a metal-framed black grille.

We have been accustomed to Danish products generally proving to be of high quality as well as beautiful design. The new Beovox 5700 is no exception: As a loudspeaker it demonstrates that handsome is as handsome does. Response in the lab was measured as within plus or minus 4.25 dB from 50 Hz to 16,500 Hz, with reference to an average output level of just under 80 dB—a characteristic that puts the unit in the ball park for speaker systems of its size and price class. The response curve generally is smooth in its over-all shape (see graphs). On audible test tones, we detected very slight doubling at about 46 Hz; this effect diminished, along with the fundamental bass output, gradually down the scale, with some response still evident at 25 Hz. Upward from the bass, response remains smooth and uniform, with no audible peaks or dips, and with very good dispersion to beyond 10,000 Hz. Although slight directional effects may be discerned starting at about 5,000 Hz, tones as high as 12,000 Hz remain clearly audible well off axis of the system. A 16,000-Hz test tone is audible at reduced level mostly on axis, and from here the response dips toward inaudibility.

B&O rates the unit's impedance at 4 to 8 ohms, and the lab confirmed this right on the nose with a 6.4-ohm reading following the characteristic bass rise. The impedance curve averages about 6 to 7 ohms across the speaker's range. Efficiency is relatively high for a topquality bookshelf model; the Model 5700 needed 7 watts to produce the standard test output level of 94 dB at 1 meter on axis. It could handle 75 watts of steady-state power before distorting significantly, and it could take pulse power peaks of up to 316.4 watts, at which level the output produced was clocked at 112 dB. This data,

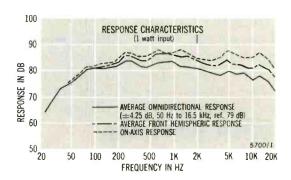
High Efficiency Danish Speaker



in sum, bespeaks a very good dynamic range and a robustness of construction that would be more than ample for use in the home.

Although midrange and tweeter level controls are not provided, we did not feel the need for any. The Beovox 5700 struck us as an inherently well-balanced reproducer, whose tonal character-neutral, wide-range, and virtually uncolored as it is-we would not want to vary. This is particularly true when the speaker is driven by a good, clean amplifier itself fed with high-quality program material. The sound of the stereo pair we tested was utterly clean and remarkably smooth, with a well-aired top end, a nicely blossomed-out midrange, and a substantial bottom. The stereo panorama furnished by a pair, spaced at a normal (six to eight feet) distance apart, was most convincing. These are speakers, in sum, that may appeal to a wide variety of buyers, but especially-in our view-to those who know and value the natural ungimmicked sound of music.

CIRCLE 144 ON READER-SERVICE CARD



Beovox 5700 Speaker Harmonic Distortion*

Output	Frequency			
Level	80	Hz	300	Hz
(dB)	% 2nd	% 3rd	% 2nd	% 3rd
70	0.15	0.25	0.04	0.06
75	0.23	0.6	0.045	0.085
80	0.32	1.1	0.047	0.13
85	0.67	1.5	0.067	0.3
90	1.4	2.2	0.11	0.56
95	8.0	2.9	0.14	1.1
100			0.33	2.0
105			1.3	3.5

*Distortion data are taken on all tested speakers until distortion exceeds the 10 per cent level or the speaker produces the spurlous output known as buzzing, whichever occurs first.

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Because it'll never get stuck on you, you'll always be stuck on it.





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Separation of sound is a true test of a speaker system. And to put Marantz—or any speaker—to the test you should

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offers you bookshelf to big on-the-floor sizes. Priced from just \$59. Each model for the money, truly the very A-1 HOŢ SHOT MOSTEST BEST.

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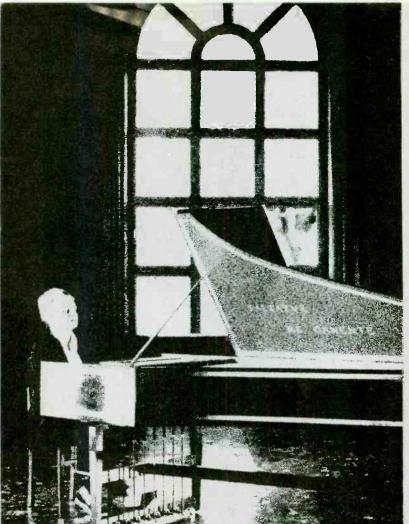
However, keep this in mind. Marantz speaker systems are built by the makers of the most expensive stereo equipment in the world. And exactly the same quality that goes into Marantz receivers and Marantz amplifiers goes into Marantz Imperial speaker systems.

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By Victor Wolfram

Harpsichord: Back from the Brink

Once nearly over the edge into oblivion, this baroque survivor

THE CUTCOME of at least one twentieth-century music revolution is no longer in doubt-the harpsichord is back and has plucked out a solid place for itself on records and in the recital hall.

Involuntarily relegated to the status of a museum piece during the Romantic heyday of the nineteenth century, the harpsichord today has found new life on a variety of fronts. Music of the baroque era is and will always be the core of the harpsichord repertory, but it is far from being limited to that. Twentieth-century composers as diverse as Poulenc, De Falla, Hans Werner Henze, and Elliott Carter have written music for it. It has even found a home in rock and jazz (not an altogether unmixed blessing-but more about that later).

Furthermore, it has adapted itself to another twentieth-century phenomenon - do-it-yourselfism. Many owners of harpsichords, like high fidelity enthusiasts, have built their instruments from a kit. The job is more difficult than assembling even the most complicated stereophonic tuner or amplifier. It requires dexterity, patience, and much time

The author, a professor of music at Oklahama State University, is a concert pianist and harpsichordist.

has reached new heights of popularity and music-making.

HE CUTCOME of at least one twentieth-century (about 150 hours of work for a small harpsichord, 500 hours and above-average skill for a large one). but the persevering hobbyist can build himself an adequate harpsichord for about one third of its ready-made price. Most kit harpsichords are small instruments suitable for amateur pleasure in the home and are equipped with a single keyboard and only one or two sets of strings. A harpsichord suitable for concert use is more complicated, with two keyboards and three or four choirs of strings each contributing a different register of tone color. Such resplendent instruments demand the skill of a professional builder and may cost as much as a topquality grand piano.

The factor that distinguishes a harpsichord from other stringed keyboard instruments is the plectrum action that excites the strings into vibrations. Piano strings are struck by hammers. The clavichord key raises a thin metal blade creating pressure that causes the string to vibrate. The blade also acts as a bridge to define one end of the string's vibrating length. A harpsichord, on the other hand, is essentially any keyboard instrument with strings that are plucked, whatever its size, shape, or name. In various countries the harpsichord has been given many names: the clavecin, the cembalo, the clavicembalo, the Klavizimbel, the Flügel. If the instrument is small and built in something other than the familiar wing shape (later bequeathed to the grand piano), it may be called a spinet. Some rectangular spinets are given the name of virginal—but to confuse matters, in sixteenth-century England *all* harpsichords were called virginals. Although this variety of harpsichord types and titles testifies to the instrument's popularity in the baroque period, at the end of the eighteenth century the harpsichord had seemingly vanished from the musical scene.

Wanda Landowska was the midwife for the modern rebirth of the harpsichord. From 1903 until her death in 1959 her artistry was devoted chiefly to baroque keyboard music, and her enthusiasm kindled a new blaze of life in the old instrument. Beginning with her earliest acoustical recordings of 1923 Landowska's performances became accessible to a mass audience. Many of her 78-rpm discs from the 1930s and early 1940s are still available in LP repressings. Her monumental recording of Bach's Well-Tempered Clavier was begun in 1949 and completed in 1954; her last performances were taped only months before she died. The memory of Landowska's magisterial interpretative imagination and leadership cannot be diminished if we critically evaluate her work.

The harpsichords on which Landowska played (and almost all modern harpsichords until a little more than twenty years ago) were significantly unlike their antique prototypes. Baroque harpsichords varied considerably according to their date and place of origin, but all were built with thin soundboards, ingeniously braced thin resonant cases, low string tensions, and solid bottoms enclosing an airfilled sound chamber. The best of these instruments compare in quality and value with their great contemporaries, the violins made by the Stradivarius family. These harpsichords speak with a strong, rich, and virile baritone voice, not the polite tinkle so often imagined. In contrast, the typical modern harpsichord of the first half of the twentieth century (as well as many built today) has a soundboard twice as thick, a heavily framed rigid case, and an open bottom that calls to mind the open baffles of cheap low-fidelity loudspeakers. The tone that results from this type of construction was thought to be interesting—nay, beautiful—so long as traditional criteria remained in the background. When compared with the tone of an antique harpsichord or a good modern replica, it sounds harsh, uninteresting, and lacking in volume.

Perhaps in an effort to compensate for the deficient tone of her instrument and to reinforce its effect in large concert halls, Landowska resorted to an excessive use of the 16-foot stop, which sounds an octave lower than the pitch at which its notes are written. This stop, not normally found on



Wanda Landowska-magisterial leadership

baroque instruments except for a very few late German harpsichords, can add a color that is heavy and opaque.

Also typical of Landowska's playing was her reliance on a kaleidoscopic effect produced by frequent changes of the tone colors controlled by the harpsichord's stops. The modern harpsichord is sometimes equipped with pedals that operate its registers and couple its keyboards. The baroque harpsichordist had hand stops for these purposes. To add or subtract a register, he had to have a hand free long enough to flick a knob. To use the coupler he had to have both hands free. With modern pedals, registers can be changed no matter how the hands may be occupied. The results often deviate wildly from anything that a baroque composer might possibly have imagined.

Pedals on baroque harpsichords, often cited in defense of this mechanism, were rare. They date mostly from the final decades of the eighteenth century when the harpsichord's fortunes were already declining. There is no evidence to show that pedals were known to any composer before 1750, with the sole possible exception of Henry Purcell. Contrasts of color and timbre in baroque harpsichord music are architectural, not impressionist. Their function is to underline the formal structure of a baroque composition. This principle was frequently violated by Landowska, who admittedly knew better but took a typically Romantic attitude toward these problems in performance.

The first half-century of the harpsichord revival







Sylvia Marlowe-outstanding Purcell

Gustav Leonhardt-high regard for baroque style

Ralph Kirkpatrick-authoritative Scarlatti

was dominated by this approach. With Landowska as principal model and teacher, the entire next generation of harpsichordists followed this path. Only a notable few of them have been able, in recent years, to achieve a mature style more consonant with baroque performance practices. Consequently, much of the recorded harpsichord repertory is deficient in style and played on inadequate instruments. New recordings of greater authenticity are badly needed in many instances.

Total authenticity is doubtless impossible. For even a modicum of authentic baroque style, the harpsichordist must be generously endowed with insight and scholarship. Baroque composers usually specified little more than the bare notes of their music, and even these were not always meant to be taken literally. Most interpretative details—not only the choices of register and color, but also most of the decisions concerning phrasing and articulation that are the elements that contain the secrets of expressive performance at the harpsichord—were generally left to the performer's discretion. A harpsichordist needs to be a practical working musicologist familiar with every baroque tradition, each with its own system of ornaments, rhythmic and melodic deviations from the written score, tempo indications, and the like.

These challenges to the mind and fingers still elude some contemporary performers. A recording of six Bach-Vivaldi concertos for solo harpsichord on Turnabout 34287 is excellent in its engineering techniques—including one of the first uses of

the Dolby S/N stretcher—but the performance by János Sebestyén whirls through color changes to the point of vertigo, inserting shifts of registration between units as closely bound together as an appoggiatura and its resolution. Attempting to solve the rhythmic problems of notes inégales in his album of Rameau's Pièces de clavecin (Argo 5491/2), the English harpsichordist George Malcolm applies rhythmic inequality like a thick paste over the entire surface of the music without regard for its appropriate use. (In the album's liner notes, Malcolm candidly admits of his application of notes inégales: "I am not convinced that I have yet really digested the system.")

Harpsichord performances of this kind, and they are numerous, resemble the Stokowski transcriptions of Bach of a couple of decades ago in their distortion of the composer's intentions. (If you happen to like Bach-Stokowski, pardon me.) Stylistic authenticity does not call for the strictures of pedantic purism, but for musical artistry of the most practical kind, in that it reveals the expressive eloquence of baroque music with a force that can be compared to the restoration of a great old painting to its original colors by the removal of layers of Victorian varnish. Fortunately, there is an increasing number of harpsichordists with a high regard for baroque style. Most distinguished among them are three virtuosi: the Americans Ralph Kirkpatrick and Igor Kipnis and the Dutch musician Gustav Leonhardt.

Modern instruments based on baroque specifications are heard more frequently now. Some of the best of these come from the American workshops of Frank Hubbard and William Dowd, and from the German builders Rainer Schütze and Martin Skowroneck.

A happy development in recent harpsichord recordings is the availability of performances played on antique instruments. The opportunity to hear harpsichords built in the seventeenth and eighteenth centuries and to compare the individual timbres of instruments from northern and southern Europe is one that we are able to enjoy only through recordings. Leonhardt has recorded for Telefunken (S 9512) on a variety of antique harpsichords. In a three-record Vox box (SVBX 5448), Alan Curtis plays eight of the early *Ordres* of François Couperin on a fine 1730 instrument by the French harpsichord maker Blanchet. Robert Conant, a Kirkpatrick pupil, can be heard on a Yale University disc, playing two 1770 instruments from the Yale collection: a German harpsichord by Hass, and one by the French builder Pascal Taskin that may well possess the most beautiful harpsichord tone ever fashioned.

Harpsichord tone poses a number of hazards to the recording engineer, even apart from the old trap (usually avoided now) of setting the recording level twice as large as life. Some noise elements are native to the harpsichord, particularly those caused by the backfall of jacks when keys are released. In proper proportion this faint clatter adds to the inherent charm of the instrument, like the "chuff" of a baroque organ. Other noises are less desirable and must be minimized by the performer as well as by the recording technician. The thud of fingers on the keys or the overenergetic knock of jacks against the jack-rail can be amplified into a rattling din of transients that will assail the ear and belie the true sweetness of the tone. To cite one horrible example, a harpsichord recording by Aimée van de Wiele on Nonesuch 71037 makes a battery of percussive noises devastatingly audible.

The repertory for solo harpsichord is well represented in the Schwann catalogue, though not without some gaps. The field is too extensive to permit a complete discography, but a brief survey arranged by the nationalities of the composers will reveal both the strengths and the weaknesses.

England

Elizabethan England was the earliest home of a virtuoso harpsichord style. The best-known composers—John Bull, William Byrd, Giles Farnaby—have been recorded (on Vox SVBX 572, among others) mostly in short selections on varied programs. In the seventeenth century, England's greatest composer was Henry Purcell. A small but delightful segment of his work was for solo harpsichord, some of which will be found on Nonesuch

71027 and Cambridge 2709. It is recorded in its entirety by the late Thurston Dart on Spoken Arts 207 and 208. Other performers who have addressed themselves to Purcell include Igor Kipnis and Sylvia Marlowe. Eighteenth-century England was dominated by an adopted son, George Frideric Handel, whose harpsichord suites have been recorded by almost a dozen players, including a complete version by Paul Wolfe on five Expériences Anonymes discs (500). After Handel, England had little to offer, though Thomas Arne wrote some pleasant harpsichord sonatas, one of which is fleetly played by George Malcolm on Argo ZRG 577.

France

Jacques Champion de Chambonnières, the seventeenth-century founder of French harpsichord music, has not been granted a separate entry in Schwann. One of his short dances turns up in a Landowska recording (RCA Victor LM 1181). Of Chambonnières' famous pupils, Louis Couperin and Jean-Henri D'Anglebert fare better, but the harpsichord music of Nicolas Lebègue is missing from the catalogue. Not all of François Couperin's compositions for harpsichord have been recorded, although they are considered to be the peak of the French harpsichord style. A fairly wide selection of Couperin can be had from the fingers of Sylvia Marlowe, Alan Curtis, and others. The complete harpsichord music of Rameau-which, despite its many felicities and manifestations of genius, lacks the profound humanity and the psychological penetration of Couperin-still exists in George Malcolm's rendition on Argo 5491/2.

Italy

From seventeenth-century Italy, harpsichord music by Frescobaldi is played by Gustav Leonhardt (Telefunken S 9463 and S 9512), Paul Wolfe (Expèriences Anonymes 22), and Sylvia Marlowe (Capitol P 8336, now deleted). In general, harpsichord music by eighteenth-century Italians (with the tremendous exception of Domenico Scarlatti) tended to be frothy and superficial. A pleasant program by eight Italian composers of this period is played by Luciano Sgrizzi on Nonesuch 71117. A complete recording of the more than 550 sonatas of Domenico Scarlatti is not yet a reality, but Scarlatti sonatas have been recorded by at least eight harpsichordists, of whom the most authoritative is Ralph Kirkpatrick.

Germany

The greatest composer of the German harpsi-

chord school, or of the baroque in any country, and perhaps of all music of any period—Johann Sebastian Bach—has had his harpsichord music recorded often enough to warrant a separate discography. There is the complete music for solo harpsichord on six three-record sets (Vox SVBX 5434, 5435, 5436, 5437, 5438, 5439) in stodgy performances by Martin Galling that are deficient in understanding of the baroque style. In smaller chunks, the Bach repertory has been recorded by just about every professional harpsichordist of the twentieth century.

Other German keyboard composers of the period are less fully represented. In the seventeenth century, Johann Froberger wrote some thirty suites for harpsichord, some of which are played by Thurston Dart (Oiseau Lyre 60038), Igor Kipnis (Odyssey Y 30289), and Gustav Leonhardt (Cambridge 1509 and RCA Victrola VICS 1494). From eighteenthcentury Germany, all thirty-six of Telemann's entertaining Fantasias are played by Helma Elsner on three Dover records (5210, 5236/7), but the harpsichord music of Muffat, Graupner, and Kirnberger-the latter a pupil of Bach-is not to be found on current discs. A few solo harpsichord recordings have been made of music by J. S. Bach's best-known sons: Carl Philipp Emanuel, Johann Christian, and Wilhelm Friedemann-and with these names we approach the point in time at which the harpsichord was supplanted by the pianoforte.

Twentieth-century harpsichord compositions merit an article of their own, as do some other areas of harpsichord music. The importance of the baroque harpsichord as an accompanying instrument to chamber groups was perhaps even greater than its role as a solo instrument. The baroque concerto for harpsichord and orchestra, a genre invented by J. S. Bach, is less common, though performances of Bach's harpsichord concertos (including complete recordings) are abundant.

In the twentieth century, extensive use has been made of the harpsichord in jazz and rock. For the latter, the instrument is usually one of two versions of an electronic harpsichord. One, totally electronic, uses tone generators rather similar to those in a Hammond organ; this instrument isn't really a harpsichord, and doesn't sound like one. Another type has the strings and jacks of a conventional harpsichord, but the sound-board (the heart of the tone) is replaced by magnetic pickups and an amplifier capable of emitting a truly nauseating sound.

The harpsichord is no mere antiquarian fad. Modern audiences have recognized both the great vitality of baroque music and the unique suitability of the harpsichord to contemporary themes.

Following are twelve harpsichord recordings the author feels are of extraordinary interest. The two that are no longer in the catalogue may still be found in some record shops.

D'ANGLEBERT/COUPERIN, L.: French Harpsichord Masterpieces. Gustav Leonhardt. RCA Victrola VICS 1370. This Couperin was the uncle of the better-known François. Leonhardt uses a modern Skowroneck harpsichord tuned to mean-tone temperament.

BACH, J. C./BACH, J. S./FARNABY/FRESCOBAL-DI/TOMKINS: Music for the Harpsichord. Gustav Leonhardt. Telefunken S 9512. Leonhardt here uses four antique harpsichords from the Netherlands,

Italy, Germany, and England.

BACH, J. S.: The Well-Tempered Clavier. Wanda Landowska. RCA Victor LM 6801 (six discs). Gustav Leonhardt. Book II only. RCA Victrola VICS 6125 (three discs). Eccentricities and all, Landowska's has no substitute. But Leonhardt's modern recording shows his great poetic musicianship. His introspective and slightly somber approach is an interesting contrast to Landowska's and possesses at least an equal validity. The sound is overly loud, but clear. I await Book I.

BACH, J. S./BOHM/COUPERIN, F./ FRESCOBAL-DI: Selections. Gustav Leonhardt. Telefunken S 9463. Leonhardt plays on a variety of harpsichords, antique and modern. The record includes a Suite by Georg Böhm that is a little (and little-known) gem.

BACH, J. S./COUPERIN, F./COUPERIN, L./FRO-BERGER: Selections. Ralph Conant. Yale University Collection of Musical Instruments, Vol. 1 (15 Hill-

house Avenue, New Haven, Conn. 06511). Conant provides musicianly performances on two antique harpsichords of great historical and musical interest.

BACH, J. S./COUPERIN, F./HANDEL/PURCELL/ RAMEAU/SCARLATTI, D.: Selections. Ralph Kirkpatrick. Deutsche Grammophon 139122. This recording is representative of Kirkpatrick's mature achieve-

BULL/BYRD/FARNABY: Virginal Pieces from the Fitzwilliam Virginal Book. Blanche Winogron. Dover 7266. These selections prove that a harpsichord by any name sounds sweet.

FRESCOBALDI/SCARLATTI, D.: Selections. Sylvia Marlowe. Capitol P 8336 (deleted). This elderly recording is worth hunting for. The Frescobaldi pieces

are particularly recommended.

PURCELL: Suites and Miscellaneous Pieces. Sylvia Marlowe. Decca DL 710419 (deleted). Miss Marlowe's mastery of French rhythmic alteration is appropriately applied to this English galanterie. The harpsichord is a fine modern instrument built by William Dowd after a baroque model.

SCARLATTI, D.: Sixty Sonatas. Ralph Kirkpatrick. Odyssey 32 26 0007 (mono only, two discs) and 32 26 0012 (rechanneled stereo, two discs). Recording engineers have learned much since the time of this early recording (and so has Kirkpatrick), but it remains one of the best large-scale surveys of Scarlatti. A more up-to-date if less comprehensive recording by Kirkpatrick (Archive 2533 072) contains eighteen Scarlatti sonatas. Here, to an even greater extent, Kirkpatrick demonstrates his total command of both style and virtuosity and the modern Rainer Schütze harpsichord has the authentic old-Italian flavor.

Speaker System Design

New Twists to an Old Debate

by Norman Eisenberg

In this issue of High Fidelity we're running two articles on loudspeaker efficiency, each representing an opposing viewpoint offered by spokesmen for Acoustic Research (low efficiency) and J. B. Lansing (high efficiency). The intent of our forum on this subject is to recall and re-examine one of the most intriguing and contested aspects of speaker system design—in the new double light provided at this time by the accumulated wisdom and experience of the loudspeaker industry, and by the renewed focus on speaker systems and their performance that is suggested by the rising interest in four-channel sound. Hopefully, our twin bill also will stimulate discussion and further exploration on the part of audio enthusiasts generally, both in and out of the high fidelity industry.

One thing we do not intend with these two articles is to hand down any dogma on either side of the question. Our own position on speaker efficiency holds that this is one of many variables in speaker design. How efficient a speaker is to be is a choice made by the speaker designer as he relates this particular characteristic to a host of others in evolving the total product he is responsible for. Our own years of listening and the results of tests—in the lab and in the living room—tell us that efficiency as such is no guide to speaker performance. You can, that is to say, have high-efficiency speakers that sound poor or great; ditto for low-efficiency speakers. In an "all-other-things-being-equal" situation, the difference in efficiency between two otherwise similar speakers reduces itself to the matter of available amplifier power to drive each. A low-efficiency speaker requires relatively more amplifier power to produce a given level of sound in a given room than does a high-efficiency speaker.

That is true of course from a purely technical viewpoint. But obviously speakers—perhaps more than any other class of audio equipment—get us involved in many extratechnical considerations. Certainly a major one is appearance; speakers are not only the mouthpieces of our stereo systems, they also are their most obvious visual objects. Speakers do take up space in a room, and where stereo vis-à-vis mono meant one more unit of space, quadraphonics vis-à-vis stereo pre-empts two more units of space over that.

The question of size does loom more significantly today. And indeed it is on this aspect of design, as it relates to efficiency, that our distinguished guest authors disagree.

But the disagreement is not a simple one, and indeed the way in which these two writers disagree is, to us, as fascinating as the nominal nature of the subject itself. To elucidate: Given three design factors—cabinet size, bass response, and efficiency—in which one factor is fixed, what happens to the other two? In other words, if you limit the factor of size to "small"—that is, two or so cubic feet—what is left? With a cabinet of this size, you can aim for high efficiency and thereby necessarily compromise to some degree the bass response; or you can go after full bass response and thereby necessarily give up something in the way of efficiency. This very equation, it must be pointed out, has occupied the minds and efforts of speaker-system designers for nearly twenty years, and the various ways in which it has been solved account for the majority of the speaker systems made, bought, and used in high fidelity systems to date.

But if this formulation were the only one involved, there would be little worth arguing about at this stage of the art, and we would hardly be inclined to devote pages in HIGH FIDELITY to a rehash of the obvious.

What enlivens the present discussion as presented by Messrs. Allison and Phillips is that each writer now brings a new element of persuasion to his side of the argument. Allison, for instance, holds that the large speaker system is now, for all intents and purposes, obsolete—and with it, the idea of high efficiency. Phillips insists that high efficiency—whether in large systems or in small ones—is highly desirable not in terms of whether or not it compromises bass response but rather because it is more capable of reproducing the actual sound of a recording session, and that this feature might outweigh all others, including such traditionally esteemed factors as frequency response.

When these two viewpoints reached our desks, we reacted strongly. Few communications from the industry or from readers have triggered such long and intensive discussion here—and we're supposed to be seasoned, sophisticated, not-easily-shaken connoisseurs of the high fidelity art. After a period of not being able to agree among ourselves we realized that if these new viewpoints had stimulated such lively debate here, their publication might constitute an equally provocative feature to our readers.

And so here it is: a new twist in an old argument about speaker design, one that may confuse at first but which doubtless will lead to deeper understanding. But whether this discussion serves to explicate or to entertain, we feel it is one you will not turn away from.



by Larry Phillips

National Sales Manager, James B. Lansing Sound, Inc.

OF ALL THE CONTROVERSIES that have appeared (and disappeared) in high fidelity over the years, one of the most persistent—and, to me, most fascinating—is that between the proponents of high-efficiency loudspeaker systems and those who believe that by ignoring the question of efficiency a better system can be produced. I don't propose to raise all the arguments again; they're too well known. Dozens of articles have been written on both sides, with elegant and conclusive proofs. Pages of laboratory data, mathematical derivations, and theory have been produced to support one hypothesis or the other.

Today, most manufacturers have switched to the low-efficiency approach—for a very good reason. It permits loudspeakers to be built for considerably less money. If electroacoustic efficiency is to be ignored in the design and manufacture of loudspeakers, little or no machining is required, parts can be stamped, ceramic magnets can be used instead of alnico, voice coils can be mass produced from round wire instead of hand wound on edge. The loudspeakers themselves usually cost less than the enclosure in which they are housed, no matter who makes them and irrespective of the final selling price. And of course the enclosure itself will cost less if it is small—which the most common of lowefficiency speaker designs are. Only a couple of manufacturers continue to insist that efficiency is necessary to the proper reproduction of music.

In the final analysis theory is relatively unimportant; you and I will listen to whatever sound we prefer, and the mass of the cone or the volume of the enclosure will not intrude on our pleasure in hearing the music. That pleasure is the object of our search in choosing a loudspeaker, and it is in this respect that I believe an important—or even overriding—consideration has been lost in the welter of technical invective.

Many articles have been written to define the term "high fidelity." Ten or twenty years ago, it meant the re-creation of a live performance, at a later time, in a different place, in so realistic a manner that the listener could imagine himself present at the original performance. The concept of recording as a preservative, as an acoustical photograph if you will, no longer is valid however. Recording has ceased to be merely the medium and now is part of the message. It has become a creative art form in itself.

This is important: The sounds on many recordings today cannot even be approximated in live performance. And unless you are a conductor you will not be able to hear a symphony as well in a hall as you can, potentially, from a record. If that causes your brow to furrow and raises your blood pressure a bit, bear with me while I review how recordings are made today.

To begin with, modern studios use highly specialized tape recorders. These machines cost about \$20,000 apiece and will record up to sixteen tracks (or sometimes more) across the width of two-inch tape. The engineer uses a track chart to log which musical sounds are on what portion of the tape. A typical track chart for a middle-of-the-road pops session might show the following: Track 1, left drums; Track 2, right drums; Track 3, bass drum; Track 4, acoustic bass: Track 5, acoustic guitar; Track 6, left piano; Track 7, right piano; Track 8, percussion; Track 9, lead vocal; Track 10, chorus; Track 11, left horns; Track 12, right horns; Track 13, left strings; Track 14, right strings; Track 15, woodwinds; Track 16, open.

As I say, this track layout suggests a middle-ofthe-road recording scheme and may be taken as more or less prototypical of the techniques that dominate the recording industry today. These techniques apply in varying degrees to different types

of music, with the potential of multitrack recording applied quite differently from job to job. At one extreme is classical music, where as a general practice the entire musical forces for a given passage are present in the studio or hall and record simultaneously. The separate tracks can be used for the several portions of the orchestra, solo instrumental passages, vocal soloists, chorus, and so on. In some cases two tracks may be reserved for the same sound—one with and one without echo or similar special effects, so that the effect can be altered or moderated in subsequent mixing. Sometimes microphones are placed toward the back of the hall and used to record its "ambiance" as a separate track or tracks. At the other extreme are many modern rock sessions, where some tracks may be "laid down" as much as months later and thousands of miles away in another studio, sometimes by musicians who had nothing to do with the original sessions. But there are no set rules. Techniques are borrowed and adapted to fit the job at hand.

The arranger may have planned to use forty musicians for this particular performance. When we look in the studio, however, we might see microphones set up for only drums, bass, guitar, and piano because only these instruments are being recorded today. As you can see from the track chart, they will take up Tracks 1 through 7. Three days from now, the string section (perhaps three violins, one viola, and two cellos) is scheduled to record. The performers will listen to the original seven tracks, played back through headphones while they record their portion of the score right onto Tracks 13 and 14 of the same tape through a process known as Sel-Sync.

While the recording is being made the engineer and the producer will listen, in sync, to Tracks I through 7, as well as 13 and 14, on the monitor speakers in the control room. In this way they can hear the previous tracks together with the new material that is being added. As the days go by, each group of musicians will repeat this process until the track chart is completed.

Let's go out into the studio and look at the microphone setup. There are five microphones on the drums, mixed down to three tracks on the tape. The mikes are located very close to the instruments; that for the bass drum actually is inside it, resting on a foam pad. Another mike picks up the traps, another the cymbals, and so forth. These percussion instruments may be isolated from the othersthe bass, guitar, and piano—by acoustical barriers. By close miking, the engineer captures all the transients and harmonics generated by the drums; by acoustical isolation he ensures that only the drums will appear on Tracks 1, 2, and 3. Similarly close miking is used for the other instruments as well. One mike may be suspended inside the piano or placed directly under it.

Throughout the recording, the engineer will be



trying to get as much signal as possible onto each track to improve the S/N ratio. No attempt is made at relative balance—which cannot be assessed until all tracks are complete of course. What the engineer will be listening for, via the monitor speakers, is the clarity and vividness of the individual sounds rather than their combined effect. That comes later.

When all tracks are filled, the mixdown sessions can begin. The musicians have gone home, and we are left with the producer, the engineer, perhaps the featured artist, and fifteen tracks of raw musical material. These fifteen signals must be mixed down to two (to make the stereo master tape), and become an artistic whole in the process.

In the mixing process the signals will be altered. Echo will be added to the strings and perhaps the voice. There will be about 6 dB of boost at 5 kHz added to the voice and 10 dB of cut at 100 Hz applied to the guitar. The drums will have 4 dB of boost at 10 kHz and 6 dB at 100 Hz. The vocal track will be compressed to reduce the dynamic range of the voice. Relative balances will be set between tracks. Each of the fifteen can be assigned to the left, the right, or anywhere in between on the final stereo copy.

At the risk of being a bit precious I'd like to suggest an analogy that is both accurate and useful in understanding the mixdown process. Consider the producer an artist. The fifteen tracks become his paints, the console his brushes, the two-track tape his canvas, and the monitor loudspeakers the light source by which he sees what he is doing.

The producer and the engineer may begin with the rhythm tracks, adding equalization to get the sound they want and some echo on the rim shots. They bring in the bass, and then the guitar for three bars only, then fade down and bring up the piano—and so it goes. This mixdown process can require weeks of concentrated effort for a single tune. The producer and engineer must get to know all the subtleties of each track, how to alter each instru-



These pictures, made in RCA studios, suggest some of the key techniques in modern record production. At left, members of the Youngbloods record miscellaneous tracks while listening to previous tracks via headphones. Note isolation screens in background at left and multiple miking. (We count seven mikes, though not all need be live at any one time.) At right, the engineer cues up a quarter-inch stereo master tape during mixdown session. Multitrack originals, from which master is made, often are recorded on two-inch tape.

ment, when to bring up which instrument, and when to fade down which combination of others. A recent popular LP required over two thousand hours of studio time for eleven tunes—an average of over five forty-hour weeks for each.

High fidelity, then, might be redefined as the recreation at a later time and different place of a musical experience in so faithful a manner that the listener can imagine himself present at the recording session. All the complex and subtle evaluations that the engineer and producer must make in subsequent processing are bent on one end—maximum effectiveness in translating the musical performances in the studio into a vivid, convincing musical experience in your home.

Any team that will spend over two thousand hours mixing an LP obviously is not looking for convenience in choosing its techniques. And this is true whether it is recording pops or classics. Bach, Haydn, and Mahler were innovators and often were misunderstood by their contemporaries. We must not assume that the live-concert perspective for which their music was written defined their musical values for all time. It seems to me that Bach would not have hesitated to put a microphone inside the piano—one can extract much more from the instrument that way. Remember, the sound on the recording is a function of what the microphones "hear." And the mikes are located among the performers, which the audience is not.

At a live concert the conductor arrives at the final mix of musical forces based on what he hears during the performance. If you sit in the right front of the hall, the brass dominates the strings. Not so on the recording. It can present the music to you much more as the conductor—or, in imagination, the composer—might hear it because of the endless series of decisions made by the producer and the engineer on the basis of what they hear through their monitor speakers.

Since the original experience that generated the



stereo (or quadraphonic) recording to which you listen was created from raw material in the studio, we must now try to re-create that experience. Remember, some recording consoles have as many as two thousand control positions on them. The permutations and combinations of changes in sound, both subtle and overt, that can be effected during the course of the performance are literally infinite. Since all these changes are made using the sound from a loudspeaker as a reference point, the characteristics of that loudspeaker obviously will be reflected in the final sound that is pressed into the recording. To re-create that original studio experience (the only reality that exists) we must use a similar type of loudspeaker. I don't mean the same model number or even the same manufacturer, but a similar type. Low-efficiency designs have a different and characteristic sound from high-efficiency designs, no matter which manufacturers are involved.

I've been intimately involved with recording and recording studio design for several years, but I don't know of a single studio that uses low-efficiency loudspeakers for monitoring—though there undoubtedly are some. The essential point is that, for all practical purposes, modern recordings are mixed using high-efficiency loudspeakers, and that the sound on those recordings reflects what the producer or conductor heard from those loudspeakers in the studio. To hear the recording the way they heard it, you need a similar loudspeaker.

Use of a dissimilar loudspeaker will, to some extent, represent a reinterpretation, rather than a recreation, of the recorded reality. Whether reinterpretation is good or bad I leave to you. This is not a reflection of any ethical stance on my part—I simply cannot judge for you, nor will I pretend to. You are the person who is listening, and you must be pleased with what you hear. Listen to both and choose the one you prefer.

Enjoy! That's what it's all about!

The Modern Speaker Sound

Large, high-efficiency models are obsolete, says this long-time proponent of the acoustic-suspension principle.

by Roy Allison

Vice President, Acoustic Research, Inc.

I HAVE IN THE PAST expounded the position that efficiency is not (or should not be) a criterion in choosing a loudspeaker system. After giving the matter some thought I find that I can no longer defend that position. Efficiency should be a criterion, at least indirectly, because the *only* way that good low-frequency performance can be obtained from a small loudspeaker system is to sacrifice efficiency that isn't really necessary,

A loudspeaker's efficiency is an index of how much acoustical power it will produce for a given amount of electrical power from the amplifier. If it is 1 per cent efficient, it will convert 1/100 of the electrical power into acoustic power; the rest is dissipated uselessly. If it is 5 per cent efficient, on the other hand, 1/20 of the amplifier power is converted into acoustical power. The 5 per cent efficient loudspeaker system will sound as loud in your living room with only 2 watts from the amplifier as the 1 per cent efficient system with 10 watts.

If we assume optimal design for a number of loudspeaker systems, and further assume equal low-frequency performance for all of them, we will find that the system efficiency is directly proportional to the cabinet volume. It will be proportional only to cabinet volume—not to woofer diameter or the number of woofers or anything else. This isn't a controversial matter like how little distortion can be heard under normal listening conditions. It is a plain statement of a physical law that is as inexorable as Newton's laws of motion. If we want full, flat low-frequency response, we must be prepared to give up either high efficiency or small size. We cannot have all three, even if some advertising copy implies that we can.

In the era of monaural high fidelity sound and 12-watt amplifiers a large speaker cabinet was a minor disadvantage. Even if it didn't have the virtue of visual beauty, it could be tolerated for its other qualities. Stereo introduced a new dimension in more ways than one: A pair of big boxes in the living room is quite a different matter from a single box in the corner. Still, there were people willing to put up with such an intrusion on living space so

that they could use dual 10-watt receivers, or to obtain some mythical performance advantage. One could continue to say that efficiency was unimportant only if size didn't matter.

But now quadraphonic sound must be considered, and no woman with a shred of independent spirit will permit her living room to be taken over by four big boxes. It is irresponsible to propose such a thing, irrational to believe that any number of sensible people would go along with it. Large loud-speaker systems for domestic use are obsolete.

Small systems can be made quite efficient if we are prepared to give up bass response. Do quadraphonics require deep-bass performance from the rear speakers? Absolutely. For any type of fourchannel recording wherein all channels carry primary information—including almost all popular music and some serious music (particularly electronic or synthesized music)—and for special effects, clearly all of the speaker systems are equally important and should be capable of reproducing the full range. Full bass capability is also needed for accurate re-creation of spatial ambience; otherwise, one of the most important parts of that ambience is lost. The awesome solidity of the deepest bass experienced in the concert hall can be duplicated at home only by a four-channel recording played back on four full-range speaker systems. It cannot be obtained with a two-channel recording played through the same four loudspeakers. This serendipitous attribute of the quadraphonic medium is lost unless all the speaker systems have excellent low-frequency capability.

If quadraphonics make it essential that loudspeaker systems be small for practical reasons, and if it is essential that these systems have well-extended flat bass response, then they will of necessity have relatively low efficiency. Fortunately the efficiency is not so low as to be troublesome. With amplifiers of moderate power these low-efficiency systems can produce more than enough sound level in living rooms to match the concert-hall experience. They can't duplicate the deafening sound levels experienced at live performances of some rock groups—but then, almost nothing can generate sound levels like those except the speakers that created them originally: large banks of speaker systems designed for brute power, rather than fidelity as such.

Finally, there is another performance advantage that can be gained from a small system because of its low efficiency. The midrange and tweeter output levels must be brought down by the manufacturer to match the woofer output. Excess efficiency in these units can be exchanged for smooth, extended

frequency response and better transient response by using damping techniques that are not permissible in a speaker system whose efficiency must be kept high at all frequencies. If this inherent engineering advantage is exploited, a well-designed small speaker system is at least equal in every audible aspect of quality to a well-designed big system, and superior in some ways. All it needs is more electrical power from the amplifier—and sheer wattage is no longer the exotic, expensive commodity it once was.

Before you buy speakers

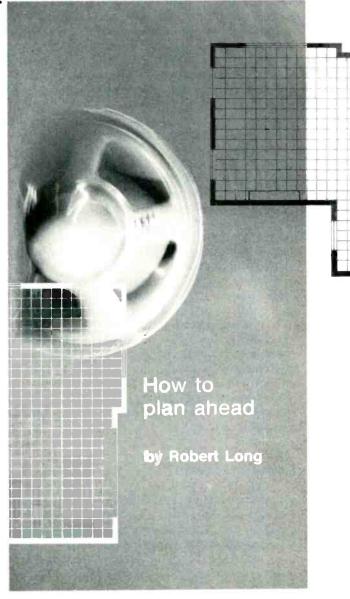
What About Quadraphonics?

FOUR-CHANNEL SOUND, while a subject of fascination today, admittedly isn't (yet) a way of high fidelity life. But judging by your letters increasing numbers of readers are planning stereo purchases in such a way that the conversion to quadraphonics—if and when you decide to take the plunge—will be as painless as possible. These notes are dedicated to that objective.

Mix or Match?

One bromide of speaker purchasing over the last decade or so has been that if you want to keep initial costs down you can buy a stereo system that includes a pair of inexpensive speakers and add a "good" pair later on when your budget allows it. The ultimate system, then, would place the better speakers in the main listening room and relegate the original cheapies to a bedroom, den, or kitchen, driven from the "remote" speaker connections of the stereo system's receiver. The plan is eminently sensible, but its application to four-channel sound is a little awkward. In its commonest form, the question it raises is: Will I be able to use my better speakers in the front channels and put the cheapies at the back of the room?

If you were to twist my arm for a yes-or-no an-



swer, I'd have to say "no." Particularly in reproducing matrixed recordings, where directionality often is achieved by a delicate balance between the loudnesses of two otherwise identical signals fed to two of the four loudspeakers, dissimilar loudspeakers can demonstrably produce instability of placement in the aural image. Let's say that the violins—usually placed on the left in most symphonic setups play first a high E and then a high A. If the front speaker has a 3-dB peak at the frequency of the E and the back speaker has a similar peak at A, the balance between speakers will be altered by 6 dB as the note changes from E to A. These are not very extreme peaks as speaker response patterns go; but the 6-dB difference is significant. (Remember that in some matrix systems the total maximum separation between front and back channels on either side may be no greater than 6 dB.) The result is, of course, that the violins can appear to jump across the left side of the room between the two notes.

They can, but the effect is seldom really noticeable. As a practical matter, differences in response due entirely to room acoustics also tend to disturb the nice, neat equations of quadraphonic theory, but the over-all effect—like that of stereo—is less fragile than theory might lead you to believe.

Even if our violins are placed firmly at the left front, and the back channels are reserved for ambiance (or "hall sound") information, do not assume that dissimilar front and back speakers pose no problems. Ambiance signals *are* quite different from the directly propagated front signals, but they are equally demanding in terms of the speakers that reproduce them. Bass reproduction is particularly important to the ambiance effect, yet bass response is one respect in which cheapie speakers regularly are deficient.

So while much solid enjoyment can be derived from a system in which there is audible disparity between front and back speakers, the basic rule is to try for maximum similarity.

My suggestion: Plan on using four identical speakers in the final system, but don't reject out of hand the possibility of using dissimilar pairs in an interim system. (Keep in mind, however, that some models—particularly among "off" brands—may no longer be available when you come to buy your second pair.)

Spread or Focus?

If questions relating to mixing speaker models for four-channel reproduction are the most often asked on this subject, those dealing with dispersion characteristics probably come in second: Will a reflective type of speaker be better or worse than direct propagation in the creation of a quadraphonic aural image? The question seems to arise—as it does in stereo reproduction—partly through confusion between directionality (or beaming) in a speaker's dispersion pattern and directionality (or the ability of the listener to localize sound sources) within the aural image. Indirect radiators, as a class, tend to spread out the sound they produce in such a way as to minimize the possibility of hole-in-the-middle localization. At the same time, by diffusing the sound, they tend to make it seem to come from a larger source—one whole corner of the room, for example, rather than a single point behind the grille cloth.

A beaming speaker, on the other hand, poses much the same problem in quadraphonic reproduction as it does in stereo: The area in which the full frequency range of its output can be heard in proper balance is relatively restricted and some of the effect may be lost as the listener moves out of the optimum listening area. The size and acoustics of the listening room, the program material and recording technique, and the personal tastes of the listener all will make important differences to the choice between dispersion types when you come to purchase speakers for a quadraphonic system.

My suggestion: Choose your speakers much as you would for stereo. If you like the way a given speaker delivers its sound to the room, it should please you whether you are listening to stereo or to four-channel sound.

Where Do the Speakers Go?

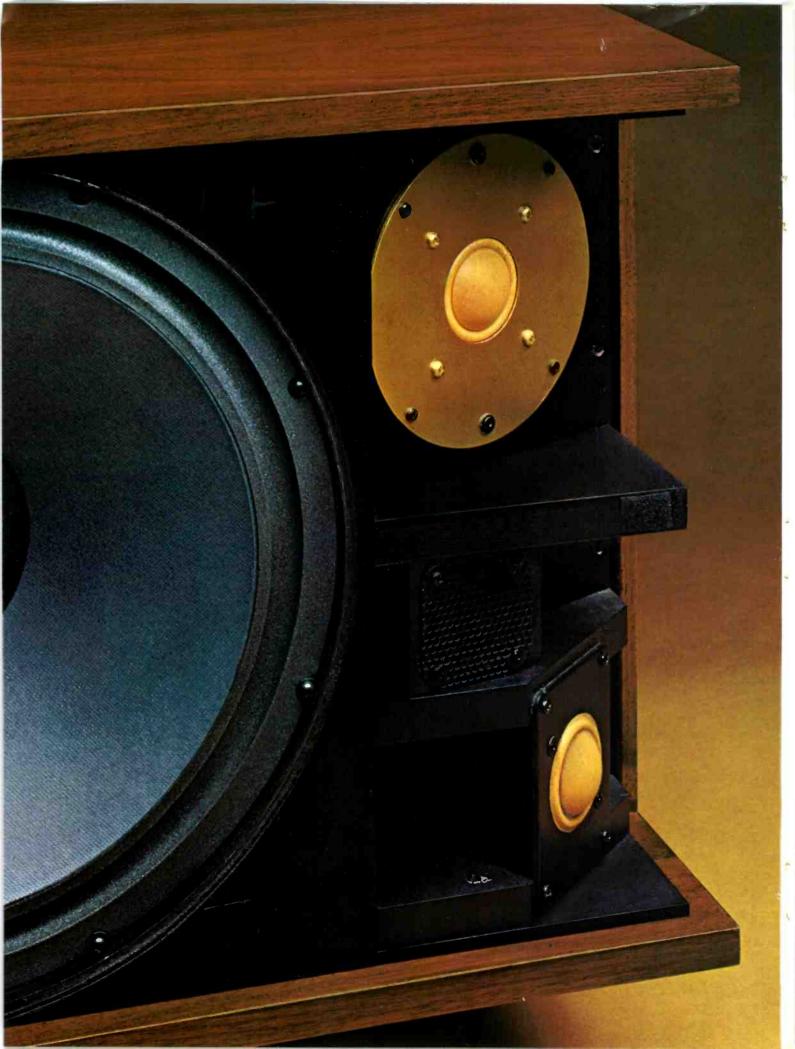
Most published descriptions of quadraphonic systems assume that the speakers will be placed roughly in the four corners of a rectangular room. If the room is exceptionally long, it may be a better plan to use one end as the listening area, with two of the speakers placed part way down the side walls. Given such an arrangement, I prefer to hear the "front" sound—rather than the back—emanating from the end wall, but depending on décor and seating arrangements, you may opt for the opposite.

Not all rooms are rectangular of course. An L-shaped room can pose problems of stereo—let alone quadraphonic—speaker placement. The main thing to keep in mind is that you will be creating a sort of "listening field" in all or part of the room, and that this field, with the speakers at its four corners, must be placed so that it will work well with the décor and traffic-flow patterns of the room.

My suggestion: Don't begin by looking for four handy spots to place your speakers, but by thinking in terms of the "sound field" you are trying to create. Does one side—perhaps that with a fire-place—tend to act as its focus? (If so, that wall probably should be thought of as the front of the sound field.) Where would the listeners logically be sit-



Announcing not merely the best Fisher speakers ever made but an important new insight into speaker design.



Controlled dispersion. The engineering concept behind the new Fisher Studio Standard speakers.



These new Fisher speaker systems are the first of a new generation of professional-quality components for the serious audiophile, distinguished from other Fisher products by the Studio Standard designation.

Even if judged by the strictly conventional criteria of frequency response, harmonic distortion and transient performance, these are by far the most advanced speakers Fisher has ever produced. But that alone is not what gives them their special technological stature.

Their true sophistication can be appreciated only by examining their dispersion characteristics. These are not conventional bookshelf speakers with highly directional forward-facing drivers. Nor do they belong to the new breed of omnidirectional speakers utilizing reflected sound for wide-angle dispersion. In the opinion of the Fisher engineering staff, the Studio Standard speakers represent a more valid approach than either of these schools.

A new insight: controlled dispersion.

Audiophiles know that the limited dispersion or "beaming" of high frequencies by conventional bookshelf speakers restricts the ideal listening area to a small section of the room. They also know that in most rooms such speakers are unable to create the impression of a very large sound

source, like a symphony orchestra or choral group, even with proper stereo placement. The effect is simply not real enough. On the other hand, more and more audiophiles are beginning to complain about just the opposite fault in fully reflective omnidirectional speakers. A solo violin appears to stretch from wall to wall. A folk singer's mouth seems fifteen feet wide. Everything sounds big, not just the big sound sources.

Once the problem is clearly stated, the solution is almost obvious. Narrowangle dispersion is inadequate. Random reflective dispersion is exaggerated and inaccurate. The truth must lie in between. With that thought, the principle of controlled dispersion was born.

In the Studio Standard speakers, the proportion of reflected to direct sound is carefully calculated and controlled, at least to the extent that the variables of room acoustics and speaker placement permit. There is enough direct sound for ideal overall presence and precise localization of solo parts; at the same time there is enough sound reflected off the walls for realistic spaciousness of large sound sources. All of this is accomplished by specially designed midrange and treble speakers, each mounted with its own precisely determined angular offset. The angles must be large enough for greatly improved dispersion but not so large as to produce an omnidirectional effect.

The patented midrange driver.

The crucial driver in all three Studio Standard systems is a patented soft-dome



midrange unit with a 1½-inch dome and giant 6-lb. magnet structure. The unusually large magnet permits the small dome to reproduce frequencies from 600 Hz up, not only relieving the woofer of a troublesome range but also dispersing the upper midrange and lower treble over a much wider angle than a typical 4-inch or 5-inch midrange speaker could. Since the soft-dome driver is assigned all frequencies up to 5000 Hz, there are no crossover effects in the range where nearly all of the basic musical material is located, and the essential sonic character of the entire speaker system is determined by this virtually perfect midrange unit.

The other sophisticated drivers.

The treble speakers are equally advanced 2-inch cone units with a 5/8-inch aluminum center dome, capable of peak-free response up to nearly 25,000 Hz.

The most elaborate of the three speakers, the Fisher ST-550, also incorporates an extra set of slightly different soft-dome drivers, angled even further out and limited to the range that benefits from the added dispersion.

Even without their sophisticated offset mounting, these drivers, along with the state-of-the-art 15-inch and 12-inch woofers used, would make the bookshelf speakers they are used in the most desirable on the market. The crossover networks, cabinets and general construction details are of the same high caliber, right down to the sculptured grilles.

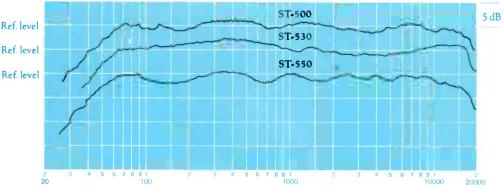
But it is the controlled dispersion principle that puts these speakers into a special category. Fisher is willing to risk the statement that the ST-550 Studio Standard is the absolute first choice for the audio perfectionist today and that the ST-530 and ST-500 are very close behind.

To have a more detailed understanding of this principle and of the engineering features of the three Studio Standard speakers, it is advisable to read the complete technical literature Fisher has prepared on the subject. For a free copy, write to Fisher Radio, Dept. HF-5, 11-40 45th Road, Long Island City, N.Y. 11101.





Total number of drivers 6 1 cone 1 cone Woofer 1 cone 15' 12' 2" Diameter 15' 2" Voice-coil diameter 16 Hz 14 Hz Resonance (open-air) 14 Hz Magnet structure 6 lbs. 13 lbs. 13 lbs. 1 soft-dome 1 ½" Midrange 1 soft-dome 2 soft-domes Voice-coil diameter 11/2" 6 lbs. 6 lbs. Magnet structure 6 lbs. 2 cones 2" Tweeters 4 cones 2 cones 2" Cone diameter 5/8" 5/8" 5/8" Center-dome diameter 9/16" 9/16" 9/16" Voice-coil diameter Side-dispersion units 2 soft-domes 11/2" Voice-coil diameter Crossover frequencies 600 Hz 600 H₂ 600 Hz Woofer to midrange 6000 Hz 6000 Hz 6000 Hz Midrange to tweeter 1000 Hz Side dispersion Controls (constant impedance) Midrange 3 pos. 3 pos. 3 pos. Tweeter 3 pos. 3 pos. 3 pos. Side dispersion 3 pos. Frequency response (see curve) (see curve) (see curve) 8 ohms 8 ohms 8 ohms Impedance (nominal) Power-handling ability 100 watts 200 watts 300 watts rms, 2 sec. 100 watts rms, 60 sec. 50 watts 100 watts rms, long-term average 25 watts 50 watts 50 watts Cabinet Dimensions 26"x15"x12" 271/2"x161/4"x13" 30"x17"x123/4" Material Walnut Walnut Walnut Finish Semigloss Semigloss Semigloss Black paint Front baffle finish Walnut vinyl Walnut vinyl



Overall frequency response of each system, obtained by using 1/3 octave-band pink noise on a sliding scale, in accordance with accepted industry measurement standards.

Fisher Studio Standard speakers.

Fisher Radio, 11-40 45th Road Long Island City, New York 11101

Because its products are subject to continuous improvement, Fisher Radio reserves the right to modify any design or specification without notice and without incurring any obligation. ting? Once you've answered both of these questions, you can begin to imagine the placement of the four speakers and get some feel for the limitations your room may impose on the size and shape of the loudspeakers you can use for the purpose.

How Big Should They Be?

This is a loaded question—if it's not irrelevant altogether. All too many purchasers make an irrational identification between the size and the quality of a loudspeaker system. Granted that most big speakers are relatively expensive, and no expensive speaker will stay on the market if it's not also a good one. But don't let that fact lead you into the trap of saying, "I'll need four big speakers to get really good quadraphonic sound." You need four good speakers; size is entirely beside the point except as it relates to décor and practical necessities.

It seems to be a foregone conclusion that if stereo's need for two speakers helped to put the relatively compact bookshelf size on the high fidelity map, so to speak, quadraphonic sound will make small-size models even more desirable. It's difficult to imagine any normal room that would welcome four full-size folded-horn systems, for example. Windows, doors, bookshelves, other furniture—even limitations of floor space itself—all work against the floor-standing behemoths. Yet it also would be a mistake to assume that you "must have four small speakers for really good quadraphonic placement."

My suggestion: Think this one out purely in terms of your own room and listening tastes.

How Much Should They Cost?

Some readers seem to assume that you should spend the same amount on loudspeakers whether they are to be used for stereo or quadraphonic reproduction—that, in other words, four \$50 speakers will give you quadraphonic reproduction that is the equivalent of the stereo from two \$100 systems. It's just not true—and would not be true even if you could make valid assumptions about speaker quality on the basis of price alone. No matter how high or low you set your sonic standards, satisfactory loudspeakers for quadraphonic listening are going to cost you more than the price of a stereo pair.

Perhaps not necessarily twice as much, though; it depends on what you're spending your loud-speaker dollar for. If bass reproduction is an important consideration in separating the men from the boys among loudspeakers—and for most of us it is—you'll normally find fuller bass in quadraphonic listening than you will in stereo with the same speakers. To put it another way, you may not

have to be quite as picky about deep-bass response in choosing four speakers as you would in choosing two. In most other respects the qualities that make a speaker a good choice for stereo are equally important to quadraphonic sound. Don't forget, too, that you'll probably be listening to your present stereo records and tapes for a long time to come; so don't sell two-channel stereo short.

My suggestion: Try not to skimp on speakers just because you may want to buy four of them. You'd be better advised to postpone the purchase of the second pair than to commit yourself to sound that isn't really what you want.

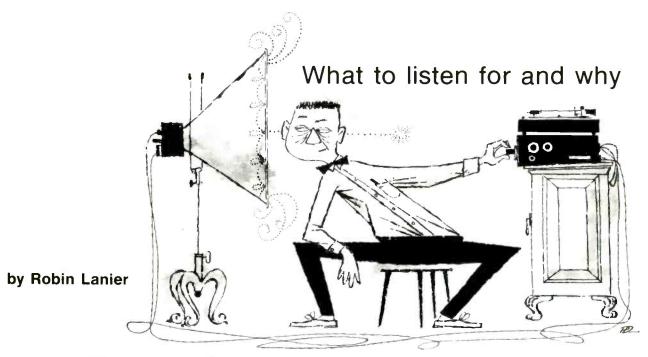
How Much Power Will They Require?

A case can be made for keeping total amplifier power constant in switching from stereo to quadraphonics, however. The technically questionable rationale runs like this: Assuming equal speaker efficiency all around, 60 watts of electrical power will deliver the same acoustic power into your room whether it is divided into two channels or four. In other words, if you need 30 watts per channel for your stereo system, the same room fitted with an additional pair of the speakers you are now using for stereo will require only 15 watts per channel to produce equally room-filling quadraphonic sound.

This proposition doesn't seem to stand up well in practice. Where the four-channel effect is strongly front-oriented—as it is in ambiance recordings—convincing reproduction will require as much power in each of the front channels as it does for stereo. And it's not true, as the argument assumes, that levels will be divided more or less equally among the four channels even in surround-style recordings.

In switching back and forth between stereo and quadraphonic reproduction I seldom feel the need to lower the volume in the latter mode. (Subjectively, of course, only a slight reduction in level is necessary to cut power by half; although the difference between 30 watts and 15 sounds important, it represents only a 3-dB drop in power—not an important difference to the ear.) Sometimes I find myself actually *boosting* the per-channel power when switching from two channels to four. Cataclysmic sounds that seem overamplified and unconvincing in stereo can be truly awesome in quadraphonics and will support, on a pure-sensation level, almost unlimited acoustic power when they roll at you from all sides.

My suggestion: Remember, again, that you have many, many hours of stereo listening ahead of you even if you convert to a quadraphonic system. And while it's probably true that you don't really need twice the power for quadraphonic listening, don't be talked into skimping on the amplifier either.



Ten Records to Test Speakers By

THERE WAS A LEGENDARY SAILOR who swore by his skill at dead reckoning-his ability to determine where he was at sea by figuring how far he had gone each day, and in what direction. He did seem to have an instinct for speeds, directions, currents, and the rest; and his calculations usually were uncannily accurate. Once, however, he didn't fix his starting point in the hurly-burly of putting to sea and could only guess at it when he was far away. That was one time his dead reckoning was useless: he had no recourse but the exact science of celestial navigation.

You will get lost too, and for analogous reasons, if you go into an audio shop or a friend's living room to listen critically to one or more loudspeakers, and don't take along three or four records with which you are totally familiar. Because aural speaker evaluation is not an exact science, the best you can manage with unknown program material is a rough guess at which properties can be attributed to the speakers and which to the recordings themselves. If, on the other hand, you know the sound source intimately to begin with, one to three minutes of music on each of three or four records usually is enough to give you a reasonably good rundown on a speaker.

minutes. The only way to make detailed comparisons is by switching back and forth between the sounds you are comparing—the so-called A/B test. But a record you know extremely well does supply a valid base line for general speaker judgments.

As many writers over the years have pointed out in this magazine and elsewhere, most of us can't remember exact tonal qualities for more than a few

You can classify the speaker and pinpoint outstanding virtues and faults. If there is more than one speaker to judge, you can rank them very accurately by combining the known-record test with A/B comparisons.

Following are the main qualities to look for.

Low bass in reasonable balance with middles. No speaker is perfect in the bass; the practical criterion for good bass is that it will be deep enough and strong enough to give the music a satisfying solidity, power, and weight. There should be no weight when no bass instrument is playing of course. Only a handful of instruments go lower than about 60 to 70 Hz: organ, tuba, bass drum, bass viol, piano. Because the bottom octave in the bass is very expensive in terms of speaker cost, and also very rare in musical material, you may want to consider it as expendable. What you should not accept is unnatural thinness or tinniness.

Smoothness-lack of extreme peaks or holes within the useful bass range. Holes-that is, notes that get lost in the medium to high bass-can weaken the music by stealing away part of what you were meant to hear. Strong peaks in the bass produce an overpowering, indistinct, one-note "juke-box" ef-

Distortion in the bass. This can reach fairly high levels before we are conscious of it. Generally speaking, distortion is within acceptable limits if bass instruments retain their characteristic sound.

Middle honk. This is one of the most common speaker faults. One or more peaks in the middle frequencies give the music a hollow, through-a-

The author, a long-time contributor to HIGH FIDELITY, recently started a custom audio consultation service.

barrel sound, dominated by a characteristic pitch. This is often hard to identify at first hearing; more on that in a moment.

Weak highs. The cause of a dull or muffled quality. Well-balanced, extended highs seem to open up "air" around the instruments, put them in an acoustic space, make them sound sharply natural.

Peaky highs. Strong treble sounds turn shrieky or scratchy when response is peaky.

Tendency to overload—intermodulation distortion. The effect is evident in loud full-orchestra passages. With moderate distortion they become just undifferentiated loud sounds, lacking in clarity and transparency. Severe distortion brings unpleasant blurring and raucousness.

Transients. The impact sounds from percussion instruments—drums, cymbals, triangle, castanets, etc.—should have their natural sharpness. Poor transient response (actually related to peakiness) takes the edge off—figuratively and, in terms of the audio waveform, literally.

To get a quick fix on these qualities, recordings of

certain types are needed. In the following list are ten recordings that I find useful for the purpose. Obviously there are many others in the record shops that would serve. I list these mainly because they are on my shelf, are presently available, and have been proved out as speaker testers. They will cue you in to the *kinds* of recordings to look for. Since three or four records would likely be the maximum number you can take when you go shopping and still expect a cordial welcome, I have arranged them in groups so you can pick and choose Chinese-menu style. However, if you can check the speaker or speakers in your own home (extremely desirable because of the tremendous effect room acoustics have on speakers' sounds) you may want to run through all ten. Some of these records are pretty spectacular, but don't fall into the trap of listening to the music or the recording *instead* of the speaker. From this point of view, you may find it easier to test speakers with a recording you don't like than with one that bowls you over.

If possible, listen to at least part of each passage on a speaker of known superiority just before you go to the unknown. Failing that, your familiarity with the record will, as already noted, give you a reasonable base line for judgments.



MAHLER Symphony No. 8, Concertgebouw of Amsterdam, Haitink. Philips 6700 049 (two discs).

Full orchestra and chorus; for highs, bass, transients, distortion, middle honk

MOZART-GROSE MESSE C-MOLL 4X 427

MOZART

Mass in C minor, K. 427.
Berlin Radio Symphony, Fricsay.
Deutsche Grammophon 138124.

These are tremendous recordings for sampling orchestra and chorus. Fortissimo tuttis put heavy strain on the ability of the speaker to maintain differentiation in loud passages. Listen to the fortissimo near the beginning of the Mahler and the soprano solo and choral passage near the end of the opening Kyrie in the Mozart. Do the massed sopranos stay as thrilling voices, or do they become shrieky or scratchy, or hard-the result of peaky highs? Do drums and cymbals have their natural sharp attack (transients)? Do low drums have satisfying weight, and the organ in the Mahler the proper power, indicating good bass response? In the tuttis do you hear male voices, female voices, and the main orchestral instruments all individually? No known sound reproduction system will do this perfectly, but a poor system does it very badly indeed. Try to make sure your standards are not too low in this respect by hearing at least a sampling of your test records on an excellent system.



Organ music. E. Power Biggs on the Thomaskirche Organ. Columbia KM 30648.

Specials for bass



STRAUSS
Also sprach Zarathustra.
Los Angeles Philharmonic, Mehta.
London CS 6609.

The organ is of course the natural instrument for a thorough low-bass test, and there are many good organ recordings. The Bach has the special virtue of using a baroque organ. The pedal notes have the wonderful, slightly snarly quality that gives us a ready criterion for low distortion. The dynamics in the opening D minor Toccata and Fugue are wide indeed—great as test material—and a lot of the bass has tremendous power. In those held chords in the Toccata, when the biggest pipes come in, do you hear great power at the very bottom? Listen most carefully when the pedal notes go up and down the scale, as in the Fugue; does the speaker reproduce them all or does it drop some out of hearing? Listen

too for the effect known as doubling, in which the deepest notes seem to lose their fundamental and seem to be dominated by the overtone an octave higher. The truer and more distinct the fundamental tone, the better the speaker. In judging bass, don't listen *only* to organ recordings, however. You will be listening to massed orchestral instruments—drums, cellos, etc.—most of the time, and the lowest organ notes are particularly difficult to record well.

The Strauss is a far-out test that will separate superb bass reproduction from the merely good. The soft opening is played by four instruments: a pedal note at low C (about 33 Hz) on the organ; the C an octave higher (about 65 Hz) on the contrabassoon; the C another octave higher on a kettle drum, and the last two Cs played together on the bass fiddles. London has managed to get the organ note onto this record with superlative power and clarity. If your speaker is in the big bass class and your room is favorable acoustically, the organ will envelop you, assail you physically with a profound power. If your speaker is not quite in that class, you may know the organ is there but will hear mostly the buzz in the contrabassoon note and the tremolo in the double basses.

Remember in making this test that you are dealing with but a single deep-bass frequency. It does not tell you all you need to know about deep-bass response, and you might evaluate the speaker differently if the musical pitch were altered by as little as a whole tone. (If the speed of your turntable can be "tuned," you can easily check out this possibility.)



XENAKIS
Métastasis for Orchestra.
French National Radio Orchestra,
Le Roux. Vanguard C 10030.

Transients and highs: percussion sounds

Varèse Amériques. Utah Symphony, Abravanel. Vanguard S 274.



Each of these discs contains passages with an abundance of percussion instruments at work. Try the fortissimo about ¾ inch from the beginning of the Varèse or the Stars and Stripes Forever on the Boston Pops record. Wood blocks, bells, cymbals, triangles, and what not all make demands on transient response and on clear, crisp sound at the top of the highs. Cymbals are particularly revealing: They should "smash," of course, but stay metallic and ringing, not papery or scratchy. It would be most helpful to hear one or more of these records



"ENCORE"
Boston Pops, Fiedler,
Polydor 24 5005.

on a very superior system first, because percussion may sound impressively sharp even when it falls short of its true quality.

The Boston Pops record is valuable not just for percussion, but also for general orchestral texture. Deutsche Grammophon has done a terrific job in Boston's Symphony Hall; the highs are exceptionally clean, wide, and smooth.

Some ultimates



MOZART
Violin Concerto, No. 4, in D,
K. 218, Heifetz. RCA Red Seal
LSC 2652.



Bartók Quartet No. 2. Juilliard Quartet. Columbia D3S 717 (three discs).



LEONTYNE PRICE
"Prima Donna," Vol. 3.
RCA LSC 3163

Individually desirable characteristics should work together to produce a unified impression which is in itself a test. Take Price's marvelous singing. On a moderately good speaker it can be thrilling enough. What a speaker of the utmost refinement in middles and highs does by comparison is to remove some last "support"—coloration, if you will—so that Leontyne stands there alone, free in space, utterly true. All middle honk is gone, the mid-highs are smooth as glass, there is no roughness to make the sound edgy or hollow. The accompanying orchestra sounds absolutely true too.

Similarly, Heifetz' violin comes through wonderfully on fairly good speakers: It is recorded well up front, with plenty of pizzazz. Get good extended, supersmooth highs, and freedom from all honk, and the violin moves a little closer and into sharper focus, but ingratiatingly, sweetly, totally without hardness—just what a fiddle is like a few feet away. (I'm a Sunday fiddler myself.) And the quartet music can be similarly indicative of the speaker's refinement at the top. It should leave behind all hollowness, all oversharpness, and stand ultraclear but sweet.

Obviously these are subjective terms. They take on most exact meaning in comparative tests; but as I've noted, they are valid for straight speaker checks if you know the records intimately. That's the key: Get your base lines firm, and you won't get lost.

NOON RECURD SILVER JUBILEE

Donizetti: LUCIA DI LAMMERMOOR

Joan Sutherland, Luciano Pavarotti, Sherrill Milnes, Nicolai Ghiaurov—The Orchestra of The Royal Opera House, Covent Garden— Richard Bonynge OSA-13103

Liszt: THE BATTLE OF THE HUNS: ORPHEUS; MAZEPPA

The Los Angeles Philharmonic Orchestra-Zubin Mehta CS-6738

Schubert: THE EIGHT SYMPHONIES

OVERTURE TO DES TEUFELS LUSTSCHLOSS OVERTURE IN THE ITALIAN STYLE **OVERTURE TO FIERRABRAS**

The Vienna Philharmonic Orchestra-Istvan Kertesz CSP-6

BERNSTEIN IN VIENNA

Mahler: DAS LIED VON DER ERDE Mozart: PIANO CONCERTO NO.15 (K.450); SYMPHONY NO. 36 (K.425)("Linz")

James King, Dietrich Fischer-Dieskau—The Vienna Philharmonic Orchestra Leonard Bernstein (piano & cond.) CSA-2233

Rachmaninov:

THE FOUR PIANO CONCERTI RHAPSODY ON A THEME OF PAGANINI

Vladimir Ashkenazy—The London Symphony Orchestra—André Previn CSA-2311

ALICIA DE LARROCHA-BACH

Italian Concerto; French Suite No. 6; Fantasia in C Minor; English Suite No. 2 CS-6748

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Various soloists—The Vienna Philharmonic Orchestra-Georg Solti OSA-1440

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Epics from Miniatures

by Harris Goldsmith



Richter and Curzon play Beethoven variations

ONE ASTONISHING ASPECT of Beethoven's genius was his ability to build colossal structures from the plainest. smallest fragments. He hammered away at two- and three-note motifs, forging them into music of grand, almost epical proportions. Naturally the theme-and-variations form offered him unlimited material for such tonal adventures and it is not surprising to find that the master was frequently drawn to this form. His efforts range from the most humble (the variations on Nel cor più) to structures of profound complexity (the Diabelli set, composed in 1822-23). As often as not, some of Beethoven's most remarkable writing in variation form is contained within works of even larger scope: Take, for example, the great second movements of the Kreutzer and Appassionata sonatas, the third of the Archduke trio, and the lovely, lyrical opening section of the A flat Sonata, Op. 26. The majority of the late string quartets and piano sonatas likewise have movements given over to this kind of development and even the great choral finale of the Ninth Synphony is, when you come down to it, basically a set of variations. To be sure, it is often in the extended codas and introductory passages that Beethoven's mightiest creative gifts came to fullest flower. Freed from the circumscribed limitations of structure, the titan was able to give free reign to his fecund inspiration and creativity.

With the exception of the aforementioned *Diabelli* Variations, the most ambitious and virtuosic of Beethoven's self-sufficient variation structures is the tour de force known variously as the *Prometheus*, *Eroica*, or simply Op. 35. Actually, as I pointed out in my discography of Beethoven's piano music [January 1971], the theme started life not in the *Eroica* Symphony or in the *Prometheus* ballet, but rather as one of the unpretentious little contradances. There are nominally fifteen variations and a fugue here, but if you take the bass line to be the real key to the work, you will find that Beethoven slipped a few extras in both the introduction and the longish coda.

Two of our foremost recitalists have recently turned to this work and their concurrent recordings present a fascinating comparison. Sviatoslav Richter picks up the *Eroica* tag and runs with it. Discophiles who recall the Soviet pianist's 1964 disc of Schubert's *Wanderer* Fantasy will know what to expect here: The operative word is "titanic." Richter plays with tremendous toughness, force, and clarity. Fingerwork is brilliantly accurate and always right in place, the rhythmic framework is slightly unyielding and four-square. To be sure, Richter is too

sophisticated and knowledgeable a musician to be completely metronomic, but it is not incorrect to say that he is remarkably chary of rhythmic rubato within the single variations. The cumulative effect of his reading registers principally because of its relentless tenacity and ferocious accuracy. In the end the listener is a bit battered and overwhelmed by the sheer implacable brilliance of it all. I was constantly reminded, when listening to Richter's performance, of Klemperer's Eroica Symphony, for there too the weight and deliberating clarity make up for a serious lack of humor and forward-plunging nervous energy. It's a very valid approach to what is, after all, a rather impersonal, monumental piece—but it will not appeal to all tastes.

Richter's performances of two less cosmic Beethoven sets of variations on the overside of this Melodiya/Angel presentation are even more open to question. In the Op. 34 Beethoven was working in a rather uncharacteristic vein for him: For one thing, he was experimenting with a multitonal scheme, setting each variation in its own key, and giving each remarkable diversity and character. Secondly, this is on the whole an untypical, almost Schubertian, effort-full of vernal lyricism and adventurous color. Richter's account is once again ultraclear and scrupulous, but almost completely lacking in the requisite charm and tenderness. Perhaps part of the blame may be placed on the close microphoning of his piano: but whatever the cause, the effect is rather hard-nosed, dry, and overbrilliant (very rarely does the dynamic go below a hefty mezzo-forte).

One finds a similar state of affairs in the slightly trivial Ruins of Athens Variations, Op. 76. Gilels' recent Angel recording of this gave considerate treatment to each variation, and his lovely polish and lightness were, in my opinion, close to ideal. Richter's viewpoint is much more concerned with forward continuity. He makes the variations follow one another very strictly-never does he pause for breath and only once does he change the tempo (at midpoint, an effective touch of excitement in the second half of Variation 5 leading to the presto Variation 6). The strength of it all is undeniably impressive, but Richter's economy has its drawbacks as well as its assets: I find his treatment of Variation I rather overbearing in its spiky nonlegato articulation and he also misses many subtleties of voicing in the curious Variation 5, not to mention his callow disregard there of the piano and dolce markings (Gilels did this to perfection). Throughout this disc, I was put off by the rather hard,

by Dale Harris

murky piano reproduction. Richter's playing is made to sound much more percussive than it does in the concert hall.

Curzon is more intimate and colorful in his performance of Op. 35. He keeps his dynamic range to pianistic rather than orchestral dimensions, but paradoxically "orchestrates" with his tone and pedal to a far greater degree than Richter. A perfect example of what I am talking about comes with the three fortissimo B flats in measure 11 of the Introduzione col basso del tema: Curzon's volatile, sensitive touch has a certain tonal mysticism that makes one wonder whether or not he is playing an extra octave in the treble (he isn't, of course, but the pedal nevertheless gives off these scintillating harmonics). One might describe the British artist's approach as Schubertian. Certainly his inward, prismatic, nuanced sound, his gracious, never overstated technique, and his structured but entirely flexible treatment of rhythm are entirely suited to that lyrical composer. As a Beethoven expression, however, some may find it slightly smallscaled and delicate. In fact, having recently heard Curzon play the same composition in the concert hall, I confess to finding more of the requisite drive and relish in the "live" version. For his recording, Curzon sounds a bit too intent on creating the "definitive" statement of his ideas. Granted the disc is far more cleanly played and mindful of detail than the concert reading, but it also seems just a trifle constrained. Yet even in the recorded form I find far more warmth and charm in Curzon's approach than I do in Richter's. (Note, for example, his deftly staccato treatment of the elfin Variation 6 and especially its whimsical subito pianos on both first endings. The brusque Richter never bothers with details of that

But if Schnabel (Seraphim) or Arrau (Philips) ultimately offer more idiomatic treatments of the Op. 35 Variations, nobody can approach Curzon's wondrous way with Schubert's Moments musicaux. There are two tiny details in his performance with which I take issue one is his inconsistent decision to omit the second repeat from No. 6 (which seems strange in view of the fact that all other such repetitions are scrupulously adhered to). Secondly, I find the F flat (given in the Breitkopf & Härtel edition) in the trio of No. 4 more convincing musically than the F natural which Curzon plays (and which appears in the equally authoritative Henle edition). Aside from these miniscule quibbles, Curzon's readings of these delightful morceaux are irresistible in their magical tonal pointing, their beguiling warmth, and their utter, but really quite deceptive, simplicity. Aurally this playing is sheer magic, as close to perfection as one can ever come. London's sound-resonant, airy, superbly voiced-gives the treasurable artistry every chance it deserves.

BEETHOVEN: Fifteen Variations and Fugue on a Theme from "Prometheus," in E flat, Op. 35. **SCHUBERT:** Moments musicaux, D. 780; No. 1, in C; No. 2, in A flat; No. 3, in F minor; No. 4, in C sharp minor; No. 5, in F minor; No. 6, in A flat. Clifford Curzon, piano. London CS 6727, \$5.98.

BEETHOVEN: Fifteen Variations and Fugue on a Theme from "Prometheus," in E flat, Op. 35; Variations on an Original Theme, in F, Op. 34; Six Variations on the Turkish March from "The Ruins of Athens," in D, Op. 76. Sviatoslav Richter, piano. Melodiya/Angel SR 40183, \$5.98.

Pavlova and Balletomania

Richard Bonynge offers a delicious collection of dancing musical confections.

This is a consequential album. For balletomanes, that is, though not necessarily for all music lovers. It is important to keep the distinction clear. Balletomania includes a love of music-the danceable kind, at any ratewhereas a love of music by no means includes an appreciation of ballet. "Music," as Balanchine has put it, "is the floor the dancer walks on," and all ballet fans will immediately recognize the indissoluble connection between aural and visual experience which this statement implies. You cannot, in other words, listen to ballet music as if it were absolute music. You are always conscious of its dependency on the stage to fulfill its ultimate intentions. Since the reforms of Diaghilev (whose Ballets Russes lasted from 1909 to 1929), a lot of superb music has been written for ballet. Diaghilev himself commissioned Firebird, Petrushka, Sacre du printemps, Les Noces, Daphnis et Chloé, Les Biches, The Three-Cornered Hat. and Jeux. Stravinsky later turned out masterworks like Card Game, Orpheus, and Agon for Balanchine; Prokofiev produced Romeo and Juliet; Hindemith Four Temperaments; and Bartók The Miraculous Mandarin. Despite this imposing array of concert-hall staples, however, the facts of performance will always obtrude upon the awareness of the initiated. To have made the acquaintance of Petrushka in the theater is to remain forever unsatisfied when encountering the score outside it. The music, glorious though it is, addresses itself to events beyond its own form. Oddly enough, the same kind of awareness is present even where the ballet has fallen into desuetude. What a ballet fan brings to a score like Satie's Parade or Prokofiev's Chout is history, a kind of collective memory, a sense of what the music adumbrates by way of story, atmosphere, and style.

This is the reason that balletomanes are inclined to collect recordings of even very familiar ballet scores; the musical experience these offer is relative, not absolute, and on that very account stimulating to the imagination. This is also the reason that balletomanes take pleasure in scores which the regular, fastidious music lover would shudder at. We can discount musical tastes too refined to acknowledge the marvels of Tchaikovsky's Sleeping Beauty, Delibes' Sylvia, of Glazunov's The Seasons. There remains, however, an entire realm of music untouched by sophisticated taste or plain inspiration. Such music, as the ballet lover immediately understands,

The Bettmann Archive



Anna Pavlova-the dance was self-sufficient.

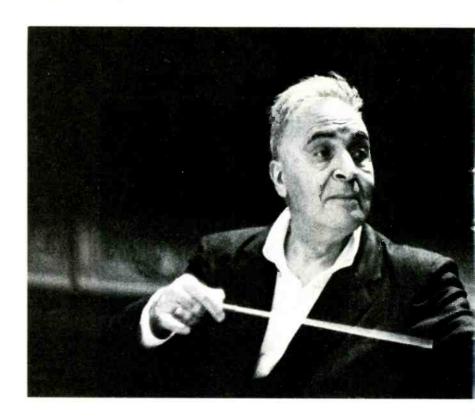
merely aims to serve the craft of dance, to satisfy, modestly, the basic needs of rhythm, propulsion, line, and metrical form. These were the limits recognized by composers like Jéan Schneitzhoeffer, who wrote La Sylphide (1832); Adolphe Adam, who wrote Giselle (1841); and Leon Minkus, who wrote La Bayadère (1877). Craftsmen though these were, and with no more than craftsmanlike attainments to their credit, such composers did in effect serve the art of dance, too. To this day, a score like Minkus' Don Quixote (1869) provides the perfect "floor" for Petipa's choreographic formulations, which are inventive yet formalized, dazzling yet controlled. It is the kind of music that imposes nothing on the dance, that indeed frees the dance to be itself. Only a few months ago at a gala in aid of the New York Public Library Dance Collection the last-act pas de deux from Don Quixote almost became the evening's climax. Among the assembled glories of the dance world this familiar piece to tinkling music offered a summation of the virtues that make up the classical style. As danced by the prodigiously gifted Gelsey Kirkland and her partner Helgi Tomasson it became an ennobling and infinitely touching ceremony of human perfectibility.

In the last resort, what is really meaningful about dance is dance. Anna Pavlova, despite her early association with Diaghilev, never learned much from him. She quickly broke away from the Ballets Russes to star in her own company. Thereafter she remained heedless of ar-

tistic progressivism, content on the whole to mount hack works, which indifferently choreographed and presented before undistinguished scenery, were almost without exception set to familiar, easily apprehended music. Through her innumerable world tours Pavlova's name became synonymous with dancing, just as Caruso's did with singing and Bernhardt's with acting. Pavlova's secret was her confidence in the expressive power of dancing and her belief in its ultimate self-sufficiency. It is clear that, contrary to what we are sometimes told, her own performances did not represent the triumph of genius over unfortunately mediocre surroundings. The ambience her company provided was one she put together herself; it was perfectly attuned to her requirements. All she asked of her productions was that they create the circumstances of dance without too much intrusiveness. Distinction would have been too great a distraction. She needed only the simplest theatrical framework to display the essentials of her art, and only the most lucid and soothing musical experiences would serve her needs. Whereas Diaghilev's characteristic composer was Stravinsky, hers was Czibulka or Krupinski or Luigini or any of the other names represented on this album. An individual musical will had no place in her autocratic and personal scheme of art. The Palm Court musician served her as well as Tchaikovsky.

What these records do is open up a whole new area of sympathy. Hearing this music makes it possible for those who did not see Pavlova to apprehend her art and to feel the force of her personality and will. Richard Bonynge has once again increased the range of our knowledge. His scholarship, interest, and understanding have already resulted in several important ballet albums: Burgmüller's La Péri, Adam's Giselle, and Le Diable à Quatre, as well as miscellanies like "Pas de Deux" and "The Art of the Ballerina." "Homage to Pavlova" is a worthy successor, fascinating and-for this must be added to any account of the music-full of charm. One thing the balletomane soon learns is that the house of music has many mansions. The Tchaikovsky waltz used for Christmas is irresistible, the Rubinstein and Czibulka pieces are delicious. There are excerpts from many works in Pavlova's repertoire, several short numbers and one full-act ballet, Le Rereil de Flore by Riccardo Drigo (1894). This is the sort of music that Richard Bonynge performs with brilliance and authority. He brings out all its rhythmic subtleties and propulsive power. The London Symphony is very responsive to his leadership and the recording (apart from some uncomfortably close miking) is good. The substantial booklet, which features a lot of superb Pavlova photographs, is (in typical London style) shoddily printed, but it does contain a long essay by the doyenne of ballet-writers, P. W. Manchester. This wise and sensitive piece is, like the records it accompanies, indispensable for anyone who wants to know about Anna Pavlova.

"Homage to Pavlova." London Symphony Orchestra, Richard Bonynge, cond. London CSA 2232, \$11.96 (two discs). Luigini: An Egyptlan Ballet (Ballet Egyptien). Saint-Saëns: The Dying Swan (Le Cygne). Massenet: Meditation (Thais Intermezzo). Rubinstein: Spanish Dance (Feramors). Czibulka: Le Réve d'Amour. Kreisler: The Dragonfly (Schön Rosmarin). Drigo: Le Reveil de Flore. Tchankovsky: California Poppy (Melody in E flat); Christmas (December Waltz from The Months). Assatieff: Papillons. Lincke: Gavotte Pavlova (Glow-Worm Idylle). Delibes: Pas des Fleurs (Naila Intermezzo). Catalani: Les Ondines (Danza delle Ondine). Krupinski: A Pollsh Wedding.



The 1936 Das Lied and the 1954 Brahms Requiem

by Robert C. Marsh

IN AN INTERVIEW in 1957, Bruno Walter observed, "I am really very happy about this idea . . . that we really, in some sense, can live on with our best efforts through recorded performances. That indeed these recordings can be a kind of school in which young musicians and others can see how Toscanini conducted. . . ."

"And Bruno Walter," the interviewer added.

"Well, and perhaps something I did," the old man added modestly.

In fact, Walter did a better job of preserving his musical legacy than Toscanini. It did not stem from egotism, but the flexibility and natural curiosity of a remarkable mind. Walter was making recordings of lasting musical value in 1936 when Toscanini was still regarding the entire recording process with the deepest skepticism, and in the final period of his life Walter co-operated with the engineers to produce stereo discs which preserve the distinctive sound of an orchestra under his baton more faithfully than any Toscanini recordings represent their protagonist. It was not just a matter of surviving into the 1960s. There could have been Toscanini stereo too if the maestro had been more receptive to the idea.

At this moment in our musical history the availability of Walter material may be the more important influence. The romantic approach to the music and the art of the romantic conductor are being studied and revived, and more and more the prototype for this school is Wilhelm Furtwängler. No one questions his importance, but even at the peak of his career he had two serious rivals in Europe, Willem Mengelberg and Bruno Walter. And when Columbia, in the notes to the Brahms disc, calls Walter the "last great representative of the Romantic tradition" this is no press agent's fancy. He was, and so

remains. If we had a couple of young Bruno Walters around, instead of an ersatz Furtwängler or two, I would feel a lot more optimistic about the state of music.

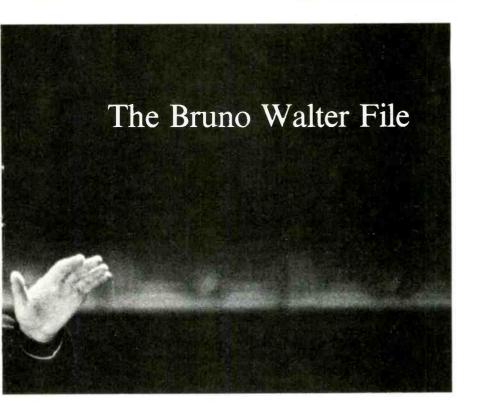
The Mahler album was originally made at a public performance in Vienna on May 24, 1936. It was issued in Europe as a Mahler Society set. In this country it appeared as Columbia M 300, a big, thick album with fancy blue labels that had a badly printed profile of the composer to set them apart from ordinary releases.

This was, of course, the initial recording of the song cycle. In fact, it was the only one for fifteen years, until Otto Klemperer and the Vienna Symphony were heard in an LP version released in 1951. The historic Walter/Vienna Philharmonic performance with Kathleen Ferrier followed late in 1952.

How do you review a recording you have been playing with some regularity for some thirty years? Well, for the generation that was becoming aware of Mahler's importance as a composer, this recording, with all the inadequacies of discs made in live performance, was the only representation we had of what may be Mahler's greatest work. Even by the standard of 1936 the album was no great technical achievement, but the vocal performances were spectacularly good (and remain so) and the playing had the style and authority that eliminated any doubt that this was a masterpiece. Hearing the records, you wanted to hear the music in concert, and hearing it live you wanted better recordings. The cycle had begun.

Up to now I have been playing this recording from a tape I made some years ago from the least worn-out 78-rpm discs I could find. The Seraphim transfer is a distinct

Continued on page 70



Treasures from the Walter Society

by David Hamilton



Joseph Szigeti and Bruno Walter in 1947 listening to a playback.

"Societies" honoring major performers of the past appear to be a growing phenomenon, and in some respects such arrangements may turn out to be the optimum solution to the production of historical reissues with limited commercial appeal but decided musical and documentary significance. The principle of the Walter Society is similar to that of other such groups: Annual membership is \$6.00 (\$7.00 abroad), and each member receives one record; further records are available in return for donations to the Society's Development Fund, which is currently underwriting a radio series on Walter for national distribution. The recordings apparently stem from a variety of sources (at least some of them, I would judge from the label typography, are of Japanese origin); the Society also issues a newsletter for members, and provides mimeographed program notes on the recordings.

The current batch of Walter Society discs, commemorating the tenth anniversary of the conductor's death, divides comfortably into two types of material: 78 reissues and off-the-air material. Of the former, the best is the Haydn coupling, two 1937 recordings graced by impeccable Viennese playing and firm, straightforward direction; except for the slightly stodgy first movement of No. 100, I prefer these readings to Walter's post-1950 LPs of the same works. The dubbings are slightly sharp, but otherwise forward and well balanced.

In the same category, but of less general appeal, is an acoustic (!) Tchaikovsky Sixth with the Berlin State Opera Orchestra (BWS 1004, coupled with two Mozart overtures)—strictly for curio collectors, archivists, and "compleat" Walterites. An early electric version of Mozart's G minor Symphony (Berlin again, on BWS 1003 with some Johann Strauss) is typical, but no competition

Marsh

Continued from page 68

improvement. When you first hear this recording, the sound seems ancient and awful, but after a few moments I find myself drawn into the performance, my ears adjust to its sonic limitations and restricted dynamics, and my attention is focused on the music. No one ever got more out of this score than Kullman and Thorborg. For me, Thorborg in the final bars, singing "Ewig..." gets to the heart of the music in a way not even Ferrier could match. I know the British will charge me with treason for that, but listen for yourself.

The Walter recording of the Brahms German Requiem was made in 1954, and it is here appearing for the first time. Walter's links with Mahler are well known, but we are less conscious of his ties with Brahms. For example, from 1910–12 Walter directed the Vienna Singakademie, a chorus that had been in Brahms's charge in the relatively recent past and must have preserved a performance tradition of the composer's choral works that would be of the greatest value to its new leader.

As a historic document, Walter's account of the Brahms seems to be of the highest importance. It is a truly beautiful performance, filled with the warmth that a great romantic conductor could bring to this music, and abounding in the felicities of phrasing and nuance that separate the truly great from the merely skillful.

Like the Mahler it is limited technically. It too may be a concert performance, although the fact that it is difficult to tell shows that the matter is not grave. (There are a few extraneous noises.) The sound is pleasant and reasonably balanced, although with the usual limitations of mono engineering. I find it almost impossible to follow the words, especially from the chorus, but musically the chorus is first-rate. Of the two soloists, George London is variable and displays vocal problems both in production and sustained tone quality. Irmgard Seefried, on the other hand, sings so beautifully that you simply cannot find fault. Everything she does is so completely right for this music, and sounds so gorgeous, that the record is worth having for her contribution alone.

One can perfectly well understand why Walter may have had second thoughts about either of these recordings being released in his lifetime. He had two later versions of the Mahler in print and he retained hopes that he could do the Brahms again with even greater success. But in the year that marks the tenth anniversary of his death, he surely belongs to history, and even a flawed likeness of his high art is able to instruct the young and recall in the not-so-young great days that still live vividly in memory.

\square	MAHLER: Das Lied von der Erde. Kerstin Thorborg,
	contralto; Charles Kullman, tenor; Vienna Philharmonic
\mathbb{H}	Orchestra, Bruno Walter, cond. Seraphim 60191, \$2.98
	(mono, recorded in 1936).
	BRAHMS: Ein deutsches Requiem, Op. 45. Irmgard
\square	Seefried, soprano; George London, bass-baritone;
1 1	Westminster Choir; New York Philharmonic, Bruno Wal-
H	ter, cond. Odyssey Y 31015, \$2.98 (mono, recorded in
	1954)

Hamilton

for his later versions. In this symphony, Walter's concern for setting the "proper" emotional character always seemed (to me, anyway) to override essential structural factors (whereas with Haydn the character is quite selfevident, so he did not worry, concentrating exclusively on setting forth the substance). This record too is sharp, but otherwise handsomely dubbed.

Among the air-check recordings, my particular favorite is the Mozart concerto with Szigeti, where the slow movement is exceptionally poised; even the occasional technical problem does not prevent this violinist from keeping afloat the longest phrase, and his sense of the style is admirable. Equally impressive is the overside Berg, with strong support from Mitropoulos and the excellent orchestra; the curve of the second movement can be heard as marvelously shaped, even through the broadcast balance (too much soloist) and limited dynamic range. On this record, the Mozart is a shade sharp, the Berg squarely in pitch—both in quite good AM sound.

Important in other respects besides the conducting is a 1942 *Don Giovanni* (WSA 304/6, three discs) with a cast including Pinza, Kipnis. Kullman, Bampton, Novotna, and Sayāo—indispensable, in fact, for Pinza's classic Don, whose delivery of the recitatives (among many other things) is absolutely nonpareil. WSA 702/3 (two discs) presents Part 1 of the *St. Matthew* Passion (sung in English, from a 1943 broadcast)—not the kind of Bach we are now used to hearing, but thoughtful and musical, an important document in the history of performance practice. (The odd side here includes Handel and Corelli concertos, from 78s.)

Finally, the Schubert/Strauss coupling, from concerts with the Vienna Philharmonic. The *Unfinished* is preceded by a speech by Walter, from which one deduces that this was a ceremonial occasion in Vienna; the well-recorded performance is, interestingly, more highly contrasted than Walter's 1958 New York version. The Strauss pieces, of earlier vintage (some grinding of air-check acetates here), are extremely stylish.

In brief, there is some very valuable material here, worth the attention of any serious collector or student of musical performance, and a must for all sound archives.

H	MOZART: Concerto for Violin and Orchestra, No. 3, in G. K. 216, BERG: Concerto for Violin and Orchestra.
	Joseph Szigeti, violin; orchestras, Bruno Walter, cond.
	(in the Mozart); Dimitri Mitropoulos, cond. (in the Berg).
	Bruno Walter Society WSA 701 (mono).
	SCHUBERT: Symphony No. 8, in b minor, D. 759 (Unfin-
	ished). STRAUSS, JOHANN II: Die Fledermaus: Over-
	ture; Der Zigeunerbaron: Overture; G'schichten aus
	dem Wiener Wald. Vienna Philharmonic Orchestra,
	Bruno Walter, cond. Bruno Walter Society BWS 1001
	(mono).
	HAYDN: Symphonies: No. 96, in D (Miracle); No. 100,
	in G (Military). Vienna Philharmonic Orchestra, Bruno
	Walter, cond. Bruno Walter Society BWS 1002 (mono).
	Available from the Bruno Walter Society and Sound

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BEETHOVEN: Fifteen Variations and Fugue on a Theme from "Prometheus," in E flat, Op. 35 (Curzon version). For a feature review of this recording and the Schubert Moments musicaux, D. 780, see page 65.

BEETHOVEN: Fifteen Variations and Fugue on a Theme from "Prometheus," in E flat, Op. 35; Variations on an Original Theme, in F, Op. 34; Six Variations on the Turkish March from "The Ruins of Athens," in D, Op. 76 (Richter version). For a feature review of this recording, see page 65.



BEETHOVEN: Quartets for Strings: No. 13, in B flat, Op. 130; No. 16, in F, Op. 135; Grosse Fuge, Op. 133. Yale Quartet. Cardinal/Vanguard, VCS 10096/7, \$3.98 each (two discs).

Selected comparison: Guarneri

RCA VCS 6418

These two discs represent the completion of the Yale's recordings of the last five Beethoven quartets and the *Grosse Fuge*. Those who read my discography of the quartets [HIGH FIDELITY, November 1970] may remember the great admiration I expressed for their three earlier discs (of Opp. 127, 131, and 132). The present two lend further support for my earlier enthusiasm. The Yale's *Grosse Fuge* is the most convincing version I have heard; they perform the work with clear contrapuntal differentiation and a truly comprehensive view of the complexities of its over-all design.

The Op. 130 is equally good. This quartet, with its violent contrasts, is a particularly difficult one from the performer's point of view: yet the Yale group projects the music with a sense of power and conviction that clarifies its mysteries to an extraordinary degree. They are particularly successful in integrating the tempo changes of the first movement into one well-defined rhythmic span. Unfortunately the Op. 135 is somewhat less impressive. Here

they seem to lack the necessary lyrical sensibility to do justice to this most intimate of the late quartets. Ironically, the very qualities that make their renderings of the other two works so admirable are apt to go awry in Op. 135: The tendency to bring out the larger shape, achieved partly through the suppression of surface nuance, leads here to an overly inflexible rhythmic flow. Although there is much that is interesting in this reading, it is not one I would want to live with over an extended period of time.

I will confine comparisons with other recordings to the recent Guarneri set comprising the late quartets. What should be said first off. I think, is that the appearance of such distinguished recordings of late Beethoven by two American quartets speaks very well indeed for the present state of the standard quartet literature in this country. My own preference falls on the side of the Yale, as I find that their more assertive approach to the music results in a stronger sense of formal cohesiveness, an eminently desirable characteristic in communicating works of such profound structural ambiguities. I always have the feeling in hearing these works that this is music which demands to be held together by sheer force, and that is precisely what the Yale group accomplishes better than any other ensemble I know. Indeed, it is only in the less monumental Op. 135 that I would give the Guarneri the edge.

Two textual peculiarities in the Yale performances are perhaps worthy of note: They play octave F's at the end of the first movement of Op. 135 rather than the F major chord notated in the score; and in the subject of the Grosse Fuge, the second of the tied notes is given a separate articulation. This latter is particularly puzzling, as it occurs only in the opening statement of the subject.

R.P.M.

BOLCOM: Twelve Etudes. **WINSOR:** Melted Ears. William Bolcom, piano (in the Bolcom); William Albright and Thomas Warburton, piano (in the Winsor). Advance FGR 14S, \$5.00.

This disc brings together works by two young American composers, both born in 1938. Of the two, William Bolcom seems to me clearly the more interesting. His Twelve Etudes for piano are written with tight compositional control and a really virtuosic conception of keyboard writing. Like the études of Chopin and Liszt, these works can best be considered-at least from a compositional (as opposed to a performance) point of view-as a series of studies in texture and sonority; and Bolcom reveals an unusual grasp of the possibilities of keyboard scoring and a pronounced flair for discovering unexpected textural combinations. Pianistically considered, the work explores a wide range of technical problems, and Bolcom, who plays the piece himself, indicates that he's a performer of no small accomplishments. Unfortunately the recording, which was apparently made at a concert, is quite poor.

Phil Winsor's Melted Ears is one of those collage pieces made up out of the fragments of well-known works from the standard literature. Although in principle I have nothing against this (readers are referred to my review of Mauricio Kagel's Ludwig Van in the February, 1971 issue of HIGH FIDELITY), in this in-

stance the results are of little interest. It sounds very much as if two pianists with a fair knowledge of the literature sat down at a party and played around for a little while. What emerges is not so much a piece as a kind of musical parlor game. There are, of course, parlor games and there are parlor games; but this one isn't terribly well done.

R.P.M.

BRITTEN: The Turn of the Screw.
Governess Jennifer Vyvyar

Governess Miles Flora Mrs. Grose Miss Jessel Quint Jennifer Vyvyan (s)
David Hemmings (s)
Olive Dyer (s)
Joan Cross (s)
Arda Mandikian (s)
Peter Pears (t)

English Opera Group, Benjamin Britten, cond. Richmond RS 62021, \$5.96 (two discs, mono only; from London A 4219, 1955).

It's possible to criticize Britten's operas for any number of reasons, but *The Turn of the Screw* seems just about perfect to me. The libretto is extremely clever—concise, brilliantly paced right up to the final exorcism, and provocatively ambiguous. Britten has made superb capital from its episodic structure, casting each scene as a variation on the twelve-tone "screw" theme that opens the opera, achieving a taut, evenly flowing musical/dramatic synthesis. His scoring for chamber orchestra has never been more brilliant, while the invention is consistently imaginative and gripping—surely the cathartic final scene is one of the most moving in all contemporary opera.

This recording is not in stereo, but the performance is so magnificent and the technical quality so good (the special sonic ambiences created for the two ghosts are vividly realized even without the benefit of two channels) that a new version hardly seems necessary. This is the cast of the premiere and they have not yet been bettered in the several productions I have seen over the past fifteen years. It is certainly one of the high points in London's valuable Britten series.

P.G.D.

BRUCKNER: Symphonies: No. 4, in E flat (*Romantic*); No. 7, in E. Berlin Philharmonic Orchestra, Herbert von Karajan, cond. Angel SC 3779, \$17.94 (three discs).

BRUCKNER: Symphony No. 6, in A. Boston Symphony Orchestra, William Steinberg, cond. RCA Red Seal LSC 3177, \$5.98.

Selected comparison (No. 4):

Lon. 6695

Selected comparison (No. 6):

Phi. 6500 164

Selected comparison (No. 7):

Lon. 2216

It is probably safe to assume that a significant

Explanation of symbols Classical: B Budget Historical R Reissue Recorded tape: Open Reel 8-Track Cartridge Cassette

part of the increasing popularity of Bruckner is due to the distinctive sound of his orchestration, the organlike effects he produces from interweaving strings and winds, and the splendor of his writing for brass. If this is the case, neither of these recordings is nearly as satisfying as it ought to be. The performances are of exceptionally high quality. Karajan and Steinberg have been champions of Bruckner for many years. They have the style at their fingertips, and they have the skill to achieve full realization of the scores

The failures are due entirely to the engineering. In the case of the Angel set, I assume that the Berlin orchestra was playing in the same church it has used for recording purposes for a number of years. But the microphone placement suggests the practices of the early stereo period of a dozen years ago. The effect is that of a very large and resonant hall. The orchestra is at one end and you're at the other-except for a few climactic moments when, out of the blue, presence mikes appear highlighting the percussion. Some of the balances, as a result, are very strange indeed.

As studies in interpretation, Karajan's treatment of the Fourth and Seventh are valuable documentations of what he does with tempo and phrasing and his current over-all view of these works. But too much detail is missing or obscure for these records to be of value as documents of his treatment of texture and color. The texts used are identified as the Haas editions.

Steinberg, on first impression, gets much better sound from the RCA engineers. I would take it that this disc was made in Symphony Hall during the 1969-70 season, just before the recording affiliation of the orchestra moved to Deutsche Grammophon. There is a nice sense of spaciousness, and the ensemble is far more precisely defined than the Berlin orchestra, but soon one senses the engineers fussing with levels during the climactic pages and cranking down the volume. The effect of the final moments of the score is particularly depressing, rather dull and flat in quality rather than brilliant and triumphant. R.C.M.

CHOPIN: Concerto for Piano and Orchestra, No. 1, in E minor, Op. 11, Claudio Arrau, piano; London Philharmonic Orchestra, Eliahu Inbal, cond. Philips 6500 255, \$5.98

This is a thoroughly rehearsed, meticulously worked-out collaboration between soloist and conductor that reveals countless carefully considered details. For example, Inbal's unusual long treatment of the appoggiatura at the beginning of the slow movement's orchestral preface is thoroughly in keeping with Arrau's by now well-known practice of keeping appoggiaturas long (as per their Mozartean antecedents) and playing acciaecaturas on the beat. Quite aside from these specific details, there are literally hundreds of other phrases which are here re-created with discernment, character, and imaginative deliberation. Note, to cite another example, the way Arrau delineates his phrases in the Rondo's opening theme, and note how he astutely colors each inner line and modifies the tempo slightly for greater point and personality. As one would expect, this new version is superlative from a pianistic standpoint: There is wide dynamic range, magnificent clarity, and above all, poetic sensibility

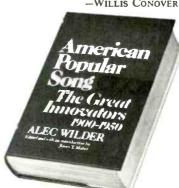


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The versions I have singled out in the above list make for fascinating comparisons. The Pollini may not be quite as arresting as the others, but his very straight approach does provide plenty of forward motion and cohesion. As a bargain stereo edition, it is more than reasonable value. The Argerich with Abbado is also, in a sense, a bargain for their full-priced disc throws in Liszt's E flat Concerto as a very substantial bonus. Theirs is an extremely wild, flamboyant reading utilizing wide extremes of tempo and dynamic. It's a bit far out for me, but very, very exciting. Lipatti is far more contained, somewhat like the aforementioned Pollini but with more lyricism and tonal color. Lipatti's patrician, delicately spun rubato happens to coincide exactly with my own views about this concerto (which is, after all, an early work of Chopin's and as such more classically oriented than romantic). Rubinstein's lovely performance with Skrowaczewski is more robust and seemingly improvisatory in its abandoned phrasing. The new Arrau, by contrast, sounds more meditative than spontaneous: It's very beautifully achieved, though I get the impression that Chopin's language doesn't come to this great musician quite as fluently as Liszt's or Beethoven's.

DES PREZ, JOSQUIN: "Chansons, Frottole, and Instrumental Pieces." The Nonesuch Consort, Joshua Rifkin, dir. Nonesuch H 71261, \$2.98. Recordans de my segnora; lle fantazies de Joskin;

Que vous ma dame / In pace; Cela sans plus; La plus des plus; Scaramella; De tous biens playne (two versions); In te Domine speravi; La bernardina; Qui belles amours a; Comment peult avoir joye; Quant je vous voy; Baises moy; Entrée suls en grant pensée; Une mousque de Biscaye; Se j'ay perdu mon amy.

Last summer's smash-hit Josquin festival in New York awakened many ears, including mine, to the multifarious beauties of this master of Renaissance music. Record production has lagged disappointingly behind, and it is a joy to welcome this elegant and exuberant glimpse of Josquin's secular chansons. Joshua Rifkin has chosen a program which illustrates Josquin's versatility in technique and expression. How astonishing it is to learn that pieces which sound so deceptively simple are based on complicated canons and elaborately counterpointing texts. The melody of Comment peult avoir joye is so inescapably beguiling, for instance, that its appearance in canon just sounds like a thoughtful dividend. Another jewel is the dreamy lover's longing of Que vous ma dame whose soothing bass line comes, we are told somewhat forbiddingly, from a responsory complin in Lent with the appropriate text "In pace," "in peace will I sleep."

As a contrast to these reflective love lyrics there are some more energetic numbers, Baises moy and Une mousque de Biscave, for example, both performed instrumentally. This last is another popular song whose deceptively simple garb cloaks an elaborate canonic structure. His freer compositions are no less graceful and charming; the pointillistic performance of Quant je vous voy is particularly appealing and when Josquin wants to make a point, as he does in the punch line of Se j'ay perdu mon amy, he is irresistible.

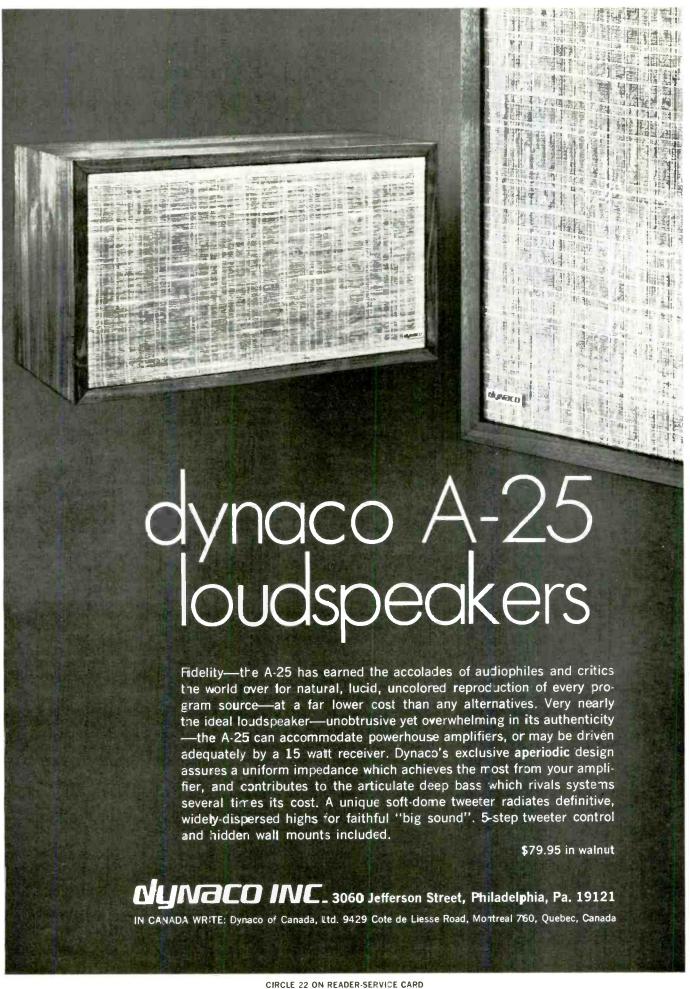
Rifkin gets remarkable sonority from the modestly staffed Nonesuch Consort: basically four voices, recorders, and bass viols (that is gambas, not bass viols as we know them in symphony orchestras). We have become used to such a breathtaking variety of color from our early-music ensembles, such bewildering curlicues of ornamentation, such a clatter of drums and rattles, that it is a relief to hear the music presented so simply. It stands up very well on its own. The tone of the ensemble is silvery clear. It is, it occurs to me, a very American sound drawing unconsciously on the heritage of the New York Pro Musica, the rhythmic vitality of Noah Greenberg, the delicate clarity of the ensemble under John White. The performers are young, fresh, and spontaneous-a lovely sound for lovely music.

HAYDN: Quartets for Strings: Op. 64

(6); Op. 2: Nos. 5 and 6; Divertimento, Op. "0." Fine Arts Quartet. Vox SVBX 597, \$9.98 (three discs).

The monumental undertaking of recording Haydn's eighty-odd string quartets does honor to the excellent Fine Arts Quartet (which has Continued on page 78





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CIRCLE 49 ON READER-SERVICE CARD

Ormandy's Incandescent Recording of Ilya Murometz

by R. D. Darrell

QUINTESSENTIALLY Russian and romantic, Glière's musical glorification of the medieval Slavic folk hero Ilya Murometz (far more a grandiose epic tone poem than a symphony) never has enjoyed concert-hall popularity-probably because it makes such unconscionable demands on both its performers and auditors. But on records, where its mesmeric evocations of " old, unhappy, far-off things and battles long ago ... are maximally effective and where its extravagant sonic opulence can be best relished by absorbed individual listeners, it has achieved a not inconsiderable vogue. In particular, it has always been an ideal work to demonstrate advances in the state of audio art and technology.

The still memorable first recording. on eleven 78-rpm disc sides by Stokowski and the Philadelphians in 1941, was timed as a tribute to the then-embattled U.S.S.R., but it was famous among discophiles as perhaps the most spectacular triumph electrical recording techniques had yet achieved. Then new standards were set in the mono LP era by Scherchen's first complete version of the 400-page-plus score for Westminster in 1953, and by the 1957 Ormandy/Philadelphia version (with the composer-approved cuts used earlier by Stokowski) for Columbia. But these, along with several other versions including a Russian one conducted by the composer, were pushed into out-ofprint limbo when Capitol released stereo-tape (1958) and stereo-disc (1959) editions of a new Stokowski version, this time with the Houston Symphony. And despite the somewhat less than topflight orchestral virtuosity and a cruel whittling down of the score to not much more than a third of its full length, the "demonstration" potency of this music in stereo made that version enough of an audiophile favorite to keep it in print, now as Seraphim S

Impressive as each of these Ilya Murometz recordings has been by the standards of its own era, it's only today that the kaleidoscopic palette and the ultraopulent sonority potentials of the work-and of the Philadelphians at their best-can be exhaustively exploited. RCA finally solved its earlier problems in recording this orchestra when the recording locale was shifted back to Philadelphia's Town Hall (renamed the Scottish Rite Cathedral). But in the present disc even its best recent engineering efforts (and, for that matter, even the best of the exceptionally fine recordings made during the last years of the Columbia contract) are thrillingly excelled. Indeed, I know of no other examples of today's multichannel audio technology which so harmoniously reconciles the often conflicting aims of sonic lucidity, transparency, and differentiation with those of cohesiveness and homogeneity. Above all, this *Murometz* is notable not only for giving full justice to the tonal splendors of the famed Philadelphian strings, but for providing true apotheoses of the brass, horn, and woodwind choirs.

Awed so completely by the magnificence of sound alone, it seems hardly necessary either to praise Ormandy for organizing the performance so expertly and for keeping the music's romantic excesses so firmly under control, or to blame him for giving us something less than the full score of what is admittedly an unconscionably long and sprawling work. The present performance runs just a few seconds less than a full hour, which is (1 think) several minutes longer than the earlier composer-approved cut versions, and some thirteen minutes longer than Stokowski's Houston performance. (Unfortunately, I no longer have the note-complete Scherchen set on hand for an exact timing or for detailed evaluations of the passages now omitted by Ormandy.)

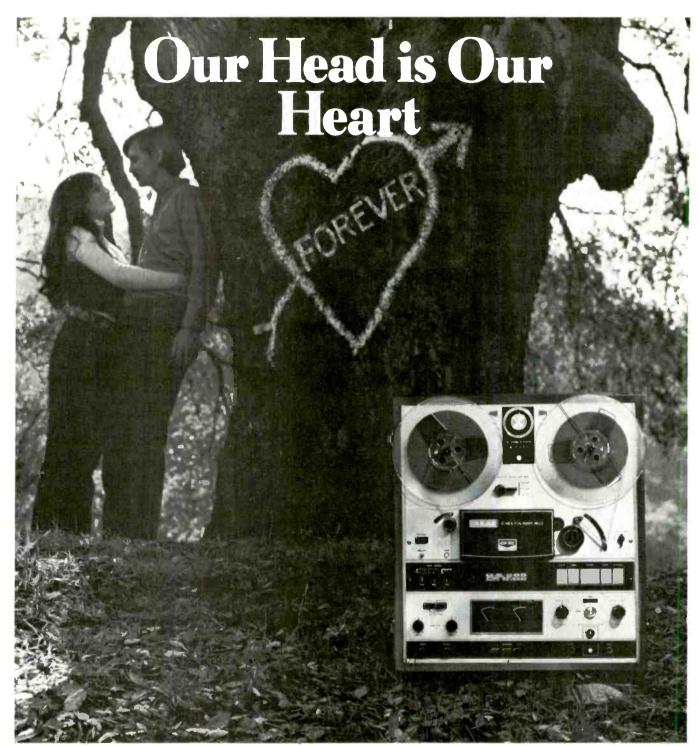
In any case, to concentrate attention on technical, executant, and editorial considerations is to dodge the issue: either to endorse or to contradict the usual damning-with-faint-praise evaluation of Glière's-and other composers'-music, which is generally considered by cognoscenti as far too obvious in its sheer aural appeal. Let us admit that Glière's structural forms and harmonic idioms are orthodox to an extreme, that his profusion of melodies may sacrifice originality and even high distinction for immediate, uninhibitedly sensuous appeal, that his elaborate "program" here seems juvenile at best nowadays. What's wrong with that?-especially when such attractions are immeasurably enhanced by orchestral scoring as skilled and splendiferous as anything by Rimsky-Korsakov, Richard Strauss, and Ravel. Why should "escapist" entertainment be any more deplorable in music than comparable historical fiction in literature-at least when practiced by experts?

Intellectual respect is not an essential in passionate love, and a double standard, even a kind of double life in the arts, well may enable us to multiply our pleasures—and simultaneously to pacify our hyperactive aesthetic consciences. Glière's *Ilya Murometz* in its present epiphany, makes an ideal starting point.

GLIÈRE: Symphony No. 3, in B minor, Op. 42 (*Ilya Murometz*). Philadelphia Orchestra, Eugene Ormandy, cond. RCA Red Seal LSC 3246, \$5.98.

Selected comparison: Stokowski

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been featured on volumes seven, eight, and nine) and to Vox. Concert managers used to refer to chamber music as "poison," but the very fact that such a ten-volume project can be embarked upon shows the remarkable growth of musical literacy. Indeed, there is no more satisfying musical experience than what has been called the intimate musical conversation of four wise men. The four instruments correspond admirably to the four-part construction that became standard in the eighteenth century; the texture is always clear, there is no place to hide, no way of slurring over difficult spots, and every note must be vouched for. In the creation of this genre Haydn's role is paramount, but to realize the magnitude of this

role we must recall his position in the sequence of events.

The year after Haydn's birth Bach finished the Kyrie and Gloria of his B minor Mass: one year before his death Beethoven's Fifth and Sixth Symphonies had their performance. Thus Haydn's life extends from the late baroque to the high classic era. No major composer, Mozart not excepted, had so decisively influenced musical history during this broad expanse of stylistic evolution. With great patience, extensive experimentation, critical acumen, and a large measure of genius, this peasant-born master gradually reconciled the many conflicting trends to establish the norms of what in the absence of a more precise term we call classicism. The string quartets occupy the central position in his fantastically rich

output, and it was in them that he concentrated his studies and experiments in the art of setting, form, instrumentation, and the problems of sonority.

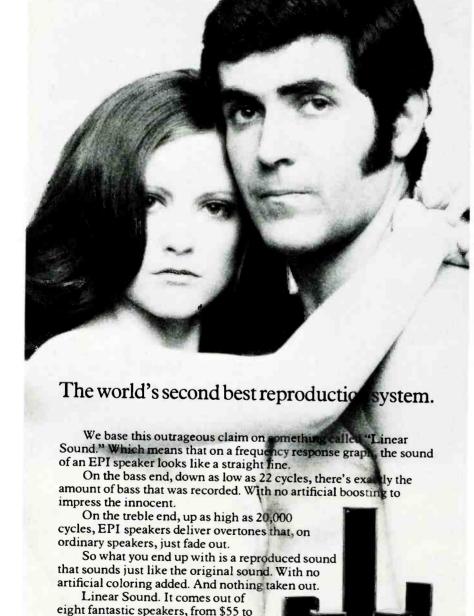
Haydn is not interested in monumentality, he likes to spin musical yarns for his audience; here a theme gets him "talking," there he picks up another idea, weighs and tests it, then either drops or elaborates it with infinite resources. The old mistake of considering Haydn and his colleagues "formalists" is nowhere better refuted than in the quartets recorded here. Aside from the fact that in Haydn's time no one had ever heard of the "sonata form" as we know and teach it, the modern textbook concept simply does not fit the originality of Haydn's imagination. Yet in spite of the seemingly casual narration, precision and logic reign everywhere.

The first quartet in Op. 64, a friendly work in C major, does not allow a single cloud in the sky. The second, in B minor, is solemn and moody with a good deal of chromaticism, though in the finale Haydn permits himself one of his marvelous musical jokes: He interrupts the coda by inserting a general pause of a measure and a half, thereby completely upsetting all our expectations. The third work, in B flat, opens with one of those typically Haydnesque themes having endless melodic, rhythmic, and harmonic possibilities, which he then exploits to the hilt. The last three quartets of the set are among the most popular works in this literature. In the opening movement of the G major (No. 4) Haydn, who often operates monothematically, does have a fine second subject, which he proceeds to develop instead of the principal subject-another rebuke to the textbooks. The minuet is really an earthy Austrian peasant dance, and the finale is musical classicism incarnate. No. 5, in D, better known as the Lark quartet, offers heavenly song but also a whirlwind finale. No. 6, in E flat, with its warm themes, clearly shows Mozart's influence on the older master. The Andante is almost romantic in its effusiveness; every instrument sings with abandon, but toward the middle the mood darkens. The minuet is a highly refined and stylized piece, while the humorous byplay in the finale thrives side by side with exceptionally transparent instrumental polyphony. The album is rounded out by two earlier quartets from Op. 2, and by the quartet-divertimento that carries

the quaint designation "Opus 0."

The quality of the performance is consistently on a very high plane. The ensemble work is irreproachable; each member of the quartet is a finely honed instrumentalist with impeccable technique and intonation, and each knows when to defer to the other. The tone is warm, the phrasing musicianly, every instruction in the score is carefully followed, and no melodic note is ever mistaken for a grace note. About the only objection that may be made concerns the use of the old-fashioned allargando at the end of fast movements, and there are some instances of exaggerated agogic freedom. The sound is first class.

P.H.L.



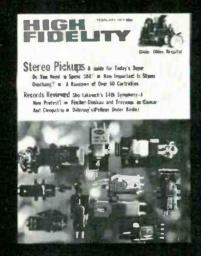
HUMPERDINCK: Hänsel und Gretel.

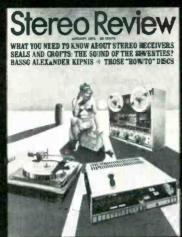
Peter Gertrud Hänsel Gretel The Witch Sandman Dew Fairy Dietrich Fischer-Dieskau (b)
Charlotte Berthold (ms)
Anna Moffo (s)
Helen Donath (s)
Christa Ludwig (ms)
Arleen Auger (s)
Lucia Popp (s)

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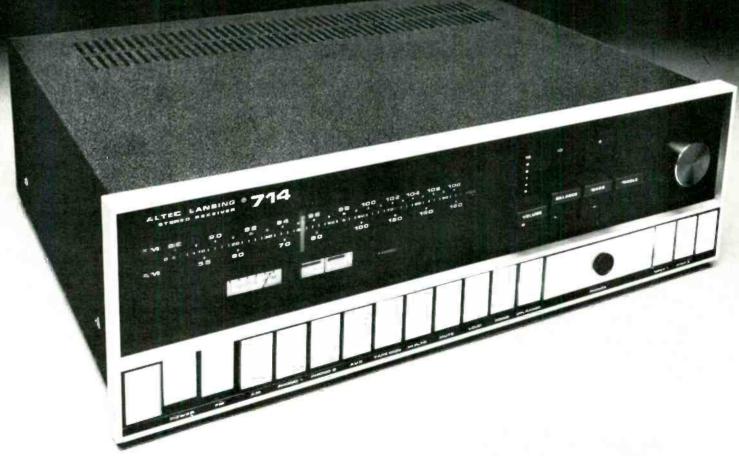
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In February, HIGH FIDELITY magazine printed a detailed two-page test report (by CBS Laboratories) on the Altec 714A stereo receiver. The wrap-up comment read as follows: "All told the 714A is one beautiful piece of audio machinery that should be given a long ser ous look by anyone in the market for a new high-quality stereo receiver". And in January, STEREO REVIEW'S equipment test report (by Hirsch-Houck Laboratories) stated, "In its general performance and listening quality, it is comparable to the best we have tested..."







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Tölzer Boychoir; Orchestra of the Bavarian Radio, Kurt Eichhorn, cond. Eurodisc 85 340, \$11.96 (two discs).

Hänsel never gets such glamorous all-star casting in the opera house as it does on this new recording. Eurodisc's largess even outdoes Angel's classic mono set (3506, deleted) with Schwarzkopf's and Grümmer's very sophisticated children and Karajan's ultrasuave leadership. (If these sound like paradoxical plus qualities for a simple fairy-tale opera, they are nonetheless appropriate-like Rosenkavalier, Hänsel und Gretel is full of paradoxes that work like a charm.) My loyalty for that sleek and silken performance remains unshaken, but this latest entry is a splendid oneeven superior to its rival in some respects.

Helen Donath is absolutely enchanting as Gretel-fresh-voiced, pure as a bell, unaffected, and superbly musical: Her little greeting to the dawn in Act III is an especially ravishing moment. Anna Motlo has had vocal trouble of late, but here the problems are minimal. Her boyish timbre suits the music perfeetly and the occasional awkward register shifts and slightly exaggerated operatic approach are only minor distractions.

Fischer-Dieskau is obviously no humble broommaker but a professional Lieder singer in disguise-another paradox, since he invests this artless little role with so much vocal art that one is constantly fascinated and delighted every time he sings. Charlotte Berthold as the Mother seems rather outclassed in this company, especially considering the bonuses pro-

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vided by Arleen Auger, a lusciously dreamy Sandman, and Lucia Popp, by contrast a deliciously pert and vivacious Dew Fairy.

Surely Christa Ludwig provides the set's most incredible tour de force. Usually the Witch goes to an aging mezzo or a buffo tenor: here we have one of the most sensational voices of today, really singing every note, having a field day batting out a high B or B flat like Brünnhilde in full cry. and savoring (but never overdoing) all the comic possibilities. Extraordinary.

Kurt Eichhorn gives a considered, deliberately paced reading that accents the Wagnerian aspects of the score. The parts do not mesh as smoothly as with Karajan, but the orchestra sounds plump and warm, most of the marvelous scoring and thematic details come through tellingly, and the tunes are affectionately phrased. The sound is smooth, rich. and creamy. P.G.D.

LISZT: Sonata for Piano, in B minor. Schu-MANN: Sonata for Piano, No. 2, in G minor, Op. 22. Martha Argerich, piano. Deutsche Grammophon 2530 193, \$6.98.

Martha Argerich seems to have found a happy middle ground between her temperamentally wild renderings of Chopin's B minor Sonata (DGG 139317), Chopin's E minor and Liszt's E flat concertos (DGG 139383), and the inordinately subdued Tchaikovsky B flat minor Concerto of last fall (DGG 2530 112). She is particularly successful in the Schumann sonata which is given a much larger-scaled performance than it usually gets. The work benefits enormously from Argerich's sanguine volatility in the molto passionato outer movements and by her reserved, structurally lucid delivery of the Andantino. This is a rhapsodic, romantic, and emotionally appealing interpretation that never sinks into maudlin excesses. Indeed, the music emerges with an almost Beethovenian profundity and solidity.

The Liszt too fares impressively well. Miss Argerich belies her sex with huge masses of bronzen sonority and a breadth of power held in reserve that brings Horowitz to mind. But I think that Argerich's treatment of the Liszt is superior to the hallowed, rather overrated one that the paradigm himself committed to wax in his days of youthful indiscretion (still available on Seraphim). All that is missing is that last degree of magic and spirituality that artists like Curzon. Richter, and Arrau have brought to the work. Take, for instance, the final climax and its resigned aftermath: Whereas Richter judges this to a T. Argerich tends to be supercharged and just a shade too restless here. I also get the feeling that perhaps she is overselling a bit by bringing out all subsidiary voices with the same clarity as the dominant ones. Such X-ray vision tends paradoxically to obscure the totality, although the intent obviously is to clarify

I don't want to quibble: This is a magnificent coupling, stupendously well played and glisteningly recorded.

MAHLER: Lieder. Dietrich Fischer-Dieskau, baritone; Leonard Bernstein, piano. Columbia KM 30942, \$6.98.

Rückert Lieder: Ich atmet' einen linden Duft; Blicke mir nicht in die Lieder; Ich bin der Welt abhanden



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gekommen; Um Mitternacht; Lieder und Gesänge aus der Jugendzelt: Um schlimme Kinder artlg zu machen; Selbstgefühl; Scheiden und Meiden; Ablösung Im Sommer; Nicht Wiedersehen!; Serenade aus "Don Juan"; Zu Strassburg auf der

Mahler's "Songs of Youth" have received less attention on recordings than his other sets-far less attention than they deserve. The seven songs represented here include six settings of poems from Des Knaben Wunderhorn (none of which is included in the later Wunderhorn cycle with orchestra), and one of a poem by the seventeenth-century Spaniard Tirso de Molina. While there are obvious similarities in style to Mahler's later songs, the selections show one relatively unfamiliar side of the composer: that of the lighthearted comedian.

Of the seven, only Nicht wiedersehen! and Zu Strassburg auf der Schanz have serious texts. The latter, incidentally, describes a homesick soldier's desertion and trial and very much recalls Wo die schönen Trompeten blasen, a later Wunderhorn setting. There is in both the same sense of bleakness and approaching death.

The five songs generally referred to collectively as the "Rückert Songs" are represented with the exception of Liebst du um Schönheit.

It is almost unnecessary to state that the performances are excellent. Fischer-Dieskau catches the mood of each song exactly; his rhythm, his diction, his sense of style and timing, all serve as pleasurable reminders that few Lieder interpreters can equal this man, and none surpass.

Bernstein's accompaniment is equally outstanding. Especially good is his playing in Um Mitternacht, where he gives the piano an almost orchestral sound-a welcome interpretation in a song whose accompaniment was originally orchestral and that sometimes sounds too weak with piano. His evocation of the varying moods of the "Youth" songs is excellent.

The Rückert songs, although available in many other performances, are done unusually well here; and the "Songs of Youth," less accessible to the collector, are equally good. The result is an interesting and valuable addition to the Mahler discography.

MAHLER: Symphonies: No. 5, in C sharp minor; No. 10, in F sharp. Concertgebouw Orchestra of Amsterdam, Bernard Haitink, cond. Philips 6700 048, \$11.96 (two discs). Selected comparisons:

Solti

Kubelik

DGG 2707 056

With this release Haitink's Mahler cycle with the Concertgebouw is complete, although momentarily his reading of the First Symphony lacks representation in the U.S. catalogue. (Reason: A new version is on its way.) Philips does not demand that you purchase all of these symphonies in one package, although Haitink is thoroughly competitive throughout all ten works. His orchestra learned its Mahler style from Mahler himself, and Haitink has absorbed the tradition with a thoroughness that makes for eloquent and idiomatic performances

With nine versions of the Fifth Symphony available, none can really be cited as best. Kubelik and Solti provide the most intense rivalry at this point, but Haitink need make no apologies to either of these senior colleagues

with respect to his skill as a Mahler interpreter. I found that the more I made comparisons the more I was convinced that each man had found his own vision of the score, and that all three were thoroughly defensible.

Haitink has two advantages. Instead of using songs to fill the final surface of the tworecord set, he offers the Adagio of the Tenth Symphony—the only portion of that score one can accept as Mahler's thought almost fully achieved by his own hand. The Haitink version is somewhat warmer and more romantic than that of Boulez (which I still admire greatly) and more spaciously recorded than that of Kubelik (which I also respect). These factors, plus the coupling with the popular Symphony No. 5, may sway your decision.

Secondly, Haitink has, for my present taste, the finest engineering of any version of this work. I am in the midst of investigations of four-channel sound, trying to see how well a recording can provide a three-dimensional likeness of concert-hall sound, and this set, even without SQ enhancement, does a remarkable job. As I commented earlier on the release of Haitink's edition of the Mahler Eighth. Philips' engineering, with its fourtrack masters, presently offers an impressive likeness of what one hears in the front of the balcony of the Concertgebouw. The beauty of sound in this set, and its ability to duplicate a live performance with so little loss, strikes me as exactly what high fidelity must be about.

The Kubelik, in contrast, seems somewhat drier acoustically and more confined, while the Solti conveys the spaciousness of a large hall (Medinah Temple in Chicago) without the same sense of presence that is so strong in the Amsterdam recording.

My congratulations to Haitink on completing this cycle, and my respects as well to the Philips engineering staff for an achievement of equal stature. RCM



MONTEVERDI: L'Incoronazione di Poppea (arr. Leppard): Excerpts.



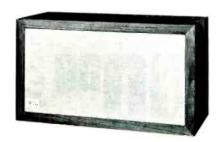
Lon. 2228

Royal Philharmonic Orchestra, Glyndebourne Festival Chorus, John Pritchard, cond. Seraphim SIB 6073. \$5.96 (two discs; from Angel SBL 3644, 1964).

Poppea Magda Laszlo (s) Nerone Richard Lewis (t) Arnalta Oralia Dominguez (c) Drusilla Lidia Marimpietri (s) Ottone Walter Alberti (bs) Seneca Carlo Cava (bs) Ottavia Frances Bible (ms) Valetto Duncan Robertson (t) Damigella Soo-Bee Lee (s) Liberto John Shirley-Quirk (b) Lucano Hugues Cuenod (t) Littore Dennis Wicks (bs) Primo Soldato Dennis Brandt (t) Secondo Soldato Gerald English (t) Elizabeth Bainbridge (s) Pallade Annon Lee Silver (s)

Raymond Leppard's version of Monteverdi's magnificent L'Incoronazione di Poppea, first produced at the Glyndebourne Festival of 1964, was a pathbreaker in the baroque opera revival, which has since made Monteverdi, Cavalli, and even such lesser lights as Cavalieri familiar to both operagoers and home listeners. This recording, which features the original Glyndebourne cast, is now reissued on the budget Seraphim label-a welcome event, especially since it has no thoroughly satisfactory competition.

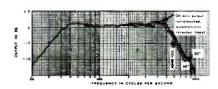
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Frequency response of the AR-3a 12-inch woofer, radiating into a 360° solid angle (hemisphere).

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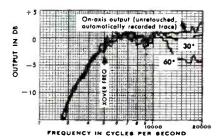
In a recent review of the AR-3a, published in *Stereo Review*, Hirsch-Houck Laboratories made the following observation:

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Not that the Leppard show is itself perfectfar from it. Anyone looking for the dramatic verities in the Busenello-Monteverdi collaboration won't find them in the chopped-up foreshortened version of this two-disc set. And although we are becoming accustomed-or numbed-to Leppard's singing strings, the effect is still a bit overblown. But all the same, Monteverdi's superb melodies are still there and the astonishingly perceptive characterizations-the blustering, weak, vacillating Nero; his nobly resigned discarded Queen; the sententious Seneca; the shallow and opportunistic Drusilla; and her enchanting and innocent counterpart, the waiting woman known only by her title, Damigella. But most of all it is Poppea's show; one of the great characters in operatic literature, she is entrancing, seductive, irresistible, and totally

amoral. The apotheosis of the drama, Poppea's triumphal coronation is a victory for the greedy, power-loving sex and status symbols of the world. Not surely a nice ending but don't we still admire the Howard Hugheses and Jacqueline Onassises of this world? And how much clearer the parallels must have seemed in the narrow hierarchies of the Italian nobility. In an age of allegory and historical fiction, Monteverdi has created the first realistic opera

Magda Laszlo's Poppea is outstanding, sung with a voluptuous tone and just the right note of insinuation. Richard Lewis matches her musically without sacrificing Nero's nebbishlike qualities. Their final duet, a forerunner of Handel's Caesar and Cleopatra, is worth the price of the recording alone. Among the minor characters Oralia Dominguez' rich contralto brings distinction to the small part of Poppea's nurse-her lullaby is a showstopper-and Soo-Bee Lee is particularly charming in the never-fail role of the Damigella.

MONTEVERDI: "Madrigali virtuosi." lan Partridge and Nigel Rogers, tenors; Christopher Keyte, bass; Hamburg Monteverdi Choir, Jürgen Jürgens, dir. Archive 2533 087, \$6.98. Se vittoria si bella; Non voglio amare; Vaga su spina ascosa; Zefiro torna a 5; Augellin che la voce; Ninfa che scalza il piede; Ah come un vago sol; O mio bene; Zefiro torna a 2; Mentre vaga angloletta; Volgende il ciel.

"Madrigali virtuosi" is an apt title for these early baroque works of Monteverdi meant to be sung for the pleasures of princes and prelates by their highly paid and phenomenally skilled musicians. Most of the madrigals in Monteverdi's last three big collections, Books 7, 8. and 9, are for two or three voices with a chamber continuo as accompaniment. Intimate pieces, usually just a harpsichord will suffice for continuo, they exploit the subtleties of the singer's art-delicate coloratura ornaments, expressive slow lines arching over great range, syllabic sections demanding perfect diction. Archive has imported these English singers who are thoroughly experienced in all phases of "early music" having appeared on just about every disc from Bernard de Venta-dorn to Purcell that has appeared in the last few years. Moreover the soloists are indeed virtuosos who would surely be welcomed in any century. To them is added the Monteverdi choir of Hamburg, a choral ensemble whose style is a disturbing contrast to the crisp clarity of the solo voices. Fortunately the programming is heavily weighted toward the chamber ensemble so the difference is not too distract-

The selections are for the most part unfamiliar to disc, and thus especially welcome. The little pastoral scenes of bird songs, nymphs, and flowers are traced in delicate detail in Ninfa che scalza il piede, Augellin che la voce, and Vaga su spina ascosa. The chromatic languishing of the lovely opening to Mentre vaga angioletta recalls the anguish of Monteverdi's most expressive madrigals tempered by the knowledge that everything will, after all, come out all right. I was particularly struck by the Schütz-like sound of Se vittoria si bella, when it is in fact Schütz who sounds like his teacher Monteverdi. O mio bene is another jewel, contrasting seductive melodic lines with fast concitato passages.

The Hamburg Monteverdi Choir appears in the five-voice Zefiro torna, which is no relation at all to the duet but rather a staid "expressive" madrigal from Monteverdi's earlier period; as a chorus in the multipartite Volgende il ciel, a joint instrumental solo and choral production redolent of an Italian-flavored masque; and in A un giro sol. a halfway point for Monteverdi, combining rather stiff madrigal writing with long duos in the new con-

certed style.

Despite the many excellences in this recording, I find I am not totally satisfied. The tempos are frequently too fast for one thing; one loses all the wonderful swing of the gound bass in Zefiro torna which gave it a brief popular notoriety as a rock hit some years ago, and the singers are not always in tune. The far-off ooh-aah sound of the Hamburg group con-

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trasts sharply with the "up-close" presence of the solo singers. S.T.S.

MOZART: Credo Mass, K. 257; Coronation Mass, K. 317. Helen Donath, soprano; Gillian Knight, alto; Ryland Davies, tenor; Clifford Grant, bass (in K. 257); Stafford Dean, bass (in K. 317); John Constable, organ; John Alldis Choir; London Symphony Orchestra, Colin Davis, cond. Philips 6500 234, \$5.98.

No more startling document than this recording can be mustered to illustrate the shattering changes in social, theological, and artistic history and thought that have taken place during the last two centuries. These masterpieces delighted and edified Mozart's contemporaries, and continued to do so in Austria's churches, but elsewhere they became victims of the Caecilian movement. Beginning with the middle of the nineteenth century they were looked upon with disfavor, and after the famous Motu Proprio of Pius X were proscribed in most places. Now what was it that those stern guardians of "religious propriety" found so objectionable in Mozart's church music? "Theatrical," they said, but is "theatrical" necessarily a pejorative epithet? Mozart's age saw in the Mass the great drama of Redemption, and the undoubted dramatic element in the liturgy accorded with Mozart's own artistic instincts. Composers in the previous centuries were no less impressed by these dramatic qualities and drew on "secular" musical elements, but these are not perceived by the untrained ear. When, however, in the Agnus Dei of K. 317 we hear an unmistakable prefiguration of "Dove sono," the Countess' great aria in Figaro, we are expected to feel a little embarrassed. Even today and even among musicologists, the role of southern Italian church music in the formation of the classical style, both vocal and instrumental, is not realized.

Mozart was a sincerely religious man, if naively so, but there was nothing naive about the great dramatist setting the text of the Mass. To him "Crucifixus," or "Qui tollis peccata mundi" represent sorrowful dramatic reality that never fails to move him, while Gloria and Sanctus lead him to vigorous and joyful demonstrations. But the clue to his whole religious attitude is in his setting of the passages dealing with the profession of faith. Take the Credo of K. 257. Mozart abandons the fluidity of the Gloria, incessantly belaboring a sharp twosyllable motif ("Cre-do") which returns again and again with a finality that admits no doubt. The Credo in the other Mass is in rondo form, permitting repeated affirmation of the key word. These two works are true masterpieces with many bold and imaginative ideas quite outside the established routine. The choral writing is homophonic but always idiomatic and wonderfully euphonious, while the orchestra is handled symphonically. A few of the older Salzburg practices are still there: no violas in the string body and colla parte trombones to beef up the chorus.

Davis goes to work with his wonted stylistic security, good rhythm, fine phrasing, and crisp orchestral and choral discipline, but he is somewhat hurt by the acoustics of the place where the recording was made—presumably a church. I suppose the performers repaired to this edifice because of the organ, which is really not needed at all. Just because the bass part is figured in the traditional way it does not

mean that a continuo is mandatory in a fully developed symphonic setting in which the harmonies are seamless. The organ was merely a religious symbol left over from the previous age, needed, like the trombones, only when the ensemble is scanty. (There are, of course, other works in which organ and trombones play obbligato parts and hence are indispensable.) Even in Beethoven's Missa Solemnis there is an organ part which does nothing but duplicate the bass line, thus aggravating the already extreme density of its texture. I am surprised that such a no-nonsense musician as Davis would put up with such archaic limitations; he has to pay a price for it because the reverberations in the church are terrific. In the fast passages the tuttis blanket several measures that follow because the echo hangs around for seconds; the timpani boom, creating a rumble which sent me to test my equipment before realizing that it is the constant echo that is at fault.

But on the whole this is a typical Davis production: gratifyingly solid and straightforward music-making that eschews everything inessential as well as the sentimental. The sustained exhilaration he maintains in the Sanctus of the Coronation Mass is a good example of his penetrating insight into Mozart. Chorus and orchestra are first class, and the solo ensemble good, though Helen Donath is decidedly a cut above her colleagues. Listen to these and the other Masses carefully, for without knowing his church music you do not know your Mozart.

P.H.L.

Mussorgsky: The Fair at Sorochinsk.

Chorus and Orchestra of the Moscow Radio, Yuri Aranovich, cond. Melodiya/Angel SRBL 4117, \$11.96 (two discs).

Parasya Lyudmila Belobragina (s)
Khivrya Antonina Kleshcheva (ms)
Gritsko Aleksei Usmanov (t)
Afanasy Ivanovich
Cherevik Gennady Troitsky (bs)
Kum Boris Dobrin (bs)
Gypsy Aleksander Polyakov (bs)

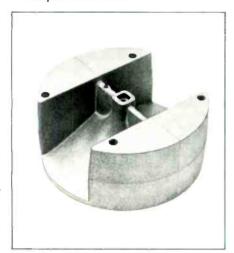
Among the jigsaw puzzles left behind by Modest Mussorgsky, perhaps the most frustrating is *The Fair at Sorochinsk*, a comic opera based on a story by Gogol. Set in the Ukraine, it concerns frustrated young love at an annual market-fair, where a folk legend about the devil provides the basis for a stratagem whereby boy gets girl despite the objections of her shrewish mother.

At his death, Mussorgsky left an outline of scenes and episodes, plus a substantial if disconnected quantity of music for the first two acts; of the final act, apparently little was composed. These days, the "standard" version of the opera is that made by Vissarion Shebalin, based on the source research of Paul Lamm, who prepared the Soviet edition of Mussorgsky's works (recently and enterprisingly reprinted by Edwin F. Kalmus).

Although Lamm and Shebalin hewed fairly closely to the composer's 1877 outline, the result is—through no fault of theirs—less than a satisfactory opera. It seems clear enough that Mussorgsky did not ever work out all the problems in his scenario, for he never actually wrote out a libretto (Shebalin wrote the text, as well as the music, for his patches). Thus the matter of internal proportions, the balance between genre scenes and set numbers, is very haphazard. Furthermore, the first two finales

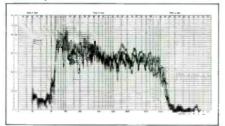
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20940 Knapp Street Chatsworth, Calif. 91311 CIRCLE 32 ON READER-SERVICE CARD are among the uncomposed episodes, and Shebalin's conservative solutions hardly suffice to counterbalance what has gone before. particularly in the second act, where Mussorgsky's character-sketching and genrepainting meanders on and on, badly needing something really substantial to clinch the farcical curtain scene. In the third act the editors have inserted the choral version of the Night on Bald Mountain as an intermezzo, with the result that all the rest is anticlimactic (Mussorgsky's original plan had it elsewhere, but the difficulty is inevitable, whatever the placement). At best, the Fair is a jerry-built construction, and not even the numerous bits of effective musical characterization, humor, local color, and harmonic adventure can compensate for the absence of a firm compositor-

We have had one previous domestically available recording of the opera, also using the Shebalin edition, from the Slovenian National Opera in Ljubljana (Epic SC 6017, mono, deleted), a worthy effort that is by no means superseded by the Melodiya/Angel stereo presentation. Brighter rhythmic pointing and impetus by the Slovenes made the conversational material trip along much more effectively than it does in the Moscow Radio crew's rather laissez-faire approach. Nor is the Russian cast more than serviceable—the usual complement of bleating tenor, shrill soprano, caustic mezzo, and woolly basses. In brief, 'twill serve, but hang on to the Epic set if you have it.

One major mystery: The Moscow set diverges from the Shebalin-Lamm edition in the Prelude—same material, but organized, developed, and scored quite differently, with a full close (whereas the published version runs directly into the opening fair scene). Can someone cast light?

One piquant footnote: The opening phrase of Gritsko's song—played first as a bassoon solo in a high register—strongly resembles the celebrated opening phrase of Stravinsky's Sacre. The instrumentation might be sheer coincidence (Shebalin scored the opera some years after the Sacre), but could the tunes have a common folk ancestry? (This one, however, is not to be found in Lamm's volume devoted to Mussorgsky's folksong notations, many of which do turn up in the Fair.)

A libretto, with transliteration and reasonably intelligible English translation, is included: there does seem to be some indecision on the typographer's part about the correct spelling of the heroine's name, however. D.H.

NIELSEN: Quintet for Woodwinds, Op. 43. WEBER: Quintet for Clarinet and Strings, in B flat, Op. 34. Paula Robinson, flute; Joseph Turner, oboe; Larry Combs, clarinet; William Winstead, bassoon; Richard Solis, horn (in the Nielsen); Harold Wright, clarinet; Vera Beths and Mari Tsumura, violins; Philipp Naegele, viola; Jeffrey Solow, cello (in the Weber), Marlboro Recording Society, MRS 5, \$6.50

The Op. 43 woodwind quintet of Carl Nielsen, composed in 1922 when he was fifty-seven, is one of his most-recorded chamber works, but you can hardly blame any ensemble for wanting to take its own turn with the piece. For one thing, it is something of a psychological curiosity: Nothing can ever convince me that the abrupt quasi tragedy of the

introduction to the last movement makes any logical sense whatever, coming as it does on the heels of all that woodsy scene-setting, the bird calls, the comic horsing around that verges on burlesque. Be that as it may, two thirds of the work is a successfully happy, open-air romp, contrived with skill and apparent spontaneity by the composer, and it is good to have this Marlboro performance of it. The players slip in and out of each other's grasp with better finesse and lightness of touch, and their sense of pacing never falters.

In the first movement, thematically so compact that it is almost sparse, the little birdy hiccups and chirrups are as brief, trim, and graceful as one could imagine, and in the Minuet the translucent texture is as delicate as the young spring foliage it suggests (sorry, but the pastoral comparisons are inescapable). The curious third movement, built on a hymn tune of Nielsen's own composition followed by eleven brief variations, is ingenious and seldom does the expected thing. The players, several of whom get a whole variation for solo exploits, are superlative.

Weber's wonderful quintet is all the clarinet's show, with strings a mere supporting cast except when the cello gets a word or two in edgewise. The first movement, a loving lilt for the most part, ventures into "drama" only in the development section, and even then one can't take matters too seriously. The real center of the work is the slow movement, in which melodic nobility is combined with a very astute and effective exploitation of the clarinet's constrasting registers. The finale has in it so much of the William Tell Overture that the Lone Ranger will materialize before your eyes, but that isn't Weber's fault. Harold Wright produces some of the shapeliest clarinet playing on records, and his performance is a joy. His colleagues don't achieve quite such heights in their ensemble work: the tone is occasionally strident and chords a bit raveled at the edges. But the clarinet is what counts, and Mr. Wright takes care of that. This release, like others of the newly formed Marlhoro Recording Society, is available only by mail order from the Marlboro School of Music, Inc., 5114 Wisioming Road, Washington, D.C. 21106.

S.F

RAMEAU: Pièces de clavecin en concerts. Frans Brüggen, flute; Sigiswald Kuiken, violin: Wieland Kuiken, gamba; Gustav Leonhardt, harpsichord. Telefunken SAWT 9578, \$5.98.

Though these compositions are not really concertos, neither are they trio sonatas, despite the combination of harpsichord, violin (or flute), and gamba. They are just the work of one of the most original minds in the entire history of music who looks both backward and forward, standing somewhere between baroque, style galant, and the preclassic era. In these interesting and attractive pieces the harpsichord dominates, and at times in almost concertante fashion. The compositions carry titles and are supposed to be musical portraits of various well-known personages, but that of course is only make-believe. The individual numbers are characteristically capricious: here Rameau develops thematically, there he plays with a jaunty rondeau, but he is always alert, elegant, and venturesome.

The performance is very good, but as in so many recordings of harpsichord music, the en-

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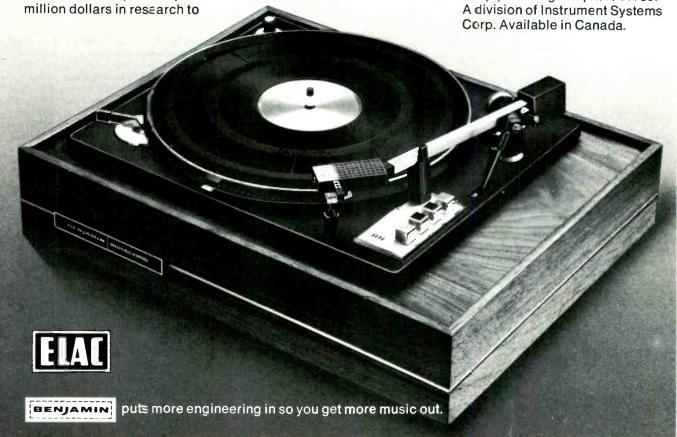
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gineers make the instrument larger than life. Since the harpsichord dominates anyway, it was not necessary to place the microphone in the instrument's gullet—the clangor is considerable and the volume must be attenuated. If anything, it is the other instruments that needed assistance from the microphone; Leonhardt can hold his own anywhere. P.H.L.

SATIE: Piano Music, Volume 6, Aldo Ciccolini, piano. Angel S 36811, \$5.98.
Trois petites pièces montées; Ogives; Danses gothiques; Sonatine bureaucratique; Poudre d'or; Pages mystiques: Douze petits chorals.
Selected comparisons:
Glazer Vox SVBX 5422

Aldo Ciccolini's sixth, and apparently last, recording devoted to Satie's piano music offers a panoramic view of the composer's diversified career, from the four Ogives (1886), with their archaic sonorities and hints of Gregorian chant, to the Trois petites pièces montées (1919), in which Ciccolini doubles with himself in Satie's piano-duet arrangement of his Rabelaisian orchestral work (the third movement must certainly have led the way for Poulenc). Along the way there are the Danses gothiques-weird and totally ingenious harmonies that give them the same "primitive" quality one finds in the paintings of Henri Rousseau: the Pages mystiques, which include the famous Vexations (to be played 840 times-Ciccolini stops after the first), a choralelike *Prière* and the strangely ethereal *Harmonies*: the *Sonatine bureaucratique*, with its distorted quotes from Clementi's Sonatina Op. 36. No. 1, and a third movement that strongly recalls the composer's *Parade*: the popular waltz. *Poudre d'or*: and what is perhaps the only piece from Satie's Schola Cantorum days (1905–1908), the *Douze petits chorals*.

Although the record jacket states that these are all "new recordings," the Ogives, Danses gothiques, and Sonatine bureaucratique can be found on Frank Glazer's set for Vox. But in spite of Glazer's easy-to-listen-to, understated approach to this music, Ciccolini's performances are, once again, the ones to have. And the excellent and informative liner notes by James Ringo are particular valuable descriptions of these Satie rarities.

R.S.B.

SCHUBERT: Moments musicaux, D. 780. For a feature review to this recording and the Beethoven Variations, Op. 35 (Curzon version), see page 65.

SCHUBERT: Symphonies: No. 1, in D, D. 82; No. 2, in B flat, D. 125. Berlin Philharmonic Orchestra, Karl Böhm, cond. Deutsche Grammophon 2530 216, \$6.98.

Selected comparisons (No. 1): Jochum

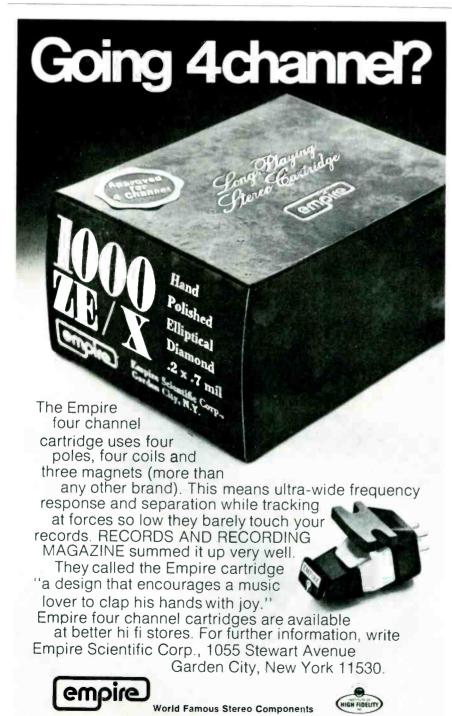
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These are beautifully turned performances. Böhm obtains an ideal classical balance between strings and winds; the tempos are firmly drawn with properly defined pulse and shape: rhythmic figurations fit into place with inevitable ease and "rightness"; and there is a welcome whimsey and lightness, a color and piquancy that bring out the fanciful side of Schubert as well as his vigorous qualities. I have always felt that the First Symphony was a slightly insipid work, but Böhm's magisterial effort wins me over as never before. Even the fine Lane/Cleveland and Georg Ludwig Jochum readings pale alongside this new one.

Böhm's No. 2 similarly displaces its commercial rivals. The first and final movements have a solidity and sensitivity equaled in my experience only by Toscanini (in 1938) and Cantelli (in 1951). The second movement, with full repeats, is a trifle slow-moving and rigid, and the Minuet is similarly a mite solemn and inflexibly Germanic. Even so, one senses a real authority and culture in Böhm's leadership, and the great orchestra responds with grandeur and tonal beauty. DGG's sound too is of the very best. A wonderful record.

SCHUBERT: Symphony No. 9, in C, D. 944. New York Philharmonlc. Leonard Bernstein, cond. Columbia M 31012, \$5.98.

This newest addition to Bernstein's ever expanding discography wins itself a middling niche. The Philharmonic's Conductor Laureate behaves himself reasonably well but, alas, his former associates don't. It is distressing to hear an orchestra of obviously first-rate potential habitually playing with slipshod attacks, muddy balances, and scraggly, unappealing tone. In music like this where rhythmic precision is de rigueur, such casualness is a decided liability. Not that Bernstein's inter-



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pretation per se is above cavil: His extremely slack tempo for the first movement's Andante introduction fails to get off the ground and only a tasteless accelerando two bars before the Allegro succeeds in making things move. Similarly there is some heaving and hauling of tempo in the coda, and an extremely heavy, lethargic account of the alla marcia second movement (Bernstein's beefy, muddy accents and lack of sprung rhythm would be questionable even for a Mahler Andante; it proves disastrous for Schubert's).

The Scherzo fares better, but even there a meretricious rallentando cheapens the transition to the trio section. For these three movements Bernstein has at least succeeded in achieving a certain quality which could charitably be described as "breadth." His finale spoils all that: It's a giddy, lightheaded, rather silly account which sounds all the more so for being juxtaposed alongside the quasi-solemnity of the other sections.

SCHUMANN: Sonata for Piano, No. 2, in G minor, Op. 22—See Liszt: Sonata for Piano, in B minor.

SCRIABIN: Prometheus: The Poem of Fire, Op. 60; Concerto for Piano and Orchestra, in F sharp minor, Op. 20. Ambrosian Singers (in Prometheus); Vladimir Ashkenazy, piano; London Philharmonic Orchestra, Lorin Maazel, cond. London CS 6732, \$5.98.

Selected comparisons (Prometheus):
Ormandy
Johanos
Selected comparison (concerto):
Ponti
Can. 31040

The Maazel/Ashkenazy performance of Prometheus is by far the best currently available. To begin with, the unbelievably realistic and beautifully balanced recorded sound is simply unmatched by either the Johanos or particularly the Ormandy versions. Not only do Scriabin's skillfully blended timbres stand out in perfect relation to one another, the stereo effect is such that when one of Scriabin's elusive themes suddenly and unexpectedly appears the emotions of the listener are aroused in a manner that Scriabin surely must have desired. Much of the credit here, of course, is also due to Lorin Maazel, who gives each of the work's eleven themes a distinctive contour within the over-all dark textures and develops them with a perfect understanding of the work's shifting structures. Furthermore, Vladimir Ashkenazy performs the obbligato piano part in a subtly nuanced manner that perfectly suits Maazel's conception of this musical "poem." Ormandy and Sokoloff seem glib in comparison, while Johanos and Mouledous, who appear to be headed in the right direction, rarely attain the heights reached by Maazel. The one exception is at the end. Here, the brilliant climax which Johanos achieves (even if his chorus is not quite equal to the task) somewhat overshadows the Maazel performance, in which, unfortunately, the chorus gets slightly buried.

Scriabin's piano concerto looks both backwards toward Chopin and Liszt and forwards toward Rachmaninoff. Ashkenazy and Maazel have opted strongly for Rachmaninoff, producing a certain heavy-handedness which, to my mind, is not as appropriate to the concerto's first two movements as Michael Ponti's

lighter approach. On the other hand, Ashkenazy produces a much more convincing, much more expressive rendition of the last movement than Ponti, who seems to dash the whole thing off with flair but little feeling. Of course, the London Philharmonic is much to be preferred to the Hamburg Symphony that accompanies Ponti (just about any orchestra would), and London's sound, while not up to that of Prometheus, generally impresses more than Candide's, although I would have liked a more brightly recorded piano, as in the Ponti version. But it is Prometheus, a landmark in the history of artistic expression, that stands out on this disc, and no one should deprive himself of the chance to hear this splendidly recorded, beautifully conceived performance. R.S.B.

STRAUSS, R.: Arabella Arabella Lisa Della Casa (s) Hilde Gueden (s) Ira Malaniuk (ms) 7denka Adelalde Matteo Anton Dermota (t) Elemer Waldmar Kmentt (t) Mandryka George London (b) Eberhard Wächter (b) Dominik Waldner Otto Edelmann (bs) Lamoral Harald Pröglhöff (bs) Vienna Philharmonic Orchestra. Georg Solti, cond. Richmond SRS 63522, \$8.94 (three discs; from London OSA 1404, 1957).

Selected comparison:
Keilberth DGG:

DGG 2709 013

When one takes an overview of Strauss's operas and considers precisely what he was after in terms of the ideal match between words and music. Arabella makes a strong claim to be his masterpiece. Act I is virtually flawless in its light conversational flow, melodic inspiration, motific craftsmanship, and uncannily appropriate text setting. There are arid patches later on, perhaps owing to Hofmannsthal's premature death before putting the finishing touches on the libretto, but the principal characters remain the most movingly human operatic personalities that the pair ever invented. The opera certainly never rises to the cosmic heights of Verdi or Wagner at their most inspired; even so, the material is such an honest and complete realization of its creators' sensibilities that Arabella does reach a kind of perfection on its own terms.

London's recording, now a prodigious bargain on the Richmond budget label, was never seriously challenged by DGG's later effort, a 1963 live performance from Munich. Delia Casa, the Arabella for both, is in peak form here for her most characteristic role—a ravishing performance beautifully partnered by Gueden's beguiling Zdenka and London's virile yet sensitive Mandryka. Solti's conducting is a bit tense perhaps, but always alive, responsive to the mood, and subtly pointed. A recording not to be missed.

P.G.D.

WEBER: Quintet for Clarinet and Strings, in B flat, Op. 34—See Nielsen: Quintet for Woodwinds, Op. 43.

WINSOR: Melted Ears—See Bolcom: Twelve Etudes.

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recitals and miscellany



MARTIN BERINBAUM: "Four Trumpet Concertos." Martin Berinbaum, trumpet; English Chamber Orchestra, Johannes Somary, cond. Vanguard/Cardinal VCS 10098, \$3.98.

Hummel: Concerto In E flat. Albinoni: Concerto "Saint Marc" (arr. Jean Thilde) Torelli: Sonata a Cinque, No. 7, in D. Haydh: Concerto in E flat. Selected comparlson (Torelli): Smithers/Marrlner Phil. 6500 110

Selected comparison (Haydn): Dokschitser/Barshai

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A young American trumpeter confirms his New York concert successes in a recording debut that immediately wins him a ranking with the best of the new generation of baroqueand-rococo repertory specialists: Frenchman Maurice André, Britisher Don Smithers, and expatriate American Edward H. Tarr, for example. Deftly if sometimes a bit too discreetly accompanied and transparently recorded in admirably bright and clean sonics. Berinbaum's program features one very familiar work (Haydn), two occasionally recorded before (Hummel and Torelli), and one-Thilde's transcription of the otherwise unidentified "Saint Mare" sonata da chiesa originally for violin and continuo by Albinoni-which I

haven't encountered before. The liner notes, which are scant on source specifics and even key designations, do helpfully specify instruments used: a "Bach" E flat trumpet for the Haydn and Hummel, a "Selmer" piccolo trumpet for the Albinoni and Torelli. And throughout they are used with notable restraint as well as skill. Interpretatively, Berinbaum can "sing" a melody without sentimentalizing it and endow his bravura passages with humor as well as éclat: tonally, he consistently exercises both taut control and good taste. In the fine Torelli work he may not be quite as ultrabrilliant as Smithers, nor his accompanying ensemble quite as distinguished as Marriner's St. Martin's-inthe-Fields, but this version is scarcely, if any, less delightful. And his Haydn concerto. which has nothing to fear from comparison with the best of the earlier recordings, provides convincing testimony that I had good grounds for branding the Russian star trumpeter. Dokschitser, as a musical vulgarian. I'll be looking forward to more Berinbaum recordings and I hope that he'll make a particular effort to expand the present boundaries of the virtuoso trumpet repertory. R.D.D.

"Domingo Sings Caruso." Placido Domingo, tenor; London Symphony Orchestra, Nello Santi, cond. RCA Red Seal LSC 3251, \$5.98

LEONCAVALLO: Pagliacci: Vesti la giubba; La Bohème: Testa adorata. Donizetti: L'Elisir d'amore: Una furtiva lagrima. Massenet: Manon: Ah! fuyez; Le Cid: O souverain CILEA: L'Arlesiana: E la solita storia. FLOTOW: Martha: M'appari. Puccini: La Franciulía del West: Ch'ella mi creda. VERDI: Rigoletto: La donna è mobile. MEYERBEER: L'Africaine: O paradiso ... Deh! ch'io ritorni.

Despite the title, the present venture really boils down to a collection of standard numbers sung in a disconcertingly self-important manner. Actually, there is an unusual item here, "Deh! Ch'io ritorni," the cabaletta that follows "O paradiso"—though, despite the claim made on the jacket, this is by no means the music's first appearance on disc. Caruso himself recorded the piece. However, it's a good idea to forget about Caruso when listening to this recital. Even a few sample comparisons reveal that Caruso's vocal and interpretive standards are beyond Domingo's current reach.

Domingo is a remarkably talented singer, one of the most vocally gifted artists to have appeared in the past decade, but he seems to have started overextending himself at a dangerously early point in his career. The fresh vibrant lyric quality of only a couple of years back seems to have largely disappeared and in its place Domingo now offers a less spontaneous, dark-hued vocalism that tends to make everything sound a bit inflated. "M'apparî" is more overbearing than tender. "La donna è mobile" is without the requisite verve, and "Una furtiva lagrima" lacks melodie flow. Given Domingo's youth it is unnerving to hear how difficult it is for him to draw a really taut line in lyric passages (e.g., in "Una furtiva" and the Manon excerpt). Domingo seems to be assuming the limitations of a dramatic tenor before actually becoming one. At the moment he certainly lacks grandeur, nobility, and tragic power. "Oparadiso" is prosaic and "Vesti la giubba" merely lachrymose. In the latter Domingo emulates not Caruso but Gigli by sobbing his way through the orchestral postlude. But then his approach to almost every aria here is unnecessarily tearful. "Ah! furez" is not so much a prayer as an excuse for self-pity. Like Gigli. Domingo mistakes emotionalism for feeling. Caruso's discs reveal more faith in the music's expressive power and in his own ability to realize it. On the evidence of this disc, it's clear that Domingo has not listened wisely to the older singer's recorded legacy; he has heard only the manner and not understood the artistic integrity that produced

Nello Santi's sluggish accompaniments are of little help in dispelling the air of stodginess that pervades these performances. For those interested, a color photo of Domingo suitable for framing is included. The liner notes mix press agent's clichés with inaccuracies (e.g., Domingo has not yet sung *L'Africaine* in San Francisco: that is a project for next season). It seems, moreover, unfitting to use the notes so baldly as a puff for the performances inside.

D.S.H.

"HOMAGE TO PAVLOVA." London Symphony Orchestra, Richard Bonynge, cond. For a feature review of this recording, see page 66.

HUGUETTE TOURANGEAU: "Arias from Forgotten Operas." Huguette Tourangeau, mezzo; Orchestre de la Suisse Romande, Richard Bonynge, cond. London OS 26199, \$5.98.

BALFE: Ildegonda nel Carcere: Sventurata Ildegonda . . . Chiuso nell'armi splendido. Bizet: Djamileh: Nour-Eddin, roi de Lahore. Donizetti: L'Assedio di Calais: Al mio core oggetti amati. AUBER: Le Cheval de Bronze: Ah, pour un jeune coeur . . . O tourment du veuvage. MASSENET: Hérodlade:

C'est sa tête que je réclame Verdi: Oberto: Ah! sgombro il loco alfin . . . Sotto il paterno tetto. Vac-cal: Giulietta e Romeo: E questo il loco! . . . Ah! se tu

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dormi. MAILLART: Les Dragons de Villars: Il m'aime, il m'aime, espoir charmant.

The extension of the operatic repertoire initiated some time ago by Maria Callas has brought to light many unjustly neglected titles. Il Pirata, Beatrice di Tenda, Anna Bolena, while not masterpieces, are worthy and often touching operas which I, for one, am grateful to see restored to at least phonographic currency. The present disc extends our operatic knowledge (and our musical pleasure) even further. Despite the title, however, not everything here is entirely forgotten. The Hérodiade aria—like the opera itself—turns up from time to time, as does the piece from Les Dragons de Villars. But of course the rest of this music has been engulfed by silence for many years.

Some pieces, indeed, are remarkably obscure. The aria by Michael Balfe, the Irishman

who wrote The Bohemian Girl. seems to have been inserted into an opera composed by Marco Aurelio Marliani, and dates from 1837. The Donizetti is from a work that has otherwise sunk without a trace. Both are large-scale bravura numbers obviously designed for expressive, virtuoso singers. Both are commendably elegant. Both leave an impression of brilliance and variety. Together they make a fascinating contrast with the similarly devised aria from Oberto, the first of Verdi's surviving operas. Verdi, from the very beginning of his career, possessed an individuality that marked him out from the run of his contemporaries. Even in music of only limited inspiration and refinement like this, one's attention is immediately caught up in the specificities of the dramatic situation. Leonora's plight-she has been seduced and then abandoned-can be vividly felt in every bar she sings. By comparison, the Balfe and the Donizetti are hard to identify emotionally, though the music is very agreeable. The tomb scene from Vaccai's Giulietta e Romeo (which like Bellini's opera on the same subject has a mezzo hero) is also somewhat generalized. Nevertheless, the music has a striking elegiac charm, and as befits the work of a great singing teacher, it lies beautifully in the voice.

The other pieces are even better. They exemplify several characteristically French virtues: spontaneity, gracefulness, elegance. They are totally lacking in self-importance. and are as a consequence disarming. Even the minor composers here create a mood of ease and confidence. The Auber and Maillart selections, for example, have an ebullience that is hard to resist. Bizet's one act opéra comique yields a ghazal of languorous charm. Massenet's biblical opera a scena in which the composer's feminine sensibility is finely distilled. The inclusion of the Massenet leads one to hope that the repertoire, both in the opera house and on records, can be further extended in his direction. Clearly there is still a lot of opera for Richard Bonynge to bring to our attention. His commitment to the music here is very evident, as is his skill in projecting it.

All the more unfortunate that his soloist is so inadequate. Whereas lovers of opera are likely to be grateful for the repertorial enterprise of this disc, those who are also lovers of singing are likely to be disgruntled by the amateurishness of its vocal execution. Huguette Tourangeau is a young mezzo of more daring than accomplishment. Here she has been given a formidable range of musical styles and techniques to encompass: cantilena. cabaletta. roulades, an exotically colored ballad, tragic grandeur, comic recklessness, a deep contralto F and a high soprano E. The assignment would be formidable even for a fully trained singer.

In the Maillart, Tourangeau delivers a single line ("et Mam'zelle Friquet va devenir madame!") in a light head tone of delightful quality. But that is the only time on the entire recital that voice ever sounds unforced and natural. Everywhere else Tourangeau is hard pressed, ill at ease, overextended. Often her voice seems to be bottled up at the back of her throat, with the result that it has a very artificial kind of weight and resonance. Much of this music needs a really sensuous vocal quality. Tourangeau changes gears as she moves up and down the scale, producing on these occasions an impression of heroic gargling. She also uses her chest register with dismaying heedlessness. Moreover, though her French is good, she enunciates so few consonants that she sounds like somebody struggling with a speech problem. Matters are not helped by Tourangeau's seeming inability to shape her vowels correctly. All vowels at the ends of phrases tend to come out as "ah." In sum, she is to my ears distressingly unfitted for this otherwise praiseworthy assignment.

The Orchestre de la Suisse Romande gives adequate support, though there is some rather unpleasant horn tone and a few slips. The recording is a bit oversized for my taste. Notes, texts, and translations.

D.S.H.

Bruno Walter. Historical performances of music by Mozart, Berg, Schubert, J. Strauss II, Haydn, Mahler, and Brahms. For a feature review of these recordings, see page 68.



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in brief

BECERRA: Symphony No. 1. PINZON: Study for Orchestra. GANDINI: Fantaisie-Impromptu for Piano and Orchestra. QUINTANAR: Sideral II. Louisville Orchestra, Jorge Mester, cond. Louisville LS 714, \$5.95.

Four short works by younger Latin-American composers. The three best are of the genus "study in sonority," and the most interesting is Gerardo Gandini's Fantaisie-Impromptu. which takes over many themes from Chopin and explodes them into a Xenakis-like cloud of sonic atoms. The composer is his own soloist and a very good one. The pieces by Jesús Pinzón and Hector Quintanar are the shortest on the disc; they are both full of rich, ear-filling, mind-involving orchestral effects without much formal interest. The symphony by Gustavo Becerra is a routine, academic, 12-tone affair.

A.F.

BLOW: Venus and Adonis. Margaret Ritchie, Margaret Field, and Elizabeth Cooper, sopranos; Robert Ellis and Michael Cynfelin, tenors; Gordon Clinton and John Frost, basses. Ensemble Orchestral de L'Oiseau-Lyre. Anthony Lewis. cond. Oiseau-Lyre OLS 128, \$5.98 (rechanneled stereo) [from Oiseau-Lyre 50004, 1954].

This is a pleasant piece, a sort of masque or English festa "all sung." Though it goes by the name, a real opera it is not; for this is more lyrical than dramatic writing. Blow's emotional range is narrow, his melodies have a short breath, and his harmony is basic, yet this mini opera still presents a fine musician who belies the often expressed belief that Purcell arose from nothing. There was operatic talent in England in the "barren" seventeenth and eighteenth centuries, but it was hard for a proper Englishman to let himself go—and without that there is no opera. The performance is good if perhaps a little quainty-dainty, but then so is *Venus and Adonis*. The sound of the doctored old mono is acceptable.

P.H.L.

GILBERT & SULLIVAN: The Pirates of Penzance. Soloists and chorus of the D'Oyly Carte Opera Company; New Symphony Orchestra of London, Isidore Godfrey, cond. Richmond SRS 62517, \$5.96 (two discs) [from London OSA 1202, 1958].

Unlike its older mono-only Richmond mates, this 1958 *Pirates* comes from the D'Oyly Carte's second long-playing traversal of the G & S canon (the operetta's first, and still best, LP recording was never reissued). If I were in the market for a *Pirates*, I would go for the newest London version; it's far from perfect, D'Oyly Carte vocal standards being what they are these days, but at least it does have the dialogue (not included here) and the ladies are definitely a cut above the appallingly shaky crew that disfigures the Richmond performance. The men are passable: Peter Pratt is a dryly humorous if occasionally rhythmically imprecise Major General. Thomas Round sounds a bit long in the tooth for Frederick. and the two basses are competent if not in the Fancourt/Watson category. This is one of Godfrey's more spirited conducting jobs and the early stereo sound is still first-rate.

P.G.D.

MOZART: Quartets for Strings: No. 1, in G, K. 80; No. 2, in D, K. 155; No. 3, in G, K. 156; No. 4, in C, K. 157. Quartetto Italiano. Philips 6500 142, \$5.98.

These are youthful works, more interesting for what they promise than for what they are. Mozart uses the arsenal of cliches the century produced in abundance, something he did all his life, but as yet without the grace of genius. Still, in the Adagio of K. 156 the sixteen-year-old strikes an astonishingly adult, pensive, almost Sturm-und-Drang tone. Here the record provides a real and pleasant surprise, giving us both versions of this Adagio, the second written several months later. The first is a good piece, but the second version is unmistakably the work of a master. Incredible what a few months of maturing means in the development of a genius. The members of the Quartetto Italiano play well and with good intonation, and they have a nice tone. But then these little pieces are hardly a touchstone for judgment. The sound is very good.

P.H.L.

OFFENBACH: Gaîté Parisienne (excerpts, Rosenthal). BIZET: L'Arlésienne: Suites Nos. 1 and 2. New York Philharmonic, Leonard Bernstein, cond. Columbia M 31013, \$5.98. Tape: ■■ MT 31013, \$6.98; ■ MA 31013, \$6.98.

A bad day in Philharmonie Hall. It began with the very poor idea of brutally truncating the effer-vescent Offenbach-Rosenthal ballet score (Bernstein's reading runs about half as long as Munch's). Then both conductor and engineers apparently got out of their beds on the wrong side. The playing—in the Bizet as well as the Offenbach—is often excessively slapdash, while the sonics themselves (except for some delectable low-level woodwind passages) are often intolerably harsh and suffer in addition from decidedly boxed-in acoustics. If you're seeking anything in the way of Gallic grace and delicacy here, forget it!

R.D.D.

STAMITZ, K.: Concertos for Flute and Strings: in D; in G. RICHTER, F.X.: Concertos for Flute and Strings: in D; in E minor. Hans-Martin Linde, flute; Wiener Solisten. Archive 2533 085, \$6.98.

More of the usual mileage on the old baroque odometer, but if this is the kind of trip you want to take you could do worse. The second movement of the Richter E minor shows some inventiveness in the dialogue between flute and orchestra, and the Presto of the G major Stamitz is bedecked with elaborate ornamentation, presumably the brainwork of flutist Linde, who is superb throughout.

S.F.

VAUGHAN WILLIAMS: Symphony No. 2 (London). London Philharmonic Orchestra, Sir Adrian Boult, cond. Angel S 36838, \$5.98. Comparing this release with the only other version of the same work in the current Schwann catalogue—by the Hallé Orchestra under Sir John Barbirolli—is futile, since the Barbirolli is listed with one of Schwann's black pips, meaning death. Hail and farewell! That record has served us well for years, but the new one brings out many things that were totally inaudible or insufficiently audible in the old, especially the very elaborate role of the percussion in this magnificently colorful work. Boult's performance is more dramatic and emphatic than Barbirolli's, his tempos are slower, his contrasts of dynamics more marked. Boult is the foremost of all the Vaughan Williamsists, and his London Symphony is in his great tradition.

A.F.

ALICE ARTZT: "Guitar Recital." DUARTE: Sonatinette. BRITTEN: Nocturnal, Op. 70. GALILEI: Fantasia Ottava. DOWLAND: Earl of Essex Galliard; Lachrimae Pavane. SCARLATTI, D.: Sonatas: in A, L. 483; in G, L. 79. DIABELLI: Sonata in A: Rondo. Alice Artzt, guitar. Gemini GME 1018, \$6.98.

Alice Artzt is a twenty-eight-year-old graduate of Columbia University, and she is not a restful guitarist. So strong is her drive, so purposeful are her intentions that she borders on the strenuous. Every phrase is highly inflected, striking out with the thrust of a serpent's tongue; and every work abounds in multiple color changes with a leaning toward the hard, metallic cutting edge that drops like acid through the mellow "pretty" tone color of surrounding passages. Alice Artzt is also a musician to the bone, and everything she does has a reason. She may tire you out, but she will hold your attention while doing it. In the last analysis you may prefer, as I do, the more seasoned approach of Julian Bream in the Britten Nocturnal: but you will also wish, as I do, not to miss further performances of Miss Artzt when aging has done for her what it does to a good Bordeaux. The program here is consistently attractive, and the five-minute piece by Duarte, dedicated to the artist, is a very palatable filler on the twentieth-century side of the disc.

S.F.

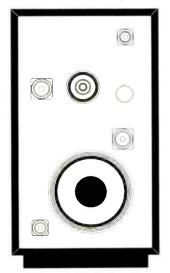
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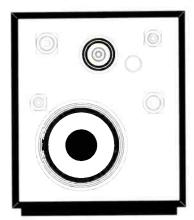
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The new version gave Stereo Review the opportunity to test the Rectilinear III again after a lapse of almost five years. And, lo and behold, the test report said that "the system did an essentially perfect job of duplicating our "live music" and that both the original and the lowboy version "are among the best-sounding and most 'natural' speakers we have heard." (Reprints on request.)

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NRBQ: Scraps. Frankie Gadler, vocals; Jody St. Nicholas, vocals and bass; Al Anderson, guitar; Terry Adams, keyboards; Tom Staley, drums. Howard Johnson's Got His Hojo Workin' on Me; Accentuate the Positive; Ain't It All Right; eleven more. Kama Sutra. KSBS 2045, \$4.98.

NRBQ was always known as a good-time, hard-rock band which frequently indulged in 1950s material. Occasionally the group would throw in a version of a Thelonious Monk song, but basically its identification was with loud, straightforward rock. NRBQ's two Columbia albums, "NRBQ" and "Boppin' the Blues," the latter with Carl Perkins, set this mood. Now the band is with Buddah/Kama Sutra, and Al Anderson, who was largely responsible for the excellent folk-rock Wildweeds album on Vanguard, is guitarist.

Perhaps he inspired the softer sound NRBQ displays in "Scraps," the band's first Kama Sutra outing. At any rate, "Scraps" is half soft rock, a bit like the old Lovin' Spoonful: One particularly lovely song by Jody St. Nicholas sounds rather like Daydream. The other half is hard rock, Ain't It All Right being an old-style NRBQ song. Within the hard rock are several genuine clinkers, notably Howard Johnson's Got His Hojo Workin' on Me, a bad idea whose time has come, and a horrid thing about sniffing glue. A version of Accentuate the Positive fares no better, despite the piracy of a line from Blue Monk for the second bridge. Over-all, "Scraps" has a casual, easygoing sort of continuity which perhaps seeks to reproduce the feeling of a live concert. Still, it's a disappointment. NRBQ's best remains its first, on Columbia.

*

LINDISFARNE: Fog on the Tyne. Si Cowe, vocals, acoustic, electric, and twelve-string guitars; Ray Jackson, vocals, harmonica, and mandolin; Ray Laidlaw, drums; Alan Hull, vocals, keyboards, acoustic, electric, and twelve-string guitars; Rod Clements, violin, electric bass, acoustic, electric, and twelve-string guitars. Meet Me on the Corner; Alright on the Night; Uncle Sam; seven more. Elektra EKS 75021, \$4.98. Tape: FT 85021, \$6.98; TC 55021, \$6.98.

Lindisfarne is an almost uninhabited, relatively primitive island off the English coast, best known as a Monk's retreat during the Middle Ages. It is also the name of a five-man English band that is well known in its native

country and has just begun to make friends in the United States. Lindisfarne plays an unusual blend of acoustic and electric music with a refreshing dependence on the mandolin. Folk, rock, and the blues blend together and the result is intriguing. Band-member Alan Hull's words and music reflect a basic optimism about being alive and a firm belief that people do need people. These attitudes are best reflected in Hull's January Song with its expressive chorus line that states "you need me needs you need him needs everyone." Hull's Passing Ghosts pictures life as a series of love-making experiences between couples who hopefully will die together and lie side by side in death. The title song, also a Hull composition, is an engaging bit of whimsey, depending on the amusing use of a number of poetic devices in order to achieve its ends. Lindisfarne is worth watching.

EDGAR WINTER'S WHITE TRASH: Roadwork. Edgar Winter, keyboards, saxophone, and vocals; Jerry LaCroix, saxophone and vocals; Jon Smith, saxophone and vocals; Rick Derringer, guitar and vocals; Randy Hobbs, bass; Bobby Ramirez, drums; Marshall Cyr and Mike McLellan, trumpets; Johnny Winter, guitar and vocals. Save the Planet; Jive, Jive, Jive; I Can't Turn You Loose; Back in the U.S.A.; Rock and Roll, Hoochie Koo; Tobacco Road; Turn on Your Lovelight; three more. Epic KEG 31249, \$9.98 (two discs).

Edgar Winter looks like a Fellini nightmare; Jerry LaCroix is still mourning the death of Otis Redding: Rick Derringer is still mourning the death of the McCoys; Johnny Winter now has a beard and resembles an albino Christ. The whole outfit has an aura about it, no doubts there. The high points of this two-LP live recording come either during the instrumentals—in an otherwise tasteless seventeen-minute version of *Tobacco Road*, or when LaCroix is making like the Otis Redding Show, volume two (which he does rather well, to his credit).

Rick Derringer's attempts to sing rock-androll, as in *Back in the U.S.A.*, fall flat; Johnny Winter does make a decent cameo appearance singing *Rock and Roll, Hoochie Koo.* And though the entire production is marred by an excess of emotion, it does succeed in capturing the essence of a performance by an impolite, dirty, and aggressive band. If that's what you want.

FRANK SINATRA, JR.: Spice. Frank Sinatra, Jr., vocals; Larry O'Brien Octette, Nelson Riddle, cond. Windmills of Your Mind; Black Coffee; Everybody's Talkin'; ten more. Daybreak DR 2003, \$4.98. Tape: P8DR 2003, \$6.98.

Frank Sinatra, Jr.'s history is carried in his name, and surely there have been times when it had to be worn like a crown of thorns. So strong is the name and its implications that no one, possibly not even its owner, has ever had a chance to know who F.S., Jr. really is. Remember him the next time you think you have an identity problem.

Daybreak Records, distributed by RCA, should be shot for the record cover, straight out of the '50s and tacky at that. It displays F.S., Jr. in a golfy cardigan sweater that could have been given to his father by Dean Martin in any of their movies. F.S., Jr.'s haircut is unbelievable: parted and barber-clipped, totally unrelated to the present.

The album was produced by Dad's longtime producer, Sonny Burke, and its arrangements bear the distinctive stamp of Dad's arranger, Nelson Riddle, who conducts. Songs include *Trolley Song*, to which nothing new is added, and a minor Arlen-Gershwin-Harburg song, *Fun to be Fooled*—an ironic title: Who's having fun and who's being fooled?

In short this is not F.S., Jr.'s album. It is Sinatra, Sr.'s album, leaning on past momentum, supported by past associates, reliving their authentically Golden Age. I have always had great compassion for this specific show-business dilemma. But patience wears thin. Even Sinatra, Sr. has made a break with the past. Will no one else move?

We are left with the same cruel question: Who is this young man whose very name negates his uniqueness? He's a good singer, that's for sure. He could be anything. Everyone knows the ways in which he is like his father. How is he different? Does he even want to be different? Will he ever have the strength and the chance to be different? And what would any of us have done in such a like dilemma, short of moving to Tokyo, changing names, and opening an electronics company?

It all can be sadly summed up in the title of a song written by Frank Sinatra, Jr. and included in the set: *Believe in Me.* Many of us would like to, if the artist would give us the chance.

M.A.

WAYNE COCHRAN & THE C.C. RIDERS: Cochran. Wayne Cochran, vocals. Do You Like the Sound of the Music; Somebody's Been Cuttin' in on My Groove; Boogie; six more. Epic E 30989, \$5.98.

To quote a passage about this band on the inner sleeve of the album: "Wayne Cochran & The C.C. Riders have gone funky. They are digging into the roots, the blues. They have gone back to the beginnings of jazz and riverboat sounds and New Orleans funeral marches—the basics—to build fluid, fresh, and soul-stirring music. To dig up a funky description—they cook!"

Better than they play. I hope. After hearing Wayne Cochran yell "Lord Have Mercy" for the nineteenth time in front of the same old unison horn riffs, one comes up with the title of a protest song: What Have They Done to the Blues? If there's anything more desolate than a funky band gone Vegas, it's a Vegas band gone funky. Keep digging, boys. M.J.



Ellen McIlwaine-most distinctive since Joplin.



ELLEN MCILWAINE: Honky Tonk Angel. Ellen McIlwaine, vocals and guitar; vocal and instrumental accompaniment. *Toe Hold; Weird of Hermiston; Up from the Sky; Losing You; Ode to Billie Joe*; five more. Polydor PD 5021, \$5.98

I suppose Ellen McIlwaine is a case of jack-ofall-trades, master of enough to make people notice. On this album she sings soul (Toe Hold), a folksy sort of jazz (Weird of Hermiston). blues (Losing You), country (Honky Tonk Angels), and gospel (Wade In the Water). Her singing is highly stylized and tends to drift into scat. She clearly is the most distinctive female vocalist on the pop scene since Janis Joplin started denting microphones. Powerful, indeed. Even her guitar playing has an edge of brutality. How many girl slide guitar players can you name? This is, at times, a slight problem. She sometimes does use power and the unusual nature of her style as an excuse not to sing real emotions. She nearly drowns Ode to Billie Joe-not a stunning piece of material anyway-in her jazz stylization. But when she sings the softer, more amorphous songs like Weird or a folk treatment like Can't Find My Way Home, she can be brilliant. And I find that the mixed material on this debut LP makes for a much more attractive experience than most recent releases. Most new singers, particularly those like Ellen McIlwaine, who play acoustic guitars have lately turned out to be sleeping pills. That is far from the case here.

Roy Young: Mr. Funky. Roy Young, vocals; rhythm accompaniment. Kapp 3662, \$4.98.

JEFFREY SHURTLEFF: State Farm. Jeffrey Shurtleff, vocals; rhythm accompaniment. A&M 4332, \$4.98.

DAVID BROWN: I Want to Be With You. David Brown, vocals and guitar; rhythm accompaniment. Uni 73128, \$4.98.

FAIRPORT CONVENTION: "Babacombe" Lee. Fairport Convention, vocals and rhythm accompaniment. A&M 4333, \$4.98.

BERNIE TAUPIN: Poetry Reading. Elektra 75020, \$4.98.

HOWARD TATE. Howard Tate, vocals; rhythm accompaniment. Altantic 8303, \$4.98.

Donny Hathaway: Live. Donny Hathaway, vocals and keyboards; rhythm accompaniment. Atco 33 368, \$4.98.

It's a big month for definite maybes. Nothing

but crushing competence from disc to disc. Everyone reeks of potential. All the above albums cling carefully to the glossy top edge of mediocrity, with an occasional tip over the top. Here's a brief breakdown.

Roy Young is billed "Mr. Funky." All right, he's funky. He also does a fine imitation of David Clayton-Thomas and appropriately the backup band does a fine Blood, Sweat & Tears (New Sun, New Horizon). If you prefer prints to originals, you'll love this.

Jeffrey Shurtleff ("State Farm"): on to the country field. Here is one more slick copy of a copy of country pop. Shurtleff, who has a nice little talent, is produced by his friend Joan Baez—perhaps this is how he got recorded in the first place.

David Brown ("I Want to Be With You"): Brown is closer to mainstream pop (as of this moment). Like all other albums mentioned, this is backed by excellent musicians, including guitarist David Spinozza and pianist Ken Ascher, ex of Woody Herman's young band. Since this is my favorite area of pop music, I like it better than the others.

Fairport Convention (* 'Babacombe' Lee'') is a group you want to get excited about and never quite do. They play genteel, old-English type rock featuring dulcimer and mandolin. Promotion to the contrary, they don't grow much. To discern changes from one album to the next requires exhaustive unbroken concentration or marriage to one of the group members. Over to you.

Bernie Taupin has made a predictable error in judgment based on an ego trip, all of which has happened a hundred times before on record with the same results. Taupin is Elton John's lyricist and the team has had enormous success due to John's strength as a singer/pianist. Since Taupin is a word man, and neither a singer nor musician, he felt compelled to make his own statement just like the other guys, especially Elton John. Never mind the media conflict, the fact is that poetry always bombs in pop music. So he made an album of poetry readings backed by those inevitable and ubiquitous first-rate musicians who hover behind soloists, raking in scale for all these carbon-copy gigs. The album is a stilted bore.

Howard Tate: Here is our soul entry of the month. No use offending one category and neglecting another. Tate's voice is light and energetic, his vocal spontaneity as good as his falsetto. That's how it has to be in r & b. A-plus for competence.

Donny Hathaway ("Live"): An extraordinary artist has come up with his first ordinary album. It's an in-person set, and you hadda be there. If you were, from the sound of it you had a ball. But as an album it fails from thin content. Much of it is devoted to endless riffing and inner group solos with an occasional sung or shouted line. Plus a few sung songs. Albums like this come over as a cop-out. The artist kills two birds with one stone, fulfilling recording and concert commitments simultaneously.

Don't think I couldn't go on thrilling you and me this way. There are at least thirty more albums just like these waiting in line.

Sometimes it feels as if you can't in all fairness put down albums anymore what with all those superb backup musicians adeptly reading out their parts. Nor can you genuinely rave about these performances. Everything is too apt, too perfectly hog-fed, too immaculately soulful, too sleekly heartfelt. There are no edges to grab onto, no spontaneous and/or inspired personalities. Whatever your race, creed, color, or cause, there is a computerized album designed specifically for your hangups. Like panty hose or foam-filled ski boots. So gulp your albums down like Hostess Twinkies, and make room for the next disposable set. That's the deal, folks.

LILY FOMLIN: And That's the Truth. Lily Tomlin, comic narrations. *Hey Lady; My Sister Mary Jean; Look in the Sky*; fifteen more. Polydor PD 5023, \$5.98.

Lily Tomlin of "Laugh-In" has become a successful coffee house and concert hall comedienne. Audiences are totally familiar with and adore her characterization of the telephone operator Ernestine. Her repertoire also includes Susie Sorority and five-year-old Edith, a Baby Snooks offshoot. This LP, recorded live at the Ice Palace in Pasadena, California, is devoted in its entirety to a running dialogue between Edith, husky-voiced and precocious. and Miss Tomlin, a slightly distraught straight woman. Edith believes that air pollution is caused by "angels frying hamburgers." She tells Miss Tomlin that she ate Humpty Dunipty for breakfast. She believes that God has a TV set and uses it to monitor the human race. When she suspects that God is watching her. Edith "does a little commercial for herself." Edith drinks Alka-Seltzer when she needs a pick-up. She sends out for Chicken Delight and wonders if vegetables get upset when people eat them. She is clever, persistent, and very ingenuous. It does not take long for her to become boring.

There's just so much of this jabber that one can take. Miss Tomlin's live audience does not seem overwhelmed either. There is very little spontaneous applause for a brilliant line or a wry perception. Instead, the audience seems to be responding warmly to an old friend. Old friends of Miss Tomlin's will probably adore this recording. Those who are not friends will probably become enemies.

KENNY ROGERS AND THE FIRST EDITION: The Ballad of Calico. Mickey Jones, drums; Terry Williams, guitar and dobro; Kin Vassy, guitar; Michael Murphey, guitar; Larry Cansler, keyboards; John Hartford, fiddle; Kenny Rogers, bass; Doyle Grisham, pedal steel guitar; vocal and instrumental accompaniment. Sunrise





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Overture; The Way It Used to Be: Dorsey, the Mail-Carrying Dog; Harbor for My Soul; One Lonely Room; fourteen more. Reprise 2XS 6476, \$9.98 (two discs).

This thematic album—written by Michael Murphey and Larry Cansler—is a semidocumentary about the birth and death of a California silver-mining town in the last part of the nineteenth century. It's a serious work, much more convincing in its sincerity and polish than most other "concept albums" or "rock operas."

Aside from an occasional excess—the bit about the dog, for one—the songs are understated and lyrical, complimenting the listener for his intelligence (quite the opposite of Jesus Christ Superstar). It is also the only rock opera with neither a Messiah nor a Messiah figure—that improvement alone earns this double-LP set serious consideration.

M.J.

GRAND FUNK RAILROAD: E Pluribus Funk. Mark Farner, guitars, organ, harmonica, and vocals; Mel Schacher, bass; Don Brewer, drums, percussion, and vocals. Footstompin Music; People, Let's Stop the War; Upsetter; four more. Capitol SW 853, \$5.98.

LED ZEPPELIN: Fourth Album. John Bonham, drums, timpani, and backing vocals; Robert Plant, lead vocals and harmonica; Jimmy Page, guitars and backing vocals; John Paul Jones, bass, organ, and backing vocals. Black Dog; Rock and Roll; The Battle of Evermore; five more. Atlantic SD 7208, \$5.98. Tape: ● M87208, \$6.95; ● M57208, \$6.95.

MOUNTAIN: Flowers of Evil. Leslie West, guitar and vocals; Felix Pappalardi, bass and vocals; Corky Laing, drums; Steve Knight, keyboards. Flowers of Evil; King's Chorale; One Last Cold Kiss; four more. Windfall 5501, \$4.98.

Here are three of the world's loudest and most successful bands. Grand Funk Railroad sold out New York's Shea Stadium faster than the Beatles ever did; Led Zeppelin was the first band to replace the Beatles in the international popularity polls; Mountain has just received Melody Maker's most recent "Brightest Hope" award. Only Led Zeppelin has consistently been able to turn out records which duplicate the ingenuous excitement of their live performances. Nevertheless, these three new releases prove anew that high energy rockand-roll is still a prevailing characteristic of the pop scene.

Terry Knight, mastermind behind Grand

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Funk Railroad, Michigan's three-man noise machine, once said: "Grand Funk is not there to soothe you; they are there to rape you. Their sound is not intended to be pleasing. It's intended to tear your guts out if possible. . . . You're stoned; you're dizzy: you can't walk straight; you're nervously perspiring, and you feel great!"

Grand Funk attempts to accomplish Mr. Knight's intentions by playing long selections, each with a recognizable and easily repeated musical phrase. Predictable guitar breaks and predictable tempo changes also predominate. Uncomplicated lyrics are usually screeched over the din. People, Let's Stop the War and Save the Land are two selections that faithfully illustrate the basic Grand Funk technique. It all goes to prove that even noise can be taken in one's stride.

The official title of the new Led Zeppelin album consists of four runic symbols. Led Zeppelin has not issued an official translation, and I know of no scholar of the ancient Germanic alphabet who has ventured a public opinion. Led Zeppelin fans will not find the album contents puzzling however. It is a representative collection of the musical skills that has made this band an international sensation.

Most of the activity on the album centers around Robert Plant's voice. Plant has the most piercing voice in rock-and-roll, and he gives his all to two typical Led Zep rockers, Black Dog and Rock and Roll. Jimmy Page's 12-string guitar solos, John Paul Jones's flashy keyboard arrangements, and John Bonham's throbbing drums contribute to the over-all effect. Led Zeppelin also incorporates enough acoustic rock to minimize the monotony that may occur from the band's basic approach. For example, Going to California is a pleasant, nonelectric ballad with an interesting Plant vocal. Led Zeppelin's music may not have the startling intensity it once had, but the band is doing its best to sustain itself.

Mountain's "Flowers of Evil" do not refer to Charles Baudelaire; they refer instead to poppies, the poppies that produce the heroin that American Gls become addicted to during their stay in Vietnam. The title song on the album explains this observation, and it makes for an obvious rather than dramatic expression of protest. Most hard-rock bands seem to feel that they must make social statements within the limited context of their music.

One half of this new LP has been recorded in the studio; the other half consists of tapes made during a live concert at the Fillmore East Theatre. Mountain is an energetic and lively



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Zweig, who was librettist for **Die Schweigsame Frau.** This opera resulted in the Nazi government discrediting Zweig and forcing Strauss to resign as President of the Reichskammer. Del Mar deals with Strauss's involvement with the Nazis, and the unfolding of that tragic story, along with his last operas. The core of this volume is the chapter on Strauss's songs, the most comprehensive, indeed the first of its kind, ever to be published in English. **No. 269. . .\$13.95**

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band in concert. On record, their sound is sludgy. Still, one can hear the intricate guitar duels between Felix Pappalardi and Leslie West, and the harsh Pappalardi-West vocals that distinguish this band from its less successful competitors.

The James Taylor-Carole King success stories tend to make people think that the age of soft rock is totally upon us. There's plenty of high energy rock-and-roll still being recorded, and plenty of it is still being sold. It cannot be ignored.

BILL COSBY TALKS TO KIDS ABOUT DRUGS. Bill Cosby, narrator. International Children's School and Jimmy Joyce Children, UNI 73101.

In this album, comedian Bill Cosby is neither clever, fascinating, nor particularly funny. He is only heartfelt, sitting around talking to a group of children about all forms of drugs.

Bill Cosby seems to have become bored with grownups lately and who can blame him? His interests are children and education, and he spends much time and energy with National Educational Television. For all we know this album may have spun out of such a television project.

It is "Recommended by the National Co-ordinating Council on Drug Education, Washington, D.C.," a group that is absurd and helpless at street level, which is the only level that counts. Where any "drug council" has to fail. Coshy succeeds. He gives ghetto kids a

no-dope hero to identify with.

The album is aimed exclusively at young children, the pre-teens. Album titles include, "Bill Talks About Pushers and Other Bad Things," plus songs such as Dope Is For the Dopies. The kids on the album are obviously having a fine time and so might yours. Cosby means to reach the kids before street dope does, and to give them someone real with whom to align their attitudes. Parents can't do it, much less drug councils. The idea is to protect them until they are old enough to sort things out for themselves. Thus, the album is a blanket statement against all drugs. Let them consider the subtler sides of the marijuana issue later.

The question of drugs is more complicated for the teenager, but Cosby has not gone after that group in this set. A city teenager might laugh at this effort, but a city pre-teen will

Bill Cosby is to be thanked for this album. M.A.

JOHN STEWART: The Lonesome Picker Rides Again. John Stewart, vocals and guitar; vocal instrumental accompaniment. Just an Old Love Song: The Road Shines Bright; Bolinas; Swift Lizard: Little Road and a Stone to Roll: Davdream Believer; six more. Warner Brothers WB 1948, \$4.98.

John Stewart spent seven years as a member of the Kingston Trio: he wrote Daydream Believer, a hit record for the Monkees, and for the past few years has been trying to establish a reputation as a singer/songwriter. He deserves a good one. "The Lonesome Picker Rides Again" is one of the finest recordings I've heard in a while. It's in a familiar countryfolk genre: The songs tend to be landscapes.

but the vision is clear. Stewart sings in a solid, evocative manner.

Best are the slow ballads like Just An Old Love Song, but there are several exceptional uptempo songs too: Wolves in the Kitchen is one. Stewart has come a long way from Scotch and Soda and striped shirts and is easy to recommend.

M.J.

FLYING BURRITO BROS.: Hot Burrito. Chris Hillman, vocals, bass, mandolin, and guitar; Sneeky Pete Kleinow, pedal steel guitar and bass; Bernie Leadon, guitar, dobro, and banjo; Rick Roberts, vocals and guitar; Michael Clarke, drums; vocal and instrumental accompaniment. Cody, Cody; Tried So Hard; To Ramona; Wild Horses; Sin City; Colorado; five more. A&M SP 8070, \$4.98.

SWAMPWATER. Stan Pratt, drums; Gib Guilbeau, fiddle and guitar; Thad Maxwell, bass; John Beland, guitar and dobro. *Ooh-Wee California; Headed for the Country; Back On the Street Again; Dakota; Back Porch Harmony;* six more. RCA Victor LSP 4572, \$5.98.

The Flying Burrito Bros., an offshoot of the Byrds, was one of the first country-rock bands to become prominent. It remains one of the best. This new album consists largely of songs from the group's first two LPs, with four new compositions.

Through the old and the new the band remains calm, mellow, relying largely on vocal harmonies for their trademark. It's less slick and more intelligent than Nashville country music: less exciting than rock or the country touch of the Byrds. In the liner notes the group mentions its aversion to the "usual love, booze, and infidelity songs of the c&w set," and states its intention to "try to become involved in greater social problems, metaphysics, technology." A part of this, no doubt, is the bunch of marijuana leaves sewn on original-Burrito Gram Parson's suit.

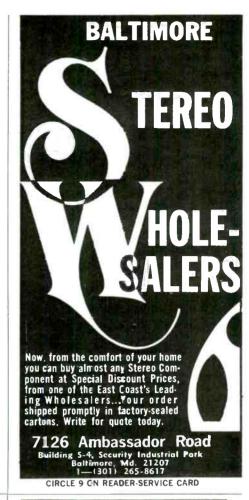
Swampwater is Arlo Guthrie's old backup group. Their debut album is country-rock, more sprightly than most efforts in the field. It ranges from twangy little country folksongs to fairly hard rockers. It's a good record, informal, unpretentious, and refreshing. In its simplicity it seems a welcome change from the occasionally ponderous music of the Burritos and other groups like Poco.

M.J.

ARTHUR FIEDLER: Arthur Fiedler Superstar. Boston Pops Orchestra, Arthur Fiedler, cond. Jesus Christ Superstar (Overture and Everything's Alright); What They've Done to My Song, Ma; Proud Mary; seven more. Polydor PD 5008, \$5.98.

Yes, I know that Dick Hayman and six arranger colleagues have symphonically inflated these hit pop tunes to Zeppelin size, and that the lusher examples (like the Love Story theme) would be almost grotesquely obese if it weren't for the seductively sensuous beauty of the tonal coloring and sonorities themselves. But when Fiedler combines sonic splendor with the kind of superbly controlled rhythmic vitality and driving momentum of which only he and the Pops Orchestra are capable-as in Richard Goldstein's scoring of Mah-Na, Mah-Na, John Woodbury's of Gentle on My Mind, and Al Woodbury's of Love Me Tonight-we're given unforgettable, exhilarating listening experiences. R.D.D.











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EARL HINES: My Tribute to Louis. Earl Hines, piano. When It's Sleepy Time Down South; Muskrat Ramble; Confessin'; five more. Audiophile 111, \$5.95.

This is a sentimental journey by Earl Hines through the repertory of his old friend Louis Armstrong and recorded in the full flush of emotion just twelve days after Armstrong's death. Despite their two periods of association-in the Twenties and again after World War II-at least half of this album takes Hines into territory he might not otherwise touch. A Kiss to Build a Dream On. Pennies from Heaven, and Blueberry Hill are not likely Hines material, but he tackles them with a brief bow to Armstrong's approach before moving into his own interpretation.

On other pieces-notably Struttin' with Some Barbecue and Some Day You'll Be Sorry-Hines indicates how far he has come since his Armstrong days in the fresh aspects he puts on these tunes (Armstrong scarcely varied his interpretations at all). Possibly the most striking aspect of this set is Hines's flexibility, his ability to simultaneously pay tribute to both Armstrong through his choice of material and to himself by making it, despite its source, very definitely a Hines program.J.S.W.

EUBIE BLAKE: Vol. 1. Eubie Blake, piano and vocals; Ivan Harold Browning, vocals. Novelty Rag: Love Will Find a Way; Some Little Bug Is Going to Find You; eleven more. Eubie Blake 1, \$5.95 (Eubie Blake Music, 284-A Stuyvesant Ave., Brooklyn, N.Y. 11221).

At the age of eighty-nine, Eubie Blake became one of the most ubiquitous concert artists of the 1972 winter season in New York as well as one of the most lively and entrancing. But that was just part of this remarkable man's activities as he approached ninety. He was also composing and publishing new material and launching his own record company. This disc sums up a good deal of this activity-it is the first release on the Eubie Blake label, it includes one of his latest compositions, Melodic Rag, and Blake's solo portion of the record (on one side he serves as accompanist for singer Ivan Harold Browning) is a representative portion of his concert programming.

He is still a positive and sure-fingered pian-

ist-even more so in person than on this recording because, after more than seventy years in show business, he reacts to an audience like a fire horse to an alarm. On the disc. he recalls one of his early show pieces (his ragtime version of the Merry Widow Waltz), demonstrates a lively result of his encounter with the Schillinger system at the age of sixty-five (Dichtys on 7th Ave.), shows how rich his melodic creativity has remained (Melodic Rag, written in the fall of 1971), and sings with exquisite expressiveness the old Cole and Johnson song Sugar Babe.

Ivan Harold Browning, who sings on the second side, was in Eubie Blake's 1921 show. Shuffle Along. He is a mere stripling of eightyone, but like Eubie Blake his performing talents have remained surprisingly intact. His songs come from black show business in the early years of the century and he sings them with an intimate knowledge of the style of those times, with occasional vocal assists from Blake. Both as representation of the period covered by Browning's songs and for its presentation of Eubie Blake's definitive performances, this is a significant collection. And it's also a delight to listen to.



Count Basie: Evergreens. Gene Goe, Oscar Brashear, W. Reed, and Sonny Cohn, trumpets; M. F. Wanzo, Grover Mitchell, and Bill Hughes, trombones; Marshall Royal, Bobby Plater, Eric Dixon, Eddie Davis, and Charlie Fowlkes, saxophones; Freddie Green, guitar; Norman Keenan, bass; Harold Jones, drums; Count Basie, piano. Blues in My Heart; Red Roses for a Blue Lady; I've Got the World on a String; nine more. Groove Merchant 2201. \$5.98.

This is the easy, dancing Basie-ballads mingled with an occasional uptempo swinger such as Idaho. Primarily a showcase for the rich Basic saxophones and the sly twinkle of the Count's piano, the album is a refreshing change of pace from those Basie collections of new originals that often boil down to repetitious displays of the basic Basie formula.

The familiar selections on this disc sport some lovely melodies-Sweet Lorraine. As Long As I Live, Moonglow-and the arrangements have more variety than Basie's straight jazz pieces often do. The challenge of coping with familiar tunes has apparently driven the arranger (unidentified) to look for fresh ideas which results in a brief and rare glimpse

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of Freddie Green's solo guitar on Ma, Ile's Makin' Eyes at Me, and on Ain't Misbehavin', that carries reminders of Basie's Waller origins. There's also a tenor solo by (presumably) Eddie Davis on Ghost of a Chance that rates comparison with Chuck Berry's classic version of that tune.

J.S.W.

theater and film



AIN'T SUPPOSED TO DIE A NATURAL DEATH. Original Broadway cast recording. Words and music by Melvin van Peebles. Just Don't Make No Sense (and Parade); The Coolest Place in Town; You Can Get Up Before Noon Without Being a Square; eighteen more. A&M SP 3510, \$9.98 (two discs).

INNER CITY. Original Broadway cast recording. Lyrics by Eve Merriam; music by Helen Miller. Fee Fi Fo Fum; Now I Lay Me; Hushaby; twenty-five more. RCA LSO 1171, \$5.98.

Ain't Supposed to Die a Natural Death. Melvin van Peebles' searing musical mosaic of life on a street in the midst of a bustling black innercity ghetto, is an angry, bitter, unrelenting theater piece that brings to life a thoroughly victimized collection of junkies, prostitutes. thieves, procurers, transvestites, Lesbians, corrupt policemen, and street people. Musically, the show is a collection of free-verse poems for voice-rhythmic prose pieces really-that are recited over a raging set of jazz-rock-soul orchestrations. These numbers are Van Peebles' version of an urban talking blues, a virtually unending series of verbal and musical riffs. There are no songs as such; traditional musical comedy numbers would make the unrelieved misery and anger too bearable.

The feel of this lacerating evening has been successfully transferred to record, but without the context of the play the full meaning of many of the evening's moments is missing. For example, one does not know that Garrett Morris' recollection of a moment of total joy and pure pleasure. Lily Done the Zampoughi Everytime I Pulled Her Coattail, is set in a jail with Morris remembering the young woman he has murdered. One knows that in Salamaggi's Birthday. Dick Williams is tormenting someone, but one does not know that he is a policeman intimidating a streetwalker until she gets into his patrol car in order to submit to the sexual advances of his partner and himself.

In addition, Van Peebles' own brand of brooding, moody, aggressive *Sprechstimme* does become wearing. Those who have not seen the play will probably not be able to listen to the two-record set in one sitting.

The nineteen actors on the disc, however, are all exemplary. Arthur French's Just Don't Make No Sense (and Parade), the play's opening, aptly states the case. While waiting for a bus. French says plaintively: "Just don't make no sense, when you are black even waiting ain't easy." Jimmy Hayes's ancient junkie has a scratchy, piercing voice that the LP can hardly contain. Minnie Gentry, as an ancient crone who delivers the play's finale, Put a Curse on You, is thoroughly harrowing. Miss Gentry, in applying a voodoo curse to her white audience, prays that their children will also grow up to be junkies and that rats will eat their babies too.

Ain't Supposed to Die a Natural Death is obviously a powerful and special theater experience. This disc makes a worthwhile effort to capture that experience.

Inner City, a new rock-blues musical revue about the horrors of New York City life, was not well received by the critics. Its company. however, received brilliant notices, and the relatively unknown Linda Hopkins became a star overnight. The play consists of a series of musical numbers that deal with rotten schools. mendacious politicians, scheming drug dealers, and insufficient housing. This material may be thin and overworked but the actors are so devoted and ingratiating that the evening becomes more entertaining than one suspects it could be. It is one of the few Broadway shows in which the audience at the play's conclusion rushes up to the stage to shake the hands of the performers. This original-cast recording not only reinforces the fact that the score is undistinguished, but also proves anew that the Inner City company is magical.

Miss Hopkins' performance is of course the most impressive. An extraordinary vocalist in the black gospel tradition, she has two major solos, the passionate lament *Deep in the Night* and *It's My Belief*, a stirring song of faith. They are both unforgettable. Delores Hall almost rivals Miss Hopkins' contribution. Her *If Wishes Were Horses* is a moving evocation of a better world and represents the best writing by the show's creators. Eve Merriam and Helen Miller, Larry Marshall's *Ieremiah Obadiah*, a portrait of a dreamer, and Carl Hall's *Street Sermon* also throb with vitality.

All of these performers are bound to be heard from again. This disc documents their beginnings: that is its major value. H.E.





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in brief

BLOOD, SWEAT & TEARS: Greatest Hits. Columbia KC 31170, \$5.98.

Blood, Sweat & Tears is now a new band. It has a new lead singer, Bobby Doyle. It has lost one musician and gained two more. This LP commemorates the Blood, Sweat & Tears that is no more, and includes eleven of the band's most golden oldies.

TINY ALICE. Kama Sutra KSBS 2046, \$4.98. Good-time, jug-band-y sort of rock. Clever at points, frivolous at others, and without great staying power. One listening just about does it.

M. J.

SONNY & CHER: All I Ever Need Is You. Kapp KS 3660, \$4.98.

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JIMI HENDRIX: In the West. Reprise MS 2049, \$5.98.

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M.J.

HENRY GROSS. ABC ABCX 747, \$4.98. Brooklyn-born Henry Gross. former lead gui-

tarist with Sha Na Na, has a pleasant enough twoice and can write a pleasant enough tune, but his debut disc is just not distinctive enough to capture one's imagination. The potential is there; let's hope the second album is more interesting.

GEORGE CARLIN: FM & AM. Little David 7214, \$4.98

George Carlin is definitely a front-runner among young comics. This album includes his routines for *Divorce Game* plus the hilarious DJ personalities for mythical radio station WINO ("Wonderful WINO"). An undercurrent of Lenny Bruce-ness occurs often. Carlin is not taking on the Bruce mantel but rather continuing the fight against bigotry in his own funny way, bowing to Bruce as he goes along. Hear it.

M.A.

THE CRUSADERS: Crusaders I. Blue Thumb BTS 6001, \$5.98.

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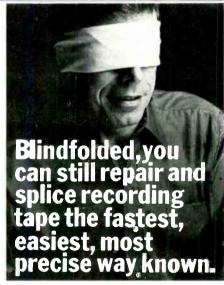
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Tchaikovsky: Tout de Suite. It's ironic that many of those earnest music lovers who complain most bitterly about the unconscionable duplication of a few "standard" masterpieces demonstrate little if any support for off-the-beatenpath recording ventures-even those featuring not difficult avant-garde music but unhackneved works in an orthodox idiom by otherwise well-known composers. Until recent years Tchaikovsky's first three symphonies were examples of such repertorial myopia, but once they began to be more frequently (and skillfully) played and recorded, they promptly won a delighted following. So far, however, the four Tchaikovsky orchestral suites haven't fared as well. Except for the theatrically exciting themeand-variations movement of the Third Suite, concert and recorded performances have been infrequent. The first complete disc set-first in stereo at least, and perhaps in any medium-didn't appear until 1967, and it's only now that this critically acclaimed but never bestselling version by Dorati and the New Philharmonia Orchestra has achieved tape release (Mercury/Ampex R 9018. two 7½-ips reels, \$21.95).

Fortunately, Dorati's infectiously zestful reading and the NPO's beautifully colored playing were so warmly and honestly recorded that five or more years later their vivid sonic appeal is unfaded. And with the case for these suites pled so persuasively, the listener may now decide for himself the justness of their long relative neglect and critical deprecation. It's not necessary to judge them by "masterpiece" standard-one need not deny the slight movements or condone the appalling nineteenth-century aesthetic tastelessness of the Fourth Suite's Mozartiana transcriptions to recognize touches of distinctive originality: the Rêves d'enfants in the Second Suite, for instance, or the infectious balletic pulse of various dance movements, and the superb coloristic sensibility of the orchestral scoring throughout. My only minor qualification is to note that the surfaces, while quiet, are not as immaculately silent as those of most current reel releases-undoubtedly a consequence of no Dolby "A" S/N-stretching in the master tape.

The "Greatest Hits" Pandemic. The advantages (commercial especially) of Columbia's seemingly interminable G-H series evidently has spurred RCA into following suit, even to the extent of using the same descriptive title. But some of the new releases represent a program-

matic improvement in that they feature at least one full-length work as well as the more usual short pieces and excerpts from major works. For example, the "Rachmaninoff's Greatest Hits" program includes the complete Cliburn/ Reiner Second Concerto as well as shorter selections all starring Cliburn (RCA Red Seal RK 1220 cassette; R8S 1220 8-track cartridge; \$6.95 each). In the same formats and at the same list price, a Brahms G-H features the Cliburn/Reiner Second Piano Concerto (RK/R8S 1225); the Tchaikovsky G-H Vol. I features the recent Ormandy/ Philadelphian 1812 Overture, while Vol. 2's major work is the memorable Heifetz/Reiner Violin Concerto (RK/R8S 1186 and 1224); the Debussy G-H feature is the Munch/Bostonian complete Nocturnes (RK/R8S 1221). Incidentally, it's only fair to note that the tape editor(s), whom I castigated so severely last April for "barbaric" cassette side breaks, here warrant only praise for completely avoiding such lapses.

Varied Remembrances of Things Past or Missed. A characteristic recession phenomenon is a reduction of new projects and a recultivation of old ones. Hence the current increase in reissues of all kinds, which compensates to some extent (in giving many older recordings a second or even a third chance to find appreciative listeners) for fewer brand-new recordings. Currently the open-reel repertory is being significantly expanded by Ampex's Mercury and Philips series of works denied tape editions when they first appeared on discs. And the normal (new-release) growth of the musicassette repertory is currently enhanced by many belated tapings of works previously confined to discs only, to those once but no longer available in open-reel format, and to various kinds of repackagings.

One of the most attractive types of anthology-reissues is an aria collection drawn from a star vocalist's complete opera recordings—ideally exemplified by the "Portrait of Birgit Nilsson" program (DDG 3300 188 cassette, \$6.98; also L 8098 7½-ips reel via Ampex, \$7.95) which includes the great Beethoven concert aria Ah, Perfido!; one aria each from Wagner's Tannhäuser and Tristan und Isolde; two from Mozart's Don Giovanni: and three from the more recent Weber Oberon.

Another popular approach is to cull various tried-and-true selections and relate them by subject—e.g., RCA's pitch to youngsters caught up in contemporary

ADVERTISING INDEX is on page 94. READER SERVICE CARDS appear on pages 17 and 95. religious, or religiosity, currents: "Jesus Loves You-Heavy Hits of Hope, Joy, and Peace" (RCA Red Seal RK 1208 cassette; R8S 1208 8-track cartridge; \$6.95 each). Actually, the one bow to socalled freak vogues here is a Japanese koto-dominated transcription of Bach's Jesu, Joy of Man's Desiring. The rest is quite orthodox: delightfully so in several Robert Shaw Chorale Handel Messiah and Vivaldi Gloria excerpts, plus a spiritual, folksong, and hymn; romantically so in the rich Luboff Choir/Stokowski Orchestra versions of Bach's Jesu, Joy (again) and Sheep May Safely Graze; routinely so in a couple of hymns by Leontyne Price with church choir and organ accompaniment.

Then there is Angel's "classical film-hit" pitch in another reissue (here complete) of the "Elvira Madigan" Mozart Concerto, K. 467, in the well-nigh ideal performance by soloist/conductor Daniel Barenboim—now coupled with a delectably small-scaled yet vital version of Mozart's G minor Symphony, K. 550, previously only available on a British disc. Gleamingly transparent recording and admirably quiet surfaces for a non-Dolbyized cassette enhance the appeal of what may well be young Barenboim's finest recorded representation (Angel

4XS 36814 cassette; 8XS 36814 8-track cartridge; \$6.98 each).

Cornucopia Anthologies. The economic situation being what it is today, I suppose it's futile to complain that recording reissues aren't released at lower pricesfollowing the not entirely accurate analogy of paperback reprints. In tape realms bargain hunters normally have to be satisfied with the only moderate savings offered by double-play releases-for example the "Favorite Brahms Concertos" coupling of the Rubinstein/Krips Piano Concerto No. 2 with the even greater Heifetz/Reiner Violin Concerto (RCA Red Seal RK/R8S 5075, \$9.95 each). That wouldn't be a bad price for two such masterpieces totaling eighty-two minutes if it weren't for a jolting editor's break (again!) in the finale of the piano work in its cassette edition.

Luckily, there's one double-play cassette this month that's first-rate both musically and technically (and Dolbyized to boot) yet priced at only \$7.98. Columbia MGT 30071 couples two 1961-62 discand-reel Copland programs by Bernstein and the New York Philharmonic: Rodeo episodes and Billy the Kid Suites; Appalachian Spring ballet, El Salón México, and a Music for the Theater dance. The once ultrabrilliant recordings still stand up remarkably well, the readings are passionately alive, and the Dolbyized surfaces are admirably quiet—in short, a tape Best Buy if there ever was one.

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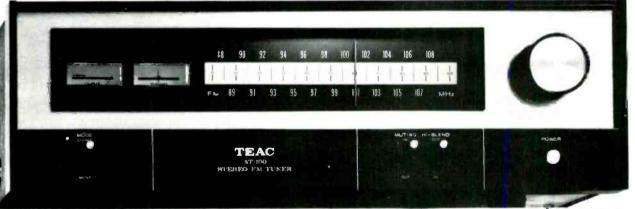
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KA-7001: FM Sensitivity 1.5 μ V; Capture Ratio 1 dB; Selectivity 90 dB; S/N 75 dB; 2-step Muting Circuit; MPX Circuit; Low-noise FET and Ceramic Filter in IF Stage produce wide frequency and sharper selectivity in AM reception.

For complete specifications, visit your nearest Authorized KENWOOD Dealer, or write...

