

How to Use Lab Test Data As a Speaker Shopping Guide Answers to Most Often Asked Questions About Speakers Extra Speakers Can Uncover Hidden Stereo Channels



### The Fisher CP-100 8-track tape cartridge player.



So far, there has been a big But. Ordinary 8-track cartridge *players* simply don't have the audio quality demanded by owners of fine component stereo systems. And that's where the new Fisher CP-100 comes in. An 8track tape cartridge player designed to meet Fisher standards. Suddenly, you're in business: you can play 4-channel Bach or rock (and lcts of it) with excellent fidelity.

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#### What to use with it.

Of course, to get the most out of your 4-channel 8-track cartridges, the CP-100 should be plugged into the best possible 4-channel stereo system. Which brings us, as any alert audiophile could have told you, to the Fisher 701.The 701 is a true 4-channel AM/FM stereo receiver with 250 watts of power, push-button electronic tuning without moving parts (from the front panel or by remote control), toroidal filters on FM' and other ultrasophisticated electronics. In addition to being the most advanced piece of 4-channel equipment you can buy, it's also a sensationally fine receiver for conventional 2-channel stereo. Not to mention mono.

With the CP-100 and the 701, you're ready for all the current action in 4-channel stereo. And you can also use them to simulate a 4-channel effect with a 2-channel program source. That, of course, doesn't sound as good as true 4-channel, but who's going to sue you?



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City	State	Zip
Please glue or tape coln on picture of handbook above.		010671

Even with a true 4-channel stereo system of the highest quality (like the Fisher 701 receiver and XP-9C speakers shown on the right), you must confront the question of *what* to listen to.

#### Why 8-track cartridges?

The 4-channel LP record and 4channel FM broadcasting are undoubtedly coming but aren't here yet. Tape is the only readily available source of true 4-channel stereo. Open-reel 7½ ips 4-channel tapes can be superb, but if you want a reasonably extensive repertory of classical and popular music, your choice is necessarily the 8-track tape cartridge. With two 4-track sequences at 3¾ ips, the 8-track cartridge is capable of good fidelity and has the unqualified backing of several major record companies. But!

Prices slightly higher in the Far West. Overseas and Canadian residents please write to Fisher Radio International, Long Island City, N.Y. 11101.

### There's no higher fi than a true 4-channel stereo system. But what do you feed into it?





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Robert P. Morgan SPEAKING OF RECORDS
Eugene Endres THERE'S A TWEETER IN MY TWEETER
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### It takes a lot of guts to say a new stereo cassette deck is the greatest ever made.

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## why most hi·fi speaker manufacturers demonstrate with the Crown DC300

It's no secret to hi-fi show goers that Crown DC300's are at work in almost every independent speaker manufacturer's exhibit. And, if you could visit their factory design labs and test chambers, you would see DC300's in nearly every plant too. We don't have to tell you why. Speaker manufacturers are interested in hearing their speakers, not the amplifier. And the Crown DC300 is the only amp in the world which can deliver a signal so pure that distortion is practically unmeasurable, at any listening level. Plus adequate power to reproduce all of the critical transient signals without overload. Does that tell you something about how your system could sound with a DC300?

300 watts/channel RMS into 4 Ω IM distortion under 0.05%, 1/10 watt to 300 watts S/N 100db below 150 watts RMS

into  $8\Omega$ 3-year warranty on parts and labor damping factor greater than 200



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### letters

#### **Colorful Music**

I was greatly interested in Robert Long's article, "The Color of Sound" [March 1971] particularly as it related to performances of Scriabin's *Prometheus*. Mr. Long refers to four recent performances of this work, with lights, in Rochester, New York City, New Haven, and at Southern Illinois University. I am pleased to make note of a fifth production of the work, which was performed in January 1971 by the San Francisco Symphony Orchestra with Seiji Ozawa conducting and Yuji Takahashi performing the piano part.

Maestro Ozawa was intent on following the composer's wishes with regard to lights, and the following excerpts from Heuwell Tircuit's review in the San Francisco Chronicle, January 22, 1971, might be of interest to your readers.

Great care was taken to present the light show with as much authenticity as possible. . . Stage manager Thomas Colangelo, Jr. got the electricians of the opera house together and rigged the house and back of the orchestral shell. These were then set into special control consoles backstage, where assistant conductor Niklaus Wyss 'played' the color element and apprentice conductor Charles Darden the intensity and flash control. Colangelo himself worked the smoke and flame for the coda. To achieve the proper colors without distortion, house, aisle and stage lights were out, with the orchestra using individual music-stand lights, as they would in the opera pit. All concerned took a bow, and deservedly so. Brilliant! Absolutely faithful to the composer in style, and awesome to behold. Those lights, that 120-piece orchestra . . . an astounding accomplishment."

The performances were extremely well received by our audiences, and I am pleased to note that the three concerts broke our all-time attendance records in the War Memorial Opera House for three performances—a total of 10,128 paid admissions, including nearly 700 standees.

Joseph A. Scafidi General Manager San Francisco Symphony Assn. San Francisco, Calif.

Readers of Mr. Long's excellent article may be interested in the evolution of an audio-visual idea which somewhat predates the "color organ" boom of the early Sixties.

In Radio and TV News, October 1957, Glen Southworth described a threechannel thyratron color organ which became an immediate hit with electronic hobbyists. I drove mine with a Marantz 2B, using as input a theremin of R. A. Moog's design which had appeared in that magazine in January 1954. For lack of a competent performer, the theremin eventually gave way to a wire recorder.

The device in this form caught the imagination of other psychometricians

here at Procter & Gamble. We substituted an audio signal generator for the recorder and arranged the lights vertically so that the higher tones would "appear" higher up thereby adding another synesthetic dimension. It was used during lectures to demonstrate the concept of intersensory correlation in the development of consumer products.

That Christmas I arranged three twenty-five-lamp strings in helix form on a large Norway spruce, and drove them separately from our hi fi via the color organ. Frequency bands were stacked in ascending order from floor to ceiling, and the search began for psychologically relevant colors. Quickly confirming the lack of consensus reported by Mr. Long, we resorted to trial and error with very satisfactory results. The nuances possible from seventy-five small colored lights in a darkened room with JBL corner horn support were so astonishing that we have done this every year since, and recently built the entire apparatus into our new home, driving the tree from a stereo center channel.

Now we have come full circle, because the most spectacular music source for our psychedelic tree is—you guessed it—recordings of the Moog synthesizer! Executing the light fields in stereo would be a logical next step, providing a horizontal impression of motion to complement the vertical spectrum. Still, there is one obvious correlation untouched: does anybody know how to make a tree revolve in *time* with the music?

A. M. Marrer Methods Research Procter & Gamble Cincinnati, Ohio

#### Schwann's Way

Like Mr. Mackler ["Letters," February 1971], I was disturbed by the deletion of monaural records from the Schwann catalogue. While I can appreciate the economic factors that led to this change, I wonder if Mr. Schwann might not consider (or reconsider) another alternative. Quite frankly, I see no point in purchasing a new catalogue each month—the change from issue to issue does not warrant it.

Why not publish separate catalogues for classical and popular recordings in alternate months? The classical material from the supplementary catalogue could be placed where the popular section now stands and popular material together with its brethren could be published in a different issue. This change might offer benefits for collectors, record manufacturers, and the Schwann staff. *Philip Blackmarr* 

Menlo Park, Calif.

Accepting the inevitable fact that it is no longer economically feasible for all currently available recordings to be listed in the regular monthly Schwann cata-

Continued on page 8

# The sound you get is the sound they got.

This is Blood, Sweat & Tears.\* Nine accomplished musicians who have mastered the art of rock and jazz and have creatively blended them to make their own distinctive sound.

As professional musicians they insist on full natural sound for their own listening enjoyment. Sound that is properly balanced and offers sharply defined separations of lows, midrange and highs. That's why they selected Pioneer speaker systems.

Their decision to use Pioneer speakers was made the same way you would make it — by listening to a variety of speakers in a dealer's showroom. When you can get nine individualists such as Blood, Sweat & Tears to agree on anything — it's got to be good. Make your own comparison test at a Pioneer dealer. Remember that the finest speaker system neither augments nor diminishes the quality of the original performance. It provides smooth, uncolored, unadulterated sound reproduction, free of distortion. There's a wide range of Pioneer speaker systems to suit any budget. Listen to them all. Blood, Sweat & Tears did. You're in good company. U. S. Pioneer Electronics Corp., 178 Commerce Rd.,

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CS-4500

CS-A700

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In Empire's stereo cylinder, the woofer faces down, for bass so "live" it gives you goosebumps, while our exclusive acoustic lens spreads the highest of highs through a full 160 arc.

There is no ugly grill cloth; the walnut finish goes all the way around; the marble top is meant to be used; and the sound is superb no matter where you put it.

If you're talking at least \$100 for a speaker system, think about this great Grenadier value. Nothing else in the world comes close.

Model 6000 Grenadier Specifications Height - 24 inches, diameter - 18 inches 3 way System up to 75 watts per channel Price \$109.95; with imported marble top \$119.95



For information and further details write Empire Scientific Corp., 1055 Stewart Ave., Garden City, N.Y. 11530



logue, I should like to offer the following alternative to Schwann's recently announced policy of listing only stereophonic recordings in their monthly catalogue with mono recordings listed only in their semi-annual supplement. List both mono and genuine stereophonic recordings of serious music in the regular monthly catalogue. Relegate electronically enhanced pseudostereophonic recordings of serious music to the supplement. This might even turn necessity into a virtue by discouraging the issuing of pseudo stereo records which have universally been denounced by critics as being nearly always sonically inferior to the mono originals. What say your other readers?

> Jim Cartwright Fort Hood, Texas

#### **Tarnished Masters**

Perhaps Harris Goldsmith and I need to have a little chat on what this recordcollecting thing is all about ["Old Masters Remastered," March 1971].

Why should one put an X amount of dollars into fine stereo equipment to reproduce records with hopelessly outmoded sound? Especially when Mr. Goldsmith himself labels the interpretations as: "erratic rhythmically. ...sloppy tech-nically...." (Schnabel); "altered dynamics. ... rephrases. ... not really Chopin's sonata at all" (Rachmaninoff); "insipid mann); "a certain sameness and blandness of tone" (Lhevinne). And yet he recommends that all "these discs. . . should be bought without delay!'

It doesn't hang together. I have just returned several such "Art of. . ." records to the dealer. Why? Kempff (for me) does a better Chopin Op. 35 than Mr. Goldsmith's "Mad Scientist" Rachmaninoff, and the sound is beyond comparison. This is not to be iconoclastic per se, but we have pianists, great ones too-Arrau, Slenczynska, Moravec, Laredo, Riefling, Larrocha, Horowitz, et al. I, for one, see no merit in dragging someone else's lares and penates behind me, and even less merit in filling a record library with inferior recordings of invalid interpretations by pianists simply because they are "legendary."

Ernest Finke

Sedona, Ariz.

#### **Casting Problems**

I have just read two (and will undoubtedly encounter more) criticisms of London's recent issue of Meyerbeer's Les Huguenots. This is then followed by David Johnson's letter [February 1971], which is little more than an echo of what has already been said before. He does not shed any new light on the issue.

Any opera fan can be an armchair a & r man and dream up a spectacular cast. So Mr. Johnson's galaxy of stars is really not important; what is significant

is what has been done. Sutherland, Bonynge, and company have made a whole new generation of listeners aware of what all the fuss was about fifty years ago. Perhaps if listeners were as perceptive today as they were half a century ago, collectors would be scratching their heads over which Les Huguenots to buy, instead of which Carmen or which Madama Butterfly. I shall enjoy Les Huguenots as a revelation of what was once meant by the words Grand Opera; I shall be ever grateful to London for its daring; and I shall overlook the sceptics.

In the midst of such quarreling and carping, I have almost completely abandoned hope of ever seeing Goldmark's Queen of Sheba or Meyerbeer's L'Africaine and Dinorah on records.

Richard F. Ellis Buffalo, N.Y.

Permit me to comment on David Johnson's letter in the February issue concerning the generally inept supporting casts that sing with Joan Sutherland on her recordings, and offer a modest solution.

I completely agree with Mr. Johnson's evaluation. While my opinions on specific singers differ from his (for example, I enjoyed the work of Bacquier and Ghiuselev, but Tourangeau drove me to utter distraction), the great majority of Miss Sutherland's recordings are fatally marred, at least to my ears, by supporting singers who are either inadequate or miscast. One may go all the way back to some of her earlier discs and find the same trend: Sonnambula's tenor and bass, Puritani's tenor and baritone.

I think there is a solution, albeit a difficult one. Perhaps London records should merely exchange Mr. Bonynge for the gentleman who selects the supporting singers for Elena Souliotis' recordings. Her Anna Bolena is superbly cast, from Marilyn Horne, John Alexander, and Nicolai Ghiaurov down to Stafford Dean, Janet Coster, and Piero de Palma. Her forthcoming Macbeth has Ghiaurov and Dietrich Fischer-Dieskau, with Lamberto Gardelli conducting. These people would surely do justice to a Sutherland recording. Meanwhile, Miss Souliotis, who has been a sad disappointment on records, would have the kind of supporting cast she deserves.

> Lawrence S. King Champaign, Ill.

#### Dual 1215 Correction

The listing of the Dual Model 1215 on page 52 of our May issue should have read: Similar to Model 1209, but different arm and coupled (nonadjustable) antiskating compensation. Price: \$99.50. The 1215, like the 1209, is equipped with a vernier speed adjustment and cueing control.

# What is the most expensive component in your stereo system?



#### Wrong.

Assuming that you picked one of the component types pictured here.

Although these three components form the typical stereo system, no system is actually complete without number four: records.

And no matter what you may have paid for your receiver, speakers, or turntable, chances are you've spent even more for your records. Or will before long.

Your records are not only your biggest investment, but the most vulnerable as well. They can remain as good as new for years or begin to wear the first time they're played. In which case they become even more expensive.

#### How to protect your investment.

Which brings us to the turntable, the one component that actually contacts your records and tracks their impressionable grooves with the unyielding hardness of a diamond.

What happens then is up to the tonearm. It must apply just the right amount of pressure to the stylus, keep this pressure equal on both walls of the groove, and follow the stylus without resistance as the groove spirals inward.

Then the stylus will be able to respond freely to all the twists and turns in the record groove, without digging in or chopping away.

#### How the Dual does it.

Dual tonearms are designed with great ingenuity and engineered to perfection. For example, the tonearm of the 1219 pivots exactly like a gyroscope: up and down within one ring, left and right within another. All four pivot points are identical, and nothing moves with the tonearm except the inner ring. If you can imagine 0.015 gram, that's the maximum resistance this tonearm offers to the stylus. This suspension system is called a gimbal, and no other automatic arm has it. Another unique feature of the 1219 tonearm is the Mode Selector, which shifts the entire arm to set the correct stylus angle in either single or multiple play.

Also, the longer the tonearm, the lower the tracking error. Thus, the 1219's arm,  $8\frac{3}{4}$ " from pivot to stylus, is the longest of all automatic arms.

#### Other things to consider.

In addition to preserving records, a turntable must also bring out the best in them.

The record must rotate at precisely the right speed, or pitch will be off. The motor must be free of vibration, or rumble will be added to the music. The platter must weigh enough to provide effective flywheel action to smooth out speed fluctuations. And, of course, the stylus must get to and from the groove as gently as possible.

#### The professionals'choice.

All this is something to think about the next time you buy a record or play your favorite one. It's why Dual turntables have been the choice of professionals for so many years.

Not only for the way Duals get the most out of records (without taking anything away) but for their ruggedness, reliability and simplicity of operation.

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#### SPECIFICATIONS

 Type . . . Bookshelf.

 Cabinet . . . Oiled Walnut.

 Dimensions . . . 23¾" H x 13" W x 11¾" D.

Weight... 37 lbs. each. Frequency Response... 33Hz–20kHz ± 3 db (measured in average listening room).

Speakers (2).... High accuracy, wide dispersion tweeter with Hi Flux Magnet and 10" high compliance woofer. Nominal Impedance..., 8 ohms. Power Required... 10 watts min. Price..., \$110 suggested resale. Write for details about other ADC speaker systems. From \$55;\$350.



AUDIO FOR AUDIOPHILES CIRCLE 9 ON READER-SERVICE CARD

### behind the scenes

5

Photo Pic

### The Comic Klemperer

#### LONDON

Otto Klemperer has now recorded Mozart's four most popular operas: the recently completed Così fan tutte will soon join his existing sets of The Magic Flute. Don Giovanni, and the newly released Figaro. EMI was persuaded to undertake the project readily enough, but the company would have much preferred it if Klemperer had finished his Die Walküre first. As it is, Act I of the Wagner opera stands intact (reputedly very impressive in sound as well as interpretation) but plans for its completion are in abeyance. With Così fan tutte, on the other hand, Klemperer would hear of no delay. "What do you want," the eightysix-year-old conductor is alleged to have protested, "a posthumous interpretation?"

What many feared-the critical public at large if not EMI-was that the interpretation of this most sparkling of comedies would be, if not posthumous, at least funereal. Those fears were completely allayed for the London public at least, when at the end of his long stint of seventeen sessions Klemperer conducted a concert performance with the same artists in the Royal Festival Hall. Obviously the finished recording may not have quite the same atmosphere, but in dramatic terms this was as genuinely comic and pointed a performance as anyone could want, especially from the singers. Although the cast had never sung these roles together before, they formed a fine team, acting the comedy out as though in costume and relishing the chances of extra pointing made possible by Klemperer's slow tempos.

Not that Klemperer's tempos seemed

particularly slow in the live performance, for his rhythms were lightly sprung and he consistently took special care with textures. In the Act I finale, for example, he was particularly careful to distinguish the textural contrasts between the deceiving men (strong and confident) and the women (their genuine concern about the "poisoning" was underlined by Klemperer's pointing up the triplet accompaniment). Suvi Raj Grubb, the recording manager, took special note of one playback during the recording of the Fiordiligi/Dorabella Act II duet "Pren-dero quel brunettino." He himself would have been quite happy to pass the take, but Klemperer's firm comment was: "I want scherzando; it's too heavy.'

The seventeen sessions at Kingsway Hall were fraught with problems of conflicting engagements on the part of almost every singer, which made it all the more remarkable that they got on so well together. But then, Geraint Evans (singing Guglielmo, not Don Alfonso as one might have expected) has a finely developed social sense that would help to keep any group happy. He was in the middle of a run of Die Meistersinger at Covent Garden, singing Beckmesser, a part he had just recorded with Karajan in Dresden [see "Behind the Scenes," April 1971]. He told Klemperer about that Karajan recording, and mentioned that the whole work had been polished off in a mere nine days. "What opera did you say?" asked Klemperer in disbelief. When he was told, his comment was predictable: "Too quick!" In Così, Evans was enthusiastic about the clarity of Klemperer's accompaniment. Hearing the playback of one of his arias, which he had sung many times, he

HIGH FIDELITY MAGAZINE

pointed to one line of the score in amazement: "I've never heard that before."

Taking the role of the other lover, Ferrando, was another *Cosi* veteran (at least comparatively), Luigi Alva. He too had conflicting commitments, and on one memorable day Alva sang three threehour recording sessions within twelve hours—one was an extra session of the Mozart opera to check on the two long finales, the other two for Philips. Alva was singing some duet madrigals with Ryland Davies for Raymond Leppard's monumental complete recording of the Monteverdi madrigals, the first five discs of which will be appearing this autumn.

Even more fraught was the to-ing and fro-ing of the Despina in Così, Lucia Popp, who at the time was committed to singing opposite Joan Sutherland in the Hamburg production of Handel's Giulio Cesare. She explained to Suvi Raj Grubb that it would be impossible to find a substitute in Hamburg, and everyone hoped that scheduled air flights would operate on time. They didn't. Quite apart from the February weather there were strikes by the staffs of both BEA and Lufthansa. On one occasion Miss Popp had to drive from Hamburg to Munich before catching a plane to London, just as the BEA strike finished. After arriving at Kingsway Hall she didn't even have time to take off her coat before launching into a take of the sextet.

The other three soloists were less predictable Così interpreters—Margaret Price as Fiordiligi, Yvonne Minton as Dorabella, and Hans Sotin as Don Alfonso-but they were proportionately more predictable in their movements. Sotin, as the oid philosopher, contrasted markedly with Alva and Evans as the junior member of the male contingent. In the choice of the two principal women singers, EMI deliberately opted for upand-coming younger singers. Yvonne Minton recently sang on Solti's Chicago Mahler records, while the young Welsh soprano, Margaret Price, has just made a fascinating recital for RCA, covering a wide repertory of Mussorgsky, Liszt, Mozart, Bellini, Verdi, and Donizetti. Certainly in the live performance, hers was the success of the evening with a formidably brilliant account of "Come scoglio." Suvi Grubb promises equally brilliant recorded results in that aria: he selected the fastest take of the final più allegro which proved to be the most precise as well as the most brilliant for both singer and orchestra.

Mozart Masses. While Klemperer was busy with Così fan tutte at Kingsway Hall, Colin Davis tackled another major Mozart project at Westminster Cathedral for Philips. This was the unusual recording site that Philips also used for Davis' Berlioz Requiem sessions, and the company felt that a return visit would be appropriate for Davis' latest choral projects, which included three Masses: the Mass in C minor in the Robbins Landon edition (that is as Mozart left it minus the Schmidt accretions) and the two C major Masses in a more extrovert style—

Continued on page 12

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#### Continued from page 11

the Credo Mass, K. 257 and the Coronation Mass, K. 317. For the big C minor Mass, the LSO was joined by the LSO chorus, but for the two shorter Masses Davis preferred a smaller band of professional singers: the John Alldis Choir. These are the latest Philips contributions to a whole collection of Mozart choral music conducted by Davis. Soloists on these occasions included Helen Donath, Heather Harper, Ryland Davies, and Stafford Dean in the C minor Mass; the same group plus Gillian Knight and Clifford Grant in the other two.

Davis' next Mozart project is even bigger, a complete recording of *Figaro* with Mirella Freni as Susanna. As in Davis' *Idomeneo* set, also for Philips, the orchestra will be the BBC Symphony, still under Davis' baton until he takes over officially at Covent Garden in the autumn.

Dart's Valedictory. The death of Thurston Dart, scholar and harpsichordist extraordinary, at the early age of fortynine came as a blow to the British musical and recording scene. As recently as the end of last year he had taken part in a complete recording of the Bach suites for Argo with Neville Marriner and the Academy of St. Martin's. He played the continuo and, even more important, edited the performing scores, sometimes opting for unexpected solo lines. With the same musicians but a different company (Philips) he was then going on to tape a complete recording of the Brandenburg Concertos in an even more controversial edition prepared by himself.

In great pain, he took part in the first two days of sessions, but then had to be taken to the hospital where within days he died. But thanks to the devotion of four of Britain's finest harpsichord players-Raymond Leppard, Philip Ledger, Colin Tilney, and George Malcolm (who was already cast for the solo in No. 5)-the scheduled sessions at Wembley Town Hall were all completed on time, and the finished set should be appearing toward the end of the year. We have had a foretaste of the Brandenburg editions on the BBC, and reactions will certainly be positive. Dart deliberately went back to the original versions written at Cöthen, well before Bach thought of sending them to the margrave of Brandenburg. No. 4 is particularly surprising because Dart deduced that echo recorders were intended and would have been played an octave higher than written. So for this occasion we shall have high sopranino recorder sound. At least it will be different. EDWARD GREENFIELD

#### LENINGRAD

#### Shostakovich's New Movie Score

Last year was a prolific one for Dmitri Shostakovich despite the serious illness that prevented him from acting as chair-

> Continued on page 14 HIGH FIDELITY MAGAZINE

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#### BEHIND THE SCENES

Continued from page 12

man of the Fourth International Tchaikovsky Competition. (At the time of the opening ceremonies he was in the Special Orthopedic Hospital at Kurgan, West Siberia.) Still the composer managed to write several ballads for unaccompanied male chorus, the Thirteenth String Quartet, and music for King Lear, a new Lenfilm production shot in Leningrad. Though Shostakovich is best known for his symphonies and chamber works, he has often written music for films over the past forty years. Grigori Kozintsev, the King Lear director/producer, has been Shostakovich's closest associate in this field-their most recent collaboration resulted in a filmed version of Hamlet in 1964, one of their most interesting joint projects. Shostakovich finished the King Lear score just a year ago at the composer's union sanatorium at Komarovo, a picturesque suburb of Leningrad. When his work was completed Shostakovich stayed on in Leningrad so that he might attend one of the recording sessions.

The site of the sessions was the hall of Lenkinokhronnika (Leningrad Newsreels' studio), which is considered to have excellent acoustic qualities. The hall is often used in taping Lenfilm's soundtracks, particularly when a symphony orchestra is involved, as well as for some of Melodiya's recording projects. A thoroughly equipped studio is always ready and waiting for action; the hall itself requires little preparation before any session begins, because it is never used for public concerts. When I arrived on a sunny June morning the engineers had already set up a network of twelve Neuman microphones, and musicians of the Leningrad Philharmonic were taking their seats. I looked into the control room where engineer Eduard Vanuntz was adjusting his mixing panel. The whole session, he said, was to be an exceptional musical event for Russia's film industry since the soundtrack would be recorded in stereo. It appeared that Melodiya also had a hand in the decision: the company plans to release the soundtrack on disc this year. Twelve machines were prepared to tape the full orchestral ensemble. Vanuntz himself took charge of balancing the most important instrumental groups in the score-winds, brass, and percussion; the strings were attended to by his assistants located in adjacent booths. The responsibility of achieving the final blend was in the hands of the producer, Joseph Shapiro. In the hall itself I was surprised to see the wellknown opera and ballet conductor Djemal Dalgat. Maxim Shostakovich, the composer's son, was originally expected to conduct the session. As it turned out, Shostakovich junior had resigned himself to a sort of tradition; all of the elder Shostakovich's Leningrad premieres are conducted by Prof. Rabinovich. Rabinovich, however, had gone on vacation somewhere in the south and Maxim, not

Continued on page 16

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#### **BEHIND THE SCENES**

Continued from page 14

realizing this, had filled his own schedule. The fifty-year-old Dalgat, according to the orchestra's manager, Leonid Kutick, appeared to be the only competent conductor available. (In 1965 L'Academie du Disque Français had awarded him the Toscanini prize for his recording of Prokofiev's Love for Three Oranges.)

Dalgat had just laid down his baton after a brief, last-minute rehearsal when the musicians began applauding gently; they had caught sight of Shostakovich, who had quietly entered the hall during the rehearsal. The composer sat to one side, together with Kozintsev, completely absorbed in his own music. A section entitled Powers of Evil was being taped. During the first take, which had been preceded by a series of balance and level tests, the amplified voice of engineer Vanuntz issued from the control room pointing out minor infelicities of ensemble and balance and calling for sample passages from the various instrumental groups. At the playback Shostakovich joined Dalgat, and the two of them closely followed the score. The first take showed some need for rebalancing, and a few adjustments were made in microphone placement and seating. There were two more takes, and the last one proved satisfactory. The next piece to be recorded was The Voice of Truth.

His crowded schedule did not allow Shostakovich to attend the additional sessions that included the Fool's songs (performed improvisationally with no accompaniment) and some brass-band music. The whole series of sessions took about ten days and within a few weeks of its completion Shostakovich's *King Lear* music had been successfully captured for both screen and phonograph. V. D. YURCHENKOV

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### speaking of records



### Pianistic Culminations by Robert P. Morgan

IN AN AGE of stereo delights, the piano offers little opportunity for engineers to display their schizophrenic skills. It is one of the most difficult instruments to record-perhaps the most difficult; there is something about the tone quality that is extremely resistant to faithful reproduction. But a recording of course is more than just a sonic blast; it is also a record (in the documentary sense) of a performance, and a reasonably permanent auditory embodiment of the notes in a composer's score. It is these considerations, then, that concern me in regard to the records I would like to discuss here.

Since I have no favorite recordings, my choice is perhaps a bit on the random side, and it is as much determined by the music involved as it is by the performances. I have settled on three pieces (or, in the last case, group of pieces) that seem to me to represent the culmination of one aspect of the development of keyboard music, each a high point of its type. They present certain unique problems to the performer and, from the point of view of execution, are the most difficult in the entire keyboard literature. They are Bach's Goldberg Variations, Beethoven's Hammerklavier Sonata, Op. 106, and the piano music of Schoenberg.

To begin with Bach, the disc I have in mind is the now famous one by Glenn Gould on Columbia (ML 5060, now available in rechanneled stereo as MS 7096). In these variations Bach has carried the development of baroque linear counterpoint to a peak that has never been eclipsed. The work is a compendium of polyphonic techniques, containing a bewildering variety of textural patterns in addition to such exotic contrapuntal feats as a series of canons, each of which is composed at a different canonic interval. It takes a very controlled type of playing to bring off this kind of music, and it seems to me that, at least in this instance, Gould handles the difficulties magnificently. I am particularly impressed by his ability to keep the piano sound "dry," thereby enabling the various voices to sound through independently, without however letting it become so parched that it loses all of its character. He also manages to keep the piece moving forward in an extraordinary way, and since the work is indeed a very long one, this is particularly welcome here. It is not just a question of Gould's tempos (which are admittedly quite fast), but of his ability to move through the variations in such a way that one hears a clear progression throughout the piece; each variation is allowed to grow logically out of the preceding one, thus preventing the work from breaking upas so frequently happens-into a series of fragmentary sections.

If the Goldberg Variations represent the culmination of the development of the linear style of keyboard writing, the Hammerklavier might be said to mark the culmination of its "spatial" development. One aspect of Beethoven's progress in his piano style is the gradual enlarging of the instrumental range to include its most extreme registers, a development that reaches its final stage in the last five sonatas. In all of these pieces, but especially in Op. 106, Beethoven goes to the far reaches of the instrument to exploit the special qualities of timbre which they uniquely afford. This is one of the reasons why these works have such an individual sound, an expressive nuance unmatched by anything else in the literature.

Any pianist who wishes to play the Hammerklavier must come equipped with two indispensable attributes: he must have an enormous technique which will not break down under the most grueling kind of long-distance exertion, and he must possess a truly penetrating musical intelligence. My choice in this case is the performance by Alfred Brendel, included in the second volume of his six-volume recording on Vox of the complete Beethoven piano music (SVBX 54170 or available separately on Turnabout TVS 34392). The Hammerklavier contains so many pitfalls for the performer, both technical and musical, that one often has the impression in listening to the piece that it looks better on the page than it sounds to the ear. Brendel, however, gives the lie to this view—he makes the piece come alive in a most convincing way. I won't say he makes it sound easy—that would be defeating the purpose—but he does make it sound "plausible." In short, he manages to make everything hang together so that the work comes out not simply as a somewhat grotesque tour de force, but rather as a composition, an extraordinary expression of musical structure at its richest and most complex.

Although Schoenberg did not compose any one keyboard piece of the scope of the Goldberg Variations or the Hammerklavier Sonata, his total keyboard output for solo performer, all of which can be contained on one long-playing record, does represent the same kind of last word in regard to a particular pianistic development. Unlike Bach and Beethoven, Schoenberg was not himself a keyboard performer (I am told that he absolutely refused to play the instrument, even for purposes of illustration in his own classes), but the rather special character of his musical thought led him to develop a keyboard style that is strikingly original and yet still remains remarkably pianistic. Schoenberg's works for piano are also particularly interesting in that one can clearly trace in them the gradual development of his compositional technique toward the serial principle, culminating in his last two compositions for piano, Opp. 33a and 33b, both of which are small masterpieces of twelve-tone music.

In this case my preferred recording is the one made by Edward Steuermann for Columbia (ML 5216), which is unfortunately no longer available. (Its place in the Columbia catalogue has apparently been taken by the more recent recording by Gould, which is especially regrettable since this is not one of Gould's better efforts.) Part of the reason why I admire the Gould Bach and Brendel Beethoven recordings just discussed is that in their readings both performers interpret the scores very much in the light of current musical conception, making them more relevant for the present-day listener. My reason for choosing this Schoenberg recording, on the other hand, could be said to be determined by just the opposite consideration: Steuermann, a pianist of the old school who studied under Busoni, plays Schoenberg's music in such a way as to illuminate its ties with the past. It seems to me that this is a very important aspect of Schoenberg's style and one that is apt to be overlooked if one concentrates too heavily on the dissonant nature of the surface sound. Underneath it all there is a basic structure of phrases and sections which in its fundamental rhythm is remarkably Brahmsian. This is not to say -as has been said-that Schoenberg is really a musical reactionary. That is of course quite absurd, and besides, I'm not sure what the term can mean in this context. But the sense of continuity with the tradition is one of the basic qualities of this music, and one which needs to make itself felt in performance. Steuermann achieves this admirably.

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We don't know why you want to hide behind the semianonymity of initials, W. D.— you have a perfectly legitimate question. If you're feeling apologetic about a receiver of only modest power by today's standards, don't. It may be quite adequate for your needs. True, 10 watts per channel doesn't match AR's recommendation of 15 per channel for the AR.4x or 20 for the AR.6. But considering your smaller-thanaverage room size and the fact that you don't plan to run the system above moderate levels, it's likely that you'll be satisfied by either speaker system. Your biggest problem may be your room proportions. Since length and breadth apparently are equal, you may need extra draperies or other soundabsorbing materials to control standing waves-and that will eat up some of the sound. But the basic rule to keep in mind in considering these factors is that doubling the amplifier power adds only 3 dB to the loudness. In other words, 10 watts is not all that far below the recommended 20 watts for the AR-6. So if 20 watts is adequate for full volume levels, 10 watts certainly should do for moderate levels.

From your comments on the Advent Dolby units it would appear that they should offer more audible improvement in home-recorded cassettes than you could get by using the new highperformance tapes. But considering the cost of the Dolby equipment and the greater complexity it introduces into the system, the new tapes seem to be a more attractive way to go. For instance, what happens if something goes wrong with the Dolby circuit?—J. W. Vere, Montclair, N.J.

First, let's get some basic facts straight. The Dolby circuit improves audible sound because it suppresses tape hiss and electronic noise generated in the recorder by as much as 10 dB. The new tapes offer some improvement in noise (a few dB) but they also improve frequency response (often audibly) and perhaps distortion (possibly audibly) when used with a recorder perfectly suited to the requirements of these tapes. There's the catch. And the new formulations are not all the same; in particular, the chromium-dioxide cassettes should offer more improvement under optimum conditions than you can get from regular iron-oxide tapes. But the chromium-dioxide (Crolyn, to use the original Du Pont name) cassettes cost more; and even 3M's new High Energy ironoxide cassettes are expected to sell for premium prices. So-to answer your question at last----if you do enough recording, the new high-performance cassettes could cost as much as the Dolby circuitry in the long run, and their advantages in terms of sound quality are not truly comparable. The Dolby circuitry does undeniably introduce some added complexity. If it conks out (that can happen to any circuit, of course) you can still play your Dolbyized tapes by reducing the treble control in your stereo system, though the sound won't quite be identical to that with the Dolby circuit in use. But in any case there's no reason why you can't use both the Dolby circuitry and the new cassettes (a Crolyn switch is built into most Dolbyized cassette decks) since their respective advantages are cumulative rather than mutually exclusive.

I have trouble receiving FM stations at 104.7 and 105.0 on my Sansui 2000. There is distortion on both stations, though this can't be a selectivity problem since I can't pick up both stations with the same antenna location. Reception at all other frequencies is perfect with equivalent signal strength. Do receivers ever fail at one particular frequency and work faithfully at all others?—Granville Bruner, Birmingham, Ala.

Seems extremely unlikely, even allowing for misalignment of the tuner section something your discussion of receiving distant stations (omitted above) does not suggest. Have you tried listening on other people's equipment? If you still hear the distortion, it presumably is originating at the station; and if you consider it serious enough, you could write to the FCC asking the local monitoring office to check the stations out. (Incidentally, that second frequency has got to be either 104.9—in which case it is on the adjacent channel to 104.7 and must be at a considerable distance from it—or 105.1. FM frequencies are assigned by channel, and no in-between frequencies are allowed.)

I beg to disagree with J. R. Smith. [In January this column contained a complaint by Mr. Smith that "as most serious listeners use their turnables manually anyway" multirecord sets should be pressed in manual, rather than automatic sequence.] I consider myself a music lover and greatly prefer my multiple-record sets to be in automatic sequence; and I always buy them that way-other things being nearly equal -both for home listening and for the stock in my store. Incidentally we sell very few manual players (AR, Thorens) compared to automatic equipment (Dual, Garrard, Miracord).-Randolph Bean, Brunswick, Me.

And as Maine goes... But as your letter implies, other things are not entirely equal. That is, one normally doesn't have a choice of either manual or automatic sequencing in a given performance. If record companies would offer the choice, it would be easier to tell which arrangement is preferred by which segments of the buying public (though the double inventory would create its own problems). Failing such a gauge, we can contribute something by allowing you and Mr. Smith to argue the matter in print.

Have you published any test reports on eight-track cartridge recorders? I'm considering buying one but I don't know which. In particular, will I get true stereo separation in the recordings?—SSG James V. Acosta, Fort Devens, Mass.

Since most of the inquiries we receive concern cassette and open-reel equipment, we have concentrated on those formats in our test reports, though we are planning reports on eight-track equipment. We're not sure why you focus on channel separation as the criterion of merit in eight-track equipment. The close spacing of the tracks on the tape can produce some overlap of the head onto adjacent tracks if the tape-to-head alignment is not correct; but there's no particular problem about separation between tracks of a given stereo pair, which are separated physically by the three other "programs." So the stereo separation is "true" enough. You'd be better advised to concentrate on factors like stability of tape motion (since the way in which the loop of tape moves within the cartridge causes a drag that can be a problem in a poorly built deck), and electronic characteristics like noise and distortion.

I would appreciate it if you could recommend the best color organ, in your opinion.—James W. Walter, Jr., Tampa, Fla.

Sorry. We can tell within fairly precise boundaries what a given recording ought to sound like; but who can say what it ought to look like?

The two that couldn't wait.

Every so often, an idea just won't wait until its time has come. So it arrives ahead of schedule. And begins a trend.

Take the new Sony 6065 receiver, for instance. It takes direct-coupled circuitry into a new dimension. Which means there is nothing to come between you and the sound -no coupling capacitors, and no interstage transformers

Those capacitors and transformers could cause phase shift or low-end roll-off, or diminish the damping factor at the low frequencies where you need it most.

So, instead we use Darlington-type coupling, a complementary-symmetry driver stage, and an output stage that needs no coupling capacitor between itself and the speaker because it's supplied with both positive and negative voltages (not just positive and ground)

The results speak for themselves. The amplifier section puts out 255 watts\* with less than 0.2% distortion, and a cleaner, purer sound than you've heard before in the 6065's price

range (or, quite probably, above it).

And the FM section has not only high sensitivity and selectivity (2.2 uV IHF and 80dB respectively) but lower noise and better interference rejection, to help you discover stations that you've never heard before re-discover stations that were barely listenable before

You'll discover new flexibility, too, in the control functions. Sony's famous two-way function selector lets you switch quickly to the most used sources - or dial conventionally to such extras as a front-panel AUX input jack, or a second phono input. There's a center channel output, too, to fill the hole-in-themiddle in large rooms, or feed mono signals to tape recorders or a remote sound system. The Sony 6065. \$399.50

Another "impatient" receiver also featuring the new Sony approach to direct coupling, the 6055 delivers 145 watts." Moderately priced, this receiver is a remarkable value at \$299.50.

So, there they are, months ahead of schedule

and way ahead of their time. Don't wait to enjoy them at your dealer. Sony Corporation of America, 47-47 Van Dam Street, Long Island City, New York 11101.

\*IHF Constant power supply method at 4 ohms



SONY



### AND NOW, 3M'S SUPERTAPE

The 3M Company's new high-performance video tape, mentioned in this column in the April issue, already has produced a companion consumer product: the Scotch High Energy cassette line. The formulation is described by 3M as being "based on a proprietary cobalt-modified ferric oxide." Cobalt-not to be confused with chromium, as in chromium-dioxide. Superficially there is a similarity, however: like chromium-dioxide, High Energy tape first appeared in nonaudio form and boasted a low-noise output. There the similarity ends. No special bias or equalization is required by the new tape; 3M says High Energy is interchangeable with "standard low-noise" (i.e.: Dynarange) in this respect. The difference appears to be largely in the higher output level of High Energy, resulting in signal-to-noise gains of at least 2 dB in the bass and up to 6 dB at the high end according to 3M.

Another improvement is incorporated into both the High Energy product and 3M's more conventional cassettes, now to be called Extended Range: a new coating on the base side of the tape is said to promote even winding on the hubs within the cassette and therefore forestall jamming. Extended Range cassettes will be made in C-30, C-60, C-90, and C-120 sizes. The High Energy product will be made only in C-60 and C-90 sizes for the present and is expected to sell at higher prices. How much higher has yet to be announced.

CIRCLE 152 ON READER-SERVICE CARD

#### ONWARD AND UPWARD WITH DOLBY

Considering how recently the Dolby "B" noise reduction system was announced, the implicit assumption by many industry insiders we have talked to that the Dolby is here to stay in at least some types of consumer equipment is high praise indeed. There are those who take a dimmer view, of course, and complain that noise reduction is simply a way of sweeping noisy electronics under the rug, so to speak. But by and large the advantages of the Dolby circuit—particularly for high-quality cassette recordings—go unchallenged.

The Dolby people began with the "A" system: an expensive affair operating in four separate frequency bands. That system is now all but indispensable in the recording industry. Then came the B model with only one frequency band. It's what most people mean when they say "Dolby" today—at least within the context of home high fidelity. A "C" system also is in the exploration stage, and would be used to control the noise inherent in disc recordings. It might have two frequency bands: high (perhaps identical to that in the B model) to reduce dust crackle for example, and low to control rumble.

Dolby Laboratories has been increasing the ranks of companies it has licensed to manufacture Dolby circuits. A recent announcement says that three more Japanese companies have been admitted to the fold, in addition to Nakamichi (a private-label company producing Dolbyized cassette recorders for American distribution) and Hitachi. We understand that several European companies now are licensed as well. And by next fall, if all we hear is true, there should be an upsurge of Dolbyized



3M's oscilloscope photographs compare new Scotch High Energy tape (right) to "standard." Vertical blurring in top pair is caused by noise in multiple copying; height in bottom pair indicates tape output.

products on dealers' shelves. In particular, the list may include a choice of high-quality open-reel decks.

But the most provocative scuttlebutt within the industry at the moment concerns Dolby circuitry built into FM receivers. By the time you read this, Dolby Laboratories will have demonstrated the application of the B circuit to noise reduction in FM broadcasting (before the National Association of FM Broadcasters). The 10 dB of quieting available through adoption of the Dolby technique not only would be a boon to listeners in receiving borderline stereo stations, it would increase the good-signal coverage areas of the stations, making them more attractive to advertisers. According to Dolby Laboratories, a comparable increase in coverage through transmitter power alone would require a doubling of the station's output (and FCC approval, of course).

If stations use the Dolby system, does that mean that we all would have to run out and buy new equipment or at least an add-on Dolby unit? Not really, says Dolby; and their demonstrations on this point seem convincing enough. As with Dolbyized cassettes, the non-Dolby listener can tame the abundance of highs in the uncorrected signal by using his amplifier's treble control. If he wants to. That is to say, some listeners—particularly if their equipment is minimal, with a weak high-end response—seem to prefer the brighter sound of the uncorrected signal. But because of the almost universal use of limiters in broadcasting, the correction appears to be less critically needed for FM reception than it is in cassette playback because the limiter forces more of the sound

Continued on page 26

# The experts agree on the Citation Eleven Preamplifier.



Citation Eleven (wired) \$295.00

Stereo Review:	The Citation Eleven is unquestionably one of the best preamplifiers we have measured. It would take better ears — and instruments — than ours to find any unintentional signal modification in the output of the Citation Eleven. As a rigorous test of the Citation Eleven's "wire with gain" properties, we connected it up so that a signal could be led either around it or through it on the way to the power amplifier. Any response aberration introduced by the Eleven would then be audible during A-B comparisons. Perhaps needless to say, the Eleven left the signals (including white noise) completely unaffected in any way detectable by our ears. It is an Ideal companion for any really good basic power amplifier. In combination with the Citation Twelve, It would be hard to beat.	unquestionably one of the best preamplifiers we have measured.
High Fidelity:	Using and listening to the Eleven is a music-lover's delight: the unit does nothing to the source material that you don't want it to do. It is one of those superior audio devices that functions without seeming to be in the circuit; it lets you listen through the system back to the program material. We have no doubt, in fact, that the performance capabilities of Citation equipment exceed the response capabilities of commercial program material. Just to nail home this point we played a stereo tape that had been dubbed from master tapes containing a variety of orchestral and vocal selec- tions which we could now hear several generations earlier than we normally would in their commercial-release versions. Their superiority was clearly audible on Citation equipment, once again demonstrating that "Citation sound" is nothing more or less than accurate reproduction of musical sound.	. accurate reproduction of musical sound.
Audio:	Having made all the measurements, we were champing at the bit to try it out. We have been using the Citation Twelve as a power amplifier for some months, and from the moment it was put into service, we noted a definite improvement in our sound quality. The Eleven does away with the need for any frequency shaping devices, since it has practically all that anyone could desire. With music, you can correct for recording misequalization, if it exists, or you can add your own. You can compensate for room acoustics to a remarkable degree, increasing the bass to make up for speaker deficiencies, and boosting or cutting the highs — extreme or middle — to make up for room furnishings. In short, there is very little that you cannot do with the Citation Eleven. It is a worthy addition to the already distinguished reputation that the name Citation has achieved over the many years since they first made their appearance.	very little that you cannot do with the Citation Eleven.
Stereo & Hi-Fi Times:	Let me say it right out. The Citation Eleven is a fitting companion to the power amp I wrote about last time. That is, the pair of units represent no-compromise audio. The Citation Elevendoes everything a separate preamp is expected to do, it does things with finesse, and it does things no other preamp does I started off heaping praise on the Citation Eleven. That praise is unqualified. Granted, there are not too many separate preamplifiers left on the market. But of these, the Citation Eleven must be the best — and more important — It will not be bettered in the near future. At \$295, it represents the culmination of a purist's dream.	represents the culmina- tion of a purist's dream.
Record Guide:	The state of the amplification art moves inexorably on. Just as I get to a point when I begin to believe that preamps hardly can be improved, some manufacturer proves me utterly wrong. Harman-Kardon has done it this time — and not for the first time, either I might add that the Citation Eleven is now the preamp that acts as the control of my own music system. And there it will stay for the foresee able future. What more can I say?	acts as the control of my own music system What more can I say?
HIGH FIDELITY	We're eager to send complete information. Write Harman-Kardon, 55 Ames Court, Plainview, N.Y. 11803 CIRCLE 25 ON READER-SERVICE CARD	harman kardon

CIRCLE 25 ON READER-SERVICE CARD

up to the levels beyond the reach of the Dolby action.

If FM broadcasters buy the idea, it will be some time before appreciable numbers are on the air with Dolbyized broadcasts of course. In the meantime there are other uses to which the noise reduction circuit in the receiver can be put. In fact—given appropriate switching —it allows the receiver to Dolbyize an existing cassette. eight-track, or open-reel tape deck. If you've been reading about the Dolby circuit, you'll remember that it "stretches" a signal fed through it in orte direction, corrects one fed through in the opposite direction. So a single pair can be used to make Dolbyized stereo recordings or to play back those so prepared—either in the home or by commercial processors.

An elegant extra in the Dolby FM proposal is that processed broadcasts could be recorded directly—making the tape Dolbyized as well as the broadcast—with the circuit in the receiver used only for monitoring: a choice of source or tape during the broadcast, and a part of the listening system in subsequent playbacks. How far in the future all this may be is hard to tell, but we're told that the receivers may be on the market this year.

Now about that C system. . . .

#### video topics

#### FREE VTR USE-IF YOU'RE A COMPANY, THAT IS

Akai America, Ltd., the new marketing agency for the audio and video products from the Akai Electric Com-

pany of Japan, has instituted an imaginative promotion service for its VT-100 portable video tape recorder. It has offered to loan the lightweight system (twenty pounds, including camera, VTR, 3-inch-screen monitor, and reel of tape) free of charge to any business firm that wants to tape a meeting, conference, sales presentation, etc. The unit, incidentally, uses 1/4-inch tape.

Interested companies may contact Stan Harris, Akai America, Ltd., 2139 East Del Amo Boulevard, Compton, California 90220.

#### **PROJECTION TV: ANOTHER STEP?**

That brave new world of big-screen projection color TV that several companies have been hinting at over the last few years seemed a mite nearer recently when RCA announced development of a new helium-selenium laser capable of producing twenty-four of the rainbow's infinite colors. The new laser's range covers everything from deep blue to red, so that a single laser can produce all three of the primary hues needed for color TV: red, green, and blue.

Previous laser projection systems have relied on multiple lasers and complex systems for integrating the three color beams in forming the image. A single laser that could be switched from one color to the next as its beam travels across the screen would seem to offer a much simpler approach. Is such a system possible? An RCA spokesman comments simply that immediate plans concentrate on use of the helium-selenium laser as a "laboratory tool in spectroscopy and materials investigations," with potential application "as an alignment laser for surveying or pipe-laying." Well, who knows.

### equipment in the news

#### Citation loudspeaker: H-K makes it official

Over the past year Harman-Kardon has been using a prototype of a floor-standing omnidirectional speaker system to demonstrate its Citation electronics at hi-fi shows; now the speaker system is available commercially as the Citation Thirteen. If you've seen the prototype, you'll note that the cabinetry of the production model is more sophisticated and solid-looking. A choice of grille cloths is available for the top panel, which is angled upward at 14 degrees. Drivers mounted beneath it include three 7-inch woofers loaded by a double-chambered enclosure to smooth out both bass response and impedance curves; response down to 30 Hz without doubling is claimed by H-K. The Citation Thirteen sells for \$295.

CIRCLE 146 ON READER-SERVICE CARD



### Bogen's eight-track deck for home systems

A component-style player for eight-track (closed-loop) tape cartridges is offered by the Bogen Division of Lear Siegler. The 8P, as it is called, has two unusual features: a "micro balance" tape-to-head alignment control on the front panel, and an auxiliary input that allows another component to play through the stereo system when the 8P is not in use. The drive system of the 8P includes a synchronous motor; wow-and-flutter performance is said to be as low as 0.25%. Front-panel controls include the micro balance and a manual program selector to override the automatic track-advance system. Suggested list price is \$79.95.

CIRCLE 147 ON READER-SERVICE CARD

Continued on page 28





# Altec's new Dynamic Force Systems. They're built a little better.





With a new 15-inch Dynamic Force woofer for better reproduction of low frequencies. Both Altec's new Barcelona and Granada speaker systems incorporate this all-new woofer. It features a long voice coil with edge wound, preflattened copper wire and a magnetic structure of extremely high flux field. Working together in our infinite baffle enclosure, this speaker is capable of producing a Dynamic Force against the compressed air in the cabinet of up to 16 psi. This greatly improves low frequency transient performance, extends low-end response and reduces distortion while maintaining medium efficiency.



With a large sectoral horn for better controlled angular distribution of mids and highs. This exclusive horn enables the new Barcelona and Granada to keep the off-axis frequency responses of mids and highs almost identical to the onaxis responses – even in the critical mid range (above 500 Hz) where most low frequency speakers have a narrow angle of distribution. This large sectoral horn also helps extend the direct field which is where you hear the original acoustics of the recording rather than the acoustics of your listening room.





With more hand-sanding and handfinishing for tiner cabinetry. The handrubbed natural walnut cabinets of Altec's new Barcelona and Granada feature an infinite baffle design inside the enclosure with snap-on fretwork grilles outside. To ensure both quality and beauty, these pieces of fine furniture have been individually hand-sanded probably more than any other speaker cabinets on the market today.

Altec's new Barcelona (873A) sells for \$550.00. Altec's new Granada (875A) sells for \$450.00. Write for our complete, new catalog. Altec Lansing, 1515 South Manchester Ave., Anaheim, Calif. 92803.

#### EQUIPMENT IN THE NEWS Continued from page 26

#### Pick your perspective with AKG headphones

The new AKG K-180 stereo headset from Norelco has transducers whose position can be altered within the earcups. Turn the knobs on the outside of each so that the transducers are as close as possible to your ears, says AKG, and the acoustic perspective will approximate that of a front-row-center orchestra seat. Move them away from your ears and the sound will grow progressively larger and more diffuse, as it might when you move toward the back of the auditorium. The K-180 is delivered with a coiled cord and has a rated impedance of 600 ohms, allowing use with either low- or medium-impedance sources. It costs \$69.

#### CIRCLE 148 ON READER-SERVICE CARD



#### Fisher markets turntables

Fisher Radio has moved into the automatic record-changer field by offering a line of three models priced from \$99.95 to \$149.95. The top model, shown here, is the Fisher 502. Among its features are a variable antiskating control, variable vertical tracking angle correction for up to eight records (the knob on the near end of the cartridge shell), vernier pitch adjustment, record sensor to prevent the stylus from descending onto the bare platter cover, and an automatic-repeat system that will repeat any record in the stack. The Fisher 502 can be used as a manual or automated single-play unit as well, of course. CIRCLE 149 ON READER-SERVICE CARD

#### New open-reel deck from Pioneer

The Pioneer Model T-6600 is a quarter-track, automatic-reverse stereo tape deck equipped with a two-speed ( $7\frac{1}{2}$  and  $3\frac{3}{4}$  ips) synchronous-motor drive system. The automatic-reverse system, cued by conductive foil strips on the tape, can be set to operate in both playback and record modes, making possible continuous unattended recording on both sides of the reel. Other features include a retracting pinch roller to simplify tape threading, a pause control, output level controls, and a front-panel headphone jack. The T-6600 sells for \$299.95.





#### British speaker available from Olson

The Celestion Ditton 15 ABR speaker system is being sold in this country by Olson Electronics, the Akron-based retail chain, as the Model S-39. The Ditton speakers from Celestion have been well known to British high fidelity enthusiasts for some years. ABR stands for Auxiliary Bass Radiator, a feature of the woofer system in the Ditton 15. Power-handling capacity of the model is rated at 15 watts rms. A single unit sells for \$110; a pair for \$200.

CIRCLE 150 ON READER-SERVICE CARD

#### Medium-priced receiver from Sansui

The Sansui 1000X is a stereo FM/AM receiver in the medium price range with some features of the company's more expensive units: connections and monitor switching for two tape decks, independent preamp and power amp stages (used for insertion of special controls like electronic crossover or speaker equalizer), FM interstation muting, and switching for two pairs of speakers (either, both, or neither). The selector includes positions for phono, FM with automatic stereo switching, AM, and "aux." Price is \$269.95.

#### CIRCLE 151 ON READER-SERVICE CARD



Or maybe a better set of speakers.

Because if you must spend more on your stereo system, you needn't spend it on the receiver. Even at just \$160, the 40W (±1 db) Nikko STA-301 is already as good as or better than most speaker systems made, no matter what they cost.

Honest.

Frequency response is 20-50,000 Hz  $\pm 1$  dB (IHF) and harmonic distortion is a low 0.8% at rated output. So if you spend more money on a receiver, you get more knobs and switches, slightly better sensitivity, separation and distortion. But mostly

you get more power, not better sound.

Of course, if you need more power, you could always buy our 64W (±1 dB) STA-501 or our 90W (±1 dB) STA-701-B.

But if all you really need is clean pure sound, spend your money wisely.

The nitty-gritty on the STA-301 AM/FM Stereo Receiver-FM Sensitivity: 2.5  $\mu$ V (IHF). FM stereo separation: 32 dB. Power output: 40W ( $\pm$ 1 dB) Frequency response: 20-50,000 Hz (IHF). Hum and noise: -60 dB (mag. phono), -65 dB (Aux). Harmonic distortion: 0.8% (rated output). IM distortion: 1% (rated output). Nikko Electric Corporation of America: 5001 Lankershim Bivd., North Hollywood, California 91601.





PURCHASED 5/10/71

Revox Corporation guarantees to the original purchaser of a Revox A77 take recorder ourchased from it in the USA Revox Corporation guarantees to the original purchaser of Revox A77 tape recorder purchased from it in the U.S.A. except as to fuses and bulbs: 1) to replace without charge Revox A77 tape recorder purchased from it in the U.S.A. except as to fuses and bulbs: 1) to replace without U.S.A. anv nart failing within twelve months after nurchase and 21 except as to fuses and bulbs. I) to replace without charge any part failing within twelve months after purchase; and 2) to provide a free replacement in exchange for any part any part failing within twelve months after purchase, and 20 provide a free replacement in exchange for any part the record and plavback heads to Provide a free replacement in exchange for any part thereafter failing except the record and playback heads capstan and pressure roller. This guarantee shall be void if the burchase has not been registered with the Revox Corporation was capstan and pressure roller. This guarantee shall be void if the Durchase has not been registered with the Revox Corporation within the time specified in the card supplied the nurchase Durchase has not been registered with the Revox Corporation within the time specified in the card supplied the Durchase with the recorder or if the recorder has been modified or within the time specified in the card supplied the purchaser with the recorder, or if the recorder has been modified or altered by anyone other than the Revox Cornoration of ite with the recorder, or if the recorder has been modified or altered by anyone other than the Revox Corporation or its authorized representatives or if the recorder has been has been altered by anyone other than the Revox Corporation or its authorized representatives. or if the recorder has been damaged by misuse or accident. Transportation charges are not included in this guarantee. There are no warranties are auarantees except those expressed herein. not included in this guarantee, there a guarantees except those expressed herein. Return this card for revalidation neturn this card for revalidation after three years from date purchased

It's guaranteed not to make a bulge in your wallet or a dent in your pocketbook.

OWNERS REGISTRATION CARD

Signature

SERIAL NO. 576-347

The Revox No-Charge Card is completely different from any card you've ever had. In fact, most of the time you leave it at home in a safe place, like next to your life insurance policy.

But let's suppose that five, ten or even 50 years from now, the unlikely happens, something goes wrong

\*Record and playback heads, capstan and pressure roller are guaranteed for one year

Revox Corporation

212 Mineola Avenue, Roslyn Heights, N.Y.11577 1721 N. Highland Ave., Hollywood, Calif. 90028 In Canada Tri-Tel Associates, Ltd., Toronto, Canada

with your faithful Revox A77. After all, it's just possible that one of the 842 parts covered by our lifetime warranty\* could go bad. Not to worry. We'll supply a replacement at no charge to you, upon presentation of your No-Charge Card and the defective part.

Come to think of it, there's only one drawback to the No-Charge Card.

The way Revox is built, you may never get to use it.



CIRCLE 40 ON READER-SERVICE CARD

DELIVERS **LTHE REST** 

### new equipment reports THE CONSUMER'S GUIDE TO HIGH FIDELITY EQUIPMENT



### LOW-PRICED RECEIVER PERMITS TAPE-TO-TAPE DUBBING

THE EQUIPMENT: Sherwood S-7100, a stereo FM/AM receiver supplied in walnut case. Dimensions:  $17\frac{1}{2}$  by  $13\frac{1}{2}$  by  $5\frac{3}{4}$  inches. Price: \$199.95. Manufacturer: Sherwood Electronic Laboratories, Inc., 4300 North California Ave., Chicago, III. 60618.

**COMMENT:** Sherwood has packed a lot into this lowpriced receiver. It offers AM and stereo FM reception combined with a stereo amplifier that contains more features and a higher level of performance—and a walnut cabinet too—than one might expect from a \$200 combination set.

Styling resembles that of the higher-priced Sherwood S-8900 (see HF test report, October 1970), although the new model understandably has fewer controls. At that, there's an ample array to suit the needs of most playback systems. The AM and FM tuning dials are clearly marked, with a maximumstrength tuning meter (that works for AM and FM) at one end and a stereo FM indicator at the other. The large knob to its right is the station tuner; next to it the set's volume control is combined with the power off/on switch. Across the bottom of the front panel there's a signal selector (with positions for auxiliary, phono, FM, and AM); switches for tape monitor stereo/mono mode, FM hush, and loudness contour; a tape dubbing jack; stereo headphone jack; speaker system selector (either, both, or none); bass control; treble control; channel balance knob. The headphone jack is live at all times. The tone controls handle both channels simultaneously.

Speaker connections at the rear accommodate two separate pairs of stereo speakers; these are controlled by the front-panel switch. Stereo inputs are provided for magnetic phono pickup, tape monitor, and an auxiliary (high-level) source. A fourth pair of jacks feeds signals to a tape recorder. Since this connection duplicates the input capabilities of the front-panel dubbing jack it permits connecting two tape recorders at once to the receiver. It also permits copying tapes from one recorder (connected to the rear tape monitor jacks) to another (connected to the front panel jack). Antenna terminals accommodate twin-lead (300ohm lead-in) for FM; there's also a terminal for a long-wire AM antenna in addition to the set's loopstick AM antenna. The rear also contains three fuses (one each for the audio output channels and one for the main AC line), plus the power cord and a switched AC outlet.

FM sensitivity was clocked at 2 microvolts, and the sensitivity curve descends fairly steeply to a maximum quieting level of -45 dB for 50 microvolts of input signal. The curve shows no sign of overload for signal levels above 50 microvolts. Harmonic distortion was generally low in mono, increasing somewhat on stereo. In both mono and stereo the distortion also increased slightly as the set's volume control was raised to maximum. Both sets of figures are given in the accompanying data chart. FM audio response was good, showing some roll-off toward the extreme upper end; stereo channel separation remained better than 30 dB across most of the range and better than 20 dB across to well beyond 10 kHz. In our cable-FM test, the S-7100 logged a total of 42 stations of which 36 were considered suitable for serious listening or for off-the-air taping. AM performance sounded better than average.

The set's amplifier portion shapes up as a "lowmedium" powered unit that would seem to make its best showing when driving moderate-to-high-efficiency



Square-wave response.

#### REPORT POLICY

Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Laboratories, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation's leading research organizations. The choice of equipment to be tested rests with the editors of HIGH FIDELITY. Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publicher. All reports should be construed as applying to the specific samples tested, neither HIGH FIDELITY nor CBS Laboratories assumes responsibility for product performance or quality.



500 1K

FREQUENCY IN HZ

2K

5K

10K 20K



speakers in a normal-size room. At power demands below its maximum rating, both harmonic and IM distortion remain very low. Response is linear across the normal audio band, equalization is accurate, tone controls are satisfactory, and both sensitivity and related signal-to-noise ratios on all inputs are fine. Squarewave response shows a roll-off in the deepest bass, and very good transient characteristics in the highs.

For its price, the S-7100 offers somewhat better performance and certainly more features than you'd expect. As such it can serve as the heart of a modest, but decent quality, stereo system.

#### CIRCLE 142 ON READER-SERVICE CARD

Sherwood	S-7100	Receiver	Additional	Data
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L L	uner Section			
Capture ratio	3 dB			
S/N ratio	58 dB			
IM distortion	0.21%			
THD Mono				
	mid* max mid* max			
	6 0.92% 1.6% 0.88% 1.5%			
400 Hz 0.55% 0.87	% 0.80% 1.2% 0.79% 1.2%			
1 kHz 0.44% 0.86	% 0.57% 1.1% 0.55% 1.1%			
19-kHz pilot	-61 dB			
38-kHz subcarrier	-64 dB			
Amplifier Section				
Damping factor	22			
Input characteristics (for 25 watts output				
phono	1.7 mV 62 dB			
tape monitor	215 mV 84 dB			
aux	225 mV 67.5 dB			

\* mid-position rotation of the volume control.

50 100 200

20

#### **NEW OMNIS OFFER MANY INSTALLATION OPTIONS**

**THE EQUIPMENT:** Wharfedale W80A, full-range speaker system in enclosure. Dimensions: 29 by 171/4 by 17 inches. List price: \$317.60. Manufacturer: Wharfedale Division, British Industries Co., Westbury, N.Y. 11590.

**COMMENT:** The newest design from Wharfedale (one of the oldest and most respected names in high fidelity on both sides of the Atlantic) is the "omnidirectional" W80A—a high-performing speaker system that offers smooth, wide-range response plus more than usual versatility in terms of its installation possibilities. The W80A uses four drivers: a  $121/_2$ -inch longthrow woofer, a 5-inch midrange cone, and a pair of domed tweeters; one with a three-inch radiating surface called a "subtreble" tweeter; the other with a one-inch surface called an "ultrasonic" tweeter.

More intriguing is the way these four speakers are mounted and how they radiate their sound. An Lshaped baffle is employed. The midrange and tweeter units face "backward" and radiate against a large, hard-surfaced disc panel which itself may be positioned to produce various dispersion patterns. The woofer faces upward from beneath the disc. Covering the entire array are four framed grille cloths which may be removed to gain access to the movable disc and to a pair of two-position toggle switches that adjust the relative levels of midrange and highs.

The enclosure itself is finished in walnut, and it may be positioned vertically or horizontally. Connections are made to terminals at one end (the bottom, if the unit is positioned vertically). Nominal input impedance is 8 ohms. The W80A is rated as a "medium-low" efficiency system, and the manufacturer suggests that an amplifier capable of supplying about 20 watts or more (sine-wave average power) per channel be used.

In the lab, the W80A produced the response curves shown on the accompanying graph. Note that the onaxis response seems droopy at the high end; this is normal for this speaker inasmuch as "on axis" here means measuring the response from behind the front panel (i.e., 180 degrees off axis), while the speakers themselves are producing sound in the opposite direction, radiating against that disc. The acoustic mix deflected off that disc is what we're really interested in. In other words, the average omnidirectional response is even more relevant for the W80A than it is for conventional speaker systems, and this (the upper curve on our graph) was clocked as within plus or minus 6.5 dB from 45 Hz to 17,500 Hz. Not only is this an excellent response characteristic for a speaker system, but it confirms that the W80A is performing exactly as its designers intended it to. In listening tests, using generator tones, we found the over-all response running from a faint, but relatively clean, 25 Hz to beyond 16,500 Hz where the slope toward inaudibility became evident. Some bass doubling could be heard in the 40-Hz to 45-Hz region; it was in sum less than that heard on most speakers. Except for a small peak at about 7,000 Hz, the entire response range sounded exceptionally smooth and uniform. Dispersion was, of course, outstanding-tones well above 10 kHz were audible all about the system. Incidentally, the tests were all run with the midrange and tweeter switches in their "more" position, which provides for about 2 dB higher output from 1,000 Hz and up than the "less" position, although in a very live room you might prefer the latter setting for these switches.

The measured impedance curve for the W80A never dipped below 6.0 ohms and averaged a fairly linear



8 ohms across the audio range. The minimum average amplifier power required to produce an output of 94 dB was 10 watts, and the speaker could take steadystate power of 80 watts before exhibiting any real distortion or buzzing. On instantaneous pulse tests, the W80A stood up bravely to peaks of 416 watts, although with some distortion. This data in sum attests to its ruggedness, ample dynamic range, and suitability for use with just about any amplifier or receiver on today's market.

We auditioned a pair of W80As in various positions and liked what we heard in all instances. They project a broad, natural-sounding acoustic front with ample "air" and "space" that lend a convincing note of realism to stereo playback. The louder we drove them the *Continued on page 34-B* 



#### Wharfedale W80A Harmo

Output	Frequency			
Level (dB)	80 Hz		300 Hz	
	% 2nd	% 3rd	% 2nd	% 3rd
70	0.03	0.15	0.15	0.10
75	0.35	0 <mark>.22</mark>	0.20	0.12
80	0.40	0 <mark>.3</mark> 5	0.35	0.15
<mark>85</mark>	0.45	0.60	0.45	0.42
90	0.50	0.65	1.20	0.73
95	0.75	0.78	2.70	1.20
100	1.40	1.90		

\*Distortion data is taken on all tested speakers until a level of 100 dB is reached, or distortion exceeds the 10-per-cent level, or the speaker produces the spurious output known as buzzing, whichever occurs first.

# Clark Kent.

The JBL 4310 is especially designed for mastering, control room installations, mixdown facilities, portable playback systems. It's full of good things like:

Wide range response. Full 90° dispersion for vertical or horizontal placement. Power handling capability, 50 watts program material. Front panel controls for separate adjustment

of presence and brilliance. 12-inch long-excursion low frequency

Ioudspeaker, massive mid-frequency direct radiator, separate ultra-high frequency transducer.

Only available through Professional Audio Contractors.

Beneath this mild mannered charcoal gray exterior, is the finest compact studio monitor money can buy.

It should be. The JBL 4310 was developed with the enthusiastic assistance of leading recording engineers. (And they're the only ones who can buy it.)

Now, guess what else the professionals have been doing with the 4310's for the last two years. You're right. They've been taking them home, using them as bookshelf speakers.

That's why we decided to get even.
# Supershelf.

It's the new JBL Century L100. It costs \$273. It would be the finest professional compact studio monitor money could buy except it's not sold to studios. (If that sounds like the JBL 4310, there's a reason. They're twins.)

JBL started with a definition of sound. It's the sound the artist creates, the sound the microphone hears, the sound the recording engineer captures.

Then they added oiled walnut and a new dimensional grille that's more acoustically transparent than cloth but has a texture, a shape and colors like Ultra Blue or Russet Brown or Burnt Orange.

Oh, yes. The JBL Century L100 has individual controls under the grille so that you can match the sound to the room—just the right presence, just the right brilliance.

And then they checked the rule book. There's absolutely no law against professional sound looking beautiful.



#### Continued from page 33

more they bloomed and no one complained of their sounding too loud. We also tried one of the installation approaches suggested by Wharfedale in its literature: putting two W80As together horizontally on a low pedestal. With the discs angled outward and slightly up, you do get a stereo effect when listening fairly close to the assembly, but this diminishes as you step back, and we found that at a distance of, say, seven feet or more it became difficult to identify left and right channels clearly. The total bass output in this position was also reduced, but by no means severely. Actually, the W80As can be enjoyed in this unusual position while at the same time helping to solve a particular decor problem. However, we feel that the W80As sound their best when separated as far apart as conventional speaker systems, and standing upright (vertically). Driven by a good amplifier or receiver, they must be ranked with the best reproducers available today. In this position, incidentally, you can vary the angle of the reflector disc to suit your own listening preferences and/or the program

#### INDEXING SYSTEM CAN CATALOGUE 10,000 RECORDS

THE EQUIPMENT: Bib Indexa Record, a record-cataloguing index book. Price: \$4.95. Manufacturer: Bib Division, Multicore Solders, Ltd., Hemel, Hempstead, Herts, England; U.S. distributor: Revox Corp., 212 Mineola Ave., Roslyn Heights, N.Y. 11577.

**COMMENT:** In our September 1969 issue, David Hamilton provided readers with suggestions for cataloguing records ("Now Where Did I Put That Franck Sonata?"). He recommended shelving records in numerical order, the numbers to be assigned by you. The logic of this storage system then would be in a corresponding card file, rather than on the shelves. "The great advantage to this method," Hamilton pointed out, "is that new records are always added at the end of the shelf, which eliminates having to shove records around in order to accommodate new purchases." Now, from England, comes a product that allows you to approximate Hamilton's system.

The Bib Indexa Record includes ten  $8\frac{1}{2}$  by  $6\frac{1}{2}$ inch double transparent plastic pockets (sort of largescale versions of wallet-photo holders), enclosed by a strong, padded plastic binder that has, additionally, a single transparent pocket inside each of its covers. The front cover insert holds a table of contents, the back cover a "records wanted" page (three of each are provided in case you change your mind).

Inside each double pocket you insert two index pages back to back, as you do wallet photos (well, not exactly back to back, since each sheet is printed on both sides—again in case you change your mind). Each index page (a pad of twenty-five is included) has space for twelve entries; thus a complete Indexa Record can accommodate 240 listings. Remember, these are 240 listings, not records. With cross-indexing, figure 100 records. Bib does; it provides 100 pairs of self-sticking labels numbered 1 to 100 for you to place on your record jackets, front and back. If you have more than 100 records, you buy another Indexa Record and add a third digit to each label. Bib thus claims that the system can be expanded to material played. For instance, if you angle the discs outward you'll get a somewhat broader proscenium effect which might sound more satisfying for largescale works such as operas. Angling them in throws the sound more directly into the room center, which you might prefer when listening to small groups or soloists.

The W80A is supplied with four small feet attached to the end that is its nominal bottom when positioned vertically. These feet may be easily unscrewed for the end-to-end installation described above. If this positioning is to be used. Wharfedale recommends placing the speakers on a special low base which is available as an accessory, Model B60A, listing at \$25.75. Yet another accessory is a roll-out base, the Model B-69 list-priced at \$18.50. This device holds a single W80A system on a platform supported by casters; with it you can install the new Wharfedales in a built-in setup, but roll them out and about for the best stereo effect when listening. And our feeling is that once you find the optimum positions for the W80As, and the preferred angle for their reflector discs, you will do a lot of listening.

CIRCLE 145 ON READER-SERVICE CARD



999 records. We suppose this is what audio appraisers call a conservative rating; we could get two more fairly large digits on a label, thereby accommodating 9,999 records (or even 10,000 if we leave the first record unlabeled and index it as "0"). The label, incidentally, has provision for noting treble and bass control settings.

An index page has space for you to indicate the type of records you are listing on it: rock, opera, shows, orchestral, or what-have-you. Since this will be the key to your entire catalogue, you had best give considerable thought to your categories. You will not be able to browse about your haphazardly organized shelves when you want to hear "some Bach" but will have to browse in your booklet. (And if the information printed on each page-file number, mono or stereo, composer, title, artist-doesn't suit your needs, Bib supplies forty white adhesive strips on which you can make your own headings.) You can probably leave your operas unlabeled (just put them in alphabetical order; they are easily spotted) and your recital albums too (again, the alphabet is as good as a number), but if you think you might ever want to pick out several versions of the theme song from Love Story or see what you own of Elisabeth Schwarzkopf, or, maybe, Kalus Schlupp, you'd better make sure you've written them down on the index page somewhat near each other.

Here lies one disadvantage the Bib system has when compared with a card file: you can't insert listings or cross-listings between other listings. If your collection is sizable and you have just bought another Kalus Schlupp recording you might not be able to list him where you can easily find him—

especially if you are up to record 687 and on your seventh Indexa book. The advantage of the Bib system: compactness, neatness, and security. With the listings in strong plastic pockets you don't have to worry about lost or damaged file cards.

CIRCLE 140 ON READER-SERVICE CARD

#### AR TUNER: PLAIN JANE LOOKS BUT SUPERB FM PERFORMANCE

**THE EQUIPMENT:** AR Tuner, a basic stereo FM tuner. Dimensions: front panel, 15<sup>1</sup>/<sub>8</sub> by 3<sup>7</sup>/<sub>8</sub> inches; chassis depth, 9<sup>1</sup>/<sub>8</sub> inches. Price: \$210. Optional walnut case: \$15. Manufacturer: Acoustic Research, Inc., 24 Thorndike St., Cambridge, Mass. 02141.

**COMMENT:** A basic tuner designed for connection to an external amplifier, the AR tuner (it has no model number) has the same very simple styling of other AR electronic components and also like them offers superb performance in its equipment class. As such it should be of interest to the stereo system owner who may not yet own an FM receiving facility or who is ready to update an older tuner with a modern highperforming version. On all counts, the AR tuner is excellent: sensitivity is very high; distortion, very low; response, very linear.

The accompanying test data tell much of the story. In both mono and stereo operation, frequency response remains virtually a ruler-straight line across





the normal FM audio band. Channel separation on stereo is outstanding, exceeding the normal 30-dB standard across most of the band and never decreasing to less than 20 dB at its extremes. Distortion, extremely low on mono, hardly increases in stereo. Other measured characteristics are uniformly excellent. The IHF sensitivity figure of 1.6 microvolts is among the best ever measured; the sensitivity curve descends steeply and reaches maximum quieting of -48 dB for only 50 microvolts of input signal (well below the normal average received strength of 1,000 microvolts), and it shows no signs of overload for stronger incoming signals. In our cable-FM tests, we logged a total of fifty-four stations of which forty-three were judged suitable for critical listening or off-the-air taping; this of course puts the AR tuner into the "champion class" in this regard. These measurements are quite borne out by the tuner's sound which we feel renders utterly clean and honest versions of whatever is being broadcast-so much so in fact that, as we have had occasion to comment on other superb FM sets in the past, we could say of the AR tuner that its response capabilities generally exceed the broadcast quality of most FM stations.

For a tuner in its performance class, the AR model has deceptively unassuming styling. The FM dial is simply but clearly marked, and tuning is aided by a stereo indicator and a center-of-channel meter. There's the tuning knob plus three rocker switches for stereo/ mono mode, interstation hush off/on, and power off/on. The output level control is at the rear along with a 300-ohm (twinlead) antenna terminal, stereo signal outputs for connecting to an amplifier and a tape recorder simultaneously, the AC line cord, and the set's fuse-holder. That's about it: simple and great, or rather, simply great.

#### CIRCLE 144 ON READER-SERVICE CARD

#### AR Tuner

Additional Data

Capture ratio S/N ratio		2 dB 66.5 dB	
THD	Мопо	L ch	R ch
40 Hz	0.18%	0.27%	0.19%
400 Hz	0.16%	0.22%	0.15%
1 kHz	0.14%	0.22%	0.10%
19-kHz pilot		- <mark>66</mark> dB	
38-kHz subcarrier		-67 dB	

# by Leonard Feldman

# How to Use Our Test Reports

THE TRUISM concerning the relative inferiority of the loudspeaker as a high fidelity component has been quoted and requoted for more than two decades. Much has been said too about preferred listening tests, comparison shopping, the use of specific recordings to reveal the merits (or demerits) of speaker systems, and finally the need for extensive subjective listening before making a final choice.

Somehow, these formulas for choosing speakers have always seemed to me vague and incomplete. For a long time we have, to a great degree, been able to select a tuner or an amplifier on the basis of numerical specifications that have more or less become standardized over the years, and which permit a certain amount of prejudging. Not so with speakers —not only has there been a conspicuous lack of standards but the ear must be relied on to a greater degree than for any other audio component.

This reliance still obtains, but today it can be supported and directed by a fairly new set of numerical data. In June 1970 HIGH FIDELITY published an illuminating article by Benjamin B. Bauer, vice president of CBS Laboratories (where most of the test data for the magazine's published equipment reports is developed). Bauer explained a new series of welldefined measurements to be used in evaluating loudspeakers. The measurements included such obvious criteria as over-all frequency response, directivity, harmonic distortion, loudspeaker efficiency, transient response, power-handling capacity, and impedance. True, all of these parameters had been measured before, but the new tests offered two advantages over earlier techniques. For one thing, CBS Labs proposed to take into account many more factors that relate directly to the actual musical listening experience, thereby making their measurements more realistic. For another, the new measurements were to be presented (graphically and verbally) in the published reviews to serve as a guide and aid to the prospective loudspeaker purchaser.

This latter aspect—using the information in HIGH FIDELITY's equipment reviews to help select the loudspeaker best suited to your needs—is what I'd like to comment on here.

#### Frequency Response

Simply stated, a loudspeaker's frequency response is the sound pressure it produces at some finite distance in front of its surface as a function of the frequency applied. Just what constitutes "good" or even "acceptable" frequency response from a loudspeaker never has been clearly defined. Nor can we discern much general agreement on specific numbers in this area. A few years ago, Harry F. Olson, the noted acoustician of RCA Laboratories, published a fairly definitive set of criteria for high fidelity loudspeaker performance in which he proposed uniform response from 30 to 15,000 Hz, with a maximum departure from such uniform response of no more than 5 dB at 100 Hz and 8,000 Hz, and a maximum departure of no more than about 8 dB at the extremes of 30 Hz and 15,000 Hz. Interestingly, Dr. Olson allows no provision for peaks above an average "zero-dB" level, only for moderate amounts of attenuation. This concurs with the opinion of many experts who have long maintained that narrow peaks of departure from uniform response are much more annoying (and tend to add to socalled speaker coloration) than are slight dips of equal amplitude. [While Olson's prescription is properly rigorous, we have found in the course of testing modern loudspeakers that a smooth rise above zero dB by no more than, say, 5 dB does not degrade the sound of a loudspeaker that has very good performance characteristics in important areas other than frequency response. Of course, much depends on where you designate the "zero-dB" level. Ed.]

In judging a loudspeaker's frequency response in

# in Selecting <sup>a</sup> Speaker

conjunction with a HIGH FIDELITY equipment review, first examine the "on-axis response curve" of the speaker to be evaluated. This is the simplest frequency response curve, since it is concerned only with the ability of the speaker to reproduce all frequencies uniformly directly in front of the speaker radiating surface. If, for example, you note a significant "valley" in the curve in the midrange region (frequencies from about 300 Hz to about 2,000 Hz), listen particularly for definition of individual orchestral instruments and for "presence" in vocal selections. Lack of midrange response often tends to make vocalists sound subdued-almost as if they are singing from somewhere behind the accompanying orchestra. A premature rolling-off of low frequencies appearing in the curve will show up in your listening tests as a distinct lack of "full-bodied" bass when such instruments as bass violins, kettledrums, and even the lower octaves of a grand piano are used as auditioning material. To some degree, male speaking voices also will be affected; they will especially show "coloration" when a peak of a few decibels occurs in the frequency response between 100 Hz and 300 Hz. This peak causes the so-called "bass-boom" or "onenote-bass" effect often heard from mass-produced console sets. The truth is that many of these sets have a built-in peaked bass response to give the untrained listener an impression of "real bass." If you're in doubt, just listen to any live male voice and compare it with the sound of a reproduced male voice.

If the on-axis frequency response curve shows high-frequency response poorer than that suggested (in Fig. 1), you have another clue to speaker performance. To verify it, listen to musical selections containing strong high-frequency signals (cymbals, triangles, and the like) as well as to the consonants in speech such as s, f, and even the letter t. If their crispness and definition seem wanting in an *on-axis* test (where highs are more easily projected from a loudspeaker than at any other listening position), you may be fairly certain that degradation will be even more extreme at any other listening position relative to the speaker's axis.

In addition to these obvious performance aspects, a few less apparent but equally important speaker characteristics should be considered. If the pressure waves created by the moving diaphragm of a loudspeaker could be directly coupled to the listener's ear, our discussion of frequency response evaluation could end right here. (In fact, properly designed stereophones work exactly that way. When using headphones that form a good seal with your ears, you eliminate all problems of room acoustics and of directivity or "angular dispersion." All reproduced frequencies are channeled directly to your hearing system, which probably explains why more and more stereophone enthusiasts maintain that no listening is as faithful to the original or as devoid of coloration as headphone listening. Since we are dealing with loudspeakers, however, we must face up to these additional problems in evaluating a given system.)

Much has been written about the shape and furnishing of an ideal home listening area, but in the



Fig. 1. Shaded area represents typical response limits of high-quality loudspeakers, approximately plus or minus 6.5 dB from 30 Hz to 15,000 Hz. The smoother the curve (i.e., the fewer dips and peaks) within this area, the better. "Normalized" response refers to the zero-dB reference line's being drawn through the center of the total dB variation, although the actual response measurements are made for a constant 1-wait input, with approximately 80-dB soundpressure level resulting as the most often encountered nominal average speaker output.

last analysis how many readers will actually redecorate their living rooms or dens to conform to that ideal? Many listening rooms, in fact, do not even have the most desirable dimensional proportions (3:4:5). Here is one area of speaker evaluation in which intelligent subjective listening can again supplement objectively determined measurements and reports. Try to do your auditioning in a dealer's showroom that is not too unlike your own listening area -both in dimension and in sound-absorption treatment. Since one of the most often heard complaints from owners of newly acquired speaker systems is that "they didn't sound that way when I listened to them at the dealer's showroom," try to get the dealer to let you "final test" the speakers of your choice by taking them home for a few days.

Faced with the problem of room acoustics and your own listening position (which is most likely to be off-axis in any reasonable stereophonic arrangement), you need to concern yourself with another important specification newly brought to light in the current method of HIGH FIDELITY speaker reviewing -that of directivity. If you examine the other two frequency response curves given in a HIGH FIDELITY speaker report you will see that they are identified as "average front hemisphere response" and "average omnidirectional response." Generally, the three curves are almost identical up to frequencies of about 150 Hz or so because bass tones emitted by a loudspeaker tend to be nondirectional. Mid and high frequencies, however, become increasingly directional so that as you move off-center of the speaker axis, these frequencies will sound weaker unless certain design precautions are taken. In stereophonic listening this is particularly significant, because the listener is more often than not well off-center of the axis of either speaker (hopefully somewhere in between them), subtending an angle of 45 degrees or more to either speaker.

The two additional frequency response curves

shown in the published test reports take cognizance of directionality by including separate measurements taken from various points around the speaker. One of these curves represents average radiated soundpressure level ("equivalent omnidirectional response") while the other corresponds to average front hemispherical response. They provide a complete and easily interpreted picture of both frequency response and directionality characteristics. Previously, directionality of a loudspeaker was usually shown by plotting a polar radiation pattern (Fig. 2a). The problem with this type of graph was that a whole series of them would be needed (one for each frequency tested) to truly define a speaker's directional characteristics.

The new presentation (Fig. 2b), which includes the two additional frequency response curves, tells you at a glance just how well the speaker can radiate energy over the entire frequency range and into the entire listening area. As you listen to a speaker which has been reviewed by this new method, you will want to walk to the extreme corners of the roomto every conceivable off-axis location in which you or other listeners in your home may find themselves. If the two off-axis-derived curves (particularly the one identified as "average omnidirectional response") exhibit marked attenuation characteristics above 1,000 Hz, pay special attention. Should you plan your home seating arrangement at a considerable off-axis angle from such a loudspeaker you are likely to sense a deficiency of high-frequency response. Try, therefore, to duplicate this condition in the showroom by moving away from "stage-center" and determining whether you can, in fact, notice the loss of highs which the published curves "predict." Again, this is best done by playing music that is rich in high frequencies. Many of the newly designed "omnidirectional" speaker systems tend to overcome this problem by using multiple drivers for their high-frequency array, often directing them away from the listener, so that the sound is dispersed by reflecting walls or



Fig. 2 (a and b). Conventional method of presenting loudspeaker dispersion data (left) does so on an absolute basis for only one frequency at a time (this graph shows a polar pattern measurement at 5,000 Hz). In contrast, CBS Labs response curves, which are used in HIGH FIDELITY's test reports, show complete frequency spectrum on a comparative basis: direct on-axis response, average front hemispheric response taken from five points, and average omnidirectional response taken from fourteen points. The most significant curve from the listener's standpoint is the third (omnidirectional) curve, but by comparing the contours of the three curves, you can form a good idea of the speaker's directivity in terms of actual dB differences all across the total audio band.

other surfaces. This type of speaker reduces the undesired beaming effect of the highs and tends to average out the high frequency energy radiated in a room. If you find that such a system pleases you and that the published curves confirm your high opinion, bear in mind that the smoothness of high frequency response depends in part upon where that speaker is located with respect to available reflecting surfaces. Should your home listening situation preclude such positioning, the high frequency dispersion of these types of speaker systems may well be altered unfavorably.

Another point to remember when considering the high frequency dispersion characteristics of any speaker system is that many systems are equipped with some sort of high-frequency control—either a continuously variable adjustment or a multiposition switch. Check the setting of such controls as you audition the speaker. As a rule, the curves shown in the published reports are derived with all controls set to their indicated "normal" position. However, the effect of the controls on the response also is described. Thus, you should audition a speaker with the controls set for neither boost nor cut, and then vary the controls while listening for the specific changes indicated in the report.

As a final check, after you are satisfied that the high frequencies are well dispersed to preferred listening positions, return to the "on-axis" position (directly in front of the speaker). Try now to judge whether the highs sound strident or overly obtrusive, particularly if the on-axis curve of the report shows a substantial increase of amplitude in the frequencies above, say, 4,000 Hz as compared with the other two off-axis curves. This procedure is advisable since in some instances you or others in your listening group may find yourselves in an on-axis position after all.

#### Distortion

The new "distortion tables" featured in speaker reports shed much needed light on this often confusing specification. Many manufacturers, after avoiding the subject for years, are also beginning to state something about distortion in their descriptive literature. Their reluctance on this point stems from their apprehension that the reader will equate the distortion figures of speakers with those normally encountered in connection with tuners, amplifiers, etc. The latter figures are minute by comparison. For instance, 5 to 10 per cent harmonic distortion at normal operating level would be considered horrendous in an amplifier, but of far less significance in a loudspeaker. Of course, by definition, the lower the distortion the better-in any audio device. Still, to understand what 10 per cent distortion at 40 Hz means for a loudspeaker, one must understand the nature of the distortion tests themselves. Suppose a

age output sound-power level of 100 dB. The same loudspeaker will produce a sound-power level of 90 dB (putting you just a few rows back in the imaginary concert hall) with only 2 per cent distortion. In general, the greater the sound output, or the lower the frequency (below the bass resonance of the system, at least), the higher the distortion. To put these figures in perspective, sound levels of 90, 100, or even 110 dB correspond to the loudest sounds normally encountered in a concert hall. For this reason the 100-dB (or in some cases, the 90-dB) level becomes the one we try to get from every loudspeaker-including those that can produce such loudness only with "break-up" or "buzzing"-that is, with relatively high distortion. However, the tabulations used in the reports also show what happens when the speaker is driven to lower sonic output. The prospective buyer then can plan accordingly. If, for example, your budget permits purchase of a system that cannot cleanly reproduce those concert-hall levels in your living room, it's nice to know that the speaker of your choice will, nevertheless, give clean output at an 80-dB level, even at the difficult low frequencies. The distortion tables thus provide a much better guide in this respect than a single statement such as "5 per cent distortion at 50 Hz" which is absolutely meaningless (though still used in some advertising) when unaccompanied by some indication of sound output level, or electrical input requirement plus an

indication of the system's efficiency.

speaker produces 10 per cent distortion when it is

fed with enough electrical energy to furnish an aver-

Given the new tabular form of reporting, you can judge a speaker system's distortion fairly easily. First, listen to an assortment of recorded material at moderate levels-well below the point where significant distortion figures apply-and familiarize yourself with the over-all tonality of the system in question. Then, in separate steps and listening to the same recorded passages, increase the level of sound with the amplifier's volume control. At some point you will begin to hear a decided change-a decrease in the "cleanness" of the signal, particularly in the bass and lower midrange region. This point will, as a rule, correspond approximately to the dB level at which the tabular report first indicates higher orders of distortion. If that level seems overpowering-and one that you are not likely to require in your home listening environment (either because of personal preferences or considerations of neighborliness)then the onset of distortion at such a level is of academic interest only; it need not dissuade you from purchasing the system in question. In conducting these tests, however, you should allow for some margin inasmuch as the dynamic range of some future musical programming may be such that instantaneous crescendos may "push" the speaker into objectionable levels of distortion-if only for short durations. By basing the distortion tables in the reports strictly upon output sound levels (and not

amplifier power applied to the loudspeaker) any consideration of speaker efficiency as such is deliberately ruled out for the purposes of this test. But efficiency is important for other reasons too, as discussed below. I mention it here, however, to remind you to be sure that an amplifier of ample, clean power output is used for listening tests-otherwise you may be listening to amplifier distortion or overload rather than the distortion caused by the speaker's limitations. In this regard, at least, most manufacturers of loudspeaker systems are careful to recommend required amplifier power for use with their products. I suggest allowing a margin of perhaps as much as 50 per cent plus in this area-because the chances that a good high-powered amplifier will "burn up" the loudspeaker are less likely than is the chance that the opposite will pertain, namely that a lowpowered amplifier will be unable to drive an inefficient speaker system to levels at which it is still relatively free from significant amounts of distortion.

#### **Efficiency and Amplifiers**

The new speaker reports in HIGH FIDELITY invariably recommend the amplifier power needed to properly drive the speaker system being evaluated-but this serves as a starting point rather than an absolute rule for your power requirement deliberations. To translate the published (and necessarily generalized) power requirement to the specifics of your own room size and listening preference, a knowlege of the relative efficiency of the system is still needed. Actually, an indication of speaker efficiency is implied in the frequency response curves already discussed. Those curves are derived with a standard electrical input to the speaker of 1 watt, and so the output levels on the dB scale of the graph provide a true indication of efficiency. For instance, an output level of 70 dB (caused by 1 watt of electrical input) represents a fairly inefficient speaker system. A speaker system that produces a sound level of 80 dB from the same 1 watt of electrical input is ten times more efficient than the one that produces only 70 dB of sound level. The acoustical (not electrical) power required to produce a 100-dB level in typical rooms of various sizes is plotted in Fig. 3. The cubic volume is simply the length by width by height of the listening room. If 90 dB of sound level is enough for your needs, you would reduce the readings by a factor of 10. If, on the other hand, you feel that you must have sounds at 110-dB levels, multiply the reading obtained for your room size by a factor of 10. A somewhat simpler approximation is to figure 1 acoustic watt per 1,000 square feet of floor space for a 100-dB sound level capability. Of course, to translate the acoustic power back into electrical power you would need to know the efficiency of the loudspeaker you contemplate purchasing. Here the frequency response

the same speaker from a higher-powered amplifier. Most dealer showrooms are equipped to easily switch the speaker under test to any of several amplifiers as a driving source. These few additional A/B tests are well worth your extra time and effort, for there is nothing so frustrating as having selected an excellent speaker system only to find that the amplifier being used to drive it just doesn't have enough power

output to do the job.



curves of the report are used-bearing in mind that

10 dB represents a 10 to 1 ratio of power. Thus, if

1 electrical watt produces a sound level of only 80

dB in a room of approximately 1,000 square feet of

floor (a large dealer's showroom is likely to have

such measurements), it means that the *acoustic* output is 20-dB lower than our desired "100-dB level,"

or the efficiency of the system is 1/10 x 1/10 or

1/100th—or 1 per cent (a figure not uncommon with

not, the final test will still be a listening test involving the use of an amplifier, whose power rating you

think is adequate, coupled to the speaker you are

evaluating. If the speaker is capable of high sonic

levels, as reported in the tests, but there is audible distortion as you approach such levels, you can be

reasonably certain that the amplifier is overloading

before desired levels of sound are attained-and you

will then want to verify this "mismatch" by running

Whether you go through all these calculations or

modern, air-suspension bookshelf-type speakers).

Fig. 3. Graph shows amount of acoustic power needed to produce 100-dB sound level in listening rooms of various sizes. Note that for other dB sound levels, the acoustic power requirements change. Specifically, for each 10-dB lower sound level desired, divide the acoustic power shown here by 10. For example: in a room that is 3,000 cubic feet in volume (length times width times height), the above graph shows that a sound level of 100 dB will be produced by 0.5 acoustic watt. To produce in this room a sound level of 90 dB, only 0.05 acoustic watt would be needed. For 80 dB, the acoustic wattage drops to 0.005, and so on. To estimate amplifier power needed, divide acoustic watts by speaker efficiency: e.g., 0.5 acoustic watt from speaker that is I per cent efficient requires amplifier capable of supplying 50 watts to speaker.

#### **Judging Transient Response**

Since the early days of speaker evaluation, nearly every reviewer has spoken of good or bad "transient response." This term refers to a loudspeaker's ability to respond with precision to sharply defined percussive sounds of short duration. Such sounds occur often in music and are produced of course by percussive instruments. Moreover, it has been suggested by some experts that all music (whatever the instruments producing it) is actually a series of "percussives" or "transients"—an interesting idea that further points up the importance of this characteristic. Anyway, the best program material for evaluating transient response is music that abounds in obvious percussive effects.

As additional help, HIGH FIDELITY's published test reports approach the problem in a somewhat more concrete and scientific way. Carefully tailored "tone bursts" are fed into a loudspeaker, while its output is observed on an oscilloscope at various sound levels. The outputs are compared with the inputs for evidence of transient response defects such as "hangover," "ringing," or "muddiness"—defects which were often suspected but never easily confirmed quantitatively by experienced listeners in the past.

While the published reports do not, as a rule, include photographs of the actual tone bursts, their relative importance and possible effect on the sound is noted by the reviewer in terms of pinpointing deficiencies in transient response at specific regions in the frequency range. Thus, high-frequency transient response may be adequate, while low-end transient capability leaves something to be desired. If careful listening tests confirm this, a comment will be included in the published report. When it does, that's your cue to concentrate-during your own listening tests-on such things as the attack of bass drums and timpani, the bowing of bass viols, while simultaneously listening for evidence of "muddiness" or lack of definition. If deficiencies are noted in the high-end transient response, listen for "fuzziness" in the reproduction of sibilant sounds, upper brass tones, and even the upper octaves on a piano solo.

#### **Power-Handling Capacity**

The transient-response tests using tone bursts serve another useful purpose: they enable the reviewer to suggest maximum power limitations for a speaker system. The older method—using continuous tones of ever increasing power—to determine how much power a speaker system can safely handle is invalid, since musical programming is unlike "continuous tones" and more like the tone bursts used in the transient-response tests. (I might add here that continuous tones still are the most valid for testing amplifiers—but for different reasons.) For judging this performance characteristic I'd recommend that you be guided solely by the test reports. In other words, do not keep increasing the sound level in your own listening tests merely to find out how much a speaker system can take before its voice coil is destroyed or its cone structure is deformed. Such destructive testing may be worthwhile in an engineering laboratory (where one or more prototypes are actually driven to destruction in the course of a design program), but it would hardly be welcomed by an audio dealer.

#### Impedance

Loudspeakers typically are rated by their manufacturers for a nominal impedance of 4, 8, or 16 ohms, which suggests that the impedance value of a loudspeaker's voice coil is a constant number. Not so. A loudspeaker's impedance is a complex function containing both resistance and inductive reactance. Its value actually varies with the frequency of the applied signal-and not always predictably. Thus, a typical speaker impedance curve plotted with respect to frequency might well appear as in Fig. 4. Note that in the vicinity of resonance (in this case at around 65 Hz), the impedance rises significantly. While this means a mismatch between amplifier and speaker (and hence less power transfer to the speaker), the increased efficiency of the system in the vicinity of resonance usually offsets this power mismatch quite nicely. Note, however, that at about 600 Hz the impedance dips briefly to a value just over 2 ohms. This is so close to a "short circuit" that most solid-state amplifiers will draw excessive current through the output transistors in an attempt to deliver large amounts of power to that low an impedance load. At worst, output transistors may be damaged beyond repair. At the very least, the condition may cause the amplifier's protective circuitry (fuses, relays, etc.) to open-interrupting the program until the level is turned down and the output transistors are permitted to resume normal operation.

The published speaker reports always mention the



Fig. 4. While a loudspeaker's nominal impedance may be 8 ohms, the actual value may vary significantly at certain frequencies. Note too that the impedance given in the test report is the value to which the curve dips immediately after its characteristic bass rise; this example would be reported as about 7.5 ohms. For importance of 600-Hz dip, see text.

range of measured impedance. The minimum impedance encountered across the audio band is given so that you can be assured of your amplifier's safety when it is used with that speaker. The impedance information also relates to the use of two loudspeakers connected in parallel across the same amplifier output terminals. For instance, while a dip in impedance to, say, 5 ohms is of little importance for a given speaker system, the same dip on the part of two such speaker systems produces a net impedance of only 2.5 ohms—which could be dangerously low for some amplifiers or receivers.

#### **Additional Considerations**

A performance characteristic of loudspeakers that is not directly documented in the reports-but which often is inferred by the reviewer from related datais that of dynamic range, the difference between the softest and the loudest sounds that you will hear when your system is finally put together in your home. The upper (or loudest) end of this dynamic range may well be determined by the highest sound level your selected speaker system can produce with reasonably low distortion, as tabulated in the test report. On the other hand, the lowest extreme (or the softest sound) you will be able to hear without masking caused by residual hum and amplifier noise will be governed more by the performance of your amplifier-not to mention the characteristics of a given phono pickup or tape deck. To gain some idea of a speaker's dynamic range, play a record at the loudest listening level you will want-and then lift the tone arm from the record. With everything (and everyone) else perfectly silent in the listening room, are you then able to hear hum and noise from the system? Is it at a bothersome level? If it is, then your lower limit of dynamic range capability is being diminished by amplifier limitations. Either the gain of the amplifier may be too high in terms of the efficiency of the speaker selected, or the amplifier's signal-to-noise ratio may be inadequate in terms of the speaker's own capabilities with respect to dynamic range. For this reason it is important that before purchasing a speaker system you should listen to it actually being driven from your own make and model of amplifier (or receiver). Today's program sources (FM, low-noise tapes, and discs) often contain useful dynamic ranges of 60 and even 70 dB. A residual noise level caused by amplifier problems may well reduce that available dynamic range by as much as 10 dB.

#### **IM** Distortion

My earlier discussion of distortion covered only harmonic distortion, as do HIGH FIDELITY's speaker reports. Few speaker specialists have dealt in depth with the possible effects of intermodulation distortion. Their justification for this approach has always been based upon the fact that most speaker systems employ two or more driver elements (woofer, midrange, tweeter, etc.). Since IM, as normally measured in amplifiers and other electronic audio equipment, involves the combined use of a low (60-Hz) and a high (6,000- or 7,000-Hz) frequency, these two test frequencies will not produce "sum and difference" beat frequencies, since they are not being reproduced from a common driving element. This argument, it occurs to me, may be entirely invalid. For one thing, not all loudspeaker systems contain separate woofers and tweeters; many less expensive systems employ a single, wide-range driver unit, in which case ordinary IM distortion products might well exist and should be measured. As for the multielement systems, IM products perhaps exist between frequencies that are not so far apart as conventional IM tests imply. For example, a poorly designed tweeter, fed with frequencies of 15,000 Hz and 14,600 Hz could very well exhibit nonlinearities that would produce significant amounts of 400-Hz (the difference) energy. These two frequencies, in fact, are used to measure IM distortion in FM tuners, and speaker designers might well borrow from the procedure used in that allied technology in this instance.

There remains much basic work to be done in this area, but I believe that the reason speakers having identical harmonic distortion characteristics and identical frequency response characteristics can still sound vastly different in a subjective A/B test with respect to "cleanness of sound" lies in the seldom measured or stated IM distortion characteristics. My own experiments in this area suggest that in your listening tests you should try to use program material that has a variety of high-frequency sounds all programmed together. Woodwind ensemble playing has often pinpointed what I can only describe as IM distortion, but correlating measurements for this phenomenon have yet to be evolved and standardized.

To suggest that the music enthusiast intent upon selecting a speaker system has but to arm himself with this new set of scientifically derived measurements would be telling only part of the story. Comprehensive auditioning of as many speaker systems as possible, in a suitable acoustic setting, will always be required. What I am emphasizing, though, is that measurements taken in a standard and repeatable manner can serve as an aid-a weeding-out process, if you will-in the final subjective evaluation that still must be made by the listener. The data contained in this new form of report can serve as a "warning flag" in those areas where deficiencies arise, and as a confirmation of your own judgment in areas where performance is estimated to be good or even superlative. Let the reports serve as program notes-while you enjoy the concert.

#### by Morley Kahn

# Uncover Extra Stereo Channels

Simple hookup reveals hidden ambience and directionality in many two-channel recordings.

EVER SINCE THE STEREO DISC became commercially feasible in 1957 it has generally been assumed that all you need do for satisfactory stereo playback is connect two loudspeakers to two separate channels of amplification. Unfortunately this assumption has prevented us from hearing—and enjoying—additional sonic information that is, to some extent, inherent in any stereo recording. As a result we have been deprived of the full content of the bass notes in our recordings and of the "concert-hall" sound that we might have been recreating in our living rooms. Yet the means by which *everything already present* on a stereo recording can be reproduced in the home are elegantly simple—and inexpensive.

The initial emphasis on those Gemini twins of stereo, the left and right channels, has blurred recognition of the fact that the differences and similarities between the two signals are as much a part of the stereo recording as the information in each channel itself. That is, the preoccupation with just two channels (compounded by inexact comparisons to double-image stereo photography) has induced us to redefine "stereo" so that it relates specifically to the notion of two sound sources. But the word is derived from the Greek *stereos*: solid, dimensional. Two points define a line. It takes a minimum of three to define a plane and four to define a solid. Conventional stereo is only a part-way approach to musical solidity.

This Euclidean simile can be carried just so far of course. In the "spatial" effects of music we are dealing primarily with breadth and depth since height has relatively little to do with our perception of musical sounds. So three points would represent the irreducible minimum needed to define musical space.

#### **Establishing the Third Point**

The difference between the signals in left and right channels can be thought of as a third signal: the "L minus R" or "difference" signal. This signal does not exist as a separate entity within your stereo system, of course, but you may hear it by attaching a loudspeaker across the "hot" terminals of the amplifier. Hooked up that way, the speaker will respond only to *differences* in voltage between the two channels, and the circuit is said to be "differential."

Used in conjunction with the normal stereo pair, a differential speaker is placed at the back of the room. It may be elevated to within a couple feet of the ceiling. (If the listener is sitting down, the back of his chair otherwise will tend to absorb a good deal of the sound coming from that direction.) The left and right speakers can remain connected and positioned just as they always have been. Fig. 1 shows this three-speaker hookup.

The relationship between the sounds each of the three speakers will produce can be understood by considering the way in which stereo recordings are made. Most are prepared from a two-channel master tape on which the signals from many different microphones are mixed. For simplicity's sake, however, let's begin by assuming that only two microphones -left and right-have been used. If the studio were completely free of reverberation (anechoic), the only differences between the signals generated by the microphones would be those caused by different relative placements of the microphones with respect to the sound source-or sources. Instruments closer to the left microphone would be recorded louder in that channel than in the right channel, and the sound would reach the left microphone an instant before it was picked up in the other channel. When this recording is played back over a conventional, two-speaker system, the amplitude (loudness) and phase (time) differences would be reproduced faithfully, allowing the listener to localize the sound somewhere between the two speakers but closer to the one on the left.

There are reflections and reverberation of sound in the environments where recordings are made, however; so the microphones pick up more than just these directly radiated sounds. Each recording studio or concert hall has its own individual characteristics. A hall that absorbs a lot of highs will sound dead; one that reflects a lot of highs will sound bright. Some halls absorb reflections quickly; others have a longer "decay" time. These "ambience" characteristics are picked up by both microphones. Therefore there are differences between channels in this ambience sound as well as in that picked up directly from the instruments.

When a stereo recording is played back over a standard, two-speaker system, each speaker reproduces the direct sounds louder and sooner than their reflections. Because of the "Haas effect," these louder, direct sounds establish precedence. Therefore most of the individual ambience qualities of the original acoustical environment remain buried if only left and right speakers are used. But when a separate, differential speaker is connected in back, the hookup subtracts all *common* elements (which produce equal voltages at the two hot terminals), unmasking the difference signal and reproducing it on

# Get the Most From Your Speakers

Most often asked questions . . . and answers.

#### by Roy Allison

While the editors do not necessarily agree with all the viewpoints expressed in this article, we welcome the opportunity to publish them in the interest of providing readers with a broad range of opinion on the subject.

IF IT IS REASONABLY SAFE to say that no one knows all there is to know about loudspeakers, it is even more certain that an awful lot of people want to learn as much as they can about them, judging from the inquiries I have received over the years. What follows is a distillation of several questions and answers covering what I regard as points of major concern and general interest to all stereo enthusiasts.

### Q. Are small speakers really best suited for small rooms?

There is no performance relationship that would make small speakers better for small rooms and big speakers better for big rooms. It certainly is true that rooms influence the perceived sound from loudspeakers, but that influence is much the same whether the speaker cabinet is large, small, or in between.

A very small room will make it more difficult for any speaker system to generate adequate bass, regardless of its size. Consequently a case might be made that a speaker system capable of really good bass performance would not be fully exploited in such a room. But the low-frequency performance capabilities of speaker systems have little to do with their size.

Speaker efficiency, on the other hand, does have a loose relationship with speaker system cabinet size. More acoustic power is required from the speakers in large rooms than in small rooms to produce equivalent sound levels; the more efficient a speaker system is, the more acoustic power it produces for a given electrical input power from the amplifier. Hence the "big speaker" system might be considered more desirable for large living rooms—not because of its physical size, but because it probably has higher efficiency. How much more desirable is it for that reason, in practical terms? This is discussed in the next question.

# Q. In practical terms, how much more desirable is a higher-efficiency speaker? And how does this relate to amplifier power?

When loudspeakers radiate acoustic energy into a living room, the fast-moving sound waves undergo a great many reflections from walls, the ceiling and floor, room furnishings, and people in the room. With each reflection some of the acoustic energy is absorbed. More is absorbed simply traveling through the air. But the rate of absorption is low enough so that once a listener in the room is more than three to five feet distant from a speaker system, the amplitude of the reflected sound energy is greater than the amplitude of the direct radiation. In other words, the reverberant field predominates over the direct field for any listener unless he is abnormally close to the speaker. That holds true regardless of which way the speaker is "aimed."

The reverberant field is composed of the sum of the speaker radiation at all angles, and for middle and high frequencies it is quite uniform in amplitude throughout the room. Therefore it is the reverberant field amplitude that determines, in all practical cases, how loud the sound will be.

The amplitude of the reverberant field is fixed ultimately by two things only: the rate at which acoustic energy is radiated into a room and the rate at which it is absorbed. Energy input rate is the product of the amplifier power times the speaker efficiency. Absorption rate is proportional to room size and to the average absorptive character of the room surfaces and furnishings. In a "dead" room, containing a lot of soft surfaces, the absorption rate is high and the reverberant field amplitude is lower than it would be in a hard-surfaced "live" room.

It seems reasonable to assume typical room conditions and from them relate speaker efficiency to amplifier power requirements. Let us say that we want

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to create in a living room a reverberant field amplitude of 100 dB SPL (sound pressure level). That is loud; it corresponds to the *peak* sound amplitude produced by a large symphony orchestra in a concert hall. Other assumptions: the room is of average size (2,400 cubic feet, or 12 by 25 by 8 ft.) and is neither very live nor very dead.

In such a room, with two speaker systems of 1% efficiency, 100 dB SPL will be produced with peak inputs from the power amplifier of 18½ watts per channel. For most kinds of formal music the average power input under these conditions would be less than 2 watts per channel.

The speakers that most people own today—relatively small acoustic-suspension systems—are about 1% efficient. It can be seen that, even allowing for normal variations in speaker efficiency and relatively large variations in room size and furnishings, the power requirements for reasonably safe sound levels are well within the range of readily available amplifiers and receivers. Reproduction of popular music at the same loudness is no problem either. But the sound levels at live rock concerts are much higher, frequently reaching 115 to 120 dB SPL.

If it is desired to reproduce at home the original sound levels of a live rock performance, bookshelfsize speaker systems should not be used. Peaks of 115 dB SPL would require peak inputs of 600 watts per channel to a pair of 1%-efficient speaker systems. The average power input would be 60 to 100 watts per channel. Even if amplifiers powerful enough can be found, the speakers would surely be destroyed. Anyone who is willing to risk permanent hearing damage by listening at such levels must do it with horn-type speakers.

#### Q. Everyone seems to recognize that the listening room is a component of a sound-reproducing chain, because the room has a significant effect on the quality of the sound we hear from a high fidelity system. That being so, what are the attributes of a good listening room?

It should not be very small, if good bass production is important. Full reinforcement of a 40-Hz fundamental tone requires a room with one dimension of at least 14 feet.

It should not have one dimension that is equal to or a multiple of another room dimension. If it does, there will be powerful reinforcement at discrete bass frequencies spaced one octave apart, and little reinforcement at other frequencies. The result will be a tendency towards boomy, one-note bass. A room 16 by 16 by 8 feet, for example, would be very bad.

The room should not be extremely live, in an acoustical sense, or extremely dead either. If it is exceptionally live—having mostly uncovered surfaces of hard material like tile, plaster, and glass—it will have sharp resonances and will be too reverberant. The sound will be shrill; stereo directionality will be

diminished or lost because the direct sound from the speakers will be so greatly submerged in the reverberant field. If the room surfaces and furnishings are at the opposite extreme—predominantly soft and absorbent—the sound will tend to be muffled and lacking in lustre. Too much of the direct sound from the speakers will be heard; high-frequency beaming and diffraction effects will be all too apparent, and the sound quality will change significantly as you move around in the room. Moderation is the key; a room with acoustical properties that are pleasant for other living purposes is likely to be a good room for music listening.

#### Q. What is your opinion of omnidirectional loudspeakers?

Omnidirectional speaker systems are not. The socalled "omni's" are multidirectional. Some may be relatively nondirectional *in the horizontal plane*, but that includes only two of the three dimensions that are implied by the word "omnidirectional."

In fact, a single radiator specifically designed for wide dispersion, and mounted in a cabinet with its back against a wall, approaches the ideal of omnidirectionality more closely than a multidirectional speaker system does.

It is claimed that the multidirectional systems make loudspeaker location noncritical. In most cases the opposite is true; their manufacturers usually recommend that they be situated well away from the room walls, thus occupying more room space than conventional units. Wherever they are placed, the room affects them in the same ways that it affects conventional systems.

It is also claimed for some multidirectional speakers that they establish the same ratio of direct to reflected sound as is found in a concert hall. This ratio, of course, varies drastically according to what seat you have chosen in the hall; there is no single "correct" ratio. And no matter what kind of speaker system you use at home, or how you aim it, you are well within the reverberant field of a normal listening room once you are more than a very few feet away from the speaker system.

Finally, the time delays associated with reflections in a concert hall differ by an order of magnitude from those of a living room. The only way that they can be duplicated successfully is with four-channel recording and playback systems.

### Q. Are room equalizers significantly more effective than tone controls in adjusting speaker response?

Room equalizers sound like a great (if expensive!) idea. Adjust the loudspeaker output in  $\frac{1}{3}$ -octave or one-octave bands to produce a flat response in the listening room, thereby eliminating room effects altogether. Problem solved.

We at AR have investigated the effects of many

typical listening rooms, and we have compared the results with measurements of concert halls. Here is what we have found: above 1 kHz, listening room resonances are so closely spaced in frequency that they do not produce modes sharp enough to be audible as such. Listening rooms simply affect the *slope* of the high-frequency response; better correction, if needed, can be obtained with treble tone controls than with narrow-band equalizers. If narrow-band compensation is needed above 1 kHz it is because of defects in the speaker system, not the room.

Below 1 kHz, discrete room modes and clusters of resonances may become discernible. But they are quite different in response pattern for each location in the room. Narrow-band equalization can smooth the response at one particular seat in the room, but I have found that it often makes the response worse at other locations. The transient response of the resonance is not affected favorably, in any case. It would seem more desirable and less expensive to subdue prominent room resonances by other means: relocation of the speaker systems or judicious application of acoustical damping material, such as drapes.

Good concert halls are so large that their resonances are very closely spaced even at low frequencies. Thus they do not suffer from audible resonant modes. They do, however, have a much more pronounced slope in response than living rooms, rolling off the high frequencies more severely. That is important because recording microphones are always placed close to the performers. They pick up a far brighter sound than the concertgoer hears. To generate a sound in your living room that is an accurate replica of the live concert-hall balance, therefore, the high frequencies must be rolled off more than the acoustical properties of your living room will accomplish alone. A flat input to the room is not desirable for greatest accuracy; a smooth, but sloping response is needed. Loudspeaker manufacturers attempt to provide that kind of response with the speaker system's controls in the "normal" positions.

#### Q. How can I add a center-channel speaker?

A fully honest answer requires a challenge to the basic assumption of *need* for a third speaker, because it serves no useful purpose if the main speakers are properly set up. Adding a center-channel speaker reduces the effective separation of the two main sound sources; it is of value only when the main speakers must be separated physically so far that they sound like two separate speakers, rather than a stereo pair. This happens only infrequently, when the listening room furniture arrangement makes such wide separation mandatory, or when the main speaker systems are designed for use in room corners.

If you must use a center-channel speaker, it should be driven by a separate power amplifier which is fed a sum-signal derived from the two side channels. Some amplifiers and receivers have a sum-signal output jack for connection to a center-channel amplifier. If yours does not, you can obtain an appropriate signal with a small microphone mixer (such as Switchcraft Model 310).

The volume of the center-channel speaker should be turned up until its contribution to the total loudness becomes just faintly audible, and no more. Of course, speakers connected to the center-channel amplifier can be used as monaural extension speakers in other rooms.

A center-channel speaker should be phased with the other two after you have adjusted its level. Do not disturb the already-phased connections to the two side-channel amplifiers and speakers; the center channel speaker must be phased to correspond with them.

### Q. How can I be certain that my speakers are correctly phased?

Despite the fact that polarity markings are provided by manufacturers of stereo components, there is no standard to which all manufacturers adhere. Even if there were, it would still be very easy to get speakers out of phase in the wires connecting them to the amplifier or receiver, and in fact it is there that most phasing problems occur.

Phasing the speakers in a stereo system is a matter of getting the diaphragms in both speaker cabinets to move in synchronism (both in the same direction for a centrally located sound image) rather than in opposition. This is required in order to obtain a coherent stereo image that remains in place between the speakers as you make small normal head movements. An out-of-phase condition produces a jumpy, erratically moving image unrelated to the proper location.

That is the key to one way of testing for proper phasing. Put on a record and set the mode switch for monaural operation. Both speakers will then be playing the same program material; balance them for the same sound volume.

Stand in front of the speakers, about six feet away, on a line exactly midway between the two. If the speakers are in phase, the sound will appear to come from a point between the two speakers. (You may have to move your head a little, left or right, to perceive the illusion.) If they are not in phase, the sound will appear to be diffuse or will jump rapidly from one spot to another in an unpredictable way as you move your head and shoulders.

To change the speaker phasing, reverse the terminal connections of the two wires in the cable going to one of the speaker systems (not both). Mark the in-phase orientation and leave the connections that way.

If the speaker systems can be moved easily, a more positive phasing test is to place the cabinets together, side by side, and to listen for changes in deep bass response as the leads to one of the speaker system are reversed. The in-phase connection will produce greater bass output. ZERO 100 is the model number of the newest, most advanced automatic turntable. The name stands for Zero Tracking Error... up to 160 times less than with any conventional tone arm... new freedom from distortion... new life for your records. In the following pages, we offer you technical and nontechnical explanations...



# We proudly present the GARRARD ZERO 1000

Two-Speed (331/3 and 45 rpm) Automatic Turntable

\$1895

This is the brilliant new star among automatic turntables, featuring zero degree tracking error and 12 other major advances.

Page □ The Zero 100 true tangent tone arm plus □ 15% vertical tracking adjustment 4

□ Cartridge overhang adjustments 4

- □ Sliding weight stylus force setting 4
- Magnetic anti-skating control
- □ Variable speed ±3%
- Illuminated stroboscope
- Tone arm safety restrictor
- Interchangeable spindles
- Patented Synchro-Lab Motor
- Kinetically matched turntable
- Gentle 2-point record support
- Separate control tabs for Auto; Manual; Cueing/Pausing

#### Again, the innovator!

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The components that comprise high fidelity systems have become increasingly sophisticated. In turn, the demands placed on the automatic tumtable for higher performance standards have also increased. These stringent requirements have led to higher price categories for automatic turntables than ever before.

Nevertheless, the Garrard Laboratories resisted the temptation to build a so-called "super changer", until they were satisfied that sufficiently meaningful improvements were feasible, to justify the establishment of such a new product category.

Over the years, Garrard has invented, pioneered and introduced virtually every significant new feature in automatic record playing units. Many of these have been revolutionary, and together they have upgraded the entire character of the automatic turntable.

But change, merely for the sake of change, has been sternly resisted.

Therefore, such notable innovations as anti-skating controls, built-in stylus pressure gauges, cueing and pause controls, dynamically balanced low mass tone arms and combination synchronous-induction motors (to name a few) were first introduced on Garrard automatic turntables ... but only after the need was established and they were thoroughly researched, tested and perfected. Today, they are standard on most of the higher-priced automatic turntables of all manufacturers.

The Zero 100 is a dramatic new concept, with styling as advanced as its features. It is a new classic, which others will emulate for years to come.

While the appearance of a product does not improve performance, it does connote craftsmanship and quality -and reflects the aesthetics most people appreciate in products which are precision-engineered. In the Zero 100, new materials have been used - such as plexiglas, brass, machined parts, satin finish aluminum - all set off on a sparkling white unit plate. Garrard has made the Zero 100 the very personification of quality.

# Heart of the **ZERO 100** is a revolutionary new tone arm

#### "ZERO" stands for Zero Tracking Error

The maintenance of zero degree tracking error over the full surface of the record has long been an experts' dream. From an engineering standpoint, the value of the principle is wellrecognized, not only for obtaining the finest sound reproduction and eliminating distortion, but for preserving the record grooves. The problem has been to obtain these results with minimal friction and realistic cost. Since the feature is so desirable, there have been some separate tone arms and manual combinations attempting to play records back with zero degree tracking error, but these have had unacceptable friction levels, or were unduly expensive. Certainly, they could not be used on automatic players.

Garrard has spent many years on this development, discarding hundreds of ideas which did not meet its criteria. Now, at last, this advancement of the first magnitude is presented for home use on the Zero 100 automatic turntable.

#### How the arm is built

In common with many examples of engineering ingenuity, the solution to the problem of tracking error looks deceptively simple on the surface.

The new arm is designed so that the cartridge housing is pivoted directly above the stylus tip. The degree of pivot is controlled by an auxiliary articulating arm. The amount of cartridge head pivoting, the length and position of the articulating arm . . . indeed, all the complex geometrical problems involved... were solved and optimized by computer. Without this procedure, the successful design and execution of this tone arm would have been impossible.

The combination of computerized design and arm articulation through advanced pivotry, results in the tracking geometry shown in the diagram. Note that the stylus is perpendicularly tangent to the groove throughout the record — a dramatic achievement of primary importance in the search for perfect reproduction.



#### Advanced pivotry for minimal friction

The extremely low — in fact, negligible friction — which is essential to this concept, has been achieved with costly, precision-loaded ball bearings, and a free-floating universal pivot. These are among the very few parts of the Zero 100 which Garrard does not build. Instead, they are purchased from an outstanding manufacturer specializing entirely in the design and construction of pivots for gyroscopes and other sophisticated space-age equipment. The articulating arm, which depends upon this advanced pivotry, is fashioned of stainless steel tube by Garrard.

Records are made with the cutter perpendicular (tangent at right angle) to each groove. When a conventional tone arm plays this back, the arm describes an arc from its pivot. Because of the fixed head, it produces a varying amount of tracking error, which can only measure zero at the two points where the cartridge is truly perpendicular to the groove. Tracking error, therefore, is inherent in the performance of all conventional tone arms. It is measured and expressed in degrees per inch. It produces distortion in the second harmonic, and, until now, could not be successfully eliminated by any tone arm on automatic playback units.



## Tracking error up to 160 times as low per inch as standard tone arm!

A comparison of the tracking error measurements of any conventionally pivoted tone arm with those of the Zero 100, indicates the magnitude of the breakthrough which Garrard has achieved.

Consider that there are 3,600 seconds of arc in a degree ... and that a conventional tone arm may produce tracking error as high as 4 degrees, or 14,400 seconds at its full playing radius. The tracking error of the Zero 100 tone arm is calculated to measure a remarkable 90 seconds, placing it in the area of 160 times as small per inch as the error of conventional tone arms.

The true tangent tone arm clearly establishes the Zero 100 as a revolutionary development of the first order.

Conversely, above and beyond the tone arm, the features described on the following pages place the Zero 100 in a class by itself, at the very forefront of all automatic turntables available today.





#### Sliding weight for setting stylus force along an extended scale

In order to impart stability and precision to the increasingly important stylus force setting, the Zero 100 tone arm utilizes a brass weight which slides under the arm.

With the weight set at "Zero", the arm is balanced to a neutral "see-saw" position. The weight is then moved forward under the arm to set in the correct stylus force. It is frictionally engaged to

#### 15° Vertical tracking adjustment

Discs are recorded with the cutter set at 15°. Therefore, for the finest reproduction, the stylus should approach this angle as closely as possible. The Zero 100 tone arm shell provides an adjustment lever for this purpose. When single records are played, a flick of the lever to "Manual" sets the cartridge and stylus angle at precisely 15°. When a stack of records is played, the lever is moved to "Automatic," and the angle of the stylus will be precisely 15° at the third record. □

#### Cartridge overhang adjustment

In order to assure the full benefits of zero degrees tracking error, and the 15° adjustment, the stylus tip must be positioned with absolute accuracy. The slotted cartridge carrier of the Zero 100 is provided with a lucite gauge, used when the cartridge is mounted. The cartridge carrier is inserted into the gauge, and the cartridge is accurately positioned for mounting by simply moving it to the point where the stylus tip lines up with the two cross hairs on the gauge.

the tone arm, to retain its exact position; yet it can be easily moved when desired.

Since it requires a movement of  $1\frac{1}{8}$ " to change the stylus force by one gram, a fraction of a gram can be set with extreme accuracy. This carries through the concept of the Zero 100 tone arm, which is designed to track the most sensitive cartridges at the precise fractional forces required for their optimum performance.



#### Magnetic anti-skating control

Garrard introduced the first anti-skating device in an automatic turntable with its patented sliding weight design, which is still used in the (up-to-now) 3 top Garrard models.

An anti-skating control is necessary to offset the normal tendency of the tone arm to move (skate) across the record toward the center. As the disc revolves, with the arm tracking, an inward skating force is created which must be counteracted and neutralized by an equal force in the opposite direction. This prevents wear on the inner side of the groove, premature damage to the record, and distortion.

Now, a unique and exceptionally precise anti-skating control has been designed for the Zero 100 and built into the tone arm assembly. A precision sliding scale, calibrated in fractions of a gram and reading conveniently from the top, shows the exact amount of anti-skating force being applied. The scale has two settings: one for elliptical; the other for conical stylii.

The simple but ingenious Zero 100 anti-skating control utilizes the wellknown magnetic principle that like poles repel each other. Built differently than any previous device of its kind, it is frictionless; not mechanically connected to the tone arm; and requires neither springs nor weights.

A ceramic disc magnet is mounted on the pivoting tone arm gimbal; and another affixed above it on the rigid plexiglas tone arm housing. A ferrous metal shield, with the precision reading

scale mounted on it, slides between the two magnets, to set the anti-skating force desired. When the shield is between the total areas of the magnets. they have no effect on each other, since the shield blocks the magnetic flux. However, as the shield is moved outward, it exposes the magnetic field, creating an infinitely variable amount of magnetic repulsion. This, in turn, exerts a controllable and measurable twisting force on the tone arm, as the two magnetic poles push apart, establishing the correct starting amount of anti-skating force desired, as indicated on the reading scale; and varying to the correct force required at every distance from the center of the record as the stylus moves inward along the radius. 



#### Variable speed control

(±3½% @ 33½ ±2½% @ 45 rpm) Variable speed is actually non-essential for the usual listening purposes when the record playing unit is equipped with a synchronous motor, since the motor insures accurate, stable speed. However, it is a welcome convenience for critical listeners with perfect pitch who prefer to play recordings at the exact speed they select; for others who simply enjoy records best at speeds they determine themselves; and for musicians who wish to "tune" the record player in order to accompany a musical instrument. Variable speed units are not new. For satisfactory performance, the inherent requirements are to have a completely stable motor, and a minimal taper on the pulley which controls the speed variation, so that it does not introduce wow or flutter. Now, with Garrard's proven synchronous motor, and with the development of a long, very slightly tapered pulley, the speed control in the Zero 100 has achieved the necessary degree of perfection.

Speed variation in the Zero 100 is approximately  $\pm 3\%$ . This creates an adjustment in pitch equivalent to one semi-tone.



#### Illuminated stroboscope (Essential with variable speed.)

visible, illuminated line.

The speed of the turntable is easily and accurately adjusted by moving a ring around the control knob which sets speed and record size. It can be monitored continuously through the strobo-

scope window, by watching the highly



#### Tone arm safety restrictor

No effort has been spared by the Garrard Laboratories to insure enjoyment by the owner. One example is the tone arm safety restrictor built into the Zero 100 tone arm to prevent it from being set down on the unit plate outside the edge of the record. A positive stop prevents accidental damage to the stylus.

#### Interchangeable spindles

There are two instantly removable spindles. The short one, for single play, rotates in the same manner as spindles on manual turntables. The long spindle accommodates a stack of six records for automatic play at 33<sup>1</sup>/<sub>3</sub> rpm. An optional automatic spindle is available for wide hole, 45 rpm records.







#### Proven features retained

The innovations described on the previous pages are all introduced for the first time on the Zero 100. In addition, it retains the fully-tested major features of the advanced series of Garrard automatic turntables, which it now heads.

# Synchronous Triduction

Retained— The Garrard Synchro-Lab Motor, an ingenious concept based upon split-rotor design. It combines the powerful torque and instant acceleration of the traditional induction motor; with the unwavering, perfect speed of a synchronous motor, locked into the accurately controlled 60-cycle frequency of the electric current. With the Synchro-Lab Motor, there are no changes in musical pitch caused by drops in voltage due to appliances or other heavy loads on the line at the same time.

SERIES

Retained—The Garrard full-diameter turntable. One of the advantages of the synchronously driven Zero 100 is

#### GARRARD ZERO 100

SPECIFICATIONS: 2 speed, 33½ and 45 rpm, 100-130 volts, 60 cycles AC (50 cycle kit available). MINIMUM CABINET DIMENSIONS: Left to right, 155%,". Front to rear,  $14\frac{1}{2}$ ". Above motor board,  $4\frac{1}{4}$ ". Below motor board,  $2\frac{1}{3}$ ". MINIMUM CABINET DIMENSIONS (Turntable on Base with Dust Eover): Left to right,  $16\frac{1}{4}$ ". Front to rear,  $15\frac{1}{4}$ ". Top to bottom,  $8\frac{1}{4}$ ".



that it does not require a heavy turntable to act as a flywheel, as would an induction motor. Instead, there's a fullsized aluminum turntable, carefully balanced and matched to the kinetic energy of the Synchro-Lab Motor. The turntable mat is heavily ribbed for easy cleaning and safe support of the record through its full diameter.

Retained—Two point record support. Garrard's exclusive record support system guarantees utmost safety and reliability. Records on the Zero 100 are handled automatically with the care and delicacy they require for long life and fine performance. The record stack is supported at the outer edge by a sturdy platform. The oversized clip at the top of the platform is easily grasped, quickly raised over the stack, where it acts as an effective stabilizer. Records are supported positively, and drop into place on a micro-cushion of air. □

Retained -- Unitized escutcheon with finger-tab, cue/pause control. Putting the right controls, in the right form, in the right place (a concept known as "human engineering") is an important Garrard feature. The Zero 100 incorporates a handsome control panel with three customized finger-tab controls: one to run the machine on automatic; one for manual operation; and the third for viscous damped cue and pause control.



# The incomparable **ZERO 100**

and the entire Garrard Series. The Zero 100 is the newest model number to bear the proudest name in high fidelity record playing equipment. Garrard's reputation has been re-earned year after year for over half a century by pedigree performance. Now, once again, Garrard lives up to its reputation with an automatic unit advanced beyond any others now available in performance and convenience... yet it is offered at a realistic price.

Now, more than ever before, there's a Garrard Automatic Turntable for every component music system.



Component Series









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**Module Series** 







by Eugene Endres

## There's a Tweeter in My Tweeter The exotic world of sound-effects records.

PEOPLE COLLECT RECORDS for all kinds of reasons. There are specialists in various categories of classical music: they trap you in their listening room and put on their lastest discovery-a Concerto for Glass Harmonica and Plumber's Plunger. There are comparative shoppers-those who have bought every version of Scheherazade, by every conductor who ever managed to live through it, including a rare early version scored for augmented brass band. There are, too, the "old record" types, who have cornered the market on Salvation Army 78s, carefully recorded them on tape, and had the discs bronzed at their local shoe store. An evening with one of these lovers of antiquities is an excruciating experience of low fi and superb surface noise. Suffice it to say, collecting records, like collecting stamps or stock certificates, attracts all kinds.

il

I collect and listen to records of sounds—just sounds. People look at you strangely when you say that, as if you had put your shirt on backwards. But sounds have fascinated me since the early days of high fidelity. Of course, I admit to having ordinary music, but so does everyone else. When you consider the tastes of other record collectors, sound effects enthusiasts are not that odd a breed.

Anyone who is serious about record collecting is familiar with W. Schwann's wishing book which is issued monthly and lists just about everything that is available on records. It is all nearly categorized too. "Classical Music," listed by composer; "Collections"; "Popular Recordings"; "Jazz," and so on. But one must refer to Schwann's Supplementary Record Guide, issued twice a year, for "Spoken and Miscellaneous," the category under which one will find listings of unusual sound records. I wonder just how many people search out these records? How many fans of pure neise are there? Very few, I'm

Mr. Endres, an engineer for Station WPAT, Paterson, New Jersey, recently made a cross-country trip to record train and other sounds. afraid. But such anonymity is the lot of those who seek the rare and unusual in the world today.

Railroad and train sounds are my particular favorites, but my collection has grown until it includes many other types of sounds. The recordings I discuss here are those that I find particularly appealing.

Sound Effects. Several record companies have issued a series of sound-effects records. Apparently these are largely aimed at the people who make home movies and collect slides and enable them to add appropriate sound effects to their pictures. Earliest in the field were records by Folkways, Audio Fidelity's "Sound Effects" (DFS 7006), and Elektra's "Authentic Sound Effects," beginning with EKS 7251. The latter two series have grown; Audio Fidelity's set now offers some ten records, while Elektra's has expanded to thirteen discs. Elektra's "Sound Effects Box" (7313/4) has 133 of the "most wanted" sound effects and Audio Fidelity has now followed suit with two new volumes of popular sound effects (7046/7).

Elektra issued a companion set of "Dramatic Cue Music and Mood Music" (EKS 75002/4) which, even though it is music, may appeal to the sound buff with a passion for the apt cliché. It is interesting to mention here that Elektra's "Authentic, Vol. 9" features the blast of an atomic bomb. Apparently, many people are curious to hear the sound of Armageddon, for this particular cut has turned up on many other records and soundtracks.

Other companies have issued some sound-effects records. Major Records has a series in both mono and stereo. The series is notable in that the sound segments are longer, making them more useful as background effects. This is a deficiency of other sound-effects records: it can be rather shattering to go from opening a bottle of pop to firecrackers to a circus carrousel in just a few seconds. True, there is a kind of existential sense in the montage of quick transitions, very close to the kind of thing John Cage has tried to do, but often it is more satisfying to have a long sound scene which creates a mood of its own. Sound-effects recordings are used by the broadcast industry to replace the sound man of years ago and are considerably more convenient than dribbling rice grains on screening to simulate rain.

Cars, Boats, Motorcycles, Airplanes. The classic works in this field were the documentary recordings of the now-defunct Riverside Records. Riverside's Bill Grauer was the first to recognize that people who follow the Grand Prix races might also like to hear the sounds of those races. Regrettably, the Riverside pressings of Grand Prix races, motorcycle scrambles, and even vintage sports cars are now out of the catalogue, and one has to haunt remaindered records shops to find them. This series led to what was, if you knew the sport, one of the funniest records associated with the field: Peter Ustinov's "Grand Prix of Gibraltar." The fantastic race took place over the nooks and crannies of the Rock of Gibraltar. and the recording provided nutty driver interviews, race descriptions and even the sounds of the cars, all done by the famous actor. The current car recordings are put out by Capitol (drag races), MGM (Grand Prix races), and Audio Fidelity (just about everything that runs on two, three, four, or more wheels).

In pre-stereo days, recording specialist Emory Cook made a number of strange records-mostly of sounds. He was the first to use high-quality equipment in the field. Cook's records boast the use of studio-type condenser microphones for recording everything from thunderstorms to jet planes. Cook's "Voices of the Sky" contains material that was recorded aboard a commercial airliner. Though not all of the sounds on this recording are terribly interesting, the record does preserve the sounds of the piston-type DC-6 as well as of the short-lived turboprops. The unholy scream of a Lockheed Electra in your living room is more out-of-this-world than the sounds of newer jets, and makes pictures on the wall vibrate and books fall off the shelf every time I play it. Needless to say, neighbors have a strong desire to destroy this record.

Other records featuring the sounds of aircraft and ships are Audio Fidelity's "CVA(N) 'Enterprise'" and "U.S. Air Force." One record no longer available is Riverside's "Fortissimo: Jets" (XK 8001). This has the best recording of a sonic boom I have ever heard (gentle wind caresses the microphone until a jet suddenly explodes right between your two loudspeakers) and was unusual because the groove was cut from the "inside out": you placed the tone arm at the center of the record and the grooves were cut so that the arm moved toward the outside edge. This was supposed to overcome the old bogey of "innergroove distortion" at the end of a piece.

Bird Songs and Nature Sounds. There is a sizable collection of records devoted to the sounds of wildlife

in the field, forest, and jungle (yes, jungle). I suppose these are meant for bird-watcher types, who stalk about the countryside, binoculars hanging albatrosslike about the neck, listening for the ululations of the Scaly-throated Leafscraper or the Bright-rumped Attila (both real birds). The best records in this area are by the Cornell Ornithological Laboratory, Sapsucker Woods Road, Ithaca, New York. The Federation of Ontario Naturalists records the sounds of Canadian birds. These records are scholarly in their approach, but I prefer those without a narrator. If you wish the sounds of birds and other life forms without a narrator identifying every cry, shriek, or groan emanating from the Cornell swamp, get their "Evening in Sapsucker Woods" or "Dawn in a Duckblind." It is true that on one side of each of these discs a narrator describes the birds and other wildlife, but the flip sides are pure nature montage. These recordings are highly recommended for people who live on the 32nd floor of an apartment building and feel that they are becoming detached from nature.

Besides bird records, there are recordings of the sounds of insects from Cornell and Folkways. One Folkways disc includes the sound of a spider walking (!) and of butterflies flying (!!). Cornell's "Voices of Night" records the sounds of frogs and toads. I have yet to hear this one in full.

Folkways has extensively covered the nature-sound field. Their pressings include "Sounds of a South African Homestead," "Sounds of the South American Rain Forest," "Sounds of the American Southwest," "Sounds of the Sea," and "Sounds of Sea Animals." The last two are not what they might seem to be from their titles; they are actually scientific discussions of the sounds made by fish.

The most intriguing sound record to appear in many years is "Songs of the Humpback Whale" (Capitol ST 620). The sounds were recorded "live" by Dr. Roger Payne of Rockefeller University, who used a hydrophone (underwater microphone) lowered off the side of a boat. Whales, it seems, not only make sounds that can be picked up underwater; they also sing!-mostly in high-pitched chirpings and warblings, but with a definite and repeated songlike phrasing, all of it strange and haunting. Dr. Payne believes that, due to certain acoustic properties of layers of ocean water, the singing is audible to other whales at great distances, perhaps hundreds of miles. Part of the disc's price is being used to help save the whales from being hunted to extinction, which is the least that can be done for these aquatic opera singers.

Finally, there are the sounds of natural phenomena. These are closest to the heart (or ear) of the true noise lover. Thunderstorms, rain, wind, surf, forest noises, and farm noises have all been recorded. Even though these are common sounds, the recorded pickings are slim indeed. Droll Yankees Records has a series on the sounds of surf, boats, forests, and even swamps. The selections on these records are lengthy. After five minutes of rain or surf or whatever, one forgets that it is just a record and begins to experience the mood one would feel under the actual circumstances.

Emory Cook also recorded the sounds of nature. The most unusual is "Voice of the Sea." This has been reissued in stereo but my copy is an old recording-a "Duplex," which was an early forerunner of today's stereo record. It is really two records in one, meant to be played by a two-headed pickup arm, which gives two channels of sound from the two hands recorded on the disc. Unfortunately, this means the record contains only half as much as the usual twelve-inch record. I have taped the two channels of this record onto a stereo tape and it does yield a kind of crude stereo (really binaural sound). This recording also features the Queen Mary's whistle, a collector's item now that the ship is no longer in active service. Few records have the extended surf sounds that are heard on this disc. I've attempted to record surf myself, but achieving realism is not easy, and the near dousings of valuable tape equipment with salt water have made me doubly appreciative of the available commercial recordings.

Another unique recording released by Emory Cook is "Voice of the Storm" which has a rip-roaring thunderstorm on a clear, blue vinyl disc, as well as one full twelve-inch side of rain falling (plus a few little surprises). Cook also made a binaural recording of "whistlers." If you put up a large radio antenna and attach a sensitive receiver, you will be able to hear radio frequency whistles emanating from meteorites falling through the upper atmosphere. The RF is caused by ionization of the air. This natural version of Edgard Varèse's *Ionisation* also includes a doppler effect as the meteor goes beyond the horizon. Cook recorded the two channels some hundreds of miles apart, setting what must be some kind of record for stereo separation.

The pièce de résistance of all the Cook recordings must be "The Compleat in Fidelytie." This record has all kinds of sounds, ranging from one of the loudest crying babies I have heard to a great cut of Mexican fireworks and church bells. As it says on the cover, "If there is any trouble with this part, just tear off the top of your speaker cabinet, drop it in the nearest mailbox. . . ." These sounds are bound to get all the dust out of your grille cloth, if nothing else. The other side is a half hour of wind noise, cooling and soothing even on a hot day. A sidelight of most of these records is that they really test the ability of your system to produce natural sound. After playing the insect records, it might be a good idea to spray the room just in case you've attracted some stray bugs.

Psychologists have noted the benign effect of natural sounds and perhaps random sounds may eventually replace the background music of today. When acoustical tile for ceilings was first introduced, each panel contained an identical number of holes, but it was found that people spent all their time counting these holes. Then the holes were cut in a random pattern which made the tile less obtrusive.

So it might be with sounds. If soothing random sounds, rather than music, were used as background material, people might fall into the kind of relaxed mood they assume at the seashore or during a rainstorm. For instance, white noise has been used for its anesthetic effect in dentistry.

In the last year two companies have put out records in the field of environmental sounds. Atlantic has two recordings that feature the sounds of sea, birds, bells, and woodlands; Audio Fidelity has similar material on two volumes titled "Ambience."

**Railroads.** This category is the most popular of all the sound records. I suspect this is because there are more train-sound nuts than just plain sound-record nuts. Indeed, many people are so taken with the romance of railroading that they wear engineer's hats, red neckerchiefs, and ties emblazoned with railroad emblems. Cameras in hand, they take fuzzy photographs of the last run on the Pittsburgh, Mc-Keesport, and Youghiogheny connecting railroad. They also carry tape recorders.

Railroad records span the period from the early 1950s to the present. They chronicle the decline and fall of a great institution and mark the passing of one of the most commonplace sounds of small-town U.S.A.

Railroad recordings range from excellent mood pieces to the very worst stuff—much of it recorded on portable disc equipment, usually in a swaying railroad car traveling at sixty miles per hour. This accounts for the low fidelity and mild wow. The prime ingredient of a good train record is the ambience. The faint whistle of the last steam clunker on the PMcK&Y is no good at all unless heard in its operating context. The recordings of the tiny trains which still run high in the Rockies are the best: you can hear and feel the presence of the mountains as well as the trains, the squeal of the wheels as the train rounds a curve, and the echoes of the whistle from canyon crags as the train disappears in the distance.

Of particular note in the railroad field are the recordings of O. Winston Link, who not only has some of the highest fi going, but a good editing sense. When I first played one of his discs—a huge freight engine working through a tunnel in Virginia and then blasting past the microphone with little hoots on the whistle—I almost hid under the sofa, and there was a dimming of lights in town as my amplifier ate up electricity at a fearsome rate. For authenticity and interest I recommend four of Link's recordings: "Sounds of Steam Railroading," "The Fading Giant," "Thunder on Blue Ridge," and "2nd Pigeon and the Mockingbird." Link's recordings are available by mail from O. Winston Link, 483 8th Street, Brooklyn, N.Y. 11215.

Audio Fidelity was the first in the railroading field with a stereo record (it was one of *the* first

stereo records issued) called "Railroad Sounds-Steam & Diesel," which has very good sound. While it is probably the most widely sold train record, it suffers from lack of variety.

The label most involved in train sounds right now is Mobile Fidelity in Los Angeles. They have at least eighteen different train recordings. The most interesting are: "Steam Under Thundering Skies," in which a train runs through a thunderstorm; "Mr. D's Machine" (Mr. D is Rudolph Diesel, inventor of the diesel engine) which is surprisingly good and has a lot of atmosphere; and "Interurban Memories," the only record that contains the sounds of old trolley cars

All this of course can lead to true esoterica. For instance, Argo has a series of records devoted to old English steam locomotives: "Rhythms of Steam" and "Trains to Remember."

Miscellaneous. In this category, you can place all other records of mere sounds. They are impossible to categorize. For example, recordings have been made of experiments with a digital-to-sound transducer hooked up to an IBM 7090 computer ("Music from Mathematics").

Folkways' recordings have to be placed in a category all their own. They have more records calculated to snare the collector of oddities than any other label. Having preserved much of our ethnic music for future generations, Moses Asch of Folkways has also released such oddities as "Sounds of the Junkyard," "Sounds of Science Fiction" (which includes the classic hit Sound of Approaching Missile or Creature), "Sounds of Medicine," as well as others mentioned previously. But be warned: the material on these Folkways records is really esoteric; in fact, it is so "far out" that it may be years before modern composers catch up with it.

Random sounds are what came before music. Natural rhythms, dynamics, and sonorities need only to be organized by the listener to become music. Or let them remain atonal, arhythmic, or (shhh!) amusical. A mosaic of sound, Marshall McLuhan strikes again! Audience participation! Pure sound, without performers or interpreters to get in the way. Listen! Your ears are now open! Not only that, your cartridge is melting and your speaker cabinets have cracked. But you don't care. Let the output transistors burn! You've entered the world of pure SOUND!

#### A SELECTIVE LIST OF SOUND-EFFECTS RECORDINGS

#### Sound Effects

Assorted Sound Effects	Folkways 6181*			
Authentic Sound Effects	Elektra EKS 7251/63			
	(13 discs)			
Authentic Sound Effects	Elektra EKS 7313/4			
	(2 discs)			
Background Music:				
Home Movies	Major 1040*			
Dramatic Cue Music and	Elektra 75002/4			
Mood Music	(3 discs)			
Home Movie Sound				
Effects	Audio Fidelity 7018			
Sound Effects	Audio Fidelity			
	7006, 7010, 7011,			
	7015, 7016, 7036,			
	7038, 7043, 7046,			
	7047			
Sound Effects, Vol. 1	Folkways 6170*			
	i olikitaya orro			
Cars, Planes, and Ships				
Airborne, Airborn All				
the Way	Gold Star 540*			
Alexander Hamilton of				
the Hudson River Day				
Line	Droll Yankees 15*			
Big Sounds of the Drags	Capitol ST 2001, ST			
g and a the Drugs	2146			
CVA (N) "Enterprise"	Audio Fidelity 7014			
Daytona Speedway	Audio Fidelity 7031			
,,	reading 1 donly 7051			

Exciting Sounds of Le			
Mans	London 56007		
Grand Prix Racing			
Sounds	MGM S 4457		
Gurney, Dan	Mobile Fidelity S 10		
Motorcycle Scramble	Audio Fidelity 7035		
1964 Pomona Drag			
Races	Audio Fidelity 7032		
Sports Car Races	Folkways 6140*		
U.S. Air Force	Audio Fidelity 7012		
Voice of the Sea	Cook 5011		
Voices of the Sky	Cook 1075*		

#### Bird Songs and Nature Sounds

African Birds	Cornell University	
	(2 discs)*	
Ambience	Audio Fidelity 6237/8	
	(2 discs)	
American Bird Songs	Cornell University	
	(2 discs)*	
Birds on a May Morning	Droll Yankees 14*	
Bird Songs in Literature	Houghton Mifflin*	
Birds' World of Songs	Folkways 6115*	
Common Bird Songs	Dover 1829*	
Compleat in Fidelytie	Cook 1044*	
Dawn in a Duckblind	Cornell University	
	(10")*	

\*Mono only

Day at Flores Morades

Day in Algonquin Park

Environments

Evening in Sapsucker Woods Farm Finches

Land of the Loon Mexican Bird Songs North American Frogs Peterson Field Guide Series Prairie Spring

Sea at Castle Hill, R.I. Songs of Insects Songs of Spring

Songs of the Forest Songs of the Humpback Whale Sounds of Animals Sounds of a South African Homestead Sounds of a South American Rain Forest Sounds of Insects Sounds of Sea Animals Sounds of the Sea Swamp in June Symphony of the Birds Thrushes, Wrens, and Mockingbirds Voice of the Storm Voices of the Night (Frogs and Toads) Warblers

Wild Bird Songs

#### Railroads

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#### the new releases

OPERA!—that Golden Fleece of the musical world! Sooner or later, nearly every composer reaches out toward it, for although the challenges and the risks are great, so are the rewards. Many of the most powerful and influential musical developments of earlier centuries surfaced first in opera, and the aesthetic-philosophical strife has always raged most furiously (if not always intelligently) around musical theater, doubtless because even mere literary men could find something more easily graspable here than in the abstract patterns of concert music.

Opera no longer occupies quite that exalted position, for a number of reasons, but it still tempts many. One of the most recent to succumb was the Polish composer Krzysztof Penderecki, whose *The Devils of Loudun*, based on John Whiting's play *The Devils* (in turn a dramatization of a book by Aldous Huxley), was first performed in Hamburg on June 20, 1969.

Much of the expectation attendant upon that premiere was based on the success of Penderecki's *St. Luke* Passion, widely acclaimed as a "highly dramatic" work. As readers of these pages may recall, I have for some time been one of the skeptics with respect to Penderecki's musical significance; the means he employs, while occasionally spectacular in their novelty, show little more than the most primitive organizational skills, and the fundamental principle is not far from that of Carl Orff, whose *Carmina burana* was the 1950s' version of "modern music for people who hate modern music." Orff adapted the rhythmic procedures of Stravinsky's *Les Noces* to an easily acceptable harmonic context; his junior Polish colleague took tone-cluster harmony and flashy instrumental sound effects, and juxtaposed them for maximum shock value.

The musical gist of the *St. Luke* Passion is, I submit, hardly substantial enough to bear the comparisons with Bach that have been made in some quarters: the basic structural unit consists of the progression from a single note to a cluster of all twelve tones, a tightening of the screw from repose to maximum dissonance, and the only large-scale movement in the piece is the progress from one to another of those single notes—all ending with a Great Big G Major Chord, which has all of the associations (but none of the functions) of a point of arrival. It is, to say the least, rather primitive—but its appeal is bolstered by the warm, friendly sound of intermittent Gregorian chant (and, no doubt, the sympathy that the composer wins as a Catholic from a Communist country).

At the premiere of *The Devils*, the question was whether Penderecki could turn his techniques to valid use in the theater, whether he would have developed new and more flexible means of organization. And, of course, the bigger question of how he would cope with the eternal problem: primacy to works or to music?

Huxley's *The Devils of Loudun*, and Whiting's dramatization thereof, are based on a documented historical event, the trial and execution of a French priest, Urbain Grandier, for witchcraft in 1634. The interpretation implicit in both works, and in the opera as well, is that Grandier, a brilliant but egotistical man, made many enemies in Loudun—through his affairs with ladies of



John Reardon as Father Urbain in the 1969 Santa Fe production of Penderecki's The Devils of Loudun.

# The Tragedy of Father Urbain

Penderecki turns Huxley's "Devils" into operatic Grand Guignol.

by David Hamilton

the parish, his wit, and his pride—and on a national scale, by opposing Richelieu's policy of demolishing the town's fortifications.

When the prioress of a local convent conceived a hysterical passion for the handsome priest (who had never seen her) and he rejected her offer of the post of director of the convent, her accusations of diabolic sexual possession were taken up by Grandier's enemies as the basis for trial, conviction, and burning at the stake.

Penderecki's opera follows the structure of the play fairly closely: numerous short scenes, many of them only a minute or two in duration. Like other composers of the twentieth century from Debussy on, Penderecki has taken over the text of the play (in Erich Fried's German translation) quite literally, making abridgements as necessary and occasional changes of order. I noted two major insertions on the composer's part: yards and yards of liturgical Latin in the scenes of exorcism and torture, and an extension of the episode where Grandier is prepared for execution, to present onstage the removal of his fingernails.

Viewed in terms of the classic words-music dichotomy, *The Devils* comes down quite firmly on the side of the words; there can have been few operas since Peri's *Orfeo* that surrender so abjectly to the requirements of intelligibility—I use the term "surrender" with intent, since the extensive use of spoken dialogue (not *Sprechstimme*, but plain, ordinary everyday speech) here passes beyond the bounds of a special effect and reaches the point of being an evasion of the whole problem of opera. Many crucial scenes are simply talked, over those interminable pedal notes or clusters: one might as well be hearing a recording of the play, on an audio system with a variable hum in the lower register!

What does the music do, then? Well, to some extent it characterizes; Grandier's lady friends have distinctive idioms, the sisters (especially Sister Jeanne, the prioress) have their lyrical moments as well as their possessed ululations, and the unsavory pair of surgeon and apothecary express themselves with embarrassing fluency in the idiom of their close relatives, the Doctor and Captain in Berg's *Wozzeck*. But otherwise the vocal writing is a very uncertain clue to identity; only after acquiring familiarity with the vocal colors of the various singers (including Grandier himself) could I follow the action without a libretto. And the vocal lines have great monotony of intervallic content, for they are made up primarily, and often exclusively, of minor seconds and tritones.

Expectably, there is much use of the chorus—indeed, a backstage chorus seems to function as part of the orchestra, sometimes echoing or amplifying sounds on stage, sometimes singing appropriate liturgical texts, often acting as instruments, singing *bouches fermées*. The material is—well, just like what the chorus does in the *St. Luke* Passion.

The same might be said of the orchestra's duties: long pedal notes, short ejaculations, slowly moving clusters, fast-moving clusters. Except for the use of an electric bass guitar, there are no major instrumental innovations in the score. Perhaps significantly, the rare episodes in the opera that are musically memorable (I use that adjective in the strictest literal, nonevaluative sense) are pictorial in intent: what is surely the first-ever orchestral representation of an enema (apparently an accepted method of exorcism in the seventeenth century), the above-mentioned episode of fingernail-removal (after all, isn't that what those repeated *sul ponticello* string notes always reminded you of—teacher scraping her nails on the blackboard?), and the burning at the stake.

In the long run what one finds really astounding about this opera-and it is reinforced on records without the visual diversion of the stage action—is the poverty of the score: there just isn't very much music in it, good or bad. Rather than creating theater *from* music, as have all the successful operatic composers from Monteverdi to Stravinsky and Schoenberg, Penderecki has given us theater with music—a species of incidental or background music, where musical instruments and voices are used to make sound effects, and a monotonous style of arioso sometimes intrudes on the drama.

You might then ask, "Well, what kind of theater does it make?" (although this will not noticeably enhance your enjoyment of the recording). Not as good, I would say, as Whiting's original play, since the abridgement has stripped away many of the political overtones and narrative points that gave the play its sense of dimension. What remains is Grand Guignol: drama of horror and sensationalism-a bare narrative of sexually motivated diabolism, pivoting around a series of ever more elaborate possession scenes (rather reminiscent, in fact, of the classic structure of pornographic novels, in which each orgy surpasses the previous one in quantity, variety, and perversity). The Hamburg production was cluttered and conventionally "modern"; I understand that the show has had better success elsewhere in proportion to the extravagance of the staging-more skin, fewer body stockings, I suppose.

With one exception, the cast of the recording is that of the premiere, but the conductor is different. Scuttlebutt around Hamburg had it that Penderecki was not happy with the work of the original conductor. A few singers should be singled out for special praise: Tatiana Troyanos puts great intensity into the part of Sister Jeanne, and her ear for pitches is obviously exceptional; Helmut Melchert's characterization of the royal commissioner is much more specific than the composer has any right to expect; and Ernst Wiemann, who never made much of an impression at the Metropolitan Opera does very well as a fatherly old priest. Andrzej Hiolski, as Grandier, has an appealing tonal quality, but suffers from a certain vagueness of pitch. Janowski, who took over the Hamburg production some months after the premiere, keeps things moving along and secures good attacks from the orchestra at critical points.

In an opera where the text has been so well treated by the composer, a libretto is an absolute necessity. Philips has not failed to provide one, but I regret to say that they have given us one of the most illegible specimens of the breed since Fred Rullman, Inc. retired from the field. Reproduced from typescript, it is printed on nasty brown paper of very low quality, full of spots that impede the already limited legibility. A high-intensity lamp should have been included with every set.

Where does *The Devils* stand in the history of opera? Somewhere in the region of such later Orff works as *Antigone* and *Oedipus*, I should say—but lacking their genuine (if limited) highmindedness. And its interest to the record listener is very small, for it has few of the elements that sustain truly *musical* opera even when divorced from its natural habitat; this is a case where repeated listening is of little use, for everything is right there on the surface. That's all there is; there ain't no more, as Ethel Barrymore used to say.

PENDERECKI: The Devils of Loudun. Tatiana Troyanos (ms), Jeanne; Horst Wilhelm (t), Father Mignon; Helmut Melchert (t), Baron de Laubardemont; Kurt Marschner (t), Adam; Heinz Blankenburg (b), Mannoury; Andrzej Hiolski (b), Urbain Grandier; Bernard Ladysz (bs), Father Barré; Hans Sotin (bs), Father Rangier; Ernst Wiemann (bs), Father Ambrose; Chorus and Orchestra of the Hamburg State Opera, Marek Janowski, cond. Philips 6700 042, \$11.96 (two discs).

by Donal Henahan



## Schubert – Transcendental Amateur

#### Wilhelm Kempff reflectively explores the "complete" piano sonatas.

IT IS A SMALL THING, perhaps, to mention in a great man's favor; but besides leaving the world an inexhaustible store of artwork, Schubert contributed to the employment of untold numbers of musicologists. The disarray in which he left his manuscripts has brought joyful labor to a mighty brigade that includes Eusebius Mandyczewski and Julius Epstein (who edited the solo piano works in the nineteenth century for the Breitkopf & Härtel *Gesamtausgabe*) and in recent times Otto Deutsch (Schubert's Köchel), Maurice J. E. Brown, and Erwin Ratz. For more than 140 years, the scholarly scouting and cataloguing has gone on, with results that can only be admired for their efforts to give us the whole Schubert.

And yet the immediate question raised by Wilhelm Kempff's album of "complete" piano sonatas is: yes, but *how* complete? Although it is now generally known that Schubert wrote at least twenty-two sonatas (Brown recognizes twenty-three, on the questionable grounds of D. 994, a thirty-eight-measure fragment in E minor), Kempff performs only eighteen.

He gives us, of course, the eleven indubitably complete and familiar sonatas published in Series X of the B & H Urtext and which one finds, for instance, in the standard Peters edition, plus virtually all the finished movements of fragmentary sonatas. He omits, oddly, the authenticated scherzo to D. 566 as well as, more justifiably, the questionable rondo. On the grounds of admitting only complete sonatas or movements, Kempff therefore omits D. 567, which is an earlier version of D. 568 as well as the fragments numbered D. 570–571, D. 612–613, and D. 655. He plays two of the four movements of D. 840 (the *Reliquie*), two of the four of D. 566. Kempff seems to break the self-imposed rule of completeness in D. 625, in which he plays the three movements to be found in the B & H Urtext, although the first and fourth movements were not quite finished by Schubert himself. He also ignores, in the same sonata, the adagio that some scholars, following Deutsch, place as the second movement. So it is easy to see that no matter what ground rules a planist might set up for himself, completeness in the Schubert sonatas is a chimera unless he stops short at eleven or goes on to embrace all the fragments that musicology has filed under the sonatas.

What Kempff gives us, then, is completeness comparable to the eighteen-sonata, nine-disc Vox mono set by Friedrich Wührer. He gives us, however, a subtler, more sonorously recorded interpretation, pervasively understated and relaxed (to the point at times of rhythmic flabbiness). Tempos, often quick enough, never emphasize keyboard virtuosity for itself; the Kempff approach to Schubert's score markings is always to avoid obvious drama. The planist tends to soften and blur, and habitually to make the slight ritardando and the sudden diminuendo that are synonymous with Schubertian intimacy for many listeners. There is little of the youthful joy and heroism that one hears in Schnabel's classic version of the final sonata, the B flat, Kempff being more in the mood to stress, or suggest, the music's pathos. Kempff's realization of the late, weightier sonatas is impressive, if one can accept his view of Schubert as a transcendental amateur who scarcely looked beyond his Biedermeier circle of friends for an audience.

There is, and some of us cherish him for it, that element in Schubert's piano music, and it is valuable to have it explored so thoroughly by a pianist of Kempff's ability and cultivated tastes. Even when the musical line is allowed to slacken off somewhat, or when one feels Kempff to be not so much conveying the intimacy of a movement as skating over its surface-as in the con moto of the D major, D. 850-there is never any doubt that an authoritative musician is in control. He lets the music reflect, and if the pensiveness sometimes seems more that of the old pianist than of a composer who was, after all, only thirty-three when he died, that is the kind of leeway that one permits-demands-in an important artist. In the formally weaker early sonatas, especially, but throughout the series, Kempff knows the difference between getting excited and conveying excitement, and that is by no means the worst test. Schubert tends to slip away from "dramatic" pianists.

Kempff easily passes another reliable test of Schubertians: he never betrays impatience with the slightly varied restatements of ideas that the composer likes to ponder over in his piano sonatas. Not that Kempff's versions of the complete sonatas are so complete that they honor all repeats: his inclusion of the massive first-movement repeat in the last sonata, so welcome there, is not by any means followed up religiously, even when in half a dozen instances the reasons are not self-evident. In the so-called *Fantasy* Sonata, D. 894, one would prefer a repeat at least in the andante if not in the first movement.

On balance, what Kempff has produced is a striking portrait of the Schubert one knows from the songs and from sentimental accounts of his role in the Schubertiads. Here is the dreamer playing for himself and letting a few congenial friends overhear.

The single disc of miscellaneous Schubert piano pieces offers some interesting things, particularly the Variations on a Theme of Anselm Hüttenbrenner, one of the composer's inner circle of friends. The theme, gravely lovely, is treated to rather gentle and unrigorous workings-out, but this is not the inconsequential piece that its rarity would suggest. Kempff is ideal in this sort of Schubert, never forcing effects and yet playing always with extraordinary shading of touch and tone. The Allegretto in C minor, which Schnabel admirers know so well; the three Klavierstücke, strangely vaporous pieces from Schubert's last year of life that Gieseking and half a dozen others have recorded without winning much popularity for them; and the A major Klavierstück round out a disc worth any Schubertian's time. It is too much to hope, but could Kempff be planning to go on now and give us all the fragments and miscellaneous piano pieces? Long life to him.

SCHUBERT: Sonatas for Piano: in B flat, Op. posth. D. 960; in A, Op. posth., D. 959; in C, D. 279; in C minor, Op. posth., D. 958; in G, Op. 78, D. 894 ("Fantasy"); in D, Op. 53, D. 850; in A minor, Op. posth. 143, D. 784; in A minor, Op. 42, D. 845; in C, D. 840, in A, Op. posth. 120, D. 664; in F minor, D. 625; in B, Op. posth. 147, D. 575; in E flat, Op. posth. 122, D. 568; in E minor, D. 566; in A flat, D. 557; in A minor, Op. posth. 164, D. 537; in E. D. 459; in E. D. 157. Wilhelm Kempff, piano, Deutsche Grammophon 2720 024, \$40.50 (nine discs).

SCHUBERT: Piano Works: Klavierstück in A, D. 604; Allegretto in C minor, D. 900; Thirteen Variations on a Theme of Anselm Hüttenbrenner, D. 576; Three Klavierstücke, D. 946. Wilhelm Kempff, piano. Deutsche Grammophon 2530 090, \$6.98.

#### Sills and Gedda star in an ideal Manon.

JULES MASSENET lived seventy years, worked steadily, wrote twenty-seven operas, and died rich. Long before 1912, when he laid down his pen, he knew that *Manon* had drawn out the best that was in him and that the 1884 setting of Prévost's story about a nymphet and her tormented nobleman—a plot that had already inspired Auber and was soon to engage Puccini—had permitted Massenet to touch the hem of immortality.

In his mature and affluent years the composer enjoyed tracing the fortunes of his brainchildren on the popularity charts of the day. *Manon* was always in front; by 1905 the Opéra-Comique had performed it 500 times. In case his spirit still keeps track (from that old rest house up in the sky) he must surely find it strange that the record companies chose to wrap up *Thais, Werther,* and sundry other works before putting a complete stereo *Manon* in the catalogue.

Still, here it is at last, every living note of it (and more, as we shall see), to strain the purse with a four-disc heft and to massage the ear and the heart with melody and passion. It is not only Massenet's masterpiece; it is a delicious and heartrending opera by anybody's standards. The music is fetching and secure, with only a few dull pages among hundreds of good ones. In this set the conductor's hand is deft, the singers are ideally cast (give or take a quibble or two in the supporting roles), the orchestra and chorus are all that one could ask, the technology is adequate, and the brochure luxurious. Do you need to know more?

Well, yes. If you live far from New York, you may care to learn that this recording takes its impulse from a 1968 production by the junior of New York's two big opera companies, the New York City Opera; and that some critics declared this production (with the same conductor, soprano, and Guillot we have here) to be the most satisfactory realization of *any* opera in New York since the war.

Beverly Sills has her critics-and her idolators. In the classical bel canto roles there are some who prefer Sutherland or Caballé; I don't agree, but listen respectfully to arguments about singing style. Yet one thing is mighty clear: Miss Sills, as a singing actress, manifests a skill far beyond the best efforts of the other ladies: indeed, a skill that is rare in the entire operatic world. And as Massenet's Manon she gives a musical characterizationon stage, and here on the record-which puts her beside Callas among the giants of her craft. Miss Sills, to be ungallant, is no chicken. Yet in Act I she creates with total conviction a wide-eyed schoolgirl, innocent yet possessed of enough guile to make sure she escapes the convent to which her guardians are sending her. In the apartment where she lives with Des Grieux she has already become the sensual woman, unpracticed but eagerly receptive-not only to Des Grieux's ardor but Guillot's moneyed lechery. Her gilded entrance in the Cours-la-Reine scene is all splendor and triumph on the surface, but Sills shows us that there is another Manon beneath, one insecure enough to doubt that she can keep a man's love; and for that reason she scorns Guillot's extravagant
by George Movshon

# Massenet's Masterpiece

swanking and runs off to Saint Sulpice to win back Des Grieux. Once she has him safe, cupidity shows through again, and she drives him to the gaming table, where disaster overtakes them both. At her death, alongside the road to Le Havre, she conveys some of Massenet's less inspired passages as poignantly as the music allows.

All of this Beverly Sills does with utter conviction and total consistency of character. But more: she weds it to a musical performance of breathtaking delicacy and assurance. The margins of my score are now defaced with superlatives, alongside all of Manon's set-piece solos: "Je suis encore tont étourdie," "Adieu, notre petite table" (delivered with the requisite half-breathed agony, and never permitted to build), the splashy Cours-la-Reine aria and Gavotte, the infinitely seductive Saint Sulpice aria "N'est-ce plus ma main," and the plunging hedonism of "A nous les amours et les roses" whereby Des Grieux is induced to gamble. You can pick out the occasional place where the Sills tone goes wiry, one or two infelicitous attacks, but they are so few and so unimportant in the entire context of this awesome achievement as to constitute Beckmesserism.

To check my own judgment I played the 1956 EMI mono set of *Manon* (now on Seraphim) in which the heroine, the well-remembered and loved Victoria de los Angeles, gives a fine performance in her secure and melodious fashion. It was for long the standard by which I judged; but it is no longer Manon to my ears—just a very fine singing job by a mature lady. Comparison with some of the great Manons of the past—Fanny Heldy, Ninon Vallin, Geraldine Farrar, and Galli-Curci—confirmed the stature of Miss Sills's achievement. True, some of these ladies delivered the French words with a deftness not to be asked of one unborn to the tongue though the Sills diction and pronunciation deserve very high marks indeed.

But enough. Mr. Gedda deserves his innings now, for his Des Grieux is surely as fine a conception of the role as the world offers today. He is ardent and gleaming in the Act 1 duet with Manon, tender and unfailingly human in the letter duet of Act II ("On l'appelle Manon") and his delivery of the two famous tenor arias Le Rêve and "Ah! fuyez, douce image" is superb, though 1 felt once or twice that he might well have benefited from a slightly more urgent pace.

It is luxurious casting to give the role of Lescaut to one of France's greatest living artists, Gérard Souzay; and of course Manon's grasping and amoral cousin gets an expert portrayal. Gabriel Bacquier, another renowned French singer, does the part of Comte des Grieux with uncommon skill; but printing the word "bass" after Bacquier's name doesn't turn him into one. He is a baritone, and lacks the richer sonorities the part needs.

Nico Castel does the lecher skillfully, though the role can take a more quirky and individual character. De Bretigny is secure in Michel Trempont's portrayal, and the three tiresome tarts no doubt do all that is expected of them.

Beneficent is a good word to describe Julius Rudel's



command of the score. The New York conductor knows how to get the very best out of this cast, and he has the key to this melodious score, shaping the climaxes most satisfactorily. There is occasionally a want of thrust or acceleration, in apparent deference to a singer's comfort, but over-all this is a satisfying reading that stands up well beside Monteux's classic 1956 realization.

The recording was made in England last summer, with the help of EMI's technicians. It is a little short of *presence*—that art so well understood by the Decca/London engineers—and the big scenes are a bit smeared by echo. Strangely enough, two of the *outdoor* scenes, Amiens and Cours-la-Reine, suffer most from this welter, creating a needless obstacle to the suspension of disbelief. In real life, you get almost no echo *en plein air*.

Nearly forgot to mention a bonus. On Side 8, after the end of the opera, you get Beverly Sills recording the *Fablian*, an alternate scene for Manon in place of the famous Gavotte. This very challenging piece was written six years after the opera was first staged, as a sort of party-piece for a favorite soprano of the day. Miss Sills has previously recorded this item, on Audio Treasury 2002. She does it, both times, with brilliance and élan.

MASSENET: Manon. Beverly Sills (s), Manon; Michele Raynaud (s), Pousette; Helia T'Hezan (s), Javotte; Patricia Kern (ms), Rosette; Nicolai Gedda (t), Des Grieux; Nico Castel (t), Guillot; Gérard Souzay (b), Lescaut; Michel Trempont (b), De Bretigny; Gabriel Bacquier (b), Comte des Grieux; Ambrosian Opera Chorus; New Philharmonia Orchestra, Julius Rudel, cond. ABC Audio Treasury 20007/4, \$23.92 (four discs).

# **classical**

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

BACH: Mass in B minor, S. 232. Elly Ameling, soprano; Yvonne Minton, mezzo; Helen Watts, alto; Werner Krenn, tenor; Tom Krause, baritone; Vienna Singakademie Chorus; Stuttgart Chamber Orchestra, Karl Münchinger, cond. London OSA 1287, \$11.96 (two discs).

Unlike the cantatas, passions, and oratorios, the B minor Mass is essentially a choral piece-of its twenty-seven numbers, only six are solo arias and three are duets; the remainder are for four-, five-, or six-part chorus or double chorus. Furthermore, Bach's choral writing is essentially instrumental in character-that is not to say unidiomatic, for he always bears in mind the capabilities and limitations of the human voice; but he obviously considers the chorus a "musical instrument" upon which he, the composer/conductor, plays just as he plays the organ or violin. I point out this fact because here is the fatal weakness 'of this recording: the Vienna Singakademie is simply incapable of performing cleanly and articulately the score's intricate polyphony and sometimes dense textures which emerge sounding massive, woolly, and ponderous. The group has been thoroughly rehearsed, and they sing with good intonation and as much precision as one could expect from so large a group; theirs is simply an unacceptable sound.

It's a great pity, too, because in nearly every other respect this is an exceptionally intelligent, energetic, and capable performance. We should expect no less from Münchinger who, with his Stuttgart Chamber Orchestra and practically these same soloists, has already given us absolutely first-rate readings of the *St. Matthew* Passion, *Christmas* Oratorio, *Easter* Oratorio, and the Magnificat—all with different choruses, of course.

Münchinger gets us off to a very good start here with a lively, energetic, and incisively articulated opening ritornello to the first Kyrie—London's rich, gutsy sound is impressive, too, although the large body of strings often causes even the orchestral music to sound opaque. Then the chorus enters with its superlegato and massive tone and interest begins to fade. Ameling and Minton are fine in the "Christe" and the violins, all playing in unison, are beautifully and distinctly articulated.

A little later on, Miss Minton has the stage to herself in the "Laudamus te," and it cannot be said the piece offers her no difficulties: she is not always squarely on pitch and the quick tempo has her gasping audibly here and there. The solo violin, recorded so closely that his sound is as big as the full orchestra in the previous number, also has his intonational difficulties. Ameling and Krenn are simply superb in the "Domine Deus": their conception and vocal qualities are in perfect accord throughout. The solo flute, however, is occasionally blurred by the thick, luscious string sound. An absolute highlight of the

entire performance, predictably, is Helen Watts's tremendously rich, expressive reading of the "Qui sedes," aided by a solo oboe player whose phrasing, articulation, and ornamentation are nearly equally impressive, though again often buried in the opaque string sound. This is followed by a "Quoniam" that can only be described as spectacular. Krause is balanced perfectly with a horn, two bassoons, and continuo (no upper strings!), and he sings with a beautiful tone and a freedom and flexibility unmatched by his peers in the competing versions. Once or twice, however, here and later in the "Et in Spiritum sanctum," this rhythmic flexibility gets out of control and causes him to arrive at a cadence considerably ahead of his colleagues. It's the kind of imperfection that would pass unnoticed in a live performance but is surprising in this context. The "Cum sancto spiritu" which follows without pause, though it is marked vivace, is in the same tempo as the "Quoniam"; with a smaller, more agile chorus (or slower tempo in the earlier number) a more satisfactory relationship would have been possible.

Münchinger does an effective job with the first Credo, a remarkable sevenvoice fugue based on the plainsong chant (five-part chorus plus two independent violin parts), by accentuating each statement of the subject and subduing all the other voices. Again in the "Crucifixus" Münchinger fastens on an outstanding detail, the thirteen-timesrepeated ground bass theme (get the symbolism!) and emphasizes it while subduing the rest. The Ameling/Watts duet, "Et in unum Dominum," is another highlight of the set; they sing Bach's later version in which a much shorter text is stretched (sometimes rather thinly) over all the original music.

The Sanctus is taken at a good tempo and it must be said that the effect is almost overwhelmingly magnificent-if only you could make out some detail in that massively complex block of sound. This number and the following fugal "Pleni sunt coeli" (the two might be considered a prelude and fugue) are undoubtedly the climax of the entire Mass and of this performance. Paradoxically, Münchinger gets his best choral performance (relatively speaking) in the following "Osanna," in which the texture increases to double chorus and full orchestra. The tempo is bracing and the choirs and orchestra manage to get a quite infectious bounce in their step. Also, the stereo separation between the two choirs is excellent and Münchinger

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So it all amounts to a splendid performance played on a totally unsatisfactory musical instrument, further compounded by an aggressive and forceful recording acoustic that too often hinders rather than enhances clarity. What about recommended alternate versions? Easy. The more I hear the smaller-scaled. original-instrument version by the Concentus Musicus (Telefunken) the more convinced I become that their eighteenthcentury sound is the best for eighteenthcentury music, and their performance is every bit as exciting and convincing as Münchinger's. A very close second choice is Karl Richter's tremendously intense reading (its few interpretive perversities notwithstanding) on Archive. If there remain a few old timers who favor the "old-guard" style of performance, needless to say they haven't agreed with much I've said above. For them the Klemperer version (Angel) was tailor-made. Klemperer approaches Bach with devotion and a great deal of intelligence; furthermore his all-star cast is rehearsed to perfection. I simply can't force myself to sit still long enough to listen to it. C.F.G.

**BEETHOVEN: Quartets for Strings, Op. 18 (complete).** Guarneri Quartet. RCA Red Seal VCS 6195, \$9.98 (three discs).

**BEETHOVEN:** Quartets for Strings: Op. 18 (complete). Juilliard Quartet. Columbia M3 30084, \$9.98 (three discs). **BEETHOVEN:** Quartets for Strings: No. 2, in G, Op. 18, No. 2; No. 16, in F, Op. 135. Flonzaley Quartet. Perennial 2003, \$6.00 (available from the Record Undertaker, P.O. Box 437, New York, N.Y. 10023).

The appearance of two complete recordings of Beethoven's Op. 18 quartets at roughly the same time is an unexpected and welcome occurrence under any circumstances; but when the recordings are by the Juilliard and Guarneri Quartets, generally considered to be the two finest American ensembles currently performing the standard quartet literature, it is an event indeed. These two groups provide the listener with particularly interesting comparisons, for they differ in almost every imaginable way. To begin with, the Juilliard has now been around for some twenty years, while the Guarneri is a relatively recent group. The Juilliard plays with a more straightforward approach to the scores, whereas the Guarneri tends to shape them in more obvious ways. And the Juilliard possesses a more neutral tone quality, while the Guarneri has a richer. sweeter sound, employing more vibrato.

It would be possible to list many such dichotomies. Yet curiously, what struck me most forcibly in listening to these new discs is how much more closely related the playing of the two quartets has become since the last time I had occasion to compare them. I think this is mainly the result of a "softening" of the Juilliard's playing, which seems to have less of the cutting edge that had been a hallmark of its style. In addition, the readings are more relaxed and intimate than before, but without any sacrifice in the quartet's well-known precision. For many, this change will undoubtedly represent a gain, particularly in the performance of these relatively simple works of the early Beethoven, but I must confess I miss the excitement and incredible dynamic thrust of, say, the old Op. 59 recordings. Perhaps this has something to do with personnel changes: these recordings were made after Earl Carlyss had replaced Isidore Cohen on second violin, although Raphael Hillyer, now departed, was still the violist. Or it may simply be a question of mellowing with age.

Be that as it may, we have here two first-rate groups of performances, and I would be hard put to make an over-all choice. I find, for example, the syncopations in the scherzo of the Op. 18, No. 6 more effectively communicated by the Juilliard; but I prefer the Guarneri version of the delicate, pianissimo fourth variation of the third movement of Op. 18, No. 5. And I had similar reactions throughout: whereas both performances were uniformly excellent, I leaned toward one or the other depending upon the specific movement.

Although I think I would stay with the Hungarian Quartet's revisions on Seraphim as my own personal preference for the Op. 18 group, 1 recommend both these new sets to everyone interested in this literature. It is heartening to know that this music, which holds such a special place for all devotees of chamber music, is currently in such good hands. I have pointed out previously in these pages that it is a literature which seems to attract excellent performers. That this attraction is by no means limited to the recent past is suggested by another new release, Perennial Records' reissue of performances by the Flonzaley Quartet, originally recorded in 1925-26, of Op. 18, No. 2 and Op. 135. The



The Guarneri String Quartet in action.

Flonzaley Quartet was founded in 1903 by the Swiss-American banker, Edward J. deCoppet, who provided the four members with incomes on the understanding that they would devote themselves exclusively to developing their individual techniques and the ensemble technique of their quartet. Thus they were granted an ideal situation, with no teaching duties and only limited concert obligations. The present performances, which were recorded shortly before the quartet was dissolved, clearly indicate the fruits of this unique arrangement: the players have an extraordinary sensitivity to one another and play with a beautifully matched ensemble tone. There are, to be sure, certain problems, many of which unquestionably result from the quality of the original recordings. (The transfers, incidentally, are on the whole quite good, although some segments of Op. 135 are rather scratchy.) And although I am impressed by how "modern" their readings seem (for example, the tempos are remarkably constant), there are certain stylistic idiosyncrasies that seem dated. Particularly noticeable is the excessive portamento which, although not applied indiscriminately, does tend to turn up at "expressive" moments. And there is also somewhat more vibrato than we are accustomed to today. Most irritating, however, is the insertion of an extra measure just before the recapitulation of the first movement of Op. 18, No. 2, thus destroying a very important overlap with which Beethoven clearly intended to hide the formal seams of the movement. Still, the total effect is impressive, and the disc provides a fascinating document for those interested in the history of musical performance.

Finally, to return to the Guarneri's Op. 18 set, I should point out that this brings to completion their integral recording of the Beethoven quartets, which are available both in three separate volumes (one each for the early, middle, and late quartets) and in a one-volume version (RCA VCS 100, eleven discs). R.P.M.

BORODIN: Prince Igor. Tatiana Tugarinova (s), Yaroslavna; Yelena Obraztsova (ms), Konchakovna; Vladimir Atlantov (t), Vladimir; Aleksander Lattev (t), Ovlur; Valery Yaroslavtstev (t), Skula; Ivan Petrov (bs), Prince Igor; Aleksander Vedernikov (bs), Khan Konchak; Artur Eizen (bs), Galitsky; Konstantin Baskov (bs), Yeroshka; Chorus and Orchestra of the Bolshoi Theater, Mark Ermler, cond. Melodiya/Angel SRDL 4116, \$23.92 (four discs).

Here, in lieu of the Bolshoi itself, is this company's new recording of *Prince Igor*. Borodin's opera, together with four other staples of the Russian repertoire, was to have been performed at New York's Lincoln Center this spring, but adverse political conditions led to a cancellation of the Bolshoi visit—a piece of bad luck for everyone except the JDL. Well, at least

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#### His operas.

The Maid of Orleans-Highlights. Until this new release, no recording was to be had of Tchaikovsky's sixth opera. Irina Arkhipova sings the title, with the Moscow Radio Chorus & Orchestra, conducted by Gennady Rozhdestvensky. Hers will be a difficult Joan to follow

Eugene Onegin. Of this new recording of the Bolshoi Opera's production, Opera News said, 'Now we have an Onegin that fully reveals the stature of Tchaikovsky's poetic composition." Rostropovich's debut as conductor was "at the heart of this sensitive, probing performance."

The Queen of Spades. Again, the Bolshoi Theater Chorus and Orchestra, with Valentina Levko and Irina Arkhipova. The only recording of this opera, it is complete in a 4-record boxed set. Or in highlights on 1 record. Martin Mayer, in Esquire: "A masterpiece of wholly Verdian quality.'

#### His concertos.

Violin Concerto. Take your choice of father or son-David or Igor Oistrakh. Choose Igor, and you gain the bonus of his father's conducting of the Moscow Philharmonic. Choose David (with Rozhdestvensky conducting the same orchestra) and you share his 60th birthday celebration.



Two of his Piano Concertos. "His playing breathed lightness, freshness, and youth." The pianist was 16-year-old Grigory Sokolov. The author, Emil Gilels, chairman of the jury that awarded Sokolov first prize in the 1966 Tchaikovsky Competition. His recording of

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we have the records, even if the performance leaves a good deal to be desired.

More than most Russian operas, Prince Igor requires voices of exceptional quality. There is little plot, the characters (barring the two bass roles) are undeveloped, while all the pageantry, exotic oriental coloring, dancing girls, etc. further contribute to the concert-in-costume flavor. Take the Polovisian act, for instance: four first-rate arias, a nice love duet, and one of the most popular ballet sequences in all opera-but after the curtain comes down one realizes that none of this pleasant material has really served any dramatic function whatsoever. So if six opulent, well-schooled voices are not on hand, you might just as well leave Igor alone.

Melodiya's cast rarely measures up to the optimum, although there is only one out-and-out disaster. Tatiana Tugarinova's Yaroslavna stands out as the weakest ever recorded-and that's saying quite a lot considering that her three rivals on MK. Angel, and Richmond are uniformly dreadful. One has learned to put up with shrill, wobbly Russian sopranos over the years, but Tugarinova offers very little to compensate for such piercingly unattractive tone: Yaroslavna's two lengthy laments seem endless under these conditions. Yelena Obraztsova, on the other hand, brings a solid, evenly focused mezzo to Konchakovna's music. The quality may not be as lush or seductive as one might wish and the melismatic orientalisms of her aria do not always fall precisely into place; but she is decidedly one of the performance's assets.

Vladimir Atlantov made a generally positive impression on Melodiya's recent Onegin recording as Lensky. Here his one opportunity is Vladimir's love song in Act II, delivered with plenty of thrust and metallic luster; it's not especially stylish, though, and he has a bad habit of singing just under the note. Ivan Petrov abandons his customary role of Khan Konchak to sing Igor on this recording-a step in the right direction since the comparatively stolid prince suits his forthright manner far more than the subtle Khan; the high baritone tessitura presents few problems for his lightish basso cantante. Even at that, much of the plush ripeness that once characterized his voice has departed and there are now signs of unsteadiness.

Galitsky and Konchak are often sung by the same artist, a practice justified only if a virtuoso interpreter such as Christoff is on hand. Melodiya wisely uses two well-differentiated basses and they are excellent. Eizen limns the highliving Galitsky with raucous, bluff humor and Vedernikov's black tone strikes just the right note of menace as the despotic Khan. The Bolshoi chorus is predictably superb, but Mark Ermler obtains a strictly routine performance from the orchestra. Part of the problem may be due to the engineering, which conjures up the bad old days of Russian recording: the sonics have little body or impact and the basic ambience is shallow, shrill, and overresonant.

Like Richmond's recent reissue of Belgrade's Prince Igor, the opera is given absolutely complete including the often omitted Act III. Richmond offers better sound and a lower price, but the singing there does not even come up to the variable level set by the Bolshoi. Angel's severely abridged lgor of a few years back has only Christoff to recommend it, while the ancient MK edition is virtually impossible to locate. This Russian recording from the Forties would still be my choice, faded sonics and all, simply for the high-class singing of Reizen (Konchak), Lemeshev (Vladimir), Ivanov (Igor), and Borisenko (Konchakovna). Otherwise, if a complete recording of Prince Igor is wanted, the new Melodiya entry will have to suffice, warts and all. P.G.D.

BUSNOIS: Chansons: Amours nous traicte ... Je m'en vois; A une dame; Bel acueil; A que ville; Terrible dame; Maintes femmes; Seule apart moy; Acordes moy. Diana Tramontini, soprano; William Zukof, countertenor; Alan Titus, baritone; Kenneth Wollitz, recorders and krummhorn; Lucy Cross, Iute; Richard Taruskin, viols; Cynthia Schwan, recorder; Joshua Rifkin, dir. Nonesuch H 71247, \$2.98.

Hats off to Joshua Rifkin, talented and versatile young musician and musicologist, who has produced this enchanting bird's-eye view of chansons by Antoine Busnois, a composer who died in the same year that Columbus discovered America. Busnois usually appears in histories—and in my mind at least—as half of a tandem, Busnois and Ockeghem, in which the gloomy Ockeghem overshadows his more congenial contemporary. With this fine recording Busnois finally gains an independent profile, and a handsome one it is, too.



"Thank you J. Rifkin"-from A. Busnois.

A member of the early Renaissance, pre-Josquin generation, Busnois shows both his conservative medieval inheritance and an experimental approach toward musical techniques, foreshadowing developments of the sixteenth century. The simultaneous use of separate texts and melodies in *Amours nous* traicte is a device which harks back a hundred years, as is the surprising appearance of a hocket in *Acordes moy*. The intricate construction of *Maintes* femmes also hints at fourteenth-century thinking.

Busnois' favorite texture is usually comprised of three voices: two luxurious serpentine melodic parts and a supplementary instrumental voice which hops about filling out the harmony. Occasionally, in Acordes moy for example, he expands to four voices, widening the range and trying out contrasting registers for effect. Terrible dame exploits this last device to create a spirited dialogue between the suitor and his heartless lady. Like Ockeghem, Busnois is sometimes partial to the newly popular lower registers-Bel acueil pairs a baritone and a bass viol most felicitously-but without the dark muddled sound of his fellow composer. Imitation, another hallmark of the generation to come, makes an appearance here, notably in the Josquinesque pairs of Acordes moy, but again as a tasty side dish rather than a substantial main course. The stylized emotion of courtly love also gives way to a more personal statement in the poignant expressivity of Seule apart moy, an exquisitely modeled canon of elongated supple lines and contained passions.

The performers, a group of New Yorkers assembled by Rifkin, are uniformly good, but special mention should go to the spring sky-blue countertenor of William Zukof. The delicate phrasing and unobstrusive elegance of the instrumentalists in the extended rondeaus A que ville and Seule apart moy are also extraordinary, and make this disc a must for connoisseurs. The recording itself is satisfactory although I found that some adjustment to balance voices (which were too loud, especially the soprano) and instruments enhanced the final effect. Otherwise, everything is exemplary: the notes are literate and informative; the translations downright beautiful. Both Busnois and his twentieth-century audiences owe Nonesuch and Mr. Rifkin a vote of thanks for this delightful recording. S.T.S.

DVORAK: Sextet for Strings, in A, Op. 48; Quintet for Strings, in A minor, Op. 1. Members of the Berlin Philharmonic Octet. Philips 839 754, \$5.98. DVORAK: Quintet for Strings, in G, Op.

77. SPOHR: Quintet for Piano and Winds, in C minor On 52 Walter Panhoffer

in C minor, Op. 52. Walter Panhoffer, piano; Members of the Vienna Octet. London CS 6673, \$5.98.

Chamber works poured from Dvořák as freely as songs from Schubert, and furIN THE ZANY world of records, "new" (like "complete") is a singularly elastic term. The present Columbia/Ormandy 1812 is advertised-and a special sticker on the disc jacket cover italicizes the claim-as an "exciting new version." But if "new" means within the last couple of years, this can't be: every discophile knows that the Philadelphians' last recordings for Columbia (before their current RCA series) were made on May 19, 1968. Maybe new in this case means within the last decade-but again the term is inapplicable. It's general knowledge-and Columbia has not officially denied itthat the present orchestral performance was first released on MS 6073 in the fall of 1959 and presumably was recorded in the spring of that year. So, what's new?

Well, like the curate's egg, parts of this 1812 are indeed fresh. What Columbia has done is to re-edit its twelve-year-old Philadelphian 1812 with substitutions and additions. For the opening two pages of the score, the Mormon Tabernacle Choir sings (in English) the original string parts of the Russian hymn, God, Preserve Thy People, apparently with an organ supplying the woodwind chords toward the end of the hymn. Then for the last twenty pages or so, the parts for band, cannon, and bells are overdubbed by, respectively, a military academy band, "authentic" cannon, and "Russian Church Bells"—the firearms obtained from 20th Century-Fox Studios, the bells of unspecified provenance.

Is there anything novel or "wrong" in these procedures? It's a moot question. Comparable audio revamping is not entirely uncommon, even in so-called classical music, and of course the reissuing of older recordings—often without calling attention to their age—is a regular practice nowadays. But with the present-day concern for consumer protection, such practices certainly provide persuasive evidence for the need of a Truth in (Sonic) Packaging law.

As a matter of fact, though, in this case the consumer is more bamboozled than actually gypped. The 1959 orchestral sonorities still are impressively "big," if considerably heavier and thicker than generally preferred nowadays. The choral, band, and sound-effects updatings are undoubtedly expansive and thunderous enough to satisfy a mass public's insatiable appetite for "spectacular" stereo. But for more discriminating tastes at least, what was a heavy-handed, stilted, dramatically unconvincing reading back in 1959 remains just that, new sonic costuming notwithstanding. And while there is no audio updating of the overside 1961 Serenade for Strings, a simi-

# Ormandy Declares War (On Himself)

by R. D. Darrell

lar interpretative heavy-handedness makes the sumptuously rich Philadelphian strings sound pretentiously pompous. Moreover, this version (like the earlier mono one it replaced) is unashamedly, if unadmittedly. brutally cut. Ormandy deletes 119 of the first movement's 293 bars, 208 of the finale's 449. So, Caveat Auditor!

Still smarting from the adverse critical comparisons of its first (1968) Philadelphia recordings with those from Columbia up to that time, RCA (which has since found better solutions to most of the technical problems involved) has naturally exulted in the chance to provide a demonstration of what it claims, with some justification, to be the "only truly new Philadelphia 1812 Overture in over a decade." Recorded last November in the Town Hall (rather than the Academy of Music), this version also is embellished with choral singing-not only in the introductory hymn but also in its return near the end of the work (but not, to my regret, at the folkish passages, on pp. 44f. and 64f. of the Eulenberg miniature score, which were effectively sung by children in the 1968 Buketoff version for RCA). And of course there are the now familiar military band, bell, and cannon augmentations of the climactic finale. Here, electronically simulated cannon shots admittedly are used (the kind of bells used is not stated), but where sonic "authenticity" is concerned there's little significant difference between the "real" thing and its electronic facsimile. What's much more important is that in this version the recorded sonics (orchestral and other) are far more luminous, airy, refined, vivid, and indeed "natural."

In an RCA press release Ormandy is quoted as saying that "On this new RCA recording, we have the most natural sound to come out of Philadelphia." In an advertisement his testimonial reads "This is the best sound the Philadelphia has ever received in a recording." To more objective ears, such superlatives/absolutes claim too much: fine as the recording is, it still falls short of ideal-as, for example, in the loss of some delicate pianissimo percussion details. And, more importantly to nonaudiophile music lovers, the genuine technical progress represented here is not matched by any measurable interpretative improvements. Ormandy's reading still lacks, to my taste, vivacity, grace, and infectious gusto. And I find the same deficiencies in the overside Beethoven Battle Symphony. Neither of these frank showpieces warrants being taken as grimly seriously as they are here-by me, perhaps, as well as by Ormandy and both his former and present recording companies.

TCHAIKOVSKY: 1812 Overture, Op. 49; Serenade for String Orchestra, in C, Op. 48. Mormon Tabernacle Choir; Valley Forge Military Academy Band; Cannon; Russian Church Bells (in the Overture); Philadelphia Orchestra, Eugene Ormandy, cond. Columbia M 30447, \$5.98.

TCHAIKOVSKY: 1812 Overture, Op. 49. BEETHOVEN: Wellington's Victory, Op. 91. Temple University Choirs; Philadelphia Brass Bands; Bells (in the Overture); Electronic Cannon; Philadelphia Orchestra, Eugene Ormandy, cond. RCA Red Seal LSC 3204, \$5.98. Tape: RS 1180, \$6.95; RK 1180, \$6.95.

thermore, they provide an index to the development of his musical thought. The three pieces considered here, which span a seventeen-year period, are a case in point. The Op. 1 quintet, with two violas, composed in 1861 when Dvořák was nineteen, finds him a very conscientious disciple of classicism-if we may stretch the term to include both Mozart and Schubert. The opening movement, with no great degree of melodic attractiveness. nevertheless manages to convey a sense of purposefulness and confidence because the scoring is well worked out and everybody is kept honorably busy, involved in a goodly amount of interaction; the viola song which leads off the second movement shows Dvořák aware of instrumental color right from the start-creditable, even though this particular movement. long-limbed in melody line, is also longwinded. The finale is notably varied in texture-one of its most attractive features, as a matter of fact-and there is an almost Brahmsian quality in its inner tensions and its atmosphere of strain: the instruments seem to be pushed almost beyond the limits of their capacities. But the movement works, and creates a sense of conviction.

Leaping chronologically over the quintet on the London disc, which is next in line among these three works, we come to the sextet of 1878, in which nationalism has grown to full force, though without the sacrifice of classical affiliations. This is by far the most fun of the three pieces, and it is easy to understand why Joseph Joachim liked it so much that he

introduced it to Berlin audiences in 1879; it was the first chamber work of Dvořák's to be performed outside his own country. It was also the first in which he made use of two traditional folk elements, the dumka (a Ukrainian folksong alternating between passages of tender contemplation and fiery explosiveness) and the furiant, a Czech dance. Though there is quite a bit of sequential side-stepping in the first movement, the motivic development keeps things fairly tight-knit; the finale presents a grave and lovely viola theme that undergoes an absolutely classical set of variations. The Berlin Octet gives robust and well-shaped performances of both works, and keeps abreast of the big-boned, Brahmsian sonorities.

We go backward in time to the Op. 77 Quintet, on the London disc, which was composed in 1875 as Op. 18 (it was the Berlin publisher Simrock who issued it thirteen years later as Op. 77 over the composer's objections). Dvořák nationalism is less overt than in the sextet, but a bumptious Czech dance (scherzo) shows the direction in which he was moving. The quintet was written for a competition (it won), and whether the composer was setting himself some special. challenge by including a double bass is an interesting question. It doesn't blend very well, and it doesn't contribute anything characteristic except some very low vibrations. The first movement, full of short thematic bursts, fails to sustain continuity, but this we can afford to ignore, as did the judges of the competition.





CIRCLE 31 ON READER-SERVICE CARD

Ludwig Spohr wrote rarely for the piano (it is no accident that this quintet is the only work with piano to be found in the current catalogue), and it comes as a surprise to find the keyboard writing so idiomatic, so free-flowing-even, in the last movement, virtuosic. The piece as a whole is easy in spirit, amiable, and, as they say about politicians these days, "low-profiled." Its exceptional grace and good humor, in addition to its razzledazzle finale, ought to win friends. No small credit to pianist Walter Panhoffer, who keeps the flow and pulse moving with some very clear-fingered pianism. The Vienna Octet members are a bit roughshod in the Dvořák (unisons aren't always exactly unisons), but in general they make a good case for both works. S.F.

HANDEL: Israel in Egypt. Heather Harper, soprano; Paul Esswood, countertenor; Alexander Young, tenor; Leeds Festival Chorus; English Chamber Orchestra, Charles Mackerras, cond. Deutsche Grammophon 2533 057, \$13.96 (two discs).

Israel in Egypt has no plot and no dramatic characters; juxtaposed excerpts from Exodus and the Psalms serve as text for the choruses, which outnumber the arias and duets by almost ten to one. The oratorio was a complete failure at its first performance in 1739. This large work, unique in the Handelian catalogue, was never really finished; it is the only oratorio with two instead of three "acts," and it is the most heavily padded of all of Handel's major works. Almost half of the pieces in Israel are borrowed, some of them in toto, Handel helping himself from Stradella, Kerll, Erba, Urio, his own Chandos Anthems, even from early works composed in Italy. A man of uncompromising integrity while in the act of creation, but of ruthless and even destructive pragmatism when switching to the role of impresario, Handel maimed the oratorio within a week after the disastrous reception. He not only cut the score but laced it with Italian songs! This last remedy gives us the clue to the reason for its initial failure, which of course applies in our own case too; such a conglomeration of weighty choral numbers, barely relieved by a few arias and duets, produces a cumulative effect of fatigue, of saturation. Yet despite its weakness as an oratorio, Israel in Egypt is rich in great music, for it contains some of Handel's most tremendous choruses. For a concert performance, liberal cuts might well be made (most of the solos and duets are expendable) and a few instrumental numbers inserted to separate the groups of choruses. But a complete recording is welcome because at home one can listen to it in installments.

Handel gets underway slowly; there is no overture, only a six-measure recitative to introduce the first big chorus, and most of the borrowings are in the first half of the work. Let us immediately dispose of the issue raised by the borrowings. In the eighteenth century this was

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not a question of plagiarism-the sainted Bach borrowed as much if not more than Handel. When a theme, a passage, or even a whole composition suited the occasion in mood and feeling, it was taken over quite openly. It often required far more work to adjust a borrowing than to write a new piece, and posterity has had difficulty in understanding why these great masters, whose invention was inexhaustible, spent so much energy and ingenuity recomposing "used" material. But the age believed implicity in the power of affective expression, and if an emi-nently suitable "affect" from any source presented itself as a flash from the composer's memory, he instantly annexed

it. It was the nineteenth century, with its insistence on individuality and originality, that saw a nonexistent moral issue in this age-old method of composition that was the norm in earlier centuries. Handel's musical transplant surgery is so amazingly inventive in most instances that a comparison of the original with the adjusted composition could serve as a wonderful treatise on the art of composition.

Then in the second half of the oratorio, Handel rises to the summit of his creative imagination and hurls at us the mightiest eight-part anthems, supported by an unusually large orchestra consisting of strings, flutes, oboes, bassoons,

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trumpets, trombones, timpani, organ, and harpsichord. It is amazing to see how comprehensive was his knowledge of the choral literature. These choruses, surely the acme of choral composition, testify to his acquaintance not only with the present, and with the immediate past represented by Carissimi or Purcell, but also with the German cantor's art and with the vocal polyphony of the sixteenth century. Mozart, who first heard *Israel* when he visited London as a boy, must have retained lasting impressions of this work, for one can follow them in the C minor Mass and in the Requiem.

Deutsche Grammophon had the good sense to record the oratorio not only in the original language but with an all-British crew, for judging by other Handel recordings, a German choir would have sung Israel in the German cantata tradition. The work is prefaced with an overture—a good move, though perhaps one of the fine overtures to forgotten operas would have been better than the familiar one to Solomon. The soloists are all good, but they have little to do, for the protagonist is the chorus. The Leeds Festival Chorus, steady, always on pitch, and expressive, deserves all the encomiums we can muster, and the English Chamber Orchestra functions admirably. Charles Mackerras, the conductor, knows and understands this style, and there is not a single instance of a lapse from inpeccable taste. There are no asthmatic ritards, not one Luftpause, the embellishments are few, the rhythm solid, and the dynamics well proportioned. The harmony is never missing because the continuo (organ or harpsichord or both) is used intelligently. The always difficult task of recording a mixed choir was here compounded because in Israel Handel wrote in his most sonorous style: widely spaced eight-part settings. Few are the recordings in which choral euphony, particularly choral dynamics, are reproduced with as much fidelity as instrumental music. Somehow, when a good-sized chorus unloads a genuine forte, there is usually distortion, or an unpleasant shrillness, or again a marked decline in timbre and intensity as the monitor interferes to avoid the expected distortion. That good and natural choral sound can be achieved has been demonstrated, but complete success is rare. Even in this excellent recording there are few spots where the chorus sounds dense rather than euphonious, though most of the time the sound is admirably clear.

Perhaps DGG, having found the right formula, will proceed to replace the old recordings of *Belshazzar*, *Saul*, *Judas Maccabaeus*, and others by new ones employing this fine group—and also the same engineers. P.H.L.

HOLST: The Planets, Op. 32. John Alldis Choir; London Philharmonic Orchestra, Bernard Haitink, cond. Philips 6500 072, \$5.98.

HOLST: The Planets, Op. 32. New England Conservatory Chorus; Boston Symphony Orchestra, William Stein

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One doesn't have to be a chauvinist to believe that certain music is best interpreted only by compatriots of the composer. Conductorial skill alone hasn't been enough in the past where this popular Holst suite is concerned-as demonstrated by the failure of Stokowski, Von Karajan, and (most recently) Bernard Herrmann to match the suitability of so thoroughly "British" readings as those by the composer himself (long ago for Columbia) and Sir Adrian Boult for Angel. The latter still remains the preferred version among Holst aficionados, but for the first time, in this music at least, the British-is-Best principle has been doubly challenged.

One challenger is a Dutchman, Bernard Haitink, who has been shrewd enough to make use of an English rather

than a Dutch orchestra and to study carefully (I'd be willing to bet) Boult's approach. His is no slavish imitation, of course, but it avoids the idiomatic errors of other "foreigners." And if Haitink is not quite as heart-twistingly moving in Venus or as ruddily roast-beefy in the big Jupiter tune, he is still very good interpretatively, while in other respects -rhythmic crispness, lucidity of innervoice details, and recording transparency -his is an even better recorded performance. Moreover, it has some special documentary interest as the first recording to use a revised score published in 1969 which embodies a number of Holst's later changes in the suggested dynamics as well as at least one "vital wrong-note correction." Actually, however, there's little if any readily apparent difference, so this feature is not likely to be as important to home listeners as it may be to musicologists.

The other challenger is a German-

## "The Greatest Orchestra in the World" by Robert C. Marsh

STANDARD PUBLIC RELATIONS and fund-raising techniques among the major orchestras today produce the conflicting claims that this group or that is, veritably, the world's greatest orchestra. For many professional observers of American musical life, the effect has now reached the point where one can only be embarrassed by the self-defeating naiveté of the process. Purely as a matter of logic, it is difficult to imagine an orchestra so trained that it could play instrumental music of all styles and periods with the same degree of skill.

The Cleveland Orchestra under the Szell regime was singularly adept in reminding one of its merits without resorting to a "world's greatest" formula. And in one respect it clearly was the world's greatest, for Szell's insistence that the ensemble tradition must be based on the principles of fine chamber music produced an orchestra that (under the conductor's comprehensive view) listened and responded to itself in a manner quite unequaled anywhere else. If that sounds like an extreme statement, I will defend it as a connoisseur of orchestral rehearsals who has heard nearly every orchestra of great reputation at work in preparatory sessions and can attest that Cleveland rehearsals consistently revealed refinements of self-awareness in the ensemble that seemingly had no counterpart elsewhere.

And if this is not everything it takes to make a group the greatest orchestra in the world, it is the key to Haydn and Mozart performances of superlative quality. A colleague, in fact, has called Szell and the Clevelanders the greatest Haydn-Mozart orchestra in the world, and I agree.

But although Szell and his players offered a great deal of this literature, they recorded only a relatively small sample of it especially in stereo. This is a tragic loss for those who look upon the phonograph as a means to document great achievements in the realization of music in performance, so every disc becomes doubly valuable.

The present record offers the first two of the Salomon symphonies in order of composition. (Nos. 93 and 94 are, in fact, works from the following year.) The notes and texts are from H.C. Robbins Landon, and the recorded sound brought to my living room the most miraculous evocation of mornings in Severance Hall when I heard this sort of playing as part of a small audience of staff and friends of the orchestra.

As for the performances, they are pure Szell. For anyone who knows what that means, nothing more need be said.

HAYDN: Symphonies: No. 95, in C minor; No. 96, in D ("Miracle"). Cleveland Orchestra, George Szell, cond. Columbia M 30366, \$5.98.

born and trained American conductor who has had the independence to ignore Holst-Boult-British traditions entirely and to direct his Boston players and singers as if they were tackling a brand-new score. The results will be startling to confirmed Holstians, but they well may attract new partisans for The Planets. Most of the faster movements and passages are taken much faster than usual by Steinberg (his 6:28 Mars is almost two minutes faster than Haitink's!), but they are most thrillingly exciting as readings as well as more spectacularly bravura as performances than I've ever heard before. Not surprisingly, however, the slower, more poetically atmospheric movements and passages fare less well interpretatively than in either the Haitink or Boult versions; yet even here the orchestral timbres and sonorities (and enchanting vocalism in Neptune) have a magic all their own-credit for which must also be shared with the engineers responsible for the truly superb stereoism. These sonics are at once warmer and more spacious, as well as more vivid, than those in the fine but apparently more distantly miked Philips recording.

No Holstian should discard his prized Boult/Angel version, but neither should he fail to investigate what Haitink and Steinberg do with the work. At the very least both new recordings, each in its own way, will enable him to hear more of, and perhaps also more in, *The Planets* than he's ever heard before. R.D.D.

IVES: "American Scenes — American Poets." The Things Our Fathers Loved; Walking; Autumn; Maple Leaves; At the River; Circus Band; The Side Show; Charlie Rutlage; Tom Sails Away; They Are There; In Flanders Field; Two Little Flowers; The Greatest Man; There Is a Lane; The Last Reader; The Children's Hour; Walt Whitman; The Light That Is Felt; Serenity; Thoreau; Duty; Afterglow; The Housatonic at Stockbridge; Grantchester. Evelyn Lear, soprano; Thomas Stewart, baritone; Alan Mandel, piano. Columbia M 30229, \$5.98.

Virgil Thomson, talking not long ago about Ives's prodigious but carelessly crafted output, thought it a shame that Ives went through life writing pieces and "throwing them over the back of his chair -you have to be Rembrandt to splash the paint on that way." One can easily agree, faced with the sizable sampling of his songs contained on this record, that the composer cared more for inspiration than perspiration, without losing respect for his best work. Anyone who looks through the "114 Songs" is likely to be by turns beguiled and annoyed at the interweaving of high artistry and outright fiasco, and the Lear/ Stewart disc accurately reflects that reality.

But this is an exceptionally valuable Ives song sampler, and in some ways the singers are ideal: they are Americans, they are intelligent musicians who possess first-quality voices, and they seem

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willing to abandon themselves to Ives's peculiar, patch-quilt aesthetic. They lovingly embrace its schoolboy enthusiasms, its embarrassing sentimentality, its oldstyle flag-waving, and its nostalgiaabove all, its nostalgia. Stewart is just right for the quintessentially Ivesian song, The Things Our Fathers Loved, for instance. His failures are oftener those of the composer than his own, as in Edgar A. Guestish numbers such as The Greatest Man or jingoist ones such as They Are There. But there are ways to minimize badness, not often discovered: Stewart's attempt at gruff pathos does not work for In Flanders Field, where he parodies the doughboy bravado rather than trying to empathize with it. Lear's success with the difficult Tom Sails Away is noteworthy, and she is good, too, in the seven-measure Duty, one of those epigrams that Ives liked so much (Vita and Ann Street are others).

She finds The Children's Hour heavy going, both vocally and interpretively, partly because it is an indigestible nougat, all too faithful to Longfellow. Lear takes the song a tone higher than the original, presumably to avoid the low Ds, though in Grantchester she opts for the original key, which has not only the low D but a C as well. Except for The Children's Hour, the songs are in their proper keys. Like Stewart to some extent, Lear sometimes adopts an art-song approach to Ives that cannot be defended. For her, "blend and blur" becomes "blend and blaar"; she encourages people to "take my hahnd." Such mannerisms, founded on every singer's preference for vowels, surely should be dropped for Ives.

There are suggestions of haste in the album. Stewart phrases awkwardly in *At* the River, possibly betrayed by Ives's failure to notate exactly at "flowing by the throne of God." And there is one clear misreading of the text by Stewart, when in *The Greatest Man* he reads "though" as "thought."

The album lacks texts of the songs, which is unfortunate in view of both singers' periodic failure to convey the words clearly. One cannot discover from the jacket, either, whose poem is used for any specific song, though not a serious complaint in *The Children's Hour*, perhaps. But who among us would know the author of *Serenity* (Whittier), *Afterglow*. (James Fenimore Cooper), or *The Last Reader* (Holmes)? Strangest of all, the final song on the "American Poets" side is *Grantchester* by Rupert Brooke, its inclusion explained on the grounds that Lear and Stewart felt "strongly drawn" to the work.

Mandel, the pianist, is both sympathetic to Ives and an expert in the idiom. His success can be measured by the fact that he almost manages to evoke the distant mists in *The Housatonic at Stockbridge*, which Ives suggested so delicately with muted upper-string sounds in the orchestral original. D.J.H.

LOEWE: Songs and Ballads: Der getreue

Eckart; Wanderers Nachtlied; Im Vorübergehen; Canzonette; Frühzeitiger Frühling; Ich denke dein; Freibeuter; Der Zauberlehrling; Der Totentanz; Gutmann und Gutweib; Turmwächter Lynceus zu den Füssen der Helena; Lynceus der Türmer; Wenn der Blüten Frühlingsregen; Die wandelnde Glocke; Gottes ist der Orient. Dietrich Fischer-Dieskau, baritone; Jörg Demus, piano. Deutsche Grammophon 2530 052, \$6.98.

Fischer-Dieskau's second Loewe program for DGG is a resounding success, not only for the baritone but for this neglected Lieder composer as well. Most of these songs (all to Goethe texts) have never been recorded before, although at least six poems will ring a bell of recognition because of the more familiar settings by Schubert, Schumann, and Wolf. Loewe needs no apologies though -his Gutmann und Gutweib expresses the point of the poem far more succinctly than Wolf's overblown version, while the impish humor of Die wandelnde Glocke, the attractively melodic Lynceus der Türmer, and the noble Gottes ist der Orient outstrip Schumann by some distance. The two poems also set by Schubert result in very different but not necessarily inferior songs: Loewe turns Wandrers Nachtlied into a sensuous, yearning statement, and his Ich denke dein (Nähe des Geliebtens) is, unlike Schubert's version, a through-composed largescale setting with a considerable amount of imaginative word painting.

Among the ballads, Der getreue Eckart is well known and one of the best, and Der Totentanz, with the dancing skeletons and howling wind graphically illustrated in the piano part, is in the delicious patter style of Hochzeitslied. Oddly enough, Der Zauberlehrling makes a very tame effect -the tale of the sorcerer's apprentice should have been a natural for Loewe's narrative gift but the musical invention is too thin to sustain interest. The remaining six songs are short but full of characteristic touches-the mirrorpoetic construction of Freibeuter, for instance, is cleverly suggested by the juxtaposition of rising and falling vocal lines against falling and rising accompanimental figures.

Except in Der Zauberlehrling where he is rather cavalier about the pitches, Fischer-Dieskau does a brilliant job: all the songs lie well for his voice and of course the interpretations are as lively and sensitively nuanced as one would expect. Demus' deftly played accompaniments couldn't be better and DGG's neatly balanced, mellow engineering is ideal. The only flaw with the production—and it's a serious one considering the unfamiliarity of the material—is the lack of English translations. P.G.D.

MASSENET: Manon. Beverly Sills, soprano; Nicolai Gedda, tenor; Gérard Souzay, baritone; Gabriel Bacquier, baritone; Ambrosian Opera Chorus; New

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CIRCLE 27 ON READER-SERVICE CARD

85

Philharmonia Orchestra, Julius Rudel, cond. For a feature review of this recording, see page 72.

MAYR: Medea in Corinto. Marisa Galvany (s), Medea; Joan Patenaude (s), Creusa; Molly Stark (s), Ismene; Allen Cathcart (t), Giasone; Robert White (t), Egeo; Thomas Palmer (b), Creonte; Chorus and Orchestra of Clarion Concerts, Newell Jenkins, cond. Cardinal VCS 10087/9, \$17.94 (three discs).

One cannot read an account of Italian opera from the first third of the nineteenth century without coming across the name of Simon Mayr (1763-1845). Every contemporary journal, correspondence, and memoir mentions him as the gran maestro of the age, and every history of music states that from Rossini to Verdi all composers were indebted to him. "No one surpassed him in his life," reads the epitaph on his grave. His reputation must have been tremendous, for his works were sung not only all over Italy, but from Vienna to Dresden. and from London to St. Petersburg. Literary men, among them Goethe and Stendhal, followed his career with interest, a dozen musical and learned societies elected him to honorary membership, the city of Bergamo caused a medal to be struck in his honor on his seventyeighth birthday, and Napoleon offered him the supreme musical position in Paris. Some of his operas, like Ginevra di Scozia, held the stage for decades in the face of the triumphs of Rossini, Donizetti, and Bellini. Yet all of Mayr's achievements are hearsay to us, because aside from a few small excerpts, we do not know his music, the scores slumber in manuscripts, and none of his works has been played within memory. Newell Jenkins and Vanguard deserve the greatest praise for making this legend an audible reality, and a fascinating reality it is, for this brilliant score is like a topographic map of an important phase of operatic history, more enlightening than all the books. Even the least scholarly minded reader of HIGH FIDELITY can follow this map without any difficulty and marvel how musical history is made and how cruel this history can be.

In his lifetime Mayr's influence was decisive on the emerging Romantic grand opera. He was the founding father of the Romantic opera orchestra, demanding quite modern effects at the time when Beethoven composed his First Symphony and Berlioz was not yet born. Well acquainted with contemporary music, he utilized every new idea, and a large share of credit goes to him for the reintroduction of the chorus in Italian opera. To the Neapolitan and French elements he added his German heritage, based mainly on Mozart and Haydn. This Bavarian-turned-Italian greatly developed the accompanied recitative, his choral settings are sensitive, often surpassing even Gluck's, and his large scenes are well constructed. All in all, from Rossini to the young Verdi, even includ-



Newell Jenkins: Simon Mayr rediscovered.

ing Meyerbeer and Berlioz, the most significant composers avidly studied these qualities and made them their own.

Unfortunately, along with these important achievements there were considerable artistic flaws, most of them present in Medea. Mayr was a born musico-dramatist, but he often succumbed to the Italian routine, and then the pleasant melodies lose their profile and become shallow. Donizetti learned from him those fatuous runs of two flutes in thirds and sixths. His fine orchestra can become noisy, and his use of the brasses, and especially of the big drum, to this day creates headaches for the conductors of Rossini and early Verdi. His mind was stocked with every known operatic cliché, to which he added many new turns that were to become clichés in the hands of most composers who followed him.

In Medea Mayr assigns an unusually prominent role to the chorus, and several of its numbers are very impressive. The body of the opera consists of constantly changing accompanied recitatives, elaborate and dramatic, the kind with independent thematic material symphonically developed by the orchestra. Many of these are stunning, though the unevenness of the work is noticeable. For instance, Creusa's recitative and aria in the second act, "Grazie vi rendo," is made of commonplace turns, the sentimental harp solo lending it a lachrymose air; but the aria is immediately followed by a string of starkly dramatic accompagnatos. Some pieces, like Aegeus' aria in the first act, are as good as Donizetti, and Medea's great monologue, "Come? ... sen riede," almost reaches Cherubini's tragic intensity. So Mayr often attains a high plateau, but he cannot rise above the average of his best competitors and imitators. He had everything but genius.

Both performance and recording are good. Only one of the singers is topdrawer, but all of them pull their weight, forming a creditable ensemble. Joan Patenaude (Creusa) is first-class; her pleasant soprano shines and she has a good dramatic sense. Marisa Galvany (Medea) has temperament and a big voice which she uses well in quiet pas-

sages, but when agitated the voice becomes a little unsteady, and the low tones, which she forces a bit, assume an altogether different color. Giasone is acceptably sung by Allen Cathcart, while the other tenor, Robert White (Egeo) does well within the staff, but above it he has trouble, including a couple of painful derailments. Thomas Palmer (Creonte) has a little difficulty with the low tones, but his baritone is adequate. Molly Stark (Ismene) completes the cast satisfactorily. Orchestra and chorus are very good. Jenkins maintains flexible discipline and a commendably dramatic tone; the ensembles and finales are precise, the tempos good, and the balance between "stage" and "pit" excellent. The conductor keeps a weather eye on that dangerous tamburo grande, and the many woodwind solos are nicely phrased. If you like a good historical novel don't miss its musical counterpart, Medea in Corinto. PHI

PENDERECKI: The Devils of Loudun. Tatiana Troyanos, mezzo; Horst Wilhelm, tenor; Helmut Melchert, tenor; Andrzej Hiolski, baritone; Hans Sotin, bass; et al.; Chorus and Orchestra of the Hamburg State Opera, Marek Janowski, cond. For a feature review of this recording, see page 69.

PROKOFIEV: They Are Seven, Op. 30; The Gambler: Four Portraits and Epilogue, Op. 49; Love for Three Oranges: Suite, Op. 33b. Yuri Yelnikov, tenor; Moscow Radio Chorus (in They Are Seven); Moscow Radio Symphony Orchestra, Gennady Rozhdestvensky, cond. Melodiya/Angel SR 40157, \$5.98.

At last! Prokofiev's "Chaldaean exorcism" They Are Seven has finally received its premiere recording. Also known as Seven, They Are Seven (from the French translation, in which it was first performed), this awe-inspiring cantata must stand not only as one of Prokofiev's major compositions, but also as one of this century's most stunning examples of musical "primitivism." Although it belongs to the same general category as the Second Symphony and the Scythian Suite, They Are Seven creates a unique atmosphere of violence and upheaval which has its roots deeply buried in the Russia of 1917 when Prokofiev composed this "exorcism,"

There is not an instant during the short work (it lasts, appropriately enough, around seven minutes) that does not seethe with an intensity that few composers could ever match. In musically recreating a "Chaldaean prayer for exorcising demons," Prokofiev literally pulled out all the stops in a style that is so audacious that it took, if I am not mistaken, over fifty years before the work was first performed in Russia. Besides the brutal and decidedly spasmodic rhythms, there are innumerable coloristic effects, including frequent glissandos in the brass, in the harp (used with particular bril-



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liance in this work), and even in the chorus. Much of They Are Seven consists of jolting fortissimo passages in which the instruments often play at the highest extremes of their ranges, while the chorus as well rises to apocalyptic heights. But there are also some ominous. obsessive quiet moments that throw the rest of the music into even sharper relief. The cantata ends, for instance, with a sustained but subdued section for percussion alone, followed by a passage in which the low male voices chant a grim, final incantation before the music simply stops. Prokofiev concluded his reworked version of the Konstantin Balmont poem that forms the basis of the cantata with several verses of his own. Since they have been omitted from the liner notes and considering the profound and seemingly prophetic nature of these lines, it might be well to quote them here: "They shrink the heavens and the earth/ They enclose whole countries behind heavy doors/ They crush the people as the people crush grain. . ./ Spirit of the heavens, exorcise them!"

In this performance, Gennady Rozhdestvensky proves once again that he is both one of Russia's greatest conductors and one of the world's foremost Prokofiev interpreters. They Are Seven literally creates revolution in seven minutes, and there must be few conductors who could sustain the necessary concentrated intensity. Rozhdestvensky has not only accomplished this by inspiring his performers to the peak of their abilities, but he has also managed to delineate an amazing number of the ingenious musical details. The stereophony for this particular work is rather extreme, no doubt deliberately so. The chorus is divided between right and left speakers, and the orchestra also tends to be sharply separated. On the other hand, the tenor solo, expertly sung by Yuri Yelnikov but somewhat weakly recorded, is centered in the middle. The general quality of the sound is nonetheless superlative.

The Four Portraits and Epilogue from Prokofiev's second opera, The Gambler (which predates They Are Seven), involved such a reworking of the musical material that Prokofiev gave the suite a new opus number when he made this arrangement much later, in 1931. That the Four Portraits represents somewhat of a patchwork job is borne out by the excellence of the Epilogue: the latter, based on themes from the original orchestral interludes, entailed much less editing and is by far the most inspired movement of the suite. Nonetheless, Four Portraits is far from uninteresting: particularly noteworthy is the originality and refinement of its scoring.

I am tempted to grumble at the inclusion of such a chestnut as the Love for Three Oranges Suite on this disc, particularly since Soviet recordings of two other Prokofiev cantatas, Zdravitsa (Op. 85) and The Ballad of the Unknown Boy (Op. 93)—never previously recorded—are yet to be released in this

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country. However, there is no denying the excellence of the Love for Three Oranges Suite, and it receives such a compelling performance and such marvelous engineering here that it is a welcome addition to the five currently listed versions. But the They Are Seven work alone should have you running to your nearest record dealer. R.S.B.

SCHUBERT: Sonatas for Piano (complete); miscellaneous piano works. Wilhelm Kempff, piano. For a feature review of these recordings, see page 71.

SCHUMANN: Songs: Frauenliebe und Leben; Widmung; Mignon; Volksliedchen; Schöne Wiege; Er ist's; Heiss mich nicht reden; Lust der Sturmnacht. Leontyne Price, soprano; David Garvey, piano. RCA Red Seal LSC 3169, \$5.98.

Although infrequently sympathetic to the efforts of operatic divas in the concert room, I found myself pleasantly surprised on first hearing this record. Miss Price does not overdo things tonally, nor is she self-indulgent with respect to details of rhythm and phrasing.

On the other hand, after further listening one realizes that she does very little that is positive with these songs, either-a little husky tone here and there in the Frauenliebe to suggest strong emotion, but otherwise not much tonal variation, not much effort to clarify the relationships among phrases or to impart anything more than a generalized shape to the individual pieces. Furthermore, the cumulative effect of minor flaws of German (carelessness, I suspect, since the basic Klang of the language is generally present) and of a persistent tendency to sing the slightest bit sharp is wearying. Only in Er ist's does one hear a truly personal touch; that band, at any rate, is quite charming.

The repertory is not unusual, save for two of Schumann's Mignon songs; fortunately, these are both available (along with two companion pieces) on Helen Watts's fine recital of last year, which also boasts the services of the finest Lieder pianist to come along in many years, Irwin Gage (Telefunken SAT 22515). One need only compare Mignon (Kennst du das Land) in the two recordings to see what is missing in the Price/ Garvey version: note the rhythmic relationship between the piano's opening phrase and the voice upbeat.

Miss Price takes the *Frauenliebe* and a couple of other songs up a semitone a harmless transposition, inasmuch as it is applied equally to the entire cycle. Full texts and good translations by Philip L. Miller are provided. D.H.

SPOHR: Quintet for Piano and Winds, in C minor, Op. 52--See Dvořák: Sextet for Strings, in A, Op. 48. TALLIS/BYRD: "Cantiones Sacrae." Cantores in Ecclesia, Michael Howard, cond. Oiseau-Lyre SOL 311/3, \$17.85 (three discs).

In 1575 Queen Elizabeth I granted her two court organists, Thomas Tallis and William Byrd, a special license to "imprint set song or songes in partes, either in English, Latin, Frenche, Italian, or any other toungue that may serve for musicke either in Church or chamber, or otherwise be plaid or soonge." The first publication of Thomas Tallis and William Byrd was a joint effort, the Cantiones Sacrae of 1575 here recorded for the first time in their entirety. The patent had provided a wide variety of possibilities and the choice of a collection of Latin motets was a bold one for two avowed Catholics in the newly Protestant country.

The thirty-four motets in the collection (seventeen by each composer, perhaps a subtle compliment to the seventeenth year of Elizabeth's reign) are recorded in the order of publication, and are surprisingly effective in this arrangement. The collection opens and closes with a series of deeply penitential motets including Tallis' beautifully moving statement of confidence, *In manus tuas* ("Into Thy hands O Lord I commend my spirit") and Byrd's dramatic setting of the familiar melody from the Requiem Mass, *Libera me, Domine de morte aeterna.* 

Tallis, the older man whose career reached back into the reign of Henry VIII, is predictably more conservative and more formal in his motivic treatment but completely up-to-date in his brilliant use of color as an expressive device. The somber majesty and dark, almost oppressive sound of the penitential In jejunio et fletu are balanced by the web of stainedglass colors in which Tallis clothes his tribute to the Trinity, Virtus, honor et potestas. I was particularly delighted by the radiant sonorities of his second setting of the familiar cantus firmus Salvator mundi, and the exquisitely melting progressions which describe the Lord's compassion for even the most wicked in Derelinquat me make a persuasive plea for conversion. Tallis uses the cantus firmus principle as a natural extension of his musical ideas; in Dum transisset Sabbatum, for instance, it floats serenely over surging motives describing the preparation of Christ's body for the tomb.

But while Tallis described himself as "verie aged" in applying for the publishing license, William Byrd was a comparatively young man in 1575, in his early thirties with almost half a century of life ahead of him. Byrd's feelings and beliefs were expressed more naturally by the individual shapes of the melodic motives themselves and in the dramatic interplay of musical ideas. *Aspice Domine* ("Behold Lord how the city is made desolate") stretches out in one continuous line, graphically depicting a barren landscape with long, grinding suspensions accentuated by grey and mournful melismas. Not that all of Byrd's motets are

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quite so gloomy. No shadow dims the joyous antiphonal spirits of Laudate. pueri, Dominum, and even works which open with sobering reflection often close on a note of triumphal affirmation. When Byrd indulges in formal device it is often for symbolic purpose; for example, in O Lux beata Trinitas, in which three voices are in canon "tres partes in una," a musical illustration of the Trinitarian doctrine-three contained in one.

For the enormous pleasure this recording of the Cantiones Sacrae has afforded me, I wish I could thank Michael Howard and the Cantores in Ecclesia singers personally for one of the most moving performances I have heard in years. Howard's approach to the motets is frankly romantic and in his case, I think, this is completely successful. It is not a style I would recommend to everyone; like a delicate Viennese pastry it must be done just right and with a most delicate hand or the result will be a cloying indigestible mass. Howard is quite abandoned in his use of crescendos and diminuendos both within phrases and in more extended passages. He asks the choir to use a whole range of tricks: sudden staccato attacks, for instance, emphasize the meaning and contour of individual lines which taken out of context might sound like the awful Fred Waring choral arrangements of my youth. But all the devices are subordinate to Howard's idea of the whole piece, which has a shape, form, and passion all its own in

his interpretation. The diction and intonation of the chorus are magnificent.

One final note dims an otherwise glorious picture. The texts of these works were very important to the composers and they are essential to an understanding of the music itself but not a word is included in this rather expensive package. For the really assiduous, I can report that both texts and music are available (in libraries only, I fear) in Vol. I of Bryd's Collected Works and, for Tallis, in Vol. 6 of the series Tudor Church Music, Oiseau-Lyre has done a grave disservice to Messrs. Tallis, Byrd, and Howard by omitting the texts, but I hope their message will come through to you STS in spite of it.

# recitals 🕝 miscellany

VICTORIA DE LOS ANGELES: "Spanish Folk Songs." Victoria de los Angeles, soprano; Miguel Zanetti, piano; Oscar Ghiglia, guitar; Jean-Claude Gérard, flute; Annie Challan, harp; Trio à Cordes Francais. Angel S 36716, \$5.98.

Another delight from this charming artist. The notes tell us that Federico Garcia Lorca took down thirteen of these folksongs, mainly in Andalusia, and scored a simple and authentic accompaniment for them. They have a fragile appeal and are handled in the singer's gentle manner, with a piano accompaniment to match. There are two songs here composed by De Falla and they call Debussy to mind. The first one is a courtly period piece for solo voice with string trio, harp, and flute; the second, a sonnet to the words of Gongora accompanied by harp alone.

But the eve-opener of the record is the collection of ten Sephardic Songs, arranged by Manual Valls and sung in the ancient lewish dialect of Spain. When the lews were expelled from Spain in 1492, they took with them all over the Mediterranean (and even to the Netherlands) a form of the Castilian tongue and a melodic tradition with strong elements from Moorish and Christian Spain. The Sephardic communities ("Sefarad" was the Jewish word for Spain) preserved this music for centuries and, so says the annotator, the phonetic softness of fifteenthcentury Spanish speech now survives only in the lewish tradition. It is fascinating melody to follow and to speculate upon: a form of musical archeology most pleasing to the ear. G M

GOR KIPNIS: "Austrian Music for Harpsichord and Clavichord." MOZART: Twelve Variations on "Ah, vous dirai-



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SHERWOOD SOUNDS EXPENSIVE je, maman," K. 265; Minuets (5), K. 1-5. POGLIETTI: Canzona and Capriccio on the Cackle of the Hen and the Crowing of the Rooster. FUX: Ciaccona in D. BEETHOVEN: Six Variations on "Nel cor più non mi sento," WoO. 70. FROBERGER: Suite No. 26, in B minor. HAYDN: Sonata No. 13, in G (Hob. XVI/6). Igor Kipnis, harpsichord and clavichord. Odyssey Y 30289, \$2.98.

How can one adequately extol the charm of this sensitively played harpsichord/ clavichord collection? The best I can do is to briefly describe the contents and urge the reader to sample the delights for himself.

Kipnis has gathered a variety of pieces, mostly lightweight in character, spanning about 150 years from the midseventeenth to late eighteenth centuries; the unifying factor is that the composers all lived and worked in Vienna at one time or another. The Froberger suite and the Fux ciaccona aspire to a somewhat loftier purpose than the other material, and provide just the right amount of weight to balance the whimsical Poglietti evocation of cackling hens and roosters and the six-year-old Mozart's minuets. The Mozart set of variations twinkles nicely, while the Beethoven is filled with warmth and love. In the last Beethoven variation Kipnis accomplishes the most startlingly beautiful crescendodecrescendo effect I've ever heard on an "inexpressive" harpshichord-whether by the gradual adding and retiring of a set of strings or by a subtle manual change I couldn't be sure, but it is quite literally breathtaking, however it was done.

Kipnis plays the Froberger, Haydn, and Mozart early pieces on an unidentified clavichord and draws from this delicately expressive instrument all the tender, lyrical charm that only a clavichord is capable of supplying. Even the Mozart minuets, which are really quite silly pieces when performed on a piano, have quite a different effect here. But in the Froberger sarabande and in the Haydn adagio one has the feeling that Kipnis is speaking straight from the heart to the listener with no interfering mechanical contrivances. Only a singer is, on rare occasions, able to communicate so directly and so intimately, and the effect here is quite unforgettable. A large share of the praise must go to the engineers who have produced the most nearly successful recording of a clavichord I've ever heard. Somehow they've managed to retain the close-up intimacy of the instrument without making it seem larger than life. It helps, of course, to lower your own volume control somewhat, but the recorded level is already lower than on the harpsichord side. The harpsichord, by the way, is Kipnis' own 1961 Rutkowski & Robinette, a beautifully warmsounding instrument in the eighteenthcentury French tradition, and is similarly recorded with an ideal balance between close-up clarity and realistic perspective. Every detail of this sensitively produced recording is thoroughly captivating and I cannot recommend it warmly enough. C.F.G.

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CIRCLE 26 ON READER-SERVICE CARD

repeat performance A SELECTIVE GUIDE TO THE MONTH'S REISSUES

BEETHOVEN: Cantata on the Death of the Emperor Joseph II, WoO. 87. Ilona Steingruber (s), Alfred Poell (b); Akademiechor; Vienna Symphony Orchestra, Clemens Krauss, cond. Turnabout TV 34399, \$2.98 (rechanneled stereo only) [from Vox PL 6820 or Lyrichord 107, 1950].

This is a useful reissue, if only because there are so few Clemens Krauss recordings left in the catalogue. Krauss, to my mind, extracts more of the Cantata's somber, Brahmsian qualities than Thomas Schippers, who is rather pedantically dry and metronomic on his deleted CBS version (undoubtedly due to reappear on Columbia before long). For some weird reason, the Schippers performance is sung in Latin; the Turnabout edition uses the original German text, adding another point in its favor. Of course, the twenty-year-old rechanneled sound here is no match for CBS's modern engineering, but even at that, the disc is perfectly listenable. For the time being though, anyone who wants to add this remarkable early Beethoven work to his collection has no other choice.

BRITTEN: Serenade, Op. 31; Les Illuminations, Op. 18. Peter Pears, tenor; Barry Tuckwell, horn; London Symphony Orchestra (in the Serenade); English Chamber Orchestra (in Les Illuminations), Benjamin Britten, cond. London OS 26161, \$5.98 [the Serenade from London CS 6398, 1964; Les Illuminations from London OS 26032, 1967].

BRITTEN: The Young Person's Guide to the Orchestra, Op. 34; Variations on a Theme of Frank Bridge, Op. 10. London Symphony Orchestra (in The Young Person's Guide); English Chamber Orchestra (in the Bridge Variations), Benjamin Britten, cond. London CS 6671, \$5.98 [The Young Person's Guide from London CS 6398, 1964; the Bridge Variations from London OS 26032, 1967].

London has arranged these four Britten performances into a more logical sequence, coupling the two orchestral song cycles on one disc and the two sets of variations onto another. Devotees of the composer will need both recordings regardless of the ordering—all four works are immediately attractive, while Pears's sensitive singing, Britten's incisive conducting, and the superb orchestral work make these versions definitive. The cycles are musically more substantial perhaps, but the heady élan of *The Young Person's Guide* and the precocious wit of the early *Bridge* variations are difficult to resist especially when so sparklingly played and brilliantly recorded.

ELGAR: Pomp and Circumstance Marches, Op. 39. BLISS: Suite: Things to Come; March: Welcome to the Queen. London Symphony Orchestra, Sir Arthur Bliss, cond. Stereo Treasury STS 15112, \$2.98 [from RCA Victor LSC 2257, 1958].

Elgar's *Pomp and Circumstance* marches are virtually foolproof: each one contains such fine, gratefully written tunes that even the most jaded orchestral musician can hardly fail to respond with equal amounts of vigor and enthusiasm. Perhaps Barbirolli's versions on Angel are a shade crisper and more striding, but at the asking price, Bliss's performances leave little to be desired.

Sir Arthur's own contributions on Side 2 are less distinctive but the suite from the H. G. Wells film has its modest attractions and the beefy, red-blooded march, written in Bliss's capacity as Master of the Queen's Music (a welcomehome tribute to Queen Elizabeth after her 1954 Commonwealth tour), is a worthy follower in the Elgarian tradition. Excellent, robust sound.

MAHLER: Das Lied von der Erde. Kerstin Thorborg, mezzo; Charles Kullman, tenor; Vienna Philharmonic Orchestra, Bruno Walter, cond. Perennial 2004, \$6.00 (mono only; available from the Record Undertaker, P.O. Box 437, New York, N.Y. 10023) [from Columbia M 300, 1936].

This recording, the first of Walter's three Das Lieds, is that of a live performance in Vienna on May 24, 1936. In his liner notes, Steven Smolian presents a perceptive and well-reasoned case for its being the finest of the three. Opinions will differ, of course, but there is no mistaking the special qualities of Walter's propulsive reading: the conductor points up the harmonic, rhythmic, and instrumentational angularities of Mahler's score far more than in his later London and Columbia versions, which sound almost sentimentalized in comparison. A most revealing view of Walter before his canonization as a "musical saint."

I'm not entirely convinced by the soloists, although they are clearly immersed in the mood of the music. Patzak, Häfliger, and Wunderlich, for instance, seem far superior to Kullman both in terms of sheer tonal allure and textual penetration; Thorborg begins weakly, but she does give an extraordinarily controlled, movingly inflected account of the long Abschied movement. The sound, naturally enough, occasionally undermines the over-all excellence of the VPO, but the dubbing has been accomplished with care and considerable skill. Students of Mahler and his principal "disciple" should hasten to acquire this valuable reissue.

MOZART: Concerto for Violin and Orchestra, No. 4, in D, K. 218. MEN-DELSSOHN: Concerto for Violin and Orchestra, in E minor, Op. 64. Jascha Heifetz, violin; Royal Philharmonic Orchestra, Sir Thomas Beecham, cond. Seraphim 60162, \$2.98 (mono only) [the Mozart from RCA Victor LM 1051, 1947; the Mendelssohn from RCA Victor LM 9016, 1949].

The combination in this music of Heifetz and Beecham could hardly fail to provoke beautiful sounds: the Mozart is all elegance and suavity, infused with a disarming lyrical sweetness and sentiment; the Mendelssohn shares these qualities, as well as an added measure of romantic passion that suits this concerto's more expansive character. The tone is one of milk and honey served up in the most civilized and cultivated fashion. For some reason the 1947 sonics in the Mozart sound fuller and more contemporary than those of 1949, but the engineering in each case is more than satisfactory.

PROKOFIEV: Concerto for Piano and Orchestra, No. 5, in G, Op. 55; Sonata for Piano, No. 8, in B flat, Op. 84; Visions fugitives, Op. 22: Nos. 3, 6, and 9. Sviatoslav Richter, piano; Warsaw Philharmonic Orchestra, Witold Rowicki, cond. (in the concerto). Deutsche Grammophon 2538 073, \$6.98 [the concerto from Deutsche Grammophon 138075, 1960; the sonata from Deutsche Grammophon 138766. 1962; the Visions fugitives from Deutsche Grammophon 138950, 1965].

The material on this disc never actually left the catalogue, but DGG has now wisely repackaged it to form an all-Prokofiev concert. Richter's playing of the concerto is stunning—graceful and colorful, yet clean-lined and sparklingly articulate. Rowicki's springy accompaniment is perfect, while the crystalline reproduction faithfully mirrors the fine performance. The gnarled Eighth Sonata is probably the composer's most densely packed composition for solo piano and Richter endows this problematical score with shape, logic, and considerable eloquence. For a brief encore there are the three little Visions fugitives from a live concert. A superb disc in every way.

PROKOFIEV: Sinfonia Concertante for Cello and Orchestra, Op. 125. Mstislav Rostropovich, cello; Royal Philharmonic Orchestra, Sir Malcolm Sargent, cond. Seraphim S 60171, \$2.98 [from Capitol 7121, 1958].

Prokofiev's last major work, the Sinfonia Concertante, is essentially a revision of the 1938 Cello Concerto with lots of extra padding. Not a strong piece in any case, it really takes a virtuoso like Rostropovich to make the music sound convincing. The cellist almost succeeds here, although he is not helped much by Sargent's lumpish conducting. Both Rostropovich's older mono disc with Sanderling (Monitor or MK) and Samuel Mayes's version with Leinsdorf and the BSO (RCA) are preferable in this respect, but the former has very faded sonics and the latter offers a dullish account of the solo part. So in view of Seraphim's budget price, the sturdy engineering, and excellent playing from Rostropovich, this current reissue wins by default. The bargain might have been made more attractive had a filler been found for Side 2. which only lasts ten minutes.

TCHAIKOVSKY: Concerto for Piano and Orchestra, No. 1, in B flat minor, Op. 23. Vladimir Horowitz, piano; NBC Symphony Orchestra, Arturo Toscanini, cond. RCA Victrola VIC 1554, \$2.98 (mono only) [from RCA Victor LCT 1012, 1941].

Both the Horowitz/Toscanini versions of the Tchaikovsky First are now listed somewhere in Mr. Schwann's dizzying collection of supplementary catalogues, and the collector can make his own choice between these two mono classics -or get both if he is curious. Victrola's current reissue is the 1941 Carnegie Hall "studio" recording while RCA LM 2319 documents the Carnegie Hall "live" performance of 1943. Either one is an indispensable supplement to any of the innumerable fine modern versions: this dynamic partnership galvanizes and revitalizes the old warhorse with such vigorous musical excitement that all other readings pale in comparison. Perhaps the in-concert performance is a shade more overwhelming as a totality, but the Victrola disc, sounding quite good for its years, will do very nicely.

WAGNER: Lohengrin. Eleanor Steber (s), Astrid Varnay (s), Wolfgang Windgassen (t), Hermann Uhde (b), Hans Braun (b), Josef Greindl (bs); Chorus and Orchestra of the Bayreuth Festival, Joseph Keilberth, cond. Richmond RS 65003, \$14.90 (five discs, mono only) [from London A 4502, 1953].

My delight at seeing the 1953 Bayreuth

Lohengrin back in circulation was considerably dampened after playing the first couple of sides: Richmond's remastering here is not up to the label's usual high standards. While the original London issue may not have been a pinnacle of engineering art (even their Parsifal of 1951 sounds richer and more spacious), the agreeable mono sonics presented a reasonable facsimile of the famed Bayreuth acoustics; the new discs, however, are afflicted by a general outof-focus watery ambience, occasional distortion, and a slight but audible highfrequency hum. Perhaps the high-level recutting is partly to blame-any flaws on the master tape would automatically be emphasized under these conditions.

Too bad-the performance is a fine one, comparable in most respects to Angel's later stereo version. The ladies are especially good. Steber's luscious soprano was at its ripest during these years and she floats Elsa's lines with unfailing tonal beauty, poise, and character. Varnay's Ortrud may not be as evenly sung as Christa Ludwig's on Angel, but her mordant portrait of this vicious, scornful, scheming woman is really a magnificent piece of work. Windgassen sounds well as Lohengrin-a little square and sluggish here and there perhapswhile Uhde's forthright Telramund, Greindl's solid King Heinrich, and Braun's Herald are competent if vocally unexceptional. Bayreuth's orchestra was made up of Germany's finest players in those days, and Keilberth takes advantage of the fact, obtaining a dramatically alive and warmly expansive reading.

JAN PEERCE: "Wonderful World Favorites." Bluebird of Happiness; A Dream; Kashmiri Song; When You and I Were Young, Maggie; Song of Songs; May the Good Lord Bless and Keep You; Bless This House; Silver Threads Among the Gold; Ah, Sweet Mystery of Life; Because; Oh Promise Me; Sing, Everyone, Sing. Jan Peerce, tenor; various orchestras and cond. RCA Victrola VIC 1553, \$2.98 (mono only) [from various RCA Victor originals, recorded between 1945–51].

Any tenor worth his salt is invariably asked to record lots of Kitsch and Peerce has certainly had his innings before the microphone. All of this cornball stuff was taped twenty to twenty-five years ago, which makes little difference as far as the Peerce voice is concerned: if he had recorded this collection yesterday, it would probaby sound much the same. Each song gets the same dignified, openhearted treatment-even in those saccharine mid-verse talk-overs ("It's a life of smiles, and a life of tears; It's a life of hope, and a life of fears ...," etc.), Peerce never condescends to the material. The sound is variable but decent enough; my "unwarpable" Dynaflex disc was so warped that the tone arm refused PETER G. DAVIS to track.



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The New Realism. There has been little reason to repeat my recent fanfares celebrating the open reel's new lease on life. That renaissance, which started off so well late last year, has made relatively little progress. Ampex continues to release only a few Angel, DGG, and London programs in reel format; the flow of RCA 33/4-ips tapes-so far devoted to reissues of best-seller programs available earlier in 71/2-ips versions-has slackened; while Columbia's few recent reels have been confined exclusively to pop programs. That discographic bible, the Schwann catalogue, accurately reflects the situation in its new tape listings by recognizing only cartridge and cassette formats-a decision justified by powerful economic factors.

An even greater problem for reel collectors is in obtaining current as well as past releases from local dealers. Potential purchasers even in large metropolitan areas have trouble finding what they want; those in smaller towns often find ordering by mail equally unsatisfactory. Various mail-order "clubs" sometimes fill in this distribution gap, but there still remains a genuine need for Ampex's new "Reel-By-Mail-Service" that promises shipment the same day orders are received. Limited of course to Ampex-produced tapings-and even at that to a selected repertory-this service is not intended to compete with retail dealers who carry comprehensive tape stocks, but simply to provide a source for collectors who are without easy access to a dealer. For information, write to Ampex Stereo Tape Service, 1000 Sunset Ridge Road, Northbrook, Ill. 60062.

AstroStereo: Still Flying. One type of open-reel production still going strong is that featuring American Airlines' threehour-long 33/4-ips "AstroStereo" programs. Since I last reported on these extraordinary musical cornucopias there have been two new "classical" examples, programmed as well as announced by WQXR's Bill Watson, and outstanding for their musical substance as well as variety (Ampex CW 231 and CW 235, \$23.95 each). The former features relatively recent recordings from the Decca catalogue, including some unexpected contemporary works by Schuman, Mennin, and Webern, as well as "standards" by Mendelssohn (Son and Stranger Overture), Tchaikovsky (Sixth Symphony), Bizet (Symphony in C), and Fauré (a considerable part of the Requiem); plus older pieces by Bach, Couperin, and Le Petit. The performers include conductors Rudolf and Waldman, the New York Pro Musica ensemble, and soloists Andres Segovia and Sylvia Marlowe.

The CW 235 reel of mostly recent Philips/Mercury/World Series recordings boasts two real novelties: the Richard Strauss Parergon on Symphonia Domestica themes and George Templeton Strong's Chorale on a Theme of Hassler. The "standards" are Beethoven's Seventh Symphony and the Op. 31, No. 1, Piano Sonata, and Bartók's Music for String Instruments, Percussion, and Celesta. Older repertories are represented by Bach's S. 1007 Cello Sonata, Vivaldi's P. 143 Concerto for Strings, Loeillet's Flute Concerto in D, Telemann's Re-corder Concerto in C, and two Soler harpsichord sonatas. The performers include conductors Alessandro, Barshai, Hanson, Dorati, and Marriner; soloists are Arrau, Somer, Starker, Puyana, Rampal, and Krainis.

Up Against the Wall. Since the state of the real world is so much worse than the reel world, it's hardly surprising that most contemporary composers feel that they lead lives of true desperationwhich in their case need not be as quiet, or as inarticulate, as those of us who have less talent for self-expression. Perhaps no other age but our own could have produced music like Shostakovich's Fourteenth Symphony, in which he carries the Dostoyevskyan despair-and near-Dostoyevskyan eloquence-of the Thirteenth (Babi Yar) Symphony to an even more intense pitch of poignance. Whether it's the personal protest of an artist imprisoned in a totalitarian state (as some musical Kremlinologists maintain) or merely a protest against universal human predicaments, it's a profoundly disturbing psychological docu-mentation of how this one-time saucy "bad boy" of music has grown. The work is a unique kind of song-symphony, based on texts by Apollinaire, Lorca, Rilke, and the comparatively obscure Küchelbecker. It is scored for bass and soprano soloists with an instrumental ensemble of strings and percussion; the work's demands are met with impressive authority by Yevgeny Vladimirov and Margarita Miroshnikova with the Moscow Chamber Orchestra under Rudolf Barshai (Melodiya/Angel cassette 4XS 40147, \$6.98; text leaflet on request). The very antithesis of "easy' or cheery listening, this work provides such a powerfully gripping emotional experience that only fanatical audiophiles may pause to appreciate the timbral variety and vividness captured in a musicassette which surely is a close sonic replica-with its touch of high-frequency overintensity-of the disc edition.

A younger contemporary composer, Luciano Berio, not only experiments with electronic music but also develops new

and daring ways of writing for conventional instruments, the better to burst the "limitations" under which musical composition has long existed. Conservative listeners well may find Berio's linked Sequenza VI, Chemins II and III program (a kind of apotheosis of the tremolo-first for viola alone, then in chamber-ensemble and full-orchestra "transformations") only too representative of today's nervous tensions. Certainly even the more sophisticated will find this an ultrastrenuous aural workout. But the dramatically powerful performance (by violist Walter Trampler with the Juilliard Ensemble and London Symphony Orchestra under the composer's direction) holds spellbinding sonic fascinations (RCA Red Seal cassette RK 1167, \$6.95).

Escapes to the Near or Far Past. However valid the Shostakovich and Berio reflections of the current human condition may be, most home (and mobile) listeners want no part of anything that reminds them of the troubles and fears of their quotidian lives. What else can account for the recent success of ultraromantic films like Love Story and Song of Norway? Devotees of the latter, or of Grieg's engagingly lyrical music before it was mass-popularized, can relax comfortably with "Grieg's Greatest Hits Made Popular in Song of Norway," an RCA anthology (cassette RK 1174; 8-track cartridge, R8S 1174; \$6.95 each) which comprises the complete Cliburn/ Ormandy 1969 version of the Piano Concerto, the March of the Dwarfs and three Peer Gynt excerpts (one with Eileen Farrell) conducted by Fiedler, the Norwegian Dance No. 2 conducted by Gould, and the considerably older Mario Lanza performances of I Love Thee and the Wright-Forest Strange Music. For enroute cartridge listening, in particular, all this is pleasant enough tonal escapism except for the misguided revival of Lanza's two incredibly vulgar examples of vocal exhibitionism.

For myself, I usually find that yesterday, or even the nineteenth century, doesn't provide enough psychic distance from the present. Going further back is at once a more complete escape and a kind of time-shift opportunity for a wider and doubled view: a way of seeing today from the perspective of the past as well as seeing the past from the perspective of later centuries. The seventeenth and early eighteenth centuries were particularly rich in grandly ceremonial music which at its best gives present-day listeners a remarkable sense of timelessness and infinite space. Listen, for example, to the magnificent works for trumpet and organ in the collection "La Tromba Sacra" by Adolf Scherbaum and Wilhelm Krumbach (DGG cassette 3300 020, \$6.98). Except for Purcell, the composers' names will be unfamiliar, but the eloquence and nobility of these sonatas da chiesa combined with the expansive ambience for the soaring high trumpet and pealing organ will prove to be incomparably thrilling.

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# Toronto—A New Nashville?

LAST JANUARY 18 the Canadian Radio and Television Commission—the governing agency of Canadian broadcasting effected a regulation that went unnoticed in the United States, except by people in the record industry. But, almost certainly, its effects are soon going to be felt all over the continent in the form of a new wave of music from Canada.

The CRTC's ruling requires that henceforth thirty per cent of the music played on Canadian radio be Canadian. At present, any of four criteria will qualify a record as "Canadian content": words by a Canadian; music by a Canadian; performance by a Canadian; or production of the record in Canada. A year from now, a disc will have to meet two of the standards to qualify. The impact of the ruling has been the instant overexposure of Anne Murray and Gordon Lightfoot on Canadian radio stations. Still, the auguries are that the ruling will in time make Toronto a major recording center, and new studios are already being built in or near the city by both independent operators and the major American and European record companies. Columbia, for example, will put a large new plant into operation here early this summer.

Canada's radio stations are, by and large, unhappy about the ruling. Like American stations, they've been quite content with a passive money-making programming based on record sales charts. And that has meant mostly music from the U.S. Canadian artists hadn't a hope of exposure unless they were recorded in the United States by an American company. This has meant, over the years, a constant drain of Canadian talent. Robert Farnon lives in England; so now does Maynard Ferguson. Robert Goulet and Percy Faith live in the United States. Joni Mitchell had no big success in Canada until her songs became famous in the United States. The same can be said of Leonard Cohen. When Anne Murray was being interviewed on a Canadian television show recently, she was told that Canadian disc jockeys had given tremendous support to her recording of Snowbird. "Yeah," she said matter-offactly, "after it had sold 500,000 copies in the States."

All that has changed. Indeed, U.S. country-and-western singer George Hamilton IV now comes to Toronto to record. (Canada has long had a big country-andwestern music movement, though it might better be called country-and-eastern, since much of it emanates from the Atlantic provinces.) And Ian and Sylvia, both Canadians, now say they'll record in Toronto, rather than Nashville.

Jazz composer, arranger, and saxophonist Gerry Mulligan and his actress wife, Sandy Dennis, are thinking seriously of taking residence for at least part of each year in Toronto, where Mulligan is tentatively set to begin work on the score of a musical. Indeed, Miss Dennis has made four films in Canada in recent years, an indication of the possibility that part of the film industry may be taking residence north of the border too. Variety recently reported that fifty-six feature films will be shot in Canada in the next year, and Vancouver is showing signs of becoming a motion picture center. This means film-scoring, and that is further increasing the quantity of recording being done in Canada.

Americans are little aware of the contribution Canadians have made over the years to the American arts, including films. Canada has contributed notables from Mack Sennett and Marie Dressler to William Shattner and Donald Sutherland. Chad Mitchell, Hank Snow, and, yes, Guy Lombardo were born in Canada, as were sundry members of the Mamas and Papas, Buffalo Springfield, Steppenwolf, the Lovin' Spoonful, Blood, Sweat and Tears, and The Band. Lighthouse and the Guess Who are Canadian groups.

## the lees side

But all sought and found their success in the United States. Then, and only then, would Canadians accept them. There is little doubt that Oscar Peterson and Glenn Gould, both Canadians, would not have the celebrity they enjoy in Canada had they not first been marked okay by American listeners and critics. (Gould and Peterson both live in Toronto.)

Now Canada is launching its own artists, and exporting their *records*, rather than the people, to the U.S. And a good deal of talent is coming home, partly because of the improved creative climate in Canada and partly because of disillusion with life in the United States these days.

One of these is Dennis Murphy, a young independent producer who spent several years with Elektra Records in New York. "There was nowhere to learn here when I left," he says. "Now Canada has become an exciting place to break a record."

When he left three years ago there were insufficient recording facilities. Not so now. He says there are five studios that can stand up to almost anything in the United States.

The city has something else it lacked a few years ago: a body of superb studio musicians, comparable to those of Los Angeles and New York City, some of them reportedly earning more than \$100,000 a year.

Glenn Gould cautiously agrees with those who think Toronto may be on its way to becoming a major musical center. "What I can see," he says, "what I think must be, is a decentralization of all recording, not only as an emergency measure, but as a means of restoring some sort of reality." Significantly, Gould has negotiated a new contract with Columbia Records: excepting sessions with symphony orchestras, he will now make all his recordings in Toronto.

RCA Canada Ltd. has boosted its Canadian recording budget from \$2,000 a month last year to \$5,000 a month this year. Columbia has boosted its budget for English-language recordings as well.

But the two most active recording programs are being carried on by the broadcasting industry itself-one by the Canadian Broadcasting Corporation, the publicly owned national broadcasting network, and the other by an organization called the Canadian Talent Library. The CBC has made fifteen albums in the last six months, most of them the work of a gifted young producer and pianist named Dave Bird. The CTL has made twenty albums in the last year. CTL is financed and supported by 204 radio stations. Both CBC and CTL recordings were originally made as transscriptions for radio use, but the CBC has started leasing some of its product to record companies for public release and CTL now has a commercial label.

You can feel the excitment in the Toronto musical world-a sense of optimism and of going forward. Nor is it confined to the record industry. Toronto has developed a tremendously vital livemusic scene as well. Within a few recent weeks, for example, Toronto was able to see and hear Peggy Lee, the Woody Herman and Stan Kenton bands, concerts by Rod McKuen, Leonard Cohen, and Tony Bennett, the jazz groups of Al Cohn and Zoot Sims, Miles Davis, Sonny Stitt, Cannonball Adderley, Junior Mance, James Moody, Freddy Hubbard, Oscar Peterson, and Bill Evans, All this in addition to the classical music scene, which is itself an active one.

Why is there so much more live music in Toronto than in New York? The reason, probably, is that people aren't afraid to walk the streets at night, or go into the midtown entertainment area. The city's center has not decayed, as have the centers of so many American cities.

The feeling in the Toronto music business is that the city is on its way to being another Nashville, only one with a broader musical base, for all kinds of music is being written, played, and recorded here. GENE LEES



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the lighter side

> reviewed by MORGAN AMES R. D. DARRELL JOHN GABREE JOHN S, WILSON

symbol denotes an exceptional recording NO, NO, NANETTE. Original cast recording. Ruby Keeler, Patsy Kelly, Jack Gilford, Bobby Van, Helen Gallagher, and Susan Watson. Columbia S 30563, \$5.98.

Vincent Youman's score for No, No, Nanette bubbles with melody and includes two of the great pop songs of the century—I Want to Be Happy and Tea for Two—along with a couple of pleasant surprises. This musical, which first turned up on Broadway in 1925 after a forty-nine-week run in Chicago, has more basic, happy, communicable songs in it than we usually find in contemporary musicals.

The fact that most of the songs sound more or less alike does not necessarily detract from the pleasure of hearing the bright and lively score. The prototypical melody is the opening song, Too Many Rings Around Rosie, which establishes a bouncy-bouncy-bounce style that echoes through I've Confessed to the Breeze; No, No, Nanette; Waiting for You; and You Can Dance With Any Girl (the latter, however, is given some differentiation by the resilient singing of Bobby Van). I Want to Be Happy and Tea for Two also ring some variations on the bouncy beat. The only song that breaks out of the general mold is "Where Has My Hubby Gone" Blues, which Helen Gallagher turns into a definitive demonstration of a Twenties' torch song,

Despite all this, the recording can convey only a dim idea of the impression that this current staging of No, No, Nanette makes in the theater. The wonderfully sunny colors with which Raoul Pene du Bois has drenched the production are missing of course. The panoramic parades of Busby Berkeley chorus girls are evoked only when a chorus of tap dancers suddenly start rat-tat-tatting like rhythmic machine guns during I Want to Be Happy.

The essential loss in the transfer, however, is the period aura that comes partly from telling touches in the libretto but most importantly from the presence in the cast of Ruby Keeler and Patsy Kelly. On this recording, Miss Kelly is represented by only two lines, rasped out in her file-scraping voice. Miss Keeler has a few more lines, a part of one song (she still sings with more expression than she can put into her spoken lines), and does a tap dance to *I Want to Be Happy* (something that is better seen than heard). J.S.W.

JIMI HENDRIX: The Cry of Love. Jimi Hendrix, vocals and guitar; instrumental accompaniment. (Freedom; Drifting; Ezy Ryder; Astro Man; Angel; five more.) Reprise MS 2034, \$5.98. Tape: M 82034, \$6.95; M 52034, \$6.95.

Like Janis Joplin's last album, Jimi Hendrix's final LP is something of a disappointment, especially because his talent was more considerable. Hendrix, after all, is the man who gave us a record that, for almost everyone who cares about rock, ranks among the several greatest albums. And he was so consistently innovative throughout his career that a tape of his first major appearance, at the 1967 Monterey Festival, could manage to be one of the more interesting released last year.

Hendrix's fascination with Dylan leads him into what seems to be unconscious parody on My Friend, which doesn't work even though he gives it everything he has. For the rest, the songs are generally not worthy of the performance, nor does the star receive the kind of support he deserves. Hendrix also seems to have been listening to Sly Stone, whose influence is not a pernicious one. A few of the songs are somewhat subdued, indicating that Hendrix may have been mellowing like so many of his contemporaries. There is not much new or different here. But as the final statement of one of the few truly great performers that rock has produced, it is one of the most important LPs of the year. J.G.

DAVID CROSBY: If I Could Only Remember My Name. David Crosby, vocals and guitar. (Orleans; Laughing; Music Is Love; five more.) Atlantic SD 7203, \$4.98. Tape: 19 TP 7203, \$6.95; CS 7203, \$6.95.

No one knows for sure whether the retirement of Crosby, Stills, Nash, and Young is temporary or permanent. Certainly the group is missed. On the other hand, they're giving us powerful consolation in the form of separate albums: several Neil Young records are out; last month Stephen Stills put out a superb album (joined by members of the former group); now David Crosby presents his own effort, and it's excellent.

David Crosby was the romantic member of CSNY. He wrote most of their best ballads, such as *Guinnevere; Wooden Ships* (written with Stills); *Long Time Gone;* and *Déjà Vu.* Many tracks in this set are in that same lissome, melting mood: *Cowboy Movie* (over eight minutes); *Tamalpais High; Song With No Words.* There is also a moving, dramatic, highly personal study called *Traction in the Rain.* 

The last track, I'd Swear There Was Somebody Here, is a remarkable but unfortunately incomplete idea. It is a series of overlayered, overlapped, electronically altered vocal tracks without words. Under its spell, one hears influences ranging from Gregorian chant to Berio to Ravel and all the way to rock. Crosby's brilliant and intricate sense of harmony combined with his steady ear and simple, earthen voice create in this moment an exquisite, hopeless child's cry in the dark. The problem is that the track doesn't have a proper ending. It just stops with a jar, as if it had been thrown in half-baked to fill the remaining space. The album has much more music than it has words, with many songs hummed, one track over the other.

These flaws are minor. David Crosby's new album is certainly among the most important of the current releases. It



David Crosby: mature, sensitive, romantic.

should be owned and known by those who are either captivated by or interested in the more mature and sensitive influences in pop music. M.A.

JOY OF COOKING. Toni Brown, vocals and keyboards; Terry Garthwaite, vocals and guitar; rhythm accompaniment. (Hush; Down My Dream; If Some God; Dancing Couple; Red Wine at Noon; five more.) Capitol ST 661, \$4.98.

Opportunities for women musicians are so rare that this record would be noteworthy even if it weren't terrific. Usually, if they get to perform at all, women are relegated to playing folk music (Baez, Collins, and Mitchell), to sexing it up (Janis Joplin), or to fronting a band (Genya Ravan). Jackie De Shannon and Carol King, as well as such superb unknowns as Elyse Weinberg and Barbara Keith, would not have had to struggle nearly so hard to be heard had they been male. Grace Slick is the proverbial exception, the only woman in hard rock to attain secure superstar status.

Joy of Cooking, led by two women, is a five-piece band that has been gigging around the Bay area for the last couple of years. I don't know why they waited so long to record. By the spit and polish of this album, it's easy to see that they might have been prepared to make a first record long ago. The tunes, most of them by Toni Brown, are inventive, and the playing of the sidemen solid. The band is paced by Brown's rolling piano, but it is Terry Garthwaite's vigorous vocals that hold it all together. The sound is blues-tinged hard rock, with a little country mixed in. The second-best first album of 1971. LG.

ARGENT: Ring of Hands. Argent, hard rock quartet. (Celebration; Sweet Mary; Chained; Rejoice; five more.) Epic E 30128, \$4.98. FACES: Long Player. Faces, hard rock quintet. (Bad 'n' Ruin; Tell Everyone; Richmond; On the Beach; Jerusalem; four more.) Warner Bros. 1892, \$4.98. Tape: M 81892, \$6.95; M 51892, \$6.95.

By now, I suppose, we are into our fourth or fifth generation of rock players. Rock has been around long enough for groups to be born, live normal lives, spawn whole schools of successors, and die. Each of the Beatles is on his own. The Buffalo Springfield gave birth to Crosby, Stills, and Nash; Neil Young; Poco; Steve Stills; Crosby, Stills, Nash, and Young; David Crosby, and soon, I hear, Graham Nash. Other groups, the Yardbirds, for example, have been as fertile. What's more, a number of musicians and groups have proven that they can survive as professional musicians without the stimulus of superstardom or massive sales. They do it by working hard, striving to be as exciting and entertaining as they can. Many of them-Poco, Keith Relf, Livingston Taylor, Linda Ronstadt, Tracy Nelson, Grass Roots, First Edition, Gordon Lightfoot, the Tremeloes, etc.-succeed admirably. Sometimes groups like the Hollies and Kinks slip belatedly over into something approaching the superstar category.

Having said all this, I wish I had nicer things to say about the albums at hand, both products of two of my favorite rock personalities. Rod Stewart was the lead singer for the Jeff Beck group (a Yardbirds spin-off) and turned out two of the best of last year's albums on his own before joining up with Small Faces, a fairly long-lived but relatively unknown British band, on their last album. Rod Argent was the leader of the Zombies, one of the most consistently satisfying of the B+ English groups until it broke up a couple of years ago. "Ring of Hands" is the second outing of the successor group.

Both albums are very workmanlike, and neither is really marred by any unforgivable flaws (though Stewart does engage in some histrionics on these live recordings that he has never allowed himself in the studio).

I can't imagine anyone disliking either record, nor probably will anyone get very excited about them. Argent and Faces are both quite obviously talented groups, but neither album was able to catch fire this time out. They wouldn't be out of place in any record collection, but they aren't likely to be worn out either. J.G.

EUGENE ORMANDY: Love Story. Earl Wild, piano; Philadelphia Orchestra, Eugene Ormandy, cond. (Theme from "Love Story"; Theme from "Elvira Madigan"; Yesterday; The Windmills of Your Mind; four more.) RCA Ped Seal LSC 3210, \$5.98. Tape: RBS 1179, \$6.95; RK 1179, \$6.95.

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Boston Pops, and since it apparently hasn't had too much success with Mancini/Philadelphia Pops substitutes, Ormandy and the Philadelphians are being rushed to the rescue. But where lightsymphonic specialists like Fiedler or, say, Carmen Dragon and Frederick Fennell can persuade their listeners that they really relish playing quasi-pop fare, Ormandy takes it so seriously and dutifully that he just can't avoid giving the impression of a kindly but condescending social worker distributing charity to slum dwellers

The gifts he bears are rich ones, to be sure. His Philadelphians demonstrate the full range of tonal glories for which they are deservedly famous, with some elegant solo, as well as massed, string playing-all enhanced by well-nigh ideally glowing stereoism. But score couturier Arthur Harris has whipped up such sumptuous Viennese/Hollywoodian clothof-gold costumes for the Lai, Lennon-McCartney, Legrand, Rota, and Grusin corn-fed ingenue tunes here that when the parade of such beautiful but dumb clotheshorses gives way to real musical beauty in the form of the Andante from Mozart's Piano Concerto No. 21 and the Liebestod from Wagner's Tristan und Isolde, even the latter inevitably take on an associative touch of artificiality or sleaziness. Anyway, my instinctive reactions shift scenes to a Fifth Avenue department store front where an earnest window dresser, oblivious to a gaping sidewalk public, is dispassionately encasing plastic mannequins in the latest styles of hot pants. R.D.D.

OHIO KNOX, Peter Gallway, vocals, guitar, and piano; rhythm accompaniment. (Abigail Archer; \* Land of Music; That Lady; Taking It Easy; seven more.) Reprise RS 6435, \$4.98.

0

It's been a heavy month for the release of meaningless albums by faceless pop groups, the Glass This and the Magenta That. Ohio Knox is a blessed exception.

The group is headed by Peter Gallway, who sings, plays guitar and sometimes piano, and writes all the material. Gallway is joined by a heavyweight rhythm section made up of pianist Paul Harris (also a fine arranger); drummer Dallas Taylor (who played for Crosby, Stills, Nash, and Young and other major groups); and bassist Ray Neapolitan, a well-known Los Angeles studio player who can handle anything but whose heart is happiest in really good rock. Even the album photographs by Guy Webster are a dozen cuts above the usual.

Peter Gallway is a strong writer who can work in several styles without losing his individuality. There Comes a Time (with horns arranged by Paul Harris) touches on jazz; Give Me John Ford (with guest John Sebastian on harmonica) leans happily toward country; Calamity Jane is in the best of mainstream rock; Baby Sox Knox nods to The Band. My favorite track is a lilting thing called Taking It Easy. At times one hears a

heavy flash of Laura Nyro. Quite possibly the tribute is deliberate, since it is most evident in a tune called *North Country Laura*. How refreshing to run into an occasional artist who is not afraid to admit to his influences.

Peter Gallway and Ohio Knox celebrate sunshine and happiness. They do it so well that it will draw you in like a special smile. The album is highly recommended. M.A.

AN ASTROMUSICAL ODYSSEY: Sounds Galactic. Unidentified chorus, orchestra, and sound effects; John Keating, arr. and cond. (Theme from "2001"; Spinning Wheel: Aquarius; Nocturne; Across the Universe; five more.) London SP Phase 4 44154, \$5.98.

The come-ons here are the title and handsome double-folder packaging so amply illustrated that there's no room for personnel identifications. There are no program annotations, either, but that's reasonable: what could be said about these crude attempts to capitalize on the fame of the already hackneyed 2001 soundtrack? The opening Strauss Zarathustra "Sunrise" passages, plus the film's notion of what outer space might sound like if it could transmit audio frequencies, are candid steals; most of the rest is an immiscible concoction of eerie effects with routine pop tune plugging. Worst of all is Kevin Martin's disarrangement of Clair de lune, the tremulous vibe-rations of which must set Debussy spinning in his grave. There's genuine animation only in a driving version of Joe Meek's Telstar. But, for whatever compensation they may provide, the sonics throughout are Phase 4's biggest, brightest, and most palpably solid. RDD

DON EVERLY. Don Everly, vocals, instrumental accompaniment. (Eyes of Asia; My Baby; My Friend; Omaha; Safari; February 15th; five more.) Ode 70 SP 77005, \$4.98.

TIM ROSE: Love, a Kind of Hate Story. Tim Rose, vocals; instrumental accompaniment. (Dimlight; Sad Song; Sympathy; Ode to an Old Ball; Jamie Sue; five more.) Capitol ST 673, \$4.98.

Don Everly and Tim Rose have been in the pop business for a long time but that is about their only point of similarity. Don is moonlighting from the Everly Brothers, one of the most successful rock acts of the late '50s and early '60s. Tim Rose was one of the leaders of the rock revival in New York in the early '60s (out of which came John Sebastian and the Lovin' Spoonful, Tim Hardin, Fred Neil, the Mamas and Papas, etc.), but somehow, despite several albums, success has eluded him.

Don Everly's album is delicate country-flavored rock, so lovely and precise in fact that words like exquisite come to mind to describe it, even when it is highly rhythmic. All of the tunes but three—*Tumbling Tumbleweeds*, Don Gibson's *Sweet Dreams of You*, and the



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Louvin Brothers' When I Stop Dreaming —are originals, and they are inventive in both melody and lyric. The band includes people like Ry Cooder, Curtis Amy, Chris Ethridge, Jim Keltner, Sneeky Pete, and Spooner Oldham.

Tim Rose is hard and craggy where Everly is sweetness and light. He has a rough, shouter's voice with which he does in fact shout his songs, most of which are concerned with being unhappy. The band, unidentified, takes the same hard-edged approach as the leader. Listening can be an exciting and unnerving experience. Rose's albums have an unrelieved tension about them which some listeners find unpleasant, but on the other hand, a great deal of enjoyment can be had listening to these sad, raucous songs. The program includes several of his own songs, one by Peter Sarstead, and the Bee Gees' I've Gotta Get a Message to You. Rose's earlier LPs, on Columbia, are worth digging up, but "Love, a Kind of Hate Story" is his best yet. IG.

jazz

BENNY GOODMAN: Today. Benny Goodman, clarinet; Johnny McLevy and Derek Watkins, trumpets; Bill McGuffie, piano; orchestra. (Willow Weep for Me; String of Pearls; Roll 'Em; Blue Skies; fifteen more.) London Phase 4 SPB 21, \$11.96 (two discs).

On the surface—that is, the surface presented by the covers of this two-disc set —there seems to be no reason whatever for one more set of recordings by Benny Goodman of his big hits of the Swing Era. The titles leap at you—Don't Be That Way, Stealin' Apples, Sing Sing Sing—and the band, spread across a vast green lawn, stares at you. Why go through it all again with some band with which Benny "recorded live in Stockholm"? Aside from this note, and the picture, the titles, and the leader's name, we are given no more information on the jacket.

The set is not quite what it appears to be, however. Yes, there are some of those familiar arrangements, in most cases played with crisp competence by a band Goodman picked up in England (although this is not mentioned anywhere) and recorded with the depth and presence for which London Phase 4 is noted. But there is also considerably more.

The recording opens as though this were going to be a small group session, with two pieces—Sweet Georgia Brown and If I Had You—played by Benny and a good rhythm section. Goodman's clarinet sounds fresher and more happily involved in the playing than his records have suggested in many, many years. Bill McGuffie's strong piano solos supplement him. Then comes another quintet selection, with Johnny McLevy on trumpet, before the full band finally appears to play Stealin' Apples. For the rest of the way the warhorses are interspersed with feature spots for Goodman's British sidemen, as well as another quintet number, *Poor Butterfly*.

All told, this is the best appearance Benny has made on records in a long, long time. J.S.W.

EARL HINES: All Star Session. Earl Hines, piano; Muggsy Spanier, cornet; Darnell Howard, clarinet; Jimmy Archey, trombone; Pops Foster, bass; Earl Watkins, drums. (Mood Indigo; Pops' Blues; Baby, Won't You Please Come Home; six more.) Jazz Trip 3, \$4.98.

Out of the blue appears this sound of Earl Hines from what might be considered his dark decade, the Fifties, when he settled in San Francisco and—so far as the rest of the world was concerned seemed to have disappeared. This is the only recorded evidence of the superb band he led at the Hangover Club. It was previously released on the relatively obscure Vintage Jazz Music label and, consequently, was probably unfamiliar to all but the most intrepid Hines collectors.

Jimmy Archey, one of the most basically stirring trombonists in jazz and a musician who received too little attention on recordings during his lifetime, is in splendid form all through the disc, complementing the freshness and enthusiasm of Hines and Muggsy Spanier. Some of their freshness comes from their playing of old material in new terms. Hines's Monday Date leads off with sparkling solos by Spanier and Darnell Howard before Hines comes swinging on. Similarly, Muggsy's familiar Relaxin' at the Touro is colored by the presence of Hines. Backing them up is a wonderfully buoyant rhythm team-Pops Foster and Earl Watkins.

This is part of the first batch of releases on the Jazz Trip label (1135 West Elizabeth Ave., Linden, N.J. 07036, if you can't find them in stores). Two are made up of air-play shots: "Webb on the Air" (JT 5) with the Chick Webb band of 1940 (and Ella Fitzgerald), playing with smooth, swinging power on Blue Lou, Limehouse Blues, and the Webb theme, Swing Out; and "Waller on the Air" (JT 4) with Fats and His Rhythm enthusiastically going through tunes he has recorded many times, like Crazy Bout My Baby, It's a Sin to Tell a Lie, and Honeysuckle Rose. On both of these discs, the low-fidelity air-check recording and the noisy surfaces require some aural adjustment. Once that has been accomplished, the two sets, particularly the Webb, are rewarding.

The series also includes "Kings of New Orleans" (JT 2). On one side is a quartet led by Jimmie Noone in 1941 and of interest only because of Noone. The other side features a band Bunk Johnson led early in his 1944 comeback in San Francisco and, again, of interest essentially because of Johnson's presence.

And there is a set of Jelly Roll Morton piano rolls (JT 1) which seems to have been taken from the same rolls as the recently released Biograph 1004Q. There

are striking differences in sound and tempos between the two releases. The Biograph LP is bright and clear, with strong presence, while Jazz Trip's sound is dim and muddy. The Biographs are generally slower than the Jazz Trips. The Biograph sound is infinitely preferable, but I rather like the livelier Jazz Trip tempos.

Jazz Trip apparently has access to some fascinating material, but its remastering could be a lot better, At the asking price, there is no excuse for the shoddy material with which Jazz Trip is making its discs. J.S.W.

TURK MURPHY'S JAZZ BAND. Leon Oakley, cornet; Turk Murphy, trombone and washboard; Phil Howe, clarinet; Pete Clute, piano; Jim Maihack, tuba; Dick Speer, banjo. (Alligator Hop; Buddy's Habits; Swipesey Cakewalk; seven more.) Merry Makers 105, \$5.00 (Merry Makers Record Co., 945 Larkin St., San Francisco, Calif. 94109).

This is, incredibly, the first recording made by Turk Murphy's band in ten years and evidently the band has not changed much. They still play at the San Francisco club, Earthquake McGoon's, and they still have the same brash, gutsy style cued by Murphy's trombone attack. Leon Oakley is a strong, punching cornetist, and Phil Howe's clarinet-bubbling, twisting, singing, mellow-is a mainstay all through the set. Pete Clute takes some lighthearted piano solos and does a polished job on a lively version of Blame It on the Blues.

It's a bright collection, studded with King Oliver numbers. Murphy's band manages to hang loose even when it is putting out its typically heavy sound, which occasionally (on Alligator Hop) becomes a solid, flat-footed stomp that always gives me a mental vision of a band of ducks swinging down Bourbon Street in double time. ].S.W.

MAYNARD FERGUSON: M. F. Horn. Maynard Ferguson, trumpet, flugel-horn, and valve trombone; Alan Downey, Martin Drover, John Huckridge, and John Donnelly, trumpets; Billy Graham, Chris Pyne, and Albert Wood, trombones; Pete King, Danny Moss, Brian Smith, and Bob Watson, Pete Jackson, piano; saxophones; George Kish, guitar; Dave Lyanne, bass; Frank Ricotti, conga; Randy Jones, drums. (If I Thought You'd Ever Change Your Mind; Eli's Comin'; four more.) Columbia C 30466, \$4.98.

This release is the work of an English band that Maynard Ferguson had been leading for two years at the time of the recording. It's a big, solid, swinging band that has more depth and range than any of the others that he had led in the States. There are echoes of those American bands in some of the shrill passages that turn up here, just as there are oc-casional echoes of Ferguson's days with Kenton. These are very legitimate ele-



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ments in his growth and, taken in balance and as colors, they contribute positively to this set.

What is most exciting in the disc, however, is the polish and maturity with which Ferguson plays. This comes out most strongly in the first two selections, Laura Nyro's *Eli's Comin'* and *Ballad to Max*, which give Ferguson opportunities to play valve trombone, trumpet, and flugelhorn in a middle range. This range is vastly superior to his shrieking high-note phases (and there are, unfortunately, some of those here too).

Stylistically, there is a lot of variety crammed into these two sides—a touch of raga on *Chala Nata*, some free-form dissonance on *L-Dopa*, some overblown production stuff on a very long (far, far too long) *MacArthur Park*, and provocative solos by Pete King on alto saxophone. There is some of the best playing here that Ferguson has ever put on records.

J.S.W.

# in brief

JOHN MAYALL: Back To The Roots. Polydor 25-3002, \$9.96 (two discs). It would be appropriate to call John Mayall the British Paul Butterfield if the implications weren't so flattering to Mayall. Butterfield, after all, is a master of blues harp, while Mayall is merely pedestrian on his various instruments. And Butterfield, despite some personnel changes over the years, has maintained one of the finest contemporary blues groups while Mayall's publicists have been left trying to make a virtue of his inability to hold a band together. His groups have included some of the best British rock stars, but rarely do they do their best work while in his company. This latest outing with some of his former sidemen is no exception. About one quarter of the four sides is interesting, not nearly enough to save the show. J.G.

#### PORTER WAGONER AND DOLLY PAR-TON: Two of A Kind. RCA Victor LSP 4490, \$4.98.

Dolly Parton is one of c & w's better composers and she is also half of its best duo. Porter Wagoner is a funky mainstream c & w crooner. About a third of this month's batch of RCA's warp-proof Dynaflex, superthin record wafers were warped. Beware. J.G.

#### BESSIE SMITH: Empty Bed Blues. Columbia G 20450, \$4.98.

Columbia's program of re-releasing their priceless Bessie Smith collection proceeds apace. Here are thirty-two from 1924 and 1928, including *Me and My Gin*, *House Rent Blues*, and the title tune.

MARY. Warner Bros. WS 1907, \$4.98. This is the debut solo album of Mary Travers, of Peter, Paul, and Mary. She cannot be said to have the voice of the century. But a dozen or so years of work and success have taught her a great deal about what's important in singing. This is a sincere, warm, well-made, and altogether charming album. M.A.

#### JOE SIMON: The Sounds of Simon. Spring SPR 4701, \$4.98.

Joe Simon is highly regarded as sort of a black Joe South. He is as subdued as Jerry Butler but lacks his authority. Polished, but too polite. Includes Your Time to Cry, his latest hit. J.G.

#### STAPLE SINGERS. Stax STS 2034, \$4.98.

The Staple Singers—Pop and three daughters—were rousing, committed gospel singers long before they saw that their survival called for the transition into secular music. This pop album is a little slick, but the group does a fine job. I can't help missing the gospel years. M.A.

#### WANDA JACKSON: I've Gotta Sing. Capitol ST 669, \$4.98.

Wanda Jackson probably wouldn't be flattered if I called her the grand old lady of c & w, but that's the way I think of her. Her singing is one of the things that first attracted me to country music. This time out she offers readings of top-40 standards like *Break My Mind*, *Those Were the Days*, and *Bridge Over Troubled Waters*. Recommended. J.G.

**CRAZY HORSE.** Reprise 6438, \$4.98. This is a good group, but not as good without Neil Young as they were with him. There are a lot of Crazy Horses and very few Neil Youngs. M.A.

GENE CHANDLER & JERRY BUTLER: One & One. Mercury SR 61330, \$4.98. Both of these artists, Jerry Butler especially, have cults of devoted followers who are treated every three or four months to a disappointing album. Here's another, with two icemen for the price of one. Butler's departure from Gamble-Huff still hasn't paid off. But buy this anyway—even when he's not at his best, he's better than the rest. I don't jest. J.G.

#### PETULA CLARK: Warm and Tender. Warner Bros. WS 1885, \$4.98.

What worked for Dusty Springfield and for Lulu has now worked for Pet Clark —dropping her into soulful circumstances, that is. Carol King, Laura Nyro, *Cry Like A Baby*, etc., on her best album ever. Arif Mardin produced. J.G.

#### THE RASCALS: Search and Nearness. Atlantic SD 8276, \$4.98.

I didn't pick up on the Rascals till Groovin' and now they've lost me again. A very lackluster effort. J.G.

#### JOHN CALE & TERRY RILEY: Church of Anthrax. Columbia C 30131, \$4.98.

Two of rock's presiding genii punch in with a mostly instrumental effort that fails to hang together. Mostly I suspect it's Cale's fault, despite his very successful recent vocal LP, because Riley has done this sort of thing quite well before by himself. Get the solo releases though; they are terrific. J.G.



Oscilloscope pattern of the frequency response of the TEAC A-24 (Reprinted by permission from 1970 Tape Stereo Magazine)

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