The cover of HIGH FIDELITY magazine for August 1976 features the title "Weighing the Evidence: Tests of Twenty-One C-90 Premium Cassette Tapes." The cover art includes a scale balancing different cassette brands, such as "SF," "AMPEX," and "Toshiba."
Twin illuminated VU meters, plus separate input level controls for each channel help you set accurate recording levels. Stereo microphone inputs as well as the headphone output jack are all easily accessible on the front panel.

By any point of reference, compare the CT-F2121's combination of performance and features with cassette decks costing much more. You can come to only one conclusion — at under $200; this is the most extraordinary cassette deck value ever offered.

**Frequency Response (Chrome Tape):**
- 30-16,000 Hz

**Wow & Flutter (WRMS):** 0.12%

**Signal-to-Noise Ratio (with Dolby):** 58dB

**Input Sensitivity:**
- 0.3mV - 63mV (mic)
- 63mV - 12V (line)

**Outputs:**
- 450mV (line & DIN)
- 80mV 8 ohms (headphones)

**U.S. Pioneer Electronics Corp.,**
75 Oxford Drive, Moonachie, New Jersey 07074.

West: 13300 S. Estrella, Los Angeles 90248 / Midwest: 1500 Greenleaf, Elk Grove Village, Ill. 60007 / Canada: S. H. Parker Co.

CIRCLE 26 ON READER-SERVICE CARD

Dolby* under $200.

* Dolby is a trademark of Dolby Laboratories, Inc. † (Optional cabinet with walnut veneered top and sides. Approximate value, $24.95.) Prices listed above are manufacturer's approxi...
Ever since the cassette deck stepped into the spotlight with proven high fidelity performance, great advances in tape and cassette deck technology have been made. Despite this progress, most of the high fidelity industry was convinced that it was virtually impossible to build a really superior front-loading, front-control cassette deck equipped with Dolby — that could sell for less than two hundred dollars.

Pioneer thought it might be impossible, too. But we figured it was worth the try.

The engineers at Pioneer were given the 2121 project two years ago. They were asked to build a front-access, front-control cassette deck loaded with features. A deck that would outperform any unit in the two hundred dollar price range that had ever been built before.

The result is the no-compromise CT-F2121 — a cassette deck with enormous capability, performance, reliability and features. Pioneer believes the CT-F2121 has the greatest combination of value ever put into a cassette deck at such an extremely reasonable price.

**Everything's up front for optimum operating convenience.**

Pioneer's engineers have designed the CT-F2121 to give you the highest degree of flexibility in use. You can stack it easily with other components in your system because every control function, as well as cassette loading, is operable from the front panel. In addition, the illuminated cassette compartment permits rapid cassette loading at an easy-to-see 30° angle. An LED indicator lets you know when you're in the recording mode. And, as all Pioneer components, the controls are simple to use and logically arranged.

**Improved sound reproduction with built-in Dolby B system.**

The CT-F2121's selectable Dolby B provides as much as 10dB improvement in signal-to-noise ratio with standard low noise tapes. There's an even greater improvement with chromium dioxide tape. An indicator light tells you instantly when the Dolby system is in operation. And to insure better, interference-free recordings of FM stereo broadcasts, Pioneer has built in a multiplex filter.

**Outstanding performance with every type of tape.**

Separate bias and equalization switches permit you to use any kind of cassette tape: standard low noise, chromium dioxide — and even the newest ferrichrome formulations. The CT-F2121 brings out the fullest capabilities of each tape. And to produce the best performance, the operating manual of the CT-F2121 gives you a chart listing the most popular cassette tape brands with their recommended bias and equalization control settings. There's never any guesswork.
The most extraordinary cassette deck value ever offered.
PIONEER STEREO CASSETTE TAPE DECK MODEL CT-F2121

Actual resale prices will be set by the individual Pioneer dealer at his own option.
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Is it your receiver?

or is it your cartridge?

Your Turntable?

Your speakers?

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Let's face it, the cartridge is that important first point where the music begins, and if the stylus cannot follow its path accurately, no amount of expensive equipment—speakers, turntable, or receiver—can make up for the distortion it can produce. That is why you need a cartridge you can depend on. One that's the best your money can buy. Specifically, a Pickering.

Because a Pickering cartridge has the superior ability to "move in the groove," from side to side and up and down, without shattering the sound of your music on your records.

Because a Pickering cartridge possesses low frequency tracking ability and high frequency tracing ability (which Pickering calls traceAbility™). It picks up the highest highs and the lowest lows of musical tones to reveal the distinctive quality of each instrument.

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CIRCLE 23 ON READER-SERVICE CARD

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Pioneer Project

This summer the U.S. Pioneer Electronics Corporation embarked on a program to help the New Jersey Symphony Orchestra, which if it proves successful may also benefit the Metropolitan Opera. For years the high fidelity equipment manufacturer located in Moonachie, New Jersey, has been contributing an annual $10,000 to the state's major symphonic ensemble. Still, the New Jersey Symphony has remained in a financial situation that has become common for cultural institutions—troubled.

Last March, Bernie Mitchell, president of Pioneer and a member of the orchestra's board of directors, devised a plan that is expected to triple Pioneer's financial assistance. For the past few months the firm has been approaching all New Jersey high fidelity dealers (with the exception of the large department stores—they can afford their own philanthropic programs) through a series of letters, offering to match any contributions they make to the symphony dollar for dollar. Mitchell anticipates raising some $10,000 from the dealers, which with Pioneer's matching contribution and its regular yearly gift will put $30,000 into the orchestra's bank account.

If the program succeeds, Mitchell hopes to extend it to every high fidelity dealer in the country this fall, with the recipient this time being the Metropolitan Opera. With this more ambitious national project, Pioneer anticipates collecting about $125,000 from dealers, which with its matching grant will provide the Met with an additional quarter of a million dollars. (I asked Mitchell what will happen to the Met project if the New Jersey project proves too successful—if some generous Hoboken dealer forces Pioneer to match, say, a million-dollar contribution. He thought a moment, smiled, and replied: "Maybe I'll ask the orchestra to change its name.")

What can Pioneer expect to gain from its largesse? First of all, I trust, the gratitude of music lovers, today in New Jersey, tomorrow the world. (The Met is, after all, an international organization; American opera buffs would feel grateful to anybody who helped save La Scala.) Second, as this editorial exemplifies, some well-deserved publicity. And publicity at the important "point-of-sale," at least in New Jersey for now, since the company will provide trophies, plaques, and certificates for the contributing dealers to display proudly, even if they don't sell Pioneer products. Frankly, I hope that Pioneer can get that publicity in every high fidelity store in New Jersey.

Third, I think, there will be a sense of pride in aiding a worthy cause and a musical genre that is vital to the high fidelity industry. I surmise a fourth: the satisfaction of forcing the government to contribute more to cultural institutions. One continually hears complaints that our various governmental levels are not doing enough to support the arts. Pioneer is putting its money where others' mouths are. Although about half of the company's, and the dealers', contributions are coming from their stockholders' pockets, the rest of this "business expense" comes out of taxes. Here, to be sure, is the best means to increase the government's contribution to music while avoiding any possibility of governmental influence: Give, yourself.

Finally, as Victor discovered in the early days of the audio industry, when the recordings of Caruso helped make the Victrola almost synonymous with the phonograph, there is a certain benefit to a manufacturer who takes advantage of the prestige that an association with the classics can bestow upon his products. Whatever else classical music may contribute to the high fidelity industry, it certainly confers the element of class.

So, good luck to Pioneer in its present program. And to any other generous manufacturers filling in for the Prince Esterhazys and Otto Kahns of bygone days: These pages are open to publicize your efforts too.

Leonard Marcus
Any LUX amplifier or tuner that doesn't meet or exceed every rated specification won't ever reach you.

It's one thing to produce components with an impressive list of published specifications. It's quite another matter to ensure that every unit will meet or exceed each of those specifications. But this is precisely what LUX does with its entire line of power amplifiers, preamplifiers, integrated amplifiers and tuners.

LUX components were conceived and designed for that very special breed of audiophile whose critical requirements for accurate music reproduction are met only by separate amplifiers and tuners. And of those products, the very best that the state of the art can provide.

Hence, the following procedure takes place at our facilities in Syosset, New York.

Every unit received from the factory in Japan is removed from its carton and placed on a test bench where it is connected to an array of test equipment, which includes a Sound Technology 1700A Distortion Measurement System and 1000A FM Alignment Generator, McAdam 2000A Digital Audio Analyzer System, and lwatsu Electric SS5100 and 5057Z Synchroscope.

Every control, switch, meter and indicator undergoes an operational check-out. There's nothing unusual about this. Any reputable manufacturer can be expected to do the same. Or at least spot check a shipment.

But LUX has only begun. Every specification is then measured against its published rating. That means 14 individual tests for a power amplifier, 14 for a preamplifier, 20 for an integrated amplifier and 7 for a tuner.

Each verified specification is entered by hand on a Performance Verification Certificate. Any unit that doesn't match or exceed every published specification is given the appropriate remedy. When a unit passes, it is returned to its carton together with a copy of the Certificate for the information of its future owner. Another copy stays with us as a permanent record.

As for the specifications themselves, here are some examples. The Luxman M-4000 power amplifier has no more than 0.05% total harmonic distortion at any frequency from 20 to 20,000 Hz, even with both channels driven simultaneously to its rated output of 180 watts per channel minimum continuous average power into 8 ohms. Another M-4000 specification: signal-to-noise ratio beyond 100 dB.

Another example is the C-1000 preamplifier. Its phono-input circuits are virtually overload proof, accepting almost half a volt of audio signal at 100 Hz. The distortion of its phono-preamplifier circuits is an astonishingly low 0.006%, and the rest of the preamplifier circuits add only 0.001% more.

There's one more expression of our confidence in our products: If any of them malfunctions during the first three years, let us know. We'll not only fix it promptly, but we'll pay the freight both ways, as well as supply a shipping carton if needed.

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With all this, we think that neither our specifications nor our procedures for verifying them is nearly so important as your satisfaction with the end result: the most accurate and musical reproduction you can hear.

The end result can be best appreciated at a select number of dealers whom we guarantee to be as dedicated to fine music reproduction as we are.

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COMING NEXT MONTH

Our September issue will once again contain a forecast of the pleasures in store for audiophiles and music lovers in the year to come: a Survey of New Equipment you'll soon be seeing at your local dealer's and a preview of The Forthcoming Year's Record Releases. We'll also offer The Hi-Fi Heist: An Insider's View, by an erstwhile professional burglar whose specialty was audio components. Who better to tell you how to prevent the theft of your own? Two interviews complete our feature section: Royal S. Brown's with Bernard Herrmann, late dean of film music composers, and Susan Gould's with Turkish soprano Leyla Gencer, Queen of Pirate Recordings. Plus High Fidelity Pathfinder Victor Brociner, Gene Lees, and more.

SOLUTION TO HIFI-CROSTIC NO. 14

CARL SANDBURG: [The] American Songbag "Walky Talky Jenny" has the swagger of the southern mountaineers when they are having a luminous good time. Perhaps before the Civil War a troupe played in the valley towns and this song was picked up. The mingling in of comic bucolic monologue was a minstrel feature.

Join the Discussion!

Our Readers React:

DBW: Our Readers React

Re "Meet the dBW" in the June issue, I passed the article among the hi-fi nuts at the office and got comments like these: "What's that?" "What's a logarithm?" "I don't know about dBWs, but bigod! I know what I like!"

"All I ask is, does it have deep, rich bass? (My stereo does.)"

"I'll never fly: 100 watts looks a lot bigger than a mere 20 dBW. And 1,000 is a heluva lot bigger than 30." (Good sales point.)

Personally, having been brought up on cycles per second, I'm damned if I'll say "kuh-HOU-zes" to commemorate some ancient European or to kowtow to the whimsies of foreign engineers. The function of language is to communicate: "eps" said precisely what was meant; "kHz" requires an interstage of translation.

It's all part of the silly clutter of the language with euphemisms. Now we are afflicted with the CB argot! Before long no one will be able to read a simple sentence; we will communicate by grunt, scratch, and signs.

And don't give me that business about the inevitability of change and that change is Progress! Grump!

E. D. Hoaglan
Omaha, Neb.

Regarding "Meet the dBW," I think the explanation you offered was very well done. I believe, however, that you should have included a graph on semi-log paper showing the relationship of dBW to conventional power output. Also, for the calculator-users among us (mine's an HP-45), you could have included the formulas for the conversion:

\[
P_e = 10^{\frac{P_{dBW}}{10}} \quad \text{(or } dBW = 10 \log P_e)\]

Louis H. Garner
Torrance, Calif.

A graph is not necessary. Our table tells all that matters, for practical purposes. That, in fact, is one of the reasons for using dBW. It shows just how insignificant the difference between, say, 225 watts (23½ dBW) and 250 watts (24 dBW) really is.

John Hammond

Bravo to John McDonough for his informative and literate "The Multiple Lives of John Hammond" (June). For thirty-eight years Hammond and I have been friends, yet McDonough disclosed things about Hammond I never knew.

The picture, however, showing Hammond with Basie, Hines, Christian, Goodman, and Humes is incorrectly captioned. As a member of that party (second from Basie's right between his manager Milton K. Ebbins and Chicago bandleader Bob Strong) on a memorable summer night, I can assure you that the photo was made on Chicago's South Side in 1940, not in New York's Harlem in 1941.

The 3 a.m. menu was, of course, barbecued ribs.

Dave Dexter Jr.
Copy Editor, Billboard
Los Angeles, Calif.

Streisand on the Classics

The article on "Classical Barbra" in the May issue of High Fidelity was very interesting—and, I hope, a put-on. Mentioning Streisand along with Schwarzkopf is a sac-

In Chicago, not Harlem: Hammond (left, with cigarette), Hines (third from left); Christian (back, with glasses); Humes (back, with turban); Basie (second from right); Goodman (right).

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rilege that is compounded when the names of De los Angeles and Farrell are introduced as well. Calling her voice “one of the natural wonders of the age” is tantamount to an endorsement of whining. Can Glenn Gould really have been listening?

Ralph Latimer
New York, N.Y.

I was taken aback to read that a master of the classical keyboard such as Glenn Gould would compare “Classical Barbera,” Barbra Streisand’s venture into the classics, with those of Elisabeth Schwarzkopf. Imagine Streisand singing the Marschallin in Der Rosenkavalier or attempting a highly sophisticated art song like Mozart’s “Das Veilchen.” Hearing her “singing” (warbling is more like it) of Handel, Schumann, and Wolf has been quite enough for me. She covers—to borrow from a great writer of aphorisms—the gamut of emotions from A to B. Although in the popular repertoire Streisand has a personal style that is widely admired, her classical efforts are more on the level of Florence Foster Jenkins.

Some classical artists—Beverly Sills, Helen Traubel, and Ezio Pinza, to name a few—have had success in the popular field, but few popular artists (in fact, name one) have made the reverse transition. One is reminded in Streisand’s case of a German proverb that counsels a shoemaker to stick to making shoes.

Paul Samuel
Dobbs Ferry, N.Y.

Glenn Gould’s comments on Barbra Streisand’s classical album prove that as a record reviewer he is one hell of a pianist.

Hugo Maxwell
New York, N.Y.

More on the Anniversary

Your twenty-fifth-anniversary issue (April) was a delight beyond words.

Ted Wick’s article on movie soundtrack recordings was of particular interest, but it does contain one major error with regard to the first commercial soundtrack album. Miklós Rózsa’s Spellbound score recorded on ARA Records (later transferred to LP by Remington Records, something the author fails to note) was predated, ironically enough, by the same composer’s The Jungle Book, with Sabu as narrator.

That score, issued on RCA Victor M 905, is the first American film-music album. The first commercial album of film music was “Things to Come,” issued in the late Thirties on English Decca 78s, conducted by Arthur Bliss and Muir Mathieson.

John Steven Lasher, President
Entr’acte Recording Society
Chicago, Ill.

Mr. Wick replies: I am somewhat surprised to learn that the British issued a movie-music album in the Thirties. Their foreknowledge that they were stealing my idea before I had a chance to use it is obvious even in the title, “Things to Come.” I am smarting for “failing to note” the obscure information that our original ARA 78-rpm “Spellbound” album was “later transferred to LP by Remington Records.” If Remington, of which I have never heard.
Some reasonably unbiased suggestions on how to select your next record player.

Since you read this magazine, chances are you already own a record player. If you're considering replacing it, it probably no longer meets your requirements. One way or another.

For example, if your turntable operates only manually, you may now prefer the convenience and safety of automatic operation. If it already provides automatic start and stop, but only in single play, you may now want the ability to play a series of records in sequence and without interruption.

You may also be taking an expensive risk with your records every time you play them. Remember: your record collection probably costs more than the rest of your equipment combined. This alone should prompt you to give thought to a new turntable.

Over the years, Dual's approach has been to build every turntable with more precision than your records are likely to need. Since we traditionally lead the state of the art, every Dual tonearm produces optimum performance from today's finest cartridges and maximum longevity from every record.

This is as true of the least expensive Dual, the 1225, as it is of the CS701. All Dual tonearms, for example, follow the same basic design principles: straight line between pivot and cartridge for maximum rigidity and lowest mass; dynamic balance maintained throughout play; stylus pressure applied around the vertical pivot; anti-skating that automatically compensates for the inherent changes in skating during play.

As for rumble, wow, flutter and crosstalk from speed accuracy, all are far below audibility in every Dual. (With the direct-drive CS701, they are virtually unmeasurable.)

We don't suggest that Dual is the only quality brand turntable available. But where Dual does indeed stand alone is in the many years of proven reliability and durability. For example, many Duals that come in for servicing (usually only for lubrication and cleaning) are more than ten years old. And many Dual owners tell us (via letters and warranty cards) that they now own their second Dual...usually for their second system.

Dual quality comes in a variety of models: semi-automatic, single-play; fully automatic, single-play/multi-play. Seven models in all are described. We think it only reasonably biased to suggest that you will find your next turntable among them.

Dual 1225. Fully automatic, single-play/multi-play. Viscous damped cue-control pitch-control. 10½" platter, less than $140, less base.
Dual 1226, with cast platter, rotating single-play spindle, less than $170.
Dual 1228, with gimbaled tonearm, synchronous motor, illuminated strobe, variable tracking angle. Less than $200.

Dual 1249. Fully automatic, single-play/multi-play. Belt drive, 12" dynamically-balanced platter. Less than $280, less base. Full size belt-drive models include: Dual 51C, semi-automatic, less than $200; Dual 601, fully automatic, less than $250; Dual CS601, with base and cover, less than $270.


United Audio Products, 120 S. Columbus Ave., Mt. Vernon, N.Y. 10553
Exclusive U.S. Distribution Agency for Dual
paid proper royalties, well and good. If not, I shall welcome a copy of "Spellbound" for keeping my mouth shut.

When film music is used to underscore narration, as presumably it must have been in the "Jungle Book" disc to which Mr. Lasher refers, can one label such a recording purely a "motion-picture" album? I think not. Certainly Mickey Rooney made no effort to restrain our group from claiming "Spellbound" as the first album of motion-picture music.

After all these years I suppose it really isn't that important, and at my age who really cares what we did? But John T. Mullin's piece on the advent of tape recording (April) carries on all the old myths. The facts are:

(1) The first broadcast model of the Magnetophon was found at Radio Luxembourg, by me.
(2) The first portable broadcast model was shipped to the U.S. by me in October 1944.
(3) The first technical articles were written by me in November 1945.
(4) We broadcast via Magnetophon from Radio Luxembourg long before Radio Frankfurt was captured; indeed, I acquired two Magnetophons in the Netherlands at Hilversum, before Frankfurt fell.
(5) I had a K4 Magnetophon (30 ips tape speed) in my home for many years, with German operas and the Berlin Philharmonic on reels of tape.

Don v. R. Drenner
Coffeyville, Kan.

If Mr. Drenner will look back at Mullin's article, he will see that the author asserts only that he was the first to stage a public demonstration of the Magnetophon in the United States—at a meeting of the San Francisco chapter of the Institute of Radio Engineers on May 9, 1946. Furthermore, far from being an exercise in claim-staking, the article was principally concerned with use the author made of the machine he had retrieved so fortuitously in Frankfurt.

Contradictions of fact are to be found in Nicolas Slonimsky's references to Sergei Koussevitzky's young assistants at Tanglewood—Eleazar de Carvalho and Leonard Bernstein—in the article "1951: A Classical Scrapbook" (April).

Koussevitzky's plans for Carvalho were to build up the Rio de Janeiro Orchestra and to help develop musical culture in Carvalho's own country. With this intent, in the autumn of 1949, he spent a month in Brazil, conducting for three memorable weeks in Rio, with Carvalho as his assistant.

For Bernstein, Koussevitzky's dream was to have his first Berkshire Music Center student conductor become an associate director at Tanglewood. It should be remembered that at the close of his (unprecedented) twenty-fifth season in Boston (1949) Koussevitzky resigned as conductor of the Boston Symphony, but not as director-founder of the Berkshire Music Center. "Tanglewood," he announced, "is my child—my tears and my great joy...."

On June 3, 1951, Bernstein flew from Mexico to spend the evening with "Sergei Alexandrovich," discussing the forthcoming season and planning for the future of Tanglewood. It was the last evening of Koussevitzky's life.

It is worthwhile also to correct the imputation that Koussevitzky's double-bass concerto had been composed by his friend Reinhold Gliere. Since the 1900s, Koussevitzky's name as a double-bass virtuoso ranked with those of Kreisler and Casals on their instruments. In order to fulfill his engagements, he transcribed and composed short works with piano accompaniment. To keep the record straight, I should like to quote from the volume Contrabass: History and Method, issued in Moscow in 1974. The article dedicated to Koussevitzky gives a detailed account of this major composition in the double-bass repertoire. It also refers to the fact that the young virtuoso approached for the orchestration of this work a professional composer, his friend and colleague Gliere. Together they worked on the orchestration of the concerto. The review of the first Moscow performance described the concerto as a work "revealing the melodic as well as the technical possibilities of the double bass in the superlative performance by its author" (italics mine).

Mrs. Serge Koussevitzky
New York, N.Y.

I am astonished by Nicolas Slonimsky's...
conclusion about the benefaction that Sergei Koussevitzky bestowed upon the Library of Congress. We are most grateful (as Mr. Slonimsky indicates) to the conductor for the creation of the Sergei Koussevitzky Music Foundation. It preceded his death, however, by nearly two years, and records of negotiations for it go back to 1948.

Even before that date Koussevitzky had close relations with the Library of Congress, and on April 24, 1933, he conducted a chamber orchestra at a festival in the Coolidge Auditorium. As the years passed, and as he thought more and more about institutionalizing his philanthropy, he broached the subject to Harold Spivacke, then Chief of the Music Division. There was an immediate meeting of minds, and several discussions took place subsequently. The first formal gathering in which Mr. Spivacke took part was in March 1949. By the end of that year the Foundation was in existence and handsomely funded, and the inaugural concert occurred on January 21, 1950. Koussevitzky was present on that occasion and graciously responded to the introduction and remarks made by the Librarian of Congress, Luther H. Evans.

It is an egregious error to suggest that our Koussevitzky Foundation resulted from a fit of spite on the part of a great conductor. Koussevitzky was present on that occasion and graciously responded to the introduction and remarks made by the Librarian of Congress, Luther H. Evans.

The April article "1951: Pop Music at the Crossroads" really rang the bell for this hopelessly addicted music buff. That was the year I got hooked on the stuff, at age fourteen. This delightful article articulated superbly a very special period in popular music as no one else has yet done.

So well did John McDonough present the era that I'm tempted to overlook his crediting the Four Aces with the Four Lads' hits "Moments to Remember," "Standing on the Corner," and "Istanbul."

Glenn Atchison
Toronto, Ont.

The First Mahler Second

In "Letters" for May, David Wilson says that the first recording of Mahler's Second Symphony was made by Eugene Ormandy and the Minneapolis Symphony Orchestra for Victor. Actually, the first recording was made back in the 1920s by Oskar Fried and the Berlin State Opera Orchestra for Polydor. Fried's orchestra is joined by the Berlin Cathedral Chorus with Gertrud Binder-Nagel, soprano, and Emmi Leisner, contralto, who gave a memorable performance of the Urlicht.

The Bruno Walter Society has issued a long-playing re-recording of Fried's performance, but I find the transfer of the sound painful.

W. Parks Grant
Oxford, Miss.

Corrections

John Hurd of London Records points out that, in HiFi-Crostic No. 12 (May), Input Word C refers incorrectly to "the RCA Kismet recording with Robert Merrill, Regina Resnik, and Mantovani. Make that "the London Kismet recording."

Seymour Solomon of Vanguard Recording Society notes that Vanguard's recording of Handel's Judas Maccabaeus, one of the ten recommendations in "Using Records to Judge Loudspeakers" (June), is conducted by Johannes Somary—not Stephen Simon, as erroneously credited.

Peters International calls our attention to an incorrect record number in our April review of the Goodall English language Rheingold and Siegfried. The latter, listed as EMI SLS 873, is in fact SLS 875.
If that expensive cassette deck you wanted is so good, why aren't its specs better than the lowest priced JVC?

A high price doesn't necessarily mean better performance. So even though you're thinking about a cassette deck in the luxury class, consider the new JVC CD-1920. Five LED peak level indicators eliminate under-recording and tape saturation.

While this excellent front-loading unit is JVC's least expensive model, it offers performance specs that equal (and surpass) many higher priced models.

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Sure, we could go on and tell you about the CD-1920's many features, including the built-in automatic noise reduction system (ANRS). 3-step bias and equalization switches, or the tape-protecting automatic stop in all playing modes.

But do yourself a favor. First listen to the sound of the CD-1920 at your JVC dealer. (Call toll-free 800-221-7502 for his name.) Then, if you need extra convincing, check its specs against decks costing $250* or more.

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*Approximate retail value
Archiv in London. In seventeen sessions crammed into just over a week, Gerd Ploehsche and his DG Archiv recording team have taped Handel's Judas Maccabaeus in London. As with the earlier Israel in Egypt and Saul recordings, Charles Mackerras conducts the English Chamber Orchestra, but it was likely the presence in the cast of Janet Baker (as the Israeelite Man) that drew European editor Edward Greenfield to one of her five sessions. He found her taking a stand.

"I'm rather suspicious when you have to play tricks in order to sing it," she said, her brow furrowed. For half an hour, Greenfield reports, she had been coping with the most elaborate ornaments—devised by Mackerras—but at one point in her big aria "Tis liberty" she drew the line. It was not the notes she objected to, but the requirement to fit extra words in, and there singer and conductor promptly came to the most amicable of compromises. These two complete professionals returned to work, not wasting a moment, consistently producing for the microphones a sense of a live performance.

The other soloists are Felicity Palmer, Ryland Davies, John Shirley-Quirk, Christopher Keyte, and Paul Esswood, with the Wandsworth School Boys' Choir.

Wagner update. Progress (of various sorts) on three long-talked-about projects:

- DG's Meistersinger. Smooth sailing here. Concurrently with performances at the Deutsche Oper Berlin, the recording was accomplished in eleven four-hour sessions in West Berlin's Jesus Christuskirche. Eugen Jochum conducted the same forces he had at the live performances, with the cast headed by Dietrich Fischer-Dieskau (Sachs), Catarina Ligendza (Eva), Placido Domingo (Walther), Christa Ludwig (Magdalena), Horst Laubenthal (David), Peter Lagger (Pogner), and Roland Hermann (Beckmesser).
- EMI's Lohengrin. The winter's other Berlin Wagner recording project is a less happy story, with work already stopped twice. The original Philharmonic Hall sessions, scheduled for December and January (on the basis of which Angel optimistically penciled in a May release date—"Behind the Scenes," March), came to a halt when Herbert von Karajan's recurrent back trouble required surgery. When recording resumed in February, Karajan suspended the sessions again after disagreements with the Lohengrin soloists. Rene Kollo. There were rumors that EMI would have to give up the whole project, but Karajan, in consultation with EMI's Peter Andry, started devising ways of continuing with another tenor—younger and less famous but more in line with his thinking. As of now the rest of the cast—Tomowa-Sintow, Schroder-Feinen, Nimsgern, Ridderbusch—remains; further developments as they reach us.
- Decca/London's Dutchman. It has been known for some time that Sir Georg Solti would realize his keen desire to record an opera with the Chicago Symphony; it finally happened in March. After flying his concert Dutchman to New York for a Carnegie Hall gala, Solti brought the show back to Chicago for taping. The title role was sung by Norman Bailey, who was seen nationally in the part on public television here in May. The rest of the cast: Janis Martin (Senta), Rene Kollo (Erik), Martti Talvela (Dal- land), Isola Jones (Mary), and Werner Krenn (Siegfried).

Duchesse Régine. Régine Crespin is scheduled to sing the title role in Offenbach's La Grande Duchesse de Gérolstein for CBS. The recording will be made in Toulouse with the forces of the Théâtre du Capitole under the company's music director, Michel Plasson.

Stokys 100th? Not long after celebrating his ninety-fourth birthday, Leopold Stokowski signed a six-year contract with CBS. CBS's Paul Myers explained that plans are being made to record the maestro's hundredth-birthday concert. First sessions were to be devoted to Aurora's Wedding, the group of excerpts from Tchaikovsky's Sleeping Beauty based on most of Act III.

Preiser arrivals. German News Company, U.S. distributor of the Austrian Preiser label, informs us of a batch of new releases coming in both the Lebendige Vergangenheit and Court Opera Classics series. A number of singers already represented in the series are heard again: Emmi Leisner, Michael Bohnen, Koloman von Pataky, Franz Volker, Margarete Klose, Ria Ginster, Gerhard Huch (three new discs, two of which include his complete Winterreise and Schöne Müllerin), Titta Ruffo, Mattia Battistini, Frieda Hempel, and Paul Knauper. Among the singers getting their first
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Solo discs in these series are Eide No- rena, Maria Olzewska, Kerstin Thor- borg, Ester Mazzoleni, Mario Sam- marco, Jacques Urlus, Leonid Sobinoff, and Karl Jorn.

Met broadcasts. For the second consecutive year, the Metropolitan Opera is offering a disc edition of one of its "historic broadcasts" to all contributors of $100 or more. The new issue is the Madama Butterfly of January 19, 1946, with Kirsten Flagstad, Lauritz Melchior, Kerstin Thorborg, Julius Huehn, and Alexander Kipnis, conducted by Erich Leinsdorf. Copies of last year’s set may still be available: the Madama Butterfly of January 19, 1946, with Licia Albanese, James Melton, and John Brownlee, conducted by Pietro Cimara. Write to the Metropolitan Opera Guild, 1805 Broadway, New York, N.Y. 10023.

Steber Foundation. Three discs containing material recorded at recitals given by Eleanor Steber in 1974 and 1975, available only as a group, have been issued by the Eleanor Steber Music Foundation. The repertory includes operatic excerpts, various songs, and the complete Geistliche Lieder from Wolf’s Spanish Songbook. The Foundation will use money raised to assist singers attempting to establish their professional careers. The records cost $18.95, from the Eleanor Steber Music Foundation, 2109 Broadway, New York, N.Y. 10023.

Classical radio. We all agree that there should be more classical programming on radio, but how does one find out who is programming classical music in the U.S.? Earlier this year the first edition of a booklet called Musica appeared, listing more than 500 stations (AM and FM), arranged geographically, with the hours of their classical broadcasting. The response was so enthusiastic that a second edition is already available, listing more than 750 stations. The price is $3.00 postpaid, from Musica, Box 1266(y). Edison, N.J. 08617.

Heifetz discography. John Anthony Maltese writes to inform us that his complete discography of Jascha Heifetz—"a comprehensive listing of LPs, 45s, 78s, and tapes (reel-to-reel, four- and eight-track cartridges, and cassette) released in the United States and Great Britain"—has been published in Le Grand Baton, the journal of the Sir Thomas Beecham Society.

The issue is available to nonmembers for $4.00 including postage from the Sir Thomas Beecham Society, Editor, Le Grand Baton, Box 6361, Cleve- land, Ohio 44101.
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Percy Faith—Master of More than Mood Music

by Gene Lees

As is widely known, the CBS Records Group has made a reciprocal agreement with the Russian Melodiya label. This has given CBS access to a large and important catalogue of Russian classical recordings. What did the Russians get out of the deal?

The answer is surprising. At the top of the list of recordings they wanted were the albums of Percy Faith.

Percy Faith? Yes—he of "mood music" with the pretty string sections.

Whether the Russians know or even care is hard to say—few Americans realize it—but Percy Faith, who died of cancer at the age of sixty-seven this March, holds a significant place in American popular music. He was one of the first arrangers to bring to the performance of popular music the skills, scope, and instrumentation of classical music. And he was doing it as far back as the mid-1930s.

In an association with Columbia Records that lasted nearly thirty years, Faith recorded more than sixty-five albums—even he wasn't sure of the precise number. "None," he said, "ever went into the red, despite the large orchestras I used." He also wrote scores for eleven motion pictures.

If your memory, or record collection, encompasses the early 1940s, you know that the songs of the period were superior to their orchestrations. The writing, particularly accompaniment for vocals, was often awkward and unevolved, with bad instrumental balances and clumsy voice-leading. And the string writing, on those rare occasions when it was heard, was especially unimaginative. The good writing was found in jazz orchestration, but this was limited to trumpet, trombone, saxophone, and rhythm sections. When Artie Shaw, Tommy Dorsey, and Harry James added strings to their bands, the effect was unsatisfactory, partly because they could not afford to carry on the road the number of strings needed to balance the brass.

One of the most pervasive influences on pop orchestration, and not only in the U.S., has been Robert Farnon. Virtually every professional arranger—from André Previn and Quincy Jones to J. J. Johnson and Roger Kellaway—has been influenced directly or indirectly by him. But what many of his followers don't know is that Farnon himself was greatly influenced by Percy Faith. He had been one of Faith's trumpet players when the two Toronto-born musicians were with Canada's government-owned network, the CBC. "I learned a lot from Percy," Farnon has told me. "I admired him very much. I admired his taste. He especially taught me what to leave out.

Faith studied at the Toronto Conservatory under a strict disciplinary system. "I was ready," he told me, "to jump two or three years ahead of what I was doing. But I was told by my harmony teacher, 'You must learn the basics. You must learn Bach, all the preludes and fugues, on the piano, then orchestrate them for string quartet, for brass quartet; learn Beethoven. Learn that foundation, and then when it's become a part of you, forget it and go on.'

In 1934, Canada established the CBC. Percy went to work there almost as soon as it was organized and began writing and conducting the music for a series of shows called Music by Faith. From the beginning he used strings and "classical" woodwinds, as opposed to the customary saxophones.

"The strings were always quite busy in anything I wrote," Percy said. "But the trumpets would have many, many bars' rest, and I gather that Bobby [Farnon] did a lot of listening.

"I had added six girls to the orchestra. I wanted certain sounds. The
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budget wouldn’t allow for extra percussion and extra woodwinds, and I found I could get six girls for $5.00 each per show. They did nothing but vocalise at first, in conjunction with three or four flutes plus a vibraphone and a celesta. We got a great sound. People thought it was an organ or some kind of electronic instrument.

"Once this clicked, the CBC suggested, 'Since you’ve got them, why don’t we hear something with lyrics?' So I turned the girls over to Bobby, and I said, 'Let’s do one number a week.' But since we were so avant-garde, I said, 'I don’t want any ballads. Let’s do nothing but out-of-left-field tunes like "Where, Oh, Where Has My Little Dog Gone?" but do them in a jazz idiom.' So Bobby started writing these vocal arrangements for me, and they were fantastic. With the band and six girls, it really swung."

In 1940, a CBC executive ordered the Music by Faith budget cut, even though it was one of the few CBC productions to be carried regularly to the larger audience of an American network. Faith was angered by these economies.

NBC was at the time auditioning conductors to replace Joe Pasternak, conductor of the Carnation Contented Hour, who had died. Faith, now thirty-one, went to Chicago to audition in July of that year, was hired for the summer, and in September became permanent music director of the program. But his pioneer work had already been done in Toronto. "As a matter of fact," he said, "as late as 1955 I recorded some arrangements that were, practically note for note, arrangements I did in Toronto in the Thirties."

A little over two years ago, we talked in the Hollywood office of his son Peter, a composers’ agent (who died a few months later at the age of thirty-seven). "Jerry Goldsmith said that the art of film scoring is gone—scoring in the style of Max Steiner, Alfred Newman, or his own,” Percy told me. "And he’s right. It’s an electronic world now, and I’ve been studying the Moog, the Arp, the Fender-Rhodes piano. I use them in my recordings sometimes.

"But you walk into the recording studio, the sound stage, and you don’t see any big string sections, any ninety-piece orchestras for the main titles. You’ll see three or four keyboard men, the finest in the country, all sitting around with synthesizers and electric pianos and the E-3 Yamaha organ, which can practically simulate any orchestra sound, and that’s your score."

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Listen. Record. Listen. The Music Tape by Capitol® takes you there again and again and again.

Because of the paucity of his film scores, Faith will always be known as an arranger. But his arrangements are models of taste and clarity from which any music student could and should learn. Perhaps all that Bach work in his own student days had its effect, but whatever the cause, you can always hear the lines—all of them, all the way to the bottom of his orchestrations. The writing was always fresh, and he had a wonderful command of colors.

His albums continue to sell, although most of the recent "pop" material he had to work with ran shallow in terms of linear and harmonic content. Still, if ever a man knew how to make a silk purse of a sow's ear, Percy Faith did.
The next time you're looking at tape decks, pick up any piece of Akai equipment. They're heavy.

The motor, the drive system, the flywheel. Akai makes them big. As big and as strong as we possibly can. So they'll perform for you.

The Akai GX-530DSS is a good example. Pound for pound and dollar for dollar, it's one of our heaviest. It's driven by a big, heavy-duty AC servo capstan motor plus 2 eddy current motors for fast forward and rewind. It features Akai's Quadra-Sync® for multiple track synchronization when recording. It offers complete versatility for mixing. And pitch control. It's got just about everything. For the guy who wants to do just about everything.

Our GX-650D stereo tape deck has just about everything, too. Closed loop dual capstan drive. One AC servo capstan motor plus 2 eddy current motors. Sound on sound. 3 speeds. It's got it.

That's the kind of equipment you can expect from Akai. Strong because we're heavy. Heavy because we're strong. Akai. Pick one up.

AKAI
COMIN' ON STRONG!

Akai reel-to-reel tape decks from $299.95 to $1,495.00 suggested retail value. Akai America Ltd. 2139 East Del Amo Blvd. Compton, California 90220.
Since we don't do a tremendous amount of national advertising at Advent, we try to make most of our ads convey (as directly and clearly as we can manage) what our individual products have to offer and why you will find them worth seeing and hearing for yourself.

But every so often (this will be the third time), we think it makes sense to give a general picture of what we are doing and why.

We didn't go into business at Advent to produce a standard line of products in every price and performance category. The idea was, and is, to produce exceptional products one by one—products that would be usefully different in performance and value. These products come when they come, usually one or two a year.

**Advent Life-Size Television.**

Our most unmistakably different product is the VideoBeam® projection television set, with a vividly clear and bright life-size color picture that measures seven feet diagonally. The picture is ten times larger than a standard 25-incher, and the difference it makes in the television experience is total. It does for television—finally—what component equipment did for music.

Like everything we make, our television set didn't come about because of elaborate "market research" or imitation of what anyone else was doing. We did it because it was interesting and exciting to us, and because we trusted that what would interest us would probably do the same for a lot of other people. And we did it because the giant manufacturers of TV sets, as had been the case earlier with audio equipment, were showing no real signs of developing something dramatically better than the standard mass-market product.

The VideoBeam set shown is the 1000A, the one that has been bringing amazed rave notices from people and publications across the country. It costs $4,000*, and is worth every nickel to the people who can afford it.

There's no way to describe here what Advent life-size television has to offer. We will be happy to send you a brochure that does a better job of it, but the only way to get the real picture is to see the real picture.

**The Advent Loudspeaker.**

Our first major product was the Advent Loudspeaker. It became one of the best-selling speakers in the country before we ran an advertisement on it. And according to every major survey we've seen over the last three years, it has become the single best-selling speaker system around.

The idea behind it was that it was possible to develop for a very moderate cost a speaker that would give up nothing significant in direct comparison to the most expensive models available or likely to be.

It may be difficult to believe that a relatively simple-looking speaker that costs $149* or less in this country (depending on cabinet finish and how far it's been shipped) is a speaker in the "best" category. But it is—and most of what it offers, including its overall frequency range and amazing bass response, is unapproached by many speakers at far higher cost.

Listening to it will tell you why it is at the top of the best-seller list.

Because we follow opportunities when we see them, without worrying what will happen to an existing product, there is also the Smaller Advent Loudspeaker to listen to. It won't play quite as loudly as the original Advent, but

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*Video Beam® is a trademark of Advent Corporation. Dolby® is a trademark of Dolby Laboratories.*
it offers the same frequency range and overall sound for quite a bit less money—and at about half the size. If you would like an absolute maximum of performance—dollar, it is worth hearing.

The Advent 201—And Process CR/70 Cassette Recordings.

There are now hundreds (seemingly) of cassette decks employing the Dolby System and claiming high or highest performance. But the first high-performance cassette equipment came from us, as the result of a development effort that some audio manufacturers said was pointless at the time. And the Model 201 cassette deck (on the market for several years now) remains the simplest and most enjoyable way we know of to make a perfect recording of whatever you’re after. We know of no tape machine of any kind of price that makes it so easy—and easily repeatable time after time—to produce a superb recording, generally indistinguishable from the original source. It costs $340.*

We developed the Model 201 in great part to show the full potential of cassette recording. To take that a step further, we market recorded cassette releases—Process CR/70 Cassettes—that employ the Dolby System and chromium dioxide themselves. We designed our own tape duplicators for the purpose, which operate at four times recording speed instead of the usual sixteen. And we use excellent original material, including some recordings we make on our own. The result is a series of cassette releases that have been called a new standard for the recording industry.

The Advent FM Radio.

All of our audio equipment is based on the idea that the simplest route to high performance is the best, and that gadgetry for its own sake is not our cup of tea. The product that takes that furthest in many ways is the Advent FM Radio (The Model 400), which is a simple and very small two-piece mono FM radio with outrageously good sound and reception that compares (as test labs have confirmed) with that of complex receivers of many times the cost. If there is a situation where you live, work, or go to school where a big component audio system would be too elaborate and/or expensive, but where you want superb music, the Advent FM Radio is probably the perfect answer. It costs $125.*

The Advent Receiver (The Model 300).

This is our newest, and as different as it looks. (It will be coming on the market at about the time this ad appears, but won’t be everywhere until later in the fall). All this piece of equipment has to offer is sound quality that compares, within its power capabilities, to that of the most expensive separate preamps, tuners, and amplifiers available. It has a new phono preamp circuit (the Holman Circuit) that sets new standards of effective performance under actual listening conditions. Its tuner is also comparable with the very best in effective performance. And its amplifier provides a minimum of 15 watts per channel (into 8 ohms, 40-20,000 Hz, with less than 0.5% harmonic distortion). It is more than powerful enough to drive most speakers (including all Advents) under home conditions. It costs $260*—less than many of the separate tuners and preamps it sounds as good as.

The Advent/2 and Advent/3.

We keep finding ways, through straightforward design and improved manufacturing techniques, to produce good speakers for less and less money. The Advent/2 (in the well-under-$100 price range) and the Advent/3 (in the $50 range) are the latest examples. They don’t have the final half-octave of lowest bass response that the Original Advent and Smaller Advent have, but they offer near-identical overall sound, with superb clarity and definition, and with an octave-to-octave tonal balance that does justice to the many different kinds of music and ways of recording it. If you have a limited budget but high expectations, you can’t go wrong listening to them.

That’s all the room we have. If you would like more information on any of the products we’ve mentioned, please send the coupon.

Thank you.

Advent Corporation, 195 Albany Street, Cambridge, Massachusetts 02139.

* Suggested price, subject to change without notice.

The Advent Loudspeaker shown is finished in genuine walnut veneer. Our other speakers have walnut-grain vinyl finish.
Maxell tapes are not cheap. In fact, a single reel of our most expensive tape costs more than many inexpensive tape recorders.

Our tape is expensive because it's designed specifically to get the most out of good high fidelity components. And unfortunately, there's not much to get out of most inexpensive tape recorders.

So it makes no sense to invest in Maxell unless you have equipment that can put it to good use.

And since even a little speck of dust can put a dropout in tape, no one gets into our manufacturing area until he's been washed, dressed in a special dust-free uniform and vacuumed.

(Yes, vacuumed.) Unlike most tape-makers, we don't test our tape every now and then. We test every inch of every Maxell tape.

Which is why every Maxell tape you buy sounds exactly the same. From end to end. Tape to tape. Year to year. Wherever you buy it. And Delrin rollers. Because nothing sticks to them.

A lot of companies weld their cassettes together. We use screws. Screws are more expensive. But they also make for a stronger cassette.

Our tape comes with a better guarantee than your tape recorder.

Nothing is guaranteed to last forever. Nothing we know of, except our tape.

So our guarantee is simplicity itself: anytime you ever have a problem with any Maxell cassette, 8-track or reel-to-reel tape, you can send it back and get a new one.

Our guarantee even covers acts of negligence.

Give our tape a fair hearing.

You can hear just how good Maxell tape sounds at your nearby audio dealer. (Chances are, it's what he uses to demonstrate his best tape decks.)

No other tape starts off by cleaning off your tape recorder. We clean off the crud other tapes leave behind.

After all the work we put into our tape, we're not about to let it go to waste on a dirty tape recorder head. So we put non-abrasive head cleaning leader on all our cassettes and reel-to-reel tapes. Which is something no other tape company bothers to do.

Our cassettes are put together as carefully as our tape.

Other companies are willing to use wax paper and plastic rollers in their cassettes. We're not. We use carbon-impregnated material.
I am a U.S. student in Central America (San Salvador). After midnight, when the local stations leave the air, U.S. AM stations broadcasting from such places as New Orleans, Dallas, Miami, Little Rock, and Chicago become audible, but with very poor quality. Would an AM antenna, such as the McKay Dy- mek DA-5, be of any significant help, considering the distance and the intervening Mexican stations?—Victor Suviilaga, Memphis, Tenn.

The behavior of the DA-3 (a predecessor of the DA-5 that we tested in June 1974) was so laudable that we doubt any other type of antenna could significantly outperform it. Some long-wire designs may deliver greater signal strength, but no broad-band design we know of should match it in selectivity—which evidently would be important to you in suppressing interference from the Mexican stations.

Hooray for recorded cassettes! At last a viable alternative to scratchable, bulky, inconvenient LPs. The advent of Dolby (get it?) makes it possible to listen comfortably to the high quality recordings turned out by almost all major record labels. Why do several companies refuse to make their products listenable? I refer to RCA, Nonesuch, Angel, and other manufacturers who do not use Dolby-B processing. DG, Columbia, Philips, Musical Heritage, and others realize the need for “cleaning up” their recorded cassettes. Any word from the holdouts on when or if they will start using Dr. Dolby’s noise mixer?—Frank L. Eskridge, Marietta, Ga.

Beside the fact that new Nonesuch recordings are released on cassettes by Advent (we got it), which does use Dolby processing, and the newly announced XDR Dolby series from Angel (see “News and Views” in this issue), we have no definite information.

I recently purchased an Onkyo TX-670 stereo receiver from a reputable dealer who assured me that Onkyo rated very well in comparison to the competition. Now I have learned that a consumer magazine has downgraded the FM section because of factory misalignment, and I begin to suspect that I might have been taken. Is there any way in which I can tell if my unit has this problem?—Kevin Barnes, Waco, Tex.

The rule is, if it sounds all right, don’t worry. The findings to which you refer do not necessarily mean that all the units are misaligned. According to Onkyo, the problem may exist in older production models of the TX-670 and the T-4055 tuner. A serial number with the prefix 2802 would indicate a suspect receiver, and Onkyo is willing to make appropriate adjustments.

Reading loudspeaker reviews and spec sheets leaves me in a quandary, especially with regard to the shape of the response at high frequencies. One school of thought (AR, Advent, et al.) seems to favor a gradual rolloff. Another (including EPI, Genesis, JBL, and Infinity) features extended highs. Who is right? Your reviewers don’t seem to care.—Alfred G. Denison, Denver, Colo.

Who is right depends, in a sense, on the kind of highs present in the monitor speaker used by the recording engineer who did the final mixing of the record. It also depends in part on how “up-close” (bright) the listener wants his sound to be. What our reviewers look for in loudspeaker response is freedom from sudden peaks and dips. This in combination with good power handling capability in the drivers will make it possible to make the high end of the speaker more or less “hot” by using tone controls. That way, any reasonable mixing equalization can be accommodated.

During a conversation about amplifiers and receivers, the term “Class A” came up. What does it mean, and what are its advantages? In what category does my Marantz 2240 receiver belong?—Mrs. William E. Hlad, Bayonne, N.J.

Amplifiers can be classified on the basis of the current that flows through the output devices—transistors or tubes—when there is no input signal. In a Class A amplifier the idle output stage carries half its maximum current. Under the same conditions a Class B stage theoretically carries no current at all. Each of the paired devices (they must always be in pairs for Class B audio amps) carries current for either the negative half or the positive half of the waveform, and their outputs are added together to reproduce the whole wave. Generally, because of problems in making the paired devices match perfectly, a small current is made to flow in a Class B stage, which is then more properly called a Class AB stage. Like most amps and receivers, your Marantz 2240 uses a Class AB output. This is preferred, because the amplifier stays cooler in normal use than would a Class A amp, thus requiring smaller output devices and heat sinks—and drawing less power from your wall socket. Proponents of Class A claim—and there may be some basis for this—that their products can be made with lower distortion, particularly in transients. But since Class B amps can be very good indeed, whatever Class A offers in the way of improvement comes at a relatively high price.

Having read at least three reviews that praise the Phase Linear 1000 Autocorrelator system, I am impressed. However, I would like to know what might happen if the Autocorrelator is used with other components besides the normal system of receiver or preamp/amplifier. My system consists of a Marantz 7T preamp, Soundcraftsmen equalizer, Intosh MC-2300 power amplifier, and the double-Bose 901 system. Depending on how I use the Bose and Soundcraftsmen equalizers, will I cause the misfunctioning of the autocorrelation circuitry?—Anthony L. Price, Rochester, N.Y.

Presumably the Autocorrelator was designed to operate on the signal before any frequency contouring or equalization is applied, and using it this way should cause no problems at all. But, since there is virtually no likelihood of damage due to other hookups, we’d suggest you try them to see which gives the most pleasing result.

I believe your statement (April “News and Views”) that the Freon used by Sound Guard is “not of the propellant type . . . alleged to be a contributor to ozone-layer destruction . . .” is false and misleading to those of us who are concerned about preserving our environment. Any fluorocarbon that evaporates—and I suspect the ones used are the 113 or 114 types, which do evaporate fast—contributes, if any other types contribute, to the alleged destruction.—Paul A. Elias, Southborough, Mass.

Ball Corporation confirms that the solvent used in Sound Guard is in fact Freon 113, a chlorofluoroethane, and that you are essentially correct about the properties of fluoro-carbons. Chlorofluoroethanes have not been detected in the stratosphere, possibly because they are used far less than the chlorofluormethanes, such as Freons 11 and 12. However, the matter of Freon damage to the ozone layer is still under study, and it may be some time before conclusive data are available. Although it would be possible to change Sound Guard so as to use another solvent, virtually all other solvents have greater potential for damaging records than Freons. Barring reasonably firm evidence that Freons cause atmospheric problems, no change in Sound Guard is planned.
NEW!

Handbook of Multichannel Recording

Here is very possibly the single most important book on sound recording for the layman or professional who wants to make quality recordings of musical groups. For the first time, here's a book that covers it all—dubbing, special effects, mixing, reverb, echo, synthesis—for both stereo and four-channel recording. Simply circle No. 781 on the coupon below.

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THE MAN WHOSE NAME, more than any other, has become associated with the acoustic-suspension loudspeaker, is Edgar Villchur. He trained as a teacher (master's degree in education, City College of New York). But long before that, as a teenager, Edgar Villchur had begun to tinker with primitive radio and phonograph equipment out of an interest that, as he puts it, "was primarily musical; I took relatively little pleasure in the technical side."

Villchur actually did teach, giving a course in sound reproduction at New York University until 1957, and in reality he was constantly "teaching" throughout his career as head of Acoustic Research, Inc. (AR). He worked as a theatrical scene designer and then as a communications officer with the Air Force during World War II before he really got into audio. After the war he turned to teaching audio in order to combine his interests in music and in electronics. His aim then was to have enough free time to pursue private research without pressure—"without any need to have this work bring in any income."

The avocation eventually eclipsed the formal vocation and resulted in the very successful acoustic-suspension speaker system, generally conceded to be the first relatively compact sound reproducer that could be taken seriously by sonically aware listeners and certainly a major impetus in establishing stereo, with its need for two speakers, as a staple in the home. The idea for the acoustic-suspension (or air-suspension) speaker was born in the early 1950s. By 1953, Villchur—together with a group of believers that included one of his NYU students, Henry Kloss (see "High Fidelity Pathfinders," June), plus two of the latter's friends, Malcolm Low and Anton Hofmann—had founded AR and started manufacturing speaker systems.

If you had met Villchur then, you would have been convinced of his "nonpressure" or "noncommercial" attitude toward this enterprise. In those days anyone who had something important to tell (or sell) could not count on to look very Establishment; this was the era of the gray-flannel suit, the button-down collar, and the close-clipped haircut. But Villchur, clad in a country-style coat and sporting a luxuriant black mustache, was very much his own man. The unconventional appearance was somehow in keeping with the unconventional product and forecast the unconventional ways in which he would, in the years to come, explain and promote that product. ("We achieve bass response not in spite of the small size, but because of it.")

The experimenters at AR were as surprised as anyone outside the company at the almost instant success of their first model, the AR-1. They expanded the facility and the line to include the AR-2, a lower-cost version with relatively less deep bass, and eventually (in 1958) the AR-3, which incorporated a new dome tweeter that Villchur had developed (with the aid of Stewart Hegeman, who had been emphasizing the need for better treble dispersion).

Following the introduction of stereo discs at the end of the 1950s, the air-suspension idea really took off, because it permitted home system owners—especially apartment dwellers who had limited space—to enjoy two
full-range sound channels from a pair of speaker boxes that occupied no more (or less) space than a single conventional speaker system of high quality. Despite lively disagreement among insiders as to the ultimate merits of air suspension, it was widely imitated, modified, and hybridized before long by some companies that had been identified with anything but a "bookshelf-size" speaker.

The rise of the air-suspension speaker dovetailed with another development that it both influenced and was influenced by: the high-powered amplifier for home use. Up to the mid-1950s a 10-watt amplifier was generally regarded as all one needed for a high-quality home music system. The power-hungry air-suspension designs needed at least double that power and could respond smoothly to even more. Ten watts no longer seemed like high fidelity.

Villchur's next contribution to "future shock" came in 1962: the AR turntable. Like the AR-1 speaker, it was the first compact model of its class to offer performance of interest to the serious audiophile. A nonamplified, single-play type, it survived as a product throughout the 1960s (which by all sales counts was "the decade of the record changer") and in its latest incarnation still is an item of importance on the home audio scene. At least one of its design features—the extremely rigid mounting between the tone-arm pivot and the platter's bearings (and the very compliant suspension of the resultant unitized assembly)—has shown up in turntables of other makes.

An innovator in product concept, Villchur was no less an innovator in audio showmanship. He was a vigorous proponent of the live-vs.-recorded type of demonstration, to the point of arguing its validity in public print and hiring professional musicians to "compete" against his latest playback equipment. One of the most celebrated of Villchur's stunts was to hammer on the deck-plate of an AR turntable while it was playing a record to show how stable the suspension was. Once, out of sheer whimsy, he bought and reconditioned an ancient (pre-jukebox) mechanical music-maker and set it clanking away at a New York audio show. In a stroke of marketing genius he rented space on the mezzanine of New York's Grand Central Station and proclaimed that you could drop into his exhibit and listen to your ears' content without ever being approached by a salesman. No one knows how many train-riders were thus confronted with components for the first time, but even grudgingly conservative estimates grant that with about 100,000 visitors a year, by actual count, the exhibit has been a potent force in furthering the acceptance of high fidelity in the home.

Villchur's influence has spread widely through the high fidelity industry. One of the stalwarts at AR during its formative years was Roy Allison, who left his job as audio editor of High Fidelity in 1959 to join AR and rose to vice president of engineering and manufacturing before he formed his own speaker company, Allison Acoustics, in 1972. Another notable who started at AR was Winslow Burhoe, who migrated to KLH and finally established his speaker company, Epicure Products. And, of course, Kloss, Low, and Hofmann founded KLH.

Villchur stayed on as head of AR until mid-1967, when he found himself in a position to realize his earlier ambition, that of devoting himself to audio research without commercial pressure. Accordingly, he left the company and started the Foundation for Hearing Aid Research, with which he remains actively involved. There is, incidentally, no basis for the rumor that his interest in hearing aids was inspired by his own disability. He left the high fidelity field not because of bad hearing, but because of good memory—as a young man he had promised himself a certain way of life, and he was finally able to make good on that promise.

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Technical Series

PROFESSIONAL TEST RECORDS

CBS Laboratories Technical Series Professional Test Records are unique, high-precision tools designed to assist audio and quality control engineers and test and service technicians in the rapid evaluation of audio components, equipment and systems. Each record has a complete series of tests, which eliminates the need for equipment, saves hours of time, and makes it a productive tool in the laboratory, on the production line, and in field testing.

1100—Sterophonic Frequency Test Record—A general purpose record for synchronization and system evaluation. Recorded with a constant velocity characteristic below 500 Hz and a constant velocity characteristic above 500 Hz. $10.00

101—Seven Steps to Better Listening—Through easy to make tests and simple narrative, this test record for home use will help you blend electronic components, room acoustics and the characteristics of your own ears into a well-tuned system for the enjoyment of all recorded sound. $6.98

112—Square Wave, Tracking and Intermodulation Test Record—Provides square wave modulation for a detailed study of the tracking capabilities of stereophonic phonograph pickups. $15.00

120—Wide Range Pickup Response Test Record—With response from 10 to 50,000 Hz, this record provides the detection and elimination of low frequency arm resonance and system rattles, and evaluation of pickup response at frequencies far beyond the audible range where elusive distortion elements can cause audible distortions. $15.00

130—ARMA Frequency Response Test Record—Provides spot and sweep frequency measurements for response testing and calibration of professional and consumer record reproduction equipment. $15.00

140—RIMA Pink Noise Acoustical Test Record—By use of bands of noise rather than pure tones, standing waves are minimized, permitting the testing and adjustment of loudspeakers in the room in which they will be used. $15.00

151—Broadcast Test Record—Especially useful for the broadcast engineer, audiophile or service technician seeking a convenient signal source for the testing and adjustment of all audio equipment. $15.00

170—318 Microsecond Frequency Test Record—Provides a convenient, easily equalized signal for all response and separation measurements. $15.00

1100—Quadraphonic Test Record—For the calibration, verification and adjustment of 50® decoding equipment. $15.00

Check or money order must accompany your order. No cash or C.O.D.'s, please. Allow 60 days for delivery.
Update on Ambience

The simulation of concert-hall acoustics seems to be occupying a good deal of the attention of the engineering talent in the high fidelity industry just now. Earlier ("News and Views," March) we reported on an ambience-generation device developed by Audio Pulse based on digital technology. (By the time you read this, we understand, the unit will have reached dealers.)

Applying digital technology in the grand manner, Acoustic Research has come up with a sixteen-channel time-delay system designed to simulate the acoustics of large concert halls. The system, which was demonstrated at the Audio Engineering Society convention May 4-7, is operated under the control of a special-purpose computer that sets the operating parameters according to a mathematical model of the hall to be simulated.

David McIntosh and Robert Berkovitz, designers of the unit, say there are three audible properties of concert-hall acoustics: Reflections make a sound source more diffuse and add a sense of space; high frequencies become incoherent and make localization of the source more difficult than otherwise; and the sound decays gradually after the source has ceased. The last effect can be easily recorded or simulated and recorded, but the first two depend on the specific timing of the reflections in the particular hall and are harder to imitate. AR reports that listeners to whom the delay system has been demonstrated have found it very convincing, particularly when room lights are extinguished to eliminate visual clues.

Meanwhile . . .

In the realm of products that one can go out and buy, Sound Concepts—like AR, a Boston-area manufacturer—has announced its Model SD-50, which is yet another time-delay system designed for ambience simulation. It uses no digital-processing techniques and is based on bucket-brigade devices (see "News and Views," June). The SD-50 uses a single delay that is adjustable to anything between 5 and 50 milliseconds in stereo or double that in mono. The optimum delay, we have been informed, is one that matches with the reverberation already recorded in the selection. Also adjustable are the amount of signal recirculated for additional "bounces" and the rate at which high frequencies are rolled off with each pass through the delay. The SD-50 is most convincing when the synthetic ambience is reproduced through an auxiliary set of loudspeakers, but provision is made for routing ambience to the main speakers along with the primary program material. This feature also allows the unit to be used for enhanced headphone listening. (The device sells for $600—only slightly higher than the present price of the Audio Pulse simulator.)

CIRCLE 160 ON READER-SERVICE CARD

Undoctored Binaural Discs

Ironically, in view of last month's "News and Views" item on compression, two discs recorded without any signal processing at all (other than the usual RIAA pre-emphasis) have come to our attention. These—"Zgodava Plays Piano Recital Favorites" and "Musica Antiqua Entertains"—were recorded and produced by Russell Borud, a recording engineer well known in the Twin Cities.

Borud, who gives careful instructions for setting realistic levels on the Zgodava disc, believes that music is often played back too loudly. He also cautions against sacrificing realism to excessive bass boost.

The recordings themselves are designed for binaural (headphone) listening, and when they are heard that way the effect is uncannily realistic. A reasonable degree of stereo compatibility is retained, but, if you must listen to these discs via loudspeakers, synthesized quad is the way to go. The sound produced in this way, while not strictly "accurate" in the purist's sense, is very nearly as convincing as the binaural sound.

The program material, incidentally, is excellent on both albums: Richard Zgodava plays works by Ginastera, Gottschalk, Debussy, Liszt, and Moszkowski; the Musica Antiqua contains works of Machaut, Isaac, Josquin, and other early composers. The discs are available from Sound Environment, 100 N. Sixth St., Minneapolis, Minn. 55403 for $7.00 each.

Universal Matrix Decoder Uses Only Two Channels

Having heard how well binaural discs "decode" for synthetic quad reproduction, we decided out of curiosity to try a matrix four-channel disc on two-channel headphones. Astonishingly, we liked what we heard. It is not quite the same as listening to a real binaural disc, but it is awfully...
good and a major improvement over normal stereo via phones.

But even more astonishing was a note we received from Benjamin Bauer of the CBS Technology Center (who developed the SQ system) a few days later, suggesting that an SQ disc heard binaurally would be fairly accurately decoded. Considering the source, the suggestion piqued our interest, so we investigated the matter more closely. And it does work! Even a surround-type disc was reproduced with the instruments in about the same positions as when decoded in a more orthodox fashion and routed via loudspeakers. Again, not perfect, but very good—and without any logic.

A paper by Koshigoe and Takahashi of Sansui—QS discs decode very nicely this way, too—establishes that at frequencies up to about 1 kHz phase differences at the listener’s ears give the primary clues for sound localization. The paper, which was delivered at the Los Angeles Audio Engineering Society convention in May, goes on to suggest that the phase shifting used in QS encoding helps to provide such clues, other matrices succeeding to a lesser extent. But whatever the explanation, the phenomenon surely seems a boon for headphone freaks who may have despaired at the lack of suitably recorded material.

And By the Way . . .

- Angel Records has upgraded its recorded cassettes, adding Dolby noise reduction and improved processing developed by Capitol that increases available dynamic range significantly. The new XDR series—for Expanded Dynamic Range—promises up to 4 dB higher sound level, high frequencies out to 15 Hz, and a sizable decrease in electrically induced distortion. The initial release will consist of eleven new performances and a demonstration tape.

- TDK Electronics Company has been granted a patent, which lists Takateru Satou as the inventor, for a cassette tape windup control that prevents runoff and jamming, especially when the tape is switched from fast winding to a play mode. The new development, using a series of tension arms and a spring, is incorporated in TDK’s C-180 cassette, available in the D series only.

- Sony Corporation has found a way to prevent illegal copying of recorded software issued via Betamax videocassettes. Prints produced with the new system will play back just like any Betamax cassette but will produce an abnormal image if copied.

New receiver from Fisher

One of the new receivers in Fisher Corporation’s line is the RS-1050. Its FM section has ladder-type filters in the IF section for high selectivity and freedom from distortion. Other features include tape monitoring and dubbing with two decks, a selector switch for three speaker pairs, an output that can be used for either headphone listening or recording on a third tape deck, and a stepped volume control calibrated in dB. Power is rated at 60 watts (17.8 dBW) from 20 Hz to 20 kHz with 0.15% distortion, mono FM sensitivity at 1.8 microvolts (10.3 dBf). The cost of the RS-1050 is $499.95.

Pioneer’s newest Dolby deck

The Pioneer CT-F8282 is a front-loading two-motor Dolby cassette deck with a twin-link design that holds it firmly in a vertical position. The solenoid-operated transport controls allow mode changes without going through the stop control. The deck also has switching for “memory stop” and for ferrichrome, chrome, and “standard” tapes. Frequency response is rated at 30 Hz to 15 kHz ±3 dB with chrome tape, signal-to-noise ratio (without Dolby) at more than 53 dB, and harmonic distortion at no more than 1.5%. The cost of the CT-F8282 is approximately $400.
Janszen markets ZVS-2

The ZVS-2 is the latest of Janszen's electrostatic loudspeakers. It uses two bipolar tweeter elements whose front radiation is channeled through a refraction lens system. The system crosses over at 1.5 kHz to a 10-inch acoustic-suspension woofer and is provided with a balance control. Janszen claims a frequency response of ±3 dB from 45 Hz to 20 kHz and impedance of 8 ohms; overload protection is inherent. The ZVS-2 is said to combine increased efficiency (with ultra-low-mass diaphragms) and dispersion (via the lens) with a new aesthetic design. The cost is $250.

CIRCLE 129 ON READER-SERVICE CARD

Empire's latest, the 698

The Model 698 turntable is now available, according to Empire Scientific Corporation. The tone-arm lift at the end of play is triggered by a photoelectric cell—a new feature for Empire turntables—and cueing is actuated by touch-sensitive controls. The turntable itself has a hysteresis synchronous motor and a suspension intended to minimize acoustic feedback. Rumble is rated at −68 dB, ARLL; average wow and flutter at 0.04%. The unit comes with a tempered-glass dust cover and costs $400.

CIRCLE 157 ON READER-SERVICE CARD

Pickering adds to XV-15 series

The XV-15/625E is the latest addition to Pickering's cartridge line and is designed for a high level of performance at a modest price. Pickering says the XV-15/625E, which has an elliptical stylus tip, is able to track at as low as ¾ gram with unusually flat response from 10 Hz to 25 kHz. Suggested price is $59.95.

CIRCLE 158 ON READER-SERVICE CARD

Bigston’s Dolby cassette deck

Bigston Corporation has introduced the BSD-300, a front-loading cassette deck with Dolby noise reduction. Features include cue and review, mike mixing, and a two-position tape selector. The BSD-300 has automatic rewind and eject, as well as automatic shutoff. The manufacturer rates wow and flutter at 0.12% (weighted RMS) and signal-to-noise ratio (with Dolby) at 55 dB. The deck sells for less than $170.

CIRCLE 159 ON READER-SERVICE CARD

3A’s Andante servo speakers

The new 3A Andante series of loudspeakers includes 3A’s exclusive Acoustic Pressure Feedback system (APF), which integrates a 21-dBW (125-watt) servo amplifier into the speaker enclosure. The use of feedback is claimed to correct frequency response and to lower distortion. The top of the Andante line is the Master Control, with a 10-inch woofer, 2-inch dome midrange, and flat ribbon tweeter. Rated response is ±3 dB from 25 Hz to 45 kHz. Maximum continuous power handling is 17.8 dBW (60 watts). The price is $729.95. Model 60 and Model 40 in the line cost $569.95 and $449.95, respectively.

CIRCLE 130 ON READER-SERVICE CARD
HiFi-Crostic No. 15
by William Petersen

INPUT

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OUTPUT

| 155 | 121 | 103 | 75 | 10 |
| 76 | 122 | 51 | 172 | 156 | 83 | 94 |
| 143 | 87 | 8 | 13 | 80 |
| 70 | 130 | 49 | 112 | 45 | 23 | 150 | 145 |
| 95 | 174 | 37 | 150 | 135 |
| 28 | 173 | 91 | 52 |
| 21 | 97 | 164 | 14 | 119 | 63 |
| 149 | 98 | 79 | 27 | 178 |
| 126 | 5 | 60 | 29 | 164 | 82 | 42 | 19 |
| 57 | 144 | 113 | 53 |
| 134 | 120 | 15 | 156 | 128 | 69 | 161 | 24 |
| 38 | 170 | 67 | 93 | 104 | 151 | 47 | 114 |
| 12 |
| 169 | 136 | 147 | 88 | 17 |
| 163 | 11 | 54 | 30 | 84 | 127 | 137 |
| 124 | 180 |

INPUT

| P | See Word F |
| O | In progress |
| R | Choral conductor Gregg |
| S | American musicologist, specialist on the Renaissance (b. 1900) |
| T | English/composer (1872-1958); a London Symphony (2 wds.) |
| U | An acknowledgement of debt |
| V | Songs, especially characteristic of medieval France |
| W | American pianist (b. 1916), at 17 was sobist in American premier of Shostakovich’s Concerto No. 1 |
| X | See Word G |

OUTPUT

| 116 | 81 | 157 | 146 | 100 |
| 89 | 99 | 177 | 61 | 125 |
| 58 | 33 | 78 | 160 | 62 |
| 43 | 96 | 59 | 165 | 77 | 68 |
| 64 | 154 | 74 | 26 | 2 | 36 | 46 | 133 |
| 86 | 123 | 110 | 179 | 55 | 16 | 102 |
| 159 | 182 | 41 |
| 111 | 148 | 22 | 9 |
| 167 | 181 | 118 | 1 |
| 107 | 140 | 131 | 168 | 25 |
| 171 | 129 | 105 | 7 | 71 |
| 48 | 101 | 92 | 115 | 18 | 141 | 34 |
| 4 | 162 | 56 | 44 | 175 | 109 |
| 183 | 132 | 108 | 90 | 85 | 31 | 66 | 142 |

DIRECTIONS

To solve these puzzles—and they aren’t as tough as they first seem—supply as many of the Output words as you can in the numbered dashes following the Input. Unless otherwise specified in the Input, the Output consists of one English word. "Comp." means compound, or hyphenated, word.

Transfer each letter to the square in the diagram that bears the corresponding number. After only a few correct guesses you should begin to see words and phrases emerging in the diagram, which when filled in will contain a quotation related to music, recordings, or audio.

The words in the quotation are separated by darkened squares and do not necessarily end at the end of a row.

Try to guess at these words and transfer each newly decoded letter back to its appropriate dash in the Output. This will supply you with further clues.

A final clue: The source of the quotation—the author and his work—will be spelled out by the first letters in the Output, reading down.

The answer to HiFi-Crostic No. 15 will appear in next month’s issue of HiFi.

Solution to last month’s HiFi-Crostic appears on page 9.

AUGUST 1976
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1976 EDITION

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(HF676)
The Elegant
Harman-Kardon
HK-2000


Comment: It is gratifying when the appearance of a piece of equipment informs the user unequivocally what it is meant to do and how it operates. This is not an easy thing to accomplish for a component of more than minimal complexity, and in a cassette deck—with which one might be recording live—the speed with which a desired response can be achieved may be of the essence. The HK 2000 combines this type of truly functional design with both attractive cosmetics and solid performance.

The transport controls are of a modified "piano-key" type with gentle spring loading for PAUSE, STOP, and EJECT, and stiffer loading for the other functions. This furthers the functionality of the design while providing an unusually attractive "feel" to the controls. Their arrangement and interaction insure that no erroneous combinations will produce disastrous results. Pressing RECORD after PLAY has been engaged brings the transport to a halt. Pressing RECORD alone allows presetting of levels without engaging the transport. Recording is initiated by pressing PLAY while RECORD is held down. Access to the heads for cleaning and degaussing is very convenient, involving only the removal of a plastic strip at the front edge of the cassette well.

The pause requires an audibly long fraction of a second to come up to speed, so that some "wowing in" can be discerned if you attempt to use it (for example, in tape dubbing) to edit music in midnote. Though the pauses on some other decks are faster acting, this can hardly be considered a serious fault in the HK-2000, since this kind of editing is seldom if ever required in normal cassette-deck use and more normal applications of the pause are well executed.

The toggle switches that control the electronics make it delightfully plain which functions are engaged and which are not. The most problematic feature of the controls is that the knobs on the sliding potentiometers that set recording and playback levels are just a bit too far apart to allow easy adjustment of both channels with a single finger. Add to this the fact that these pots do not track quite perfectly (though no less so than we have become used to with this type of control) and have different amounts of mechanical resistance as they are moved along, and it becomes clear that fades are not the easiest stunts to pull off. But with care they can be managed.

The meters are of the peak-reading type, supplemented by a peak light meant to catch transients too short to overcome the inertia of the meters' pointers. The meters are calibrated so that their 0-VU indication measures 3 dB below the DIN standard's 0 VU in the lab's tests.

Lab data were taken with two tapes suggested by Harman-Kardon: Maxell UDXL ferric for the LOW-NOISE position of the tape switch and Memorex CrO, for the CHROME posi-

REPORT POLICY: Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Technology Center, 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 publisher. All reports should be construed as applying to the specific samples tested, neither High Fidelity nor CBS Technology Center assumes responsibility for product performance or quality.
tion. In addition, we tried the deck with such tapes as TDK SA (using CHROME) and Audua (using LOW-NOISE) with excellent results.

The record/playback response curves are up to what we have come to expect in this price range—except response in the deep bass is exceptional. With ferric tape the high end remains within 3 dB of flat up to 14 kHz; with chrome tape it is within 2 dB to 14 kHz. Noise, measured with the CBS weighting curve, is 50/2 dB below DIN 0 VU, and the Dolby circuit reduces this by about the expected 9 to 10 dB from 3 kHz up. Harmonic distortion, measured by the new technique (see box), remains below 1%. Comparison of the unweighted data with past reports will show that this is an exceptionally quiet cassette deck. Worst-case flutter is a mere 0.06%.

The mike inputs of the HK-2000 are paired phone jacks on the top panel and accept low-impedance mikes. Mike and line inputs can be mixed. Mike levels are adjusted at a pair of rotary pots (making simultaneous fades in both channels essentially a two-hand operation), and the level of the sum of the mike and line inputs is controlled by the recording sliders. Thus a fade from pure line input to pure mike input cannot be managed unless there is some external control over the line level, and even then the operator would need a nonstandard number of hands. Where fades are not contemplated, however, the system should prove eminently satisfactory.

The Dolby-alignment controls are unusual in being accessible on the front panel. They include a spring-loaded button that feeds a test tone from the built-in generator to the tape for recording-level adjustment, the screwdriver controls for this purpose (and, most unusual of all) similar controls to align playback levels as well.

The back panel contains three unusual features. One is a screwdriver adjustment that allows the running speed of the tape to be varied between -14.3 and +22.5%. This control, rare in cassette decks, is useful for playing (live) along with prerecorded material. But one caveat: It is difficult to return to the normal speed once the factory setting has been altered unless you have first acquired a test tape. The second feature is a switchable subsonic filter (especially useful, since with its extended low-frequency response the unit could easily be overloaded by severe rumble or even by disc warps). The third is dual (high- and low-sensitivity) line inputs, often helpful in matching the deck to the particular line levels of your system.

In our use tests, we found that it was no trick at all to make dubs that sounded indistinguishable from the original discs. The meters and peak indicator are easy to interpret, and the logic of the controls is plain—which may account for our making fewer errors than we usually do. Given its excellent performance and extra features—including provision for speed variation, easy Dolby calibration, and a subsonic filter—the Harman-Kardon HK-2000 justifies its claim of being a "professional" cassette deck. (The overly simplified instruction manual, incidentally, does not.) In sum, this looks like a cassette deck with which it would be hard to go wrong.

**Harman-Kardon HK-2000 Additional Data**

- **Speed accuracy:** 0.30% fast at 105 VAC 0.16% slow at 127 VAC
- **Wow and flutter:** playback: 0.05% record/play: 0.06%
- **Rewind time (C-60 cassette):** 89 sec.
- **Fast-forward time (same cassette):** 89 sec.
- **S/N ratio, CBS weighted (re 0 VU, Dolby off):**
  - playback: L ch: 54 dB R ch: 54 dB
  - record/play: L ch: 50½ dB R ch: 50½ dB
- **S/N ratio, unweighted (re 0 VU, Dolby off):**
  - playback: L ch: 56 dB R ch: 57 dB
  - record/play: L ch: 54 dB R ch: 55 dB
- **Erasure (333 Hz at normal level):** 64 dB
- **Crosstalk (at 333 Hz):**
  - record left, play right: 46½ dB
  - record right, play left: 43½ dB
- **Sensitivity (re DIN 0 VU):**
  - line (high): L ch: 350 mV R ch: 380 mV
  - line (low): L ch: 50 mV R ch: 55 mV
  - mike input: L ch: 0.24 mV R ch: 0.24 mV
- **Meter action (re DIN 0 VU):**
  - L ch: 3 dB high R ch: 3 dB high
- **IM distortion (record/play, -10 VU):**
  - L ch: 8.0% R ch: 7.0%
- **Maximum output (re DIN 0 VU):**
  - L ch: 2.40 V R ch: 2.45 V
Dokorder's
"Home-Studio"
Model 1140 Deck

The Equipment: Dokorder 1140, a two-speed (15 and 7½ ips) stereo/quad quarter-track open-reel tape deck with multi-sync and NAB reel capacity, in wood case. Dimensions: 17 by 16 inches (base), 20½ inches high; approx. 1 inch clearance required in back for NAB reels and interconnect cables, 2½ inches at each side for NAB reels. Price: $1,199.95. Warranty: “limited,” two years parts, one year labor; cosmetic parts excepted; shipping not included. Manufacturer: Denki Onkyo Co., Ltd., Japan; U.S. distributor: Dokorder, Inc., 5430 Rosecrans Ave., Lawndale, Calif. 90260.

Comment: First you look at the deck. Wow—all those switches and knobs and meters and things! Then you open the manual. It begins, “Nobody likes to read these manuals (nobody likes to write them either), but they’re important.” Frankly we were, if anything, more impressed by the latter than by the former. Not that those switches and knobs don’t do things that are worth doing; they do. But so does the manual—particularly on such a complex product—and to find it written not only intelligibly, but with humor and with compassion for the bewildered new owner is a joy indeed. It also happens to be exceptionally informative.

The upper section of the deck—a sort of electronics penthouse overhanging the transport—has pin inputs for the line connections at the back, four phone jack mike inputs in a well at the right end, and a pair (front and back) of stereo headphone jacks at the left end. The four meters (which, curiously, are calibrated for a 0 VU indication at signal levels about 6 dB below the Ampex standard) are of the averaging (“true VU”) type and are backstopped by a peak indicator for each channel, lighting at +8 VU, according to the manual. The four monitor buttons (one for each channel, needed for multi-sync) control both signal output and metering. You cannot, for example, listen to the output from the tape (the level of which is varied, both to the line connections and to the meters, by the playback-level control) while metering the source input. For this reason we prefer separate meter and signal switching on a deck of this sort, but few manufacturers seem to agree with us. The mode switch either activates all four channels or, when switched to 2-ch, disables the back ones—in both recording and playback.

The most interesting and unusual feature of the electronics package, however, is the test generator, which produces pink noise. In the past we have occasionally examined recorders with sine-wave generators intended for bias adjustment. They are a help, but essentially they leave in doubt the behavior of the tape/bias combination at all frequencies except that produced by the generator. Since the pink noise, in effect, contains all frequencies, it is a better solution to the problem of adjusting the deck to tapes other than those for which it is factory-set.

One position of the bias switch on the transport does deliver factory-set bias; the other position switches in the bias adjustments just behind it, which are normally protected from inadvertent misadjustment by a plastic cover. To use these controls, you turn on the test generator (which automatically switches the meters to an extra-damped mode so that they respond more stably to the pink noise, but not without some wandering) and record this signal. By monitoring playback on the meters (we found listening helps, too, since overbiasing yields audible “dulling” of the noise) you can adjust for maximum output.

The electronics package also has an equalization switch marked NORMAL/SPECIAL. The lab tested the deck (using the fixed bias) with Scotch 212 and the NORMAL position, Maxell UD-35 and the SPECIAL position of this switch. In addition we experimented with TDK Audua, the SPECIAL position, and the variable bias. At the first try, using meters alone, we set the bias somewhat higher than the fixed setting but found we had overdone it, ultra-highs were a little wanting in the sound. When we readjust the bias using the
Noise and Distortion—Our New Approach

Engineers often refer to conventional total harmonic distortion measurements as "total garbage" because that's just what they express: everything except the desired signal, including noise as well as distortion. The usefulness of such figures varies with the subject at hand. In measuring tape equipment, where noise is inherently high, classical THD figures say relatively little about distortion as such. It has always been paradoxical that tape recorders in which no distortion could be heard had THD figures that would indicate audible distortion. Beginning in this issue's reports on tape equipment, distortion is measured by means of spectrum analysis, a technique that identifies the individual harmonics and distinguishes them from the noise. Tape recording by its nature produces distortion that is characterized by the unwanted introduction of the third harmonic—three times the fundamental tone's frequency—into whatever signal is used. Hence, with the new distortion-only technique, it can generally be assumed that in the lab's THD results it is third-order harmonic distortion that predominates. Naturally, with the noise contribution removed, the THD measurements are much lower and cannot be compared with conventional "total garbage" harmonic-distortion numbers.

As to the noise itself, we have for years printed "unweighted" figures, which represent a straight measure of absolute noise with no attempt to "tailor" it to the audibility of the noise. "Weighting" is a method that purports to represent audible rather than absolute noise. Such schemes have existed for years, but none appeared satisfactory for full-audio-band measurements. (The CBS ARL curve for rumble figures and similar weighting systems address themselves only to the bass.) Without weighting, hiss at the extreme top of the audio range (where it is highest in absolute level) and AC hum at 60 Hz have as much influence on the measurement as noise at, say, 2 kHz. Yet the ear is far more sensitive to the latter than it is to either of the former, particularly at the extremely low levels to which noise has been driven in modern componentry. What we needed was a new weighting system that would truly represent the audibility of the noise with normal hearing and at normal playback levels.

CBS Technology Center, after a thorough study of the available data on noise audibility (literature to which the lab itself has made valuable contributions), has come to the conclusion that—at last—there is sufficient consensus on the characteristics of low-level-noise audibility that a weighting curve can be derived from it with confidence. That CBS weighting is being used in this month's reports for the first time. It is coincidental that the weighted and unweighted figures are as close as they are, for there is no necessary correlation between them. For the time being, to preserve comparability with earlier reports, both figures will be given. However, for greater accuracy in comparing the audible noise in tape equipment, the new figures should be used.
users (which, to a large extent, is what the 1140 is all about) probably would disagree on this point. Speed accuracy and stability are very fine indeed, and distortion is very low. Back-channel performance generally matches that of the front channels very closely; for simplicity and clarity we have shown only the front-channel data except where that for the back channels differs materially.

All told, this is the most impressive Dokorder we have yet tested. Its construction and finish seem markedly better, its performance finer, and its multiple capabilities—always dazzling in their variety for any given price class on decks from this company—somewhat better thought-out in their interrelationships. Whether these capabilities are exactly the ones any individual user may need is a question that must—as always—be left to the user; but a wide spectrum of potential buyers owe it to themselves to consider the 1140 carefully. It has a great deal going for it. Incidentally, it is delivered with an empty NAB reel, a pair of NAB reel adapters, and the usual patch cords; a remote transport control—which we did not test—is an optional extra that plugs into the front of the unit's base, and rack-mounting adapters are available.

**Dokorder 1140 Additional Data**

<table>
<thead>
<tr>
<th>Speed accuracy</th>
<th>15 ips: 0.05% slow at 105, 120, &amp; 127 VAC</th>
<th>7½ ips: 0.13% slow at 105, 120, &amp; 127 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wow and flutter (ANSI weighted)</td>
<td>15 ips: playback 0.04%, record/play 0.05%</td>
<td>7½ ips: playback 0.04%, record/play 0.06%</td>
</tr>
<tr>
<td>Rewind time, 7-in., 1,800-ft. reel</td>
<td>90 sec.</td>
<td></td>
</tr>
<tr>
<td>Fast-forward time, same reel</td>
<td>90 sec.</td>
<td></td>
</tr>
<tr>
<td>S/N ratio (re Ampex 0 VU, CBS weighted)</td>
<td>playback L ch: 56 dB, R ch: 53 dB</td>
<td>record/play L ch: 51½ dB, R ch: 49½ dB</td>
</tr>
<tr>
<td>S/N ratio (re Ampex 0 VU, unweighted)</td>
<td>playback L ch: 56½ dB, R ch: 56 dB</td>
<td>record/play L ch: 53 dB, R ch: 52 dB</td>
</tr>
<tr>
<td>Erasure (400 Hz at normal level)</td>
<td>73 dB</td>
<td></td>
</tr>
<tr>
<td>Crosstalk (at 400 Hz)</td>
<td>60 dB</td>
<td></td>
</tr>
<tr>
<td>Sensitivity (re Ampex 0 VU)</td>
<td>line input L ch: 60 mV, R ch: 68 mV</td>
<td>mike input L ch: 0.22 mV, R ch: 0.25 mV</td>
</tr>
<tr>
<td>Meter action (re Ampex 0 VU)</td>
<td>front channels L ch: 6 dB high, R ch: 6½ dB high</td>
<td>back channels L ch: 5½ dB high, R ch: 5½ dB high</td>
</tr>
<tr>
<td>IM distortion (record/play, -10 VU)</td>
<td>15 ips: L ch: 0.13%, R ch: 0.12%</td>
<td>7½ ips: L ch: 0.13%, R ch: 0.12%</td>
</tr>
<tr>
<td>Maximum output (line, Ampex 0 VU)</td>
<td>L ch: 1.40 V, R ch: 1.60 V</td>
<td></td>
</tr>
</tbody>
</table>
Nakamichi’s Unique and Fascinating 600

The Equipment: Nakamichi 600, a stereo cassette deck with IM Suppressor and Dolby noise reduction, in metal case. Price: $500. Warranty: “limited,” one year on parts and labor, two years on parts for all but heads and drive assembly, shipping not included. Manufacturer: Nakamichi Research, Japan; U.S. distributor: Nakamichi Research (U.S.A.), Inc., 220 Westbury Ave., Carle Place, N.Y. 11514.

Comment: We use the word “unique” in our headline on two grounds. First, this is not a typical cassette deck designed to do its thing in just any old system (though it can be used that way); second, in addition to several unusual features it has one (the IM Suppressor circuit) that is introduced here for the first time. Nakamichi—never a company to shun innovation—has done it again.

The 600 was conceived to work in conjunction with the Nakamichi 610 preamplifier (not reviewed here) to deliver an astonishing variety of functions far beyond those of a typical home cassette deck. The functions (such as input mixing) that are pre-empted by the preamp are therefore absent from the 600, but it is a basic, high-quality deck (and then some) that you can integrate into a system that does not include the 610 preamp. It is in such a system that we used the 600, and this report is written on that basis.

The recording level controls consist of a pair of channel-balance knobs plus a master fader (a system we like because it allows you to preadjust and then forget channel balances, using the single REC LEVEL knob for fades). There is a single output control (no channel-balance adjustment here) that does not influence playback metering (so you don't need to align the meters with a standard playback tape before making Dolby or similar adjustments). On the back there are only line connections (both pin and DIN), of course, but there also is a block-schematic that will remind you how the unit works even if you've misplaced the manual—a nice idea adapted from some professional equipment.

The transport controls are similar to those in the Nakamichi 500 and 550. When you are recording or playing tapes you must press STOP before going to the fast-wind modes. The stop key doubles as an eject key, ejecting the cassette only when the transport has been stopped. These features, though they may seem a little cumbersome if you're used to fast-wind without the interlock or a separate eject key, are sensible, gentle on the tape, and practical, in our opinion. On this model (unlike other Nakamichis) you can make unattended recordings with an inexpensive timer. With the power off, you set up for recording (or playback, if you want to use the 600 as an alarm clock) and pause. A few seconds after the timer turns on the AC, the pause releases by itself. (Incidentally, this design causes the stop key to release the pause key as well.)

Even more important are the front-panel adjustments. Screwdriver pots protected by tiny plastic caps (which are easily lost, so watch it) are provided for individual settings, in each channel, of bias, Dolby recording level, and IM Suppressor action; and each of these sets of adjustments is repeated for two different tapes (essentially, ferric and chrome). Dolby recording controls have been standard on Nakamichi decks (and are making a gradual reappearance at the high ends of other brands). They allow you to tune Dolby action to the sensitivity of the tape in use. The bias adjustments allow use of tapes significantly different from those for which the 600 is preadjusted, but most users would be well advised to leave this—and certainly the IM Suppressor adjustment—to a competent service technician.

The action of the IM Suppressor is broader than its name implies. Both harmonic and intermodulation distortion arise from nonlinearity in the recording characteristic as the tape approaches saturation. The Suppressor operates only in playback (where it can be more effective than "predistortion" of the input waveform to compensate for the anticipated nonlinearity) and almost exclusively at levels higher than those encountered with tapes recorded "correctly" on other equipment. Its primary use, therefore, is as an alternative to a limiter for tapes to be played on the 600. And it works. Though CBS Technology Center could find no significant change in distortion or response at "normal" levels with the IM Suppressor on, at 0 VU (DIN—a level about 2 dB above that indicated, at Dolby level, on the meters) the Suppressor cuts THD from 1.4 to 0.63% with a 400-Hz test signal. Raising the level increases distortion rapidly with the Suppressor off, slowly with it on. The 3% distortion point (reached at a little over +2 VU without the Suppressor) is thus pushed up to about +4½ VU—very close to the levels represented by the +7 to which the top of the Nakamichi meters is cali-
brated. In other words, the lab confirms that the IM Suppressor adds several dB to the effective headroom of the deck. Incidentally, the peak-reading meters read not only to +7 at the top, but (like other models in the line recently) to +40 at the bottom.

The equalization switch is marked in actual time constants (120 and 70 microseconds) instead of the usual FERRIC and CHROME. One reason for this is that the "chrome" tape for which the 600 is preadjusted is not a chrome formulation at all—it's Nakamichi SX, a ferricobalt that is interchangeable with TDK SA (See the tape reports in this issue.) Hence the chrome bias setting is marked SX. Similarly, the ferric setting is marked EX. The latter is preadjusted for Nakamichi EX II, which is interchangeable with Maxell UD XL. SX and EX II are the tapes used by CBS for the lab tests. Other tapes to which the 600 provides an excellent match are Nakamichi EX, Maxell UD, Fuji FX, and TDK Audua. The owner's manual—which is top-notch—spells out all this in no uncertain terms. We have also used Scotch Master with the 120/EX settings and various chrome tapes with the 70/SX settings, to good effect. Other ferrics generally are wanting in high-end response (particularly with Dolby) unless the unit is readjusted for them.

The lab data show the 600 to be a really fine machine. The response curves are astonishing for a deck with a combination record/play head since they penetrate into territory that has been almost owned by monitor-head machines like Nakamichi's own 1000. This is one deck in which the usual undefeated Dolby multiplex filter to suppress any 19-kHz pilot in the signal would measurably have compromised performance. Distortion, noise, wow, and so on, all are excellent. The drive speed, while unaffected by line voltage, is a little farther from exact (a hair over 1% fast) than we would expect on a deck of this class, but it should bother only the most fastidious of users. What does not show in the lab data is the excellent phase linearity (which few other cassette decks seem even to strive for), required by the IM Suppressor but paying off as well-defined transients.

And the 600 most certainly is handsome—despite two significant shortcomings of its cosmetics. First, Nakamichi has put no dust-resistant lid on the cassette well. This is one deck in which the usual undefeatable Dolby multiplex filter to suppress any misjudgments of this sort are easily put up with. This deck's manifest advantages are impressive indeed.

### Nakamichi 600 Additional Data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed accuracy (at -10 VU)</td>
<td>1.16% fast at 105, 120, 8, 127 VAC</td>
</tr>
<tr>
<td>Wow and flutter</td>
<td>playback: +0.04%, record/play: +0.06%</td>
</tr>
<tr>
<td>Rewind time (C-60 tape)</td>
<td>112 sec.</td>
</tr>
<tr>
<td>Fast-forward time (same cassette)</td>
<td>110 sec.</td>
</tr>
<tr>
<td>S/N ratio (re 0 VU, Dolby off, CBS weighted)</td>
<td>playback: L ch: 52 dB R ch: 52.5 dB record/play: L ch: 49 dB R ch: 49 dB</td>
</tr>
<tr>
<td>Erasure (333 Hz at normal level)</td>
<td>71 dB</td>
</tr>
<tr>
<td>Crosstalk (at 333 Hz)</td>
<td>record left, play right: +45 dB</td>
</tr>
<tr>
<td></td>
<td>record right, play left: +43 dB</td>
</tr>
<tr>
<td>Sensitivity (re DIN 0 VU)</td>
<td>line input: L ch: 88 mV R ch: 93 mV</td>
</tr>
<tr>
<td>Meter action (re DIN 0 VU)</td>
<td>L ch: 2 dB R ch: 2.5 mV high</td>
</tr>
<tr>
<td>IM distortion (record/play, -10 VU)</td>
<td>L ch: 2.8%</td>
</tr>
<tr>
<td>Maximum output (re DIN 0 VU)</td>
<td>L ch: 780 mV R ch: 820 mV</td>
</tr>
</tbody>
</table>

![HARMONIC DISTORTION CURVES](image)
Tests of Twenty-One Premium C-90 Cassettes

Since our last reports on cassette tapes (in 1973), many new formulations have come onto the market and our ideas on the subject of tape testing have changed somewhat. So a new round of testing seemed in order. We decided to test only national-brand premium C-90 tapes (top formulations from any given company and in any given class) and only types that had appeared on the market since our last evaluation. Our list came to twenty-four tapes. One soon dropped out because we could get samples neither from the company nor at retail—meaning, presumably, that it was not as "national" as we had at first supposed. The field was narrowed further when we discovered that two tapes were not available in C-90 format. (See note at end of "Ferrichrome C-90 Tapes.")

We changed from the C-60 standard of 1973 to C-90 because that's what you appear to buy most of; all the companies we have queried on this point agree that C-90 is by far the most popular length. This was somewhat discouraging news. Though a C-90 will hold most of the major works in the symphonic repertoire, uninterrupted, on one side—and do so at a lower cost per listening hour than the shorter lengths—its thinner tape exacts a price in technical performance. Print-through tends to be higher, saturation levels lower, sensitivity—particularly at low frequencies—poorer. Not by much, perhaps; but we felt it unfair to use C-60s for data you might be using to choose between C-90 brands.

An important change in the test procedure (at CBS Technology Center) is in the matter of biasing and equalization. As before, we used a Nakamichi 1000, whose separate playback head—in addition to offering extreme frequency bandwidth—makes possible the Maximum Recorded Level (overload) curves shown in the graphs. In 1973 the 1000's tape switch-
presumed level of your meters' 0 VU upward by 2 dB. To compensate for this, you would have to move the adjusted deck—that is, for any given input level the rating of +2 dB. This is, essentially, what you do when you adjust a tape's Dolby recording level with a given tape, and put level—that is, to "correct" for tape sensitivity. The calibration at the left of these graphs is in dB with respect to DIN 0 VU (technically, a recorded level of 250 nanowebers per meter on the tape—approximately 2 dB above the 200-nanowebber Dolby-level standard). If we have tested your deck in our equipments reports, we will tell you at what level your meters would read for the graph's 0 dB. If, for example, we report that your meters read "3 dB high," the DIN 0 VU is shown as +3 VU on your meters; conversely, the 0-VU mark on your meters is at −3 dB on the graphs. If we have not tested your model but its meters show a Dolby (or ANRS) calibration point (that point on your meters would fall at approximately −2 dB on the graphs). This information will help you relate the MRL curve and other data to the signal levels read on your equipment.

The data are shown in terms of recorded level on the tape. To do this, the lab had to adjust the input voltage of the test signal to deliver the required output level—that is, to "correct" for tape sensitivity. This is, essentially, what you do when you adjust a deck's Dolby recording level with a given tape, and the data therefore represent the values for a correctly adjusted Dolby deck. The degree of adjustment required, with respect to the "standard" tape of each of the three types, is shown as the Relative Sensitivity Rating at 400 Hz. A tape with, say, 2 dB more output than the standard formulation will therefore have a rating of +2 dB.

If you use this hypothetical tape on a deck adjusted for the standard tape, not only will the Dolby calibration be off by 2 dB, but you will be recording at levels 2 dB higher than those in a correctly adjusted deck—that is, for any given input level the recorded signal will be 2 dB closer to the MRL curve. To compensate for this, you would have to move the presumed level of your meters' 0 VU upward by 2 dB on our scale. But since 2 dB of Dolby mistracking already threatens audibly degraded performance, you're better off either adjusting Dolby tracking for the new tape or sticking with one closer to the sensitivity for which your deck already is adjusted—and, therefore, staying with your original determination of the relationship between our dB scale and your meters.

Noise is measured (using the CBS weighting explained in this month's "Equipment Reports" section) in so many dB below the DIN 0 VU, with the deck's Dolby circuit turned off. One word of caution, however: Though the lab used a particularly noise-free deck (the Harmon-Kardon 2000) for these measurements, the tape noise is so close to that of the deck that the noise differences between tapes may be minimized. And there is very little difference in the noise measured—except in comparing the tapes tested with standard equalization against those measured with chrome equalization, which lowers high-frequency output specifically to suppress tape hiss.

Before we go on to examine the test results tape by tape, we should note a number of ancillary considerations that may or may not be of importance to you, depending on your equipment, your habits with a recorder, and your general persnicketyness about the tapes you make.

All of our test samples except the Memorex MRX, the Scotch Classic, and the Columbia have screw closures, which these days universally seem to imply pin-and-wheel internal guides as opposed to Memorex's fixed posts. There are legitimate arguments on both sides of this design question, but the screw closure appears to be winning, at least among the top brands. Ampex, Memorex, and Scotch Classic all have oversize pressure pads—a hedge, in our opinion, against poor tape-to-head contact due to poor pad alignment.
ored labels are BASF, Capitol's chrome, Certron, Memorex, and Nakamichi. The labeling space is cramped on the Ampex, BASF, Certron, and Realistic shells.

Most brands come (or are available) in standard Philips-style plastic boxes, which—as we’ve said in the past—is a hard design to beat. Generally the paper insert is a very practical labeling medium. Among the notable exceptions, Columbia’s is of poor quality, Nakamichi’s is cut up by punch-out holes, Scotch fills up the "spine" (all that is visible in normal storage) with timing information on the Master—a goof 3M says it is remedying.

Of the special boxes, the Memorex looks jazziest, but it is least practical for labeling and has loop-prevention plugs that are easily lost. We find the Capitol drawer-style interlocking boxes cumbersome and skimpy on label space. The Scotch C-Box strikes us as a little better, but not much. Fortunately, both Scotch and Capitol give the Philips-box option. In our samples, the BASF, Fuji, Maxell, Nakamichi, Scotch, and TDK Philips boxes have eliminated those little holes originally intended for an antipilfer display system. Since we’ve never seen this system used in stores, and since the holes let in dust, we hope other manufacturers will follow this lead. Maxell’s box, incidentally, is a redesign that seems more break-resistant than the others.

The prices shown are suggested retail or catalogue values supplied by the manufacturers or distributors. Many brands are, however, subject to wide price variation. So a brand that appears to be a good buy in these reports may not necessarily be when you come to compare prices in your area.

And one last note. There are three pairs of cassettes on our list that, as far as we can tell, are made in the same factories and contain the same tapes. The pairs are Audio Magnetics XHE and Lafayette XHE; Maxell UDXL and Nakamichi EX II; and TDK SA and Nakamichi SX. (Neither Nakamichi nor Lafayette has its own tape manufacturing facilities.) You will see that test results for the two tapes in each pair are very similar but not identical. This is to be expected; it can, in fact, be taken as an index of the variations to be anticipated in any tape type, even among premium varieties. Keep that in mind as you view the test results. The data shown represent one sample of each type, and the cassette you buy should be expected to provide similar but not necessarily identical performance.

“Standard” Ferric C-90 Tapes

As a group, the quality of these tapes is very close indeed to that of the “special” formulations and is both higher and more consistent (so far as the changes in test procedures allow us to judge) than comparable tapes three years ago.

**Ampex 20/20+**

The top Ampex ferric turned out to be the most sensitive tape tested in this group, and—more important—the MRL curve shows the greatest headroom throughout the most important range, from 100 Hz to 10 kHz. It can, therefore, be recorded at appreciably higher levels than typical "standard" ferrics. The gently rising high end in the RS curve suggests that it prefers slightly higher bias than our reference tape, but there certainly is no severe mismatch. Price: $5.29; also sold in C-45, C-60, C-120.

CIRCLE 134 ON READER-SERVICE CARD

**Audio Magnetics XHE**

XHE is, as the data show, an excellent tape both in performance characteristics and in matching the "standard" bias, though its output is a little (2 dB) higher than that of the reference tape. The RL curve holds up particularly well at both frequency extremes. Price: $3.49; also sold in C-45, C-60, C-120.

CIRCLE 135 ON READER-SERVICE CARD
BASF Studio

The top BASF ferric has an excellent MRL curve, a very smooth RS curve down to all but the very deepest bass (where its slight falling-off is hardly cause for complaint), and relatively high output (3 dB above that of the reference tape). It is definitely among the best of the tapes in this group. Price: $4.49; also sold in C-60, C-120.

CIRCLE 136 ON READER-SERVICE CARD

Capitol Music Tape

The top ferric entry in Capitol's line (the chrome also is called The Music Tape) has a good RS curve, despite some falling-off in the extreme bass. Its MRL curve represents the approximate average for this group of premium "standard" ferrics. Sensitivity is on the high side, noise is among the lowest measured in this group. Price: $3.59 in standard Philips box; also sold in C-45, C-60, C-120; available as well in special stacking boxes.

CIRCLE 137 ON READER-SERVICE CARD

Certron HE

HE, incidentally, stands for High Energy Gamma—Certron's designation for its top ferric. It turns out to be above average for this group. There is some falling-off toward the frequency extremes between its RS curve and that of the reference tape. Noise is a hair higher than that of the others. Price: $2.39; also sold in C-60, C-120.

CIRCLE 138 ON READER-SERVICE CARD

Columbia

The RS curve shows good response to the frequency extremes in the test setup. The MRL curve is best in the range just above 1 kHz but poorer elsewhere. In particular, the want of headroom between 200 Hz and 1 kHz suggests that care must be taken, with typical music, to avoid overload. Sensitivity is on the low side and noise a bit high for this group. Price: $3.29, also sold in C-40, C-60, C-120.

CIRCLE 139 ON READER-SERVICE CARD
Lafayette XHE

This, the top of Lafayette's Criterion line of ferric tapes, is very similar (presumably identical in manufacture) to Audio Magnetics' XHE. It is, therefore, equally excellent. Price: $3.99; also sold in C-60, C-120 (through Lafayette Radio stores only).

CIRCLE 140 ON READER-SERVICE CARD

Memorex MRX

The improved Memorex ferric (we tested the older formulation in 1973) displays excellent headroom in the upper midrange (the hump in the MRL curve), less in the critical range just below 1 kHz. Sensitivity, with our test setup, rises slightly at the extreme top, falls off a little at the extreme bottom, but without materially compromising the smooth RS curve. Sensitivity is relatively high. Price: $3.59; also sold in C 30, C-45, C-60, C-120; not available in Philips box.

CIRCLE 141 ON READER-SERVICE CARD

Realistic Supertape

Radio Shack’s “laboratory standard” cassette has a very good RS curve, despite the slight dip toward the top and a marked falling-off in the extreme bass, and a fair MRL curve. Sensitivity and noise are about average. Price: $3.19; also sold in C-45, C-60, C-120 (through Radio Shack stores only).

CIRCLE 142 ON READER-SERVICE CARD

Superscope SHF (C-92)

The Super High Fidelity tapes, Superscope's best, are rated for one extra minute of playing time on each side by comparison with standard lengths. Its RS curve is good, with only a slight peak at the high end and a noticeable rolloff only in the extreme bass. The MRL curve is about average for this group, sensitivity slightly higher than average. Price: $2.79; also sold in C-62, C-122.

CIRCLE 143 ON READER-SERVICE CARD
Ferrichrome C-90 Tapes

The chrome layer (over a ferric layer) on these tapes generally is claimed to deliver better high-frequency response and headroom than ferrics; that the only brand available in C-90 here does not bear out the former claim should not be interpreted as a comment on other ferrichromes that are supposed to take higher bias.

Scotch Classic

The ferrichrome entry from 3M surprised us. We had expected that, with its chrome layer, it would respond best to the higher ferric bias. On the contrary, even with "standard" bias, there is a significant dip in high-frequency sensitivity. The chrome layer certainly contributes to the excellent headroom at the very top; at lower frequencies the MRL curve is not impressive. The noise measurement equals that of the quietest standard ferric tested. Price: $3.99; also sold in C-45, C-60; in C-Box (C-60 and C-90 only), 50 cents extra.

"Hot" Ferric C-90 Tapes

This group is, on average, a little higher in sensitivity and noticeably better in available headroom than the "standard" ferrics—which justifies the generally higher prices.

Fuji FX

Fuji's "Pure-Ferrix" spearheaded this company's recent introduction of its tape to the American market. (Fuji also makes the less expensive FL ferric in addition to the FC chrome reported on below.) All the data represent excellent performance, very close to that of other tapes in this group, though treble headroom and noise are both slightly higher than average. Price: $7.05; also sold in C-46, C-60.

Maxell UDXL

Maxell is the company that originally established the bias point (15% above "standard"), with its UD, for the "hot" group. The newer UDXL proves to be an excellent tape in every respect, though there is a slight drop in sensitivity at the extreme top in our sample. The midrange headroom is particularly fine. Price: $6.50; also sold in C-60.
Nakamichi EX II

This tape, in a sense, supersedes EX, just as its counterpart in the Maxell line, UDXL, supersedes UD. The similarity between the two newer tapes (or between the two older ones) is not surprising since they appear to come from the same production facilities. EX II is equally excellent. Price: $5.60; also sold in C-60 (through Nakamichi equipment dealers only).

Scotch Master

The 3M entry in the "hot" ferric group displays the smoothest RS curve of any with our test setup but less midrange headroom than most (and less, even, than that of the best "standard" ferrics). Sensitivity is a little lower than average. So is noise. Price: $3.59; also sold in C-45, C-60, C-120; in C-Box (C-60 and C-90 only), 50 cents extra.

TDK Audua

Audua proves to be the least typical of the tested "hot" ferrics. In the treble at around 5 kHz the headroom is excellent, but in the critical midrange area it is on the low side. Sensitivity, too, is the lowest in this group, noise is slightly higher than average. The RS curve shows a rising high-frequency characteristic, suggesting that the test setup may offer a little less bias current than is ideal for this tape. Price: $3.99; also sold in C-60.

Chrome-Compatible Ferricobalt C-90 Tapes

The special ferric-based particle in these tapes delivers enough high-frequency headroom to allow chrome's 70-microsecond equalization (which "trades away" that headroom for lower noise), but with the better midrange headroom of ferrics.

Nakamichi SX

Again, the extreme similarity between the Nakamichi tape and the comparable product from the same factory (TDK's SA) should cause no wonder. This is an excellent tape in every respect. Price: $6.00; also sold in C-60 (through Nakamichi equipment dealers only).
TDK SA

TDK—which developed the ferricobalt technology on which this tape is based—has produced a product that matches (or beats) chromium dioxide in its own performance turf without using chromium. Headroom is better than that of typical chremes, except possibly at the extreme top. Since the test setup was biased essentially for ferricobalt but produced very flat output with the tested chremes as well, they do appear to be completely compatible in this respect. Output of SA is, however, about 2 dB higher than that of typical chremes. Price: $4.79; also sold in C-60.

CIRCLE 151 ON READER-SERVICE CARD

Chromium Dioxide C-90 Tapes

Chrome offers inherently great high-frequency resolution in terms of both response and headroom, but most of that headroom advantage is used to accommodate the 70-microsecond chrome equalization, which noticeably reduces audible noise; midrange headroom generally is not as good as that of ferrics.

Capitol (CrO₂) Music Tape

Capitol’s recent entry into chrome tape has produced a formula- tion that—in headroom (the MRL curve), response (the RS curve), and output (the sensitivity figure)—is typical of chremes we have tested. Noise is higher by a hair than that of other chremes in this group. Price: $4.49; also sold in C-60.

CIRCLE 152 ON READER-SERVICE CARD

Fuji FC

Fuji’s chromium dioxide (which has received less attention than its FX “hot” ferric tape) is typical of chremes in every respect. Price: $7.05; also sold in C-60.

CIRCLE 153 ON READER-SERVICE CARD

Royal Sound CrO₂

The RS curve of this recent (and relatively inexpensive) addition to the chrome lists is excellent. Headroom, as represented on the MRL curve, is not as good as that of most chremes; but noise is the lowest measured in the present tests. Sensitivity is a trifle lower than that of typical chremes. Price: $4.49; also sold in C-60.

CIRCLE 154 ON READER-SERVICE CARD
How to mix power

The power of your amplifier is one of the most important elements in the performance of your high fidelity system. It gives your amplifier sufficient power to drive your speakers. And you need well engineered power to give you the instantaneous burst that music may require.

The pleasure of your tuner is fullest when properly matched with its power supply; when it is sensitive and highly selective, and offers noise- and distortion-free sound. In short, an instrument attuned to your musical pleasure.

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Imagine first of all an ideal set of circumstances. You have at your disposal one of the great symphony orchestras, one whose style and tonal qualities are particularly appropriate to the music you are about to record, the Prelude and Liebestod from Wagner’s Tristan und Isolde. Thus in Europe you would choose the Vienna or the Berlin Philharmonic rather than the Orchestre de Paris or the Suisse Romande, just as in the U.S. the Chicago Symphony or the Philadelphia Orchestra would be preferable to, say, the excellent Bostonians simply in terms of the kind of sound produced. (Precisely the opposite might apply if we were talking about Daphnis et Chloé.) The conductor is a specialist in the kind of music to be recorded—indeed, let us go further and imagine him as one of the few really great Wagner conductors of our time.

The orchestra must then be carefully and comfortably seated in a hall or studio that is known to be acoustically excellent. Your team of engineers will have given much thought to the choice and placement of microphones, and all the other equipment is known to be in perfect order. In such ideal (and quite unrealistic) circumstances, what part does the recording producer play? The answer is, a very small part indeed. He will keep notes on the proceedings; he may decide that one take is marginally better than another; and he may, if necessary, act as a sort of psychological prop if the conductor is ill at ease under recording conditions. Yet the fact remains that he will have little to do if everything has been so perfectly ordained.

Of course, it never is. No hall or studio is perfect for all kinds of music, and neither is any orchestra. Every engineer has his own ideas about what microphones to use and where to put them, and by no means are all conductors as secure on matters of balance in the recording studio as they are in the concert hall. The function of the producer is to coordinate all these factors in relation to the score, and what I shall try to do in this article is to indicate some of the problems he might encounter in a single short passage from the Prelude to Tristan. And to introduce a note of realism, I am going to assume that he has with him a good team of engineers, a suitable though not ultimately perfect orchestra, a hall or studio in which good records are known to have been made, and a youngish, brilliant conductor of world potential who has conducted the piece many times before but never under recording conditions. This kind of situation, while much closer to reality than the aforementioned “ideal,” is still a great deal better than what usually happens.

Before we get to the specifics, there are some general observations to be made about this particular score, and the immediate requirement is for a great opulence of sound. A mere glance at the score is enough to show that “separation” between instruments or instrumental groups is precisely what is not needed, and yet the sound must not congeal. In other words, the conductor and producer must work together to produce a sound that is rich and rounded, yet not so thick as to obscure individual lines when they need to emerge with clarity from the over-all texture. Therefore, from the start, the layout of the orchestra is crucial. It is often the case in the opera house, and sometimes in the concert hall, that a conductor has to accept a layout that from his point of view may be very far from ideal; but under recording conditions it should be possible to achieve something like a perfect layout for this music.

My own choice would be conventional, with the
strings in a semicircle from the conductor's left as follows: first violins, second violins, violas, and cellos. There can be some flexibility in placing the double basses, although if there is room I would always opt to place them to his right behind the cellos. The woodwinds should be in a block in the center, behind the back desks of the second violins and violas. I would try to place the timpani on the conductor's left, though not at an extreme; if properly placed, they should complement the basses on his right. I would place the brass instruments on either side of, but behind, the woodwinds, with the trumpets and trombones on the left and the horns on the right, and with as much distance between them as is practicable. The reason for that placement—which might not be advantageous for a different work—will emerge when we take a close look at the score.

The Prelude to Tristan is a gradual and marvelously sustained buildup to a climax reached in the last of the twelve measures illustrated, and the final approach to that climax—which will determine whether it works as Wagner intended—begins on the third of those measures. In the passage immediately before that (culminating in our measures 1 and 2), the focus has been largely on the upper strings, with a certain amount of duologue between the first and second violins, which might at first sight tempt a producer to place his second violins where I have placed the cellos, simply for the sake of stereo effect. In fact, if you ignore everything else in the score and just look at the writing for the first and second violins in the first two measures of our illustration, you can see what might lead him to that wrong conclusion.

But now take a look at what the horns are doing. They are building up toward our crucial measure 3, and at the very end of measure 2 they are marked with strong accents. Now if we had our second violins on the right of the orchestra (for stereo separation), they would be on the same side as the horns, which would make it exceedingly difficult for the conductor to create an ideal blend between first and second violins on the one hand, and the violins and horns on the other. In any case, Wagner's scoring makes his intentions perfectly
clear. In the nine measures before our illustration begins, the first and second violins have been in
duologue, but at the very end of our measure 2—
right at the moment when the horns and winds
gain ascendancy—the firsts, seconds, and violas
are written in octaves, with the violas in the upper
octave along with the firsts, precisely to provide
the necessary string power to counterbalance the
horns. They can do so, however, only if they are
themselves close enough together and yet physi-
cally separated from the horns—that is, if you are
going for what I like to call a natural balance,
rather than something effected by altering levels
on microphone outputs or postmixing with a mul-
titrack recorder, which I shall come to later.

In measures 3, 4, and 5 there should be no diffi-
culty in obtaining a saturated string sound, be-
cause all the strings—apart from the double
basses—are playing in octaves. The horns must be
heard as well, especially in measure 4. It is pre-
cisely there that an inexperienced conductor
might be tempted to force them, and it would be
up to the producer to try to restrain him. An expe-
rienced conductor would know that, without trying
to blast their way through, the horns will make
themselves perfectly well heard against the sound
of fifty-eight string instruments playing in unison
and octaves.

Measures 6, 7, and 8 belong to the first and sec-
ond violins, which are playing, as before, in oc-
taves. The balance of the woodwinds should take
care of itself, though I once actually saw a record-
ing producer and his balance engineer make an
elementary mistake at this very point. They not-
ticed that the woodwinds had the same marking—
sempre forte—as the first and second violins and
therefore assumed that the output of sound from
the two departments should be the same. Since it
was clearly nothing like the same, they opened up
the woodwind microphones to bring that section
forward, and the result was predictably grotesque.
Sempre forte is an instruction pertaining to the ca-
pacity of the different instruments, and in prac-
tical terms there is precious little difference be-
tween the fortissimo in measure 3 and the ongoing
sempre forte in measure 6. Nor should the fortis-
simply marking for the bass clarinet in measure 6 be taken to mean that Wagner wanted it highlighted in the texture. He is using it as the bass instrument of the woodwind group at that moment, because his bassoons are otherwise occupied doubling the bass strings; so the bass clarinet, given the nature of its sound in that particular register, needs to play its kind of fortissimo in order to take its proper place in the texture.

Measures 9 to 12 lead us to the climax, and they are full of terrible balance traps. What happens in the purely musical sense is that, while the first and second violins continue their relentless upward surge, part of the theme that opened the Prelude appears, divided in two and overlapping itself. The first part appears in the horns and cellos in the middle of measure 9, marked forte, espressivo, and crescendo. By measure 10 it appears again, still louder and joined by our friend the bass clarinet with his fortissimo, which we still have to remember is only relative. And by the time we reach the third statement in measure 11, the entire horn section is in, plus the cellos and two bassoons—all of them marked fortissimo. It is, or should be, a magnificent sound, demonstrating the reason for placing the horns and the cellos on the same side of the orchestra, not just because they will sound richer in coming from the same source, but because the contrasting sound of trumpet and trombones encountered in measure 10 comes from the opposite side.

The trumpet (or trumpets, for most conductors double the part) is concerned with the other fragment from the opening theme and brings it in forte with a crescendo in measure 10; in measure 11, he plays it again, still louder. In these measures the trombones are doing no more than providing harmonic underpinning for the trumpet and should therefore not obtrude. The important issue is the balance between the dark sound of the horns and cellos and the brighter, penetrating sound of the trumpet(s). Now the plain fact is that trumpet sound can cut right through a texture of this kind with almost no effort, and nothing is nastier than to hear a performance of the Prelude in which measure 10 and 11 in our example are dominated by a fierce emphasis on the trumpet. Nor should the first and second violins be lost in those measures, for although they ceased to be thematically present at any conductor will ask the utmost of his string section, and even so they may not really register until measure 4, in which case some gentle microphone assistance would not be out of place. (Indeed, it is out of place only when it is noticed.) Riding the channel controls (or “monitoring,” as it used to be called) must be treated with caution, however, for any excessive enthusiasm can lead one into the trap of reaching maximum undistorted level before the musical climax; this is plainly disastrous, since it will either eliminate the climax altogether or, worse still, necessitate a reduction of level at the very moment when it should be at its highest.

One final point worth noting is that, like many passages in Wagner, the measures we have been considering scarcely admit any possibility of orthodox editing except—and even then at some risk—on the first beat of measure 12. The music is simply too sustained, with too many notes tied over the lines, to make direct tape-splicing practicable except at that one point. (In the very last resort a complicated “cross-fade” edit involving three tape recorders might be attempted anywhere, since the issue in that unhappy event is extremely simple: It either works or it doesn’t.) And I can’t escape the feeling that any conductor whose performance needed editing in this particular passage should not be recording the work anyway.
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How a Pop Producer Does It

Sometimes the musicians don’t even meet each other

If you’ve ever had the opportunity to glance into the cockpit of a modern jetliner, it has no doubt crossed your mind that there’s just a bit more to flying than pulling back on a throttle and yelling “Contact!” And, if you’ve ever seen the inside of a modern recording studio control room, you may have come to the same sort of conclusion about taping. Obviously, there’s more to it than meets the ear.

Recording no longer is the simple matter of plugging a microphone into a tape recorder and yelling “Take One.” Although excellent recordings can be made this way, the professional recording engineer has for the most part abandoned such straightforward ways of doing things, especially when taping popular music, in favor of a more complicated multitrack technique.

To help explain the intricacies of the multitrack technique, we’ll follow a group of students from New York’s Institute of Audio Research as they proceed through an actual recording session. The institute offers a series of courses in recording studio technology; in the final semester, students engineer and produce their own session at the Big Apple Recording Studio—which, despite its whimsical name, is a fully equipped modern facility with more than $100,000 worth of recording gear packed into its control room, reflecting the state of the recording-studio art today.

The technology involved may be traced back to the days of Les Paul and Mary Ford. Not satisfied with conventional recording techniques, the guitarist/singer team began “overdubbing” additional guitar and vocal lines to the basic two-part recordings. The overdub process was reasonably uncomplicated, though not without its practical limitations. The session would begin in the usual manner, with a simple recording of the duo. When this first-generation taping was completed, it would be played back and recorded onto a second machine. At the same time, the musicians would listen to the first tape and play along in accompaniment. The old-plus-new material would be recorded on the second tape recorder to form a second-generation master tape. Theoretically, the process could be repeated over and over again, adding more and more parts. Each generation also added tape hiss, however, and early generations could not be corrected or modified without scrapping all succeeding ones.

To circumvent these production limitations, Ampex developed a special eight-track tape recorder. On it, the first generation might use only two or three tracks. Then the tape would be rewound, and the musicians would add parts on the tracks that remained—or as many of them as were needed. One track could be totally redone without altering any of the others. Via a sophisticated switching system (which Ampex called Sel-Sync, though other manufacturers have since dreamed up other names for the same process), the engineer could play back the tracks previously recorded while recording new material on the unused tracks, and do so in perfect sync by using the record head to perform a dual function: recording and playback simultaneously.

At the time, the ability to record eight sounds independently—even at different times and studios if necessary—was considered pretty earth-shattering. Today the number seems modest; anything up to sixteen tracks is commonplace, with some equipment recording as many as forty on a single tape! Will a song profit from the services of an oboist who lives, or is on tour, in Toronto? You can send a tape “cut” in Nashville on to Canada for the oboe line, then to New York for some final choral tracks that have been dreamed up in the meantime. The process may take months, and it’s not
even necessary for the musicians ever to meet as long as each knows what's expected of him musically.

Once all the tracks have been recorded to everyone's satisfaction, the multitrack tape is played back through the console, and the tracks are mixed together to form a final two-track stereo (or four-track quad) program. During this "mixdown session," the engineer may spend hours experimenting with special effects and different balances. The possibilities are virtually infinite, and many studios have specialized equipment assigned exclusively to mixdown.

To take full advantage of the production capabilities of multitrack recording, most engineers have developed their own favorite close-miking techniques. The basic idea is that each microphone hears only the instrument placed directly in front of it. Then, in the control room, the engineer may add equalization, reverberation, and a host of special effects to any instrument, without affecting the sound of others. If a certain instrument must be removed later on, the listener will hear no trace of it in the form of "leakage" into other microphones set up near other instruments in the studio.

The accompanying pictures, from a recording session of a new four-man band, Showcase, tell the rest of the story, as the students in the Institute of Audio Research's Recording Studio Workshop take us through each step of their session.

Student engineer Michael Barry prepares the console for the first take. The meters at the top of the console indicate what's happening at each microphone location in the studio. The sixteen rows of knobs, switches, and faders allow the engineer great flexibility in signal processing, routing, and balancing of each microphone output. Later on, these same controls may be used to mix down the completed multitrack tape.

Producer John Thomas points out a few changes in balance. The control room crew usually consists of an engineer, who oversees the technical details, and a producer, who generally is responsible for musical decisions and, as his title suggests, is in charge of the over-all production.
The Big Apple's sixteen-track tape recorder is readied for the day's recording activity. Note the size of the splicing block just below technician Marc Paley's arm.

This close-up shows the sixteen-track erase, record, and playback heads, each one eight times the size of a conventional stereo head.

In the studio, the musicians are separated from each other by acoustic baffles, or "goboes." Headphones allow guitarist Pete Romano and bass player Phil DiFranco to hear each other, as well as whatever was recorded earlier.

The microphone for Pete Romano's acoustic guitar is placed very close, to help minimize leakage from other instruments.

Perhaps it's an unlikely spot to listen to a piano, but as with the guitar microphone the placement helps the engineer to isolate the sound of the piano on its own track. The pianist is Mitch Sarro.

The ultimate in close-miking technique: no microphone at all! The "Y" connector routes the electric bass signal from the coiled cord both to the instrument's amplifier (for monitoring) and, via the small cylindrical transformer, to a microphone cable feeding the console. This direct pickup is often used on electrical and electronic instruments.
As the session progresses, the instrumentalists of Showcase become its chorus.

In the drum booth, there seems to be a microphone on just about every part of the set. Since the drums are often acoustically well separated from the other instruments, drummer Lary Cozzalino must wear headphones just to know what else is going on in the studio.

And finally, the vocal solo. Pete Romano, now the lead singer, in effect becomes the accompanist. He shapes the vocal line to follow what has previously been recorded.
"Necessarily so" Gershwin. The long-anticipated first complete recording of *Porgy and Bess* (HF, May) stresses its grand-opera embodiment rather than its black folk soul. That's all to the good in that it reminds us that the composer, for all his formal inexperience, did more than string together the hit songs usually remembered best. They have been recorded more magnetically before, but never have they been better integrated into a mosaic. Nor has Gershwin's rough but magnetically before, but never have they been better integrated into a mosaic. Nor has Gershwin's rough but magnetic before, but never have they been better integrated into a mosaic. Nor has Gershwin's rough but magnetic before, but never have they been better integrated into a mosaic. Nor has Gershwin's rough but magnetic before, but never have they been better integrated into a mosaic. Nor has Gershwin's rough but magnetic before, but never have they been better integrated into a mosaic. Nor has Gershwin's rough but

It's ironic that so refreshingly off-beat a musical program as that of "The Bohemian French Horn" should be produced primarily for passionate connoisseurs of quadriphonic tape technology: Sonar QR 1130/31, two Q-reels, $19.95 each (also stereo-only reel editions and even more expensive 15-lips and 10-inch Q-reel editions, as detailed in a catalogue available from Sonar Records Corporation, Box 455, Kingsbridge Station, Bronx, N.Y. 10463). The music is a quintet of strings Quintet in E by Antonio Reicha (1770-1836), a lighter-weight but no less engaging horn quartet by "Giovanni Punto" (J. Stich, 1748-1803), and Haydn's Divertimento a tre per il corno da caccia. This remarkable showpiece may not be by a Czech but it was written for one—the super-virtuoso hornist Steinmuller of the Esterhazy Orchestra. The present Music Company performances star William Hamilton playing a modern instrument rather than the original valveless one, but he and his colleagues display notable relish as well as skill, and they are magnificently recorded.

Paradoxically novel yet nostalgic. You probably can't imagine what a present-day, but not avant-garde, musical Passion might sound like (especially a British one using black spirituals as Bach used Lutheran chorales) until you actually hear Michael Tippet's A Child of Our Time as most recently recorded by soloists Norman, Baker, Cassilly, and Shirley-Quirk with the BBC Symphony and choral groups under Colin Davis (Philips 7300 45L, Dolly-B cassette, $7.98). No matter how dubious you may be about contemporary compositions, you'll find this example of the paradoxically individual, poignantly moving, eloquently performed, and immaculately recorded. There's only one catch: Philips includes notes and a synopsis but no complete text.

Even more novel is the 1880 Mass in A by—believe it or not—Puccini. Sung with the same youthful fervorliness with which it was written, this warmly yet solidly recorded performance by soloists with a Lisbon orchestra and chorus under Michel Corboz is one of the most delightful musical discoveries of the year (RCA Red Seal FRK/FRS 1-5890, cassette/cartridge, $7.95). Here the no-text catch is not as serious as the lack of Dolly-B noise reduction.

Both Dolly B and texts (on supplied-postcard request) enhance the taping of last year's Nostalgia Hit, the truly superb Joan Morris/William Bolcom "After the Ball" salon-song/epiphany program (Nonesuch/Advent D 1037, Dolly-B cassette, $5.95). Not to be missed even—or especially—by the most serious music-lover!

Yeaning: in miniature and in excess. Only a master like Emil Gilels could endow 20 of the 66 little Lyric Pieces by Grieg with both their quintessential simplicity and intensity of feeling. Once the delight of amateur pianists, they now can be relished in all their freshness and poignancy by everyone (Deutsche Grammophon 3300 493, Dolly-B cassette, $7.98). And perhaps only the teaming of a young master like Ashkenazy with the lusciously rich Philadelphians under Ormandy could draw the full emotionalism and bravura dramatic impact from Rachmaninoff's Third Piano Concerto (RCA Red Seal ARK/ARS 1-1324, cassette/cartridge, $7.95 each). The recording ranks with RCA's best ever; and I can almost forgive the lack of Dolly B since a proper side-break location (despite a full nine minutes' side-length difference) indicates that the prayed-for new RCA tape-editing policy may indeed be here to stay.

Herrmann memorial. For me, he'll always be remembered as the stimulating musical friend I knew as Benny in his apprentice days long ago. And since I can't possibly be critically objective about Bernard Herrmann as film-music composer and conductor, all I can add to colleague Royal S. Brown's interview and discographic listing in this issue is an assurance of the technical excellence of three current imported London Phase-4 Dolly-B musicassette releases. "Great British Film Scores" (SPC5 21149) is just as brilliantly recorded and processed as "The Mysterious World" (SPC5 21137), which was praised here last month. Almost as good technically is last year's "Great Shakespearean Film Music" (SPC5 21132). They're all infused with the joy of life and music-making Benny Herrmann once radiated in person and still radiates in his recorded legacies.
Play-offs were held April 8, 1976 in the Ampex Magnetic Tape Research Laboratory at Redwood City, California, using a Nakamichi-1000 cassette deck at standard factory bias setting and following each tape manufacturer's playback instructions. We measured frequency response at a record level 20 dB below 200 nwb/m, third harmonic distortion at zero dB (200 nwb/m, 400 Hz), output at 3% third harmonic distortion (400 Hz), and N.A.B. weighted noise. C60 cassettes were used. The photos are unretouched chart recorder output. You can see why Ampex 20/20+ is the best quality cassette you can buy.
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WITH THE UNTIMELY DEATH of Rudolf Kempe last May 11 at the age of sixty-five, Seraphim's issue of his Beethoven symphonies (first released abroad in 1974) sadly takes on memorial significance. It is regrettable that Americans had so little opportunity to experience his artistry at first hand, for his recordings stamp him unmistakably as one of the most gifted and sensitive conductors of his time.

Kempe was not the average Germanic conductor. Though he had certain mannerisms of the Teutonic style—the occasional mild tempo fluctuations, a tendency to moderation in temperament—his Beethoven has a welcome aristocratic sense of proportion, sentiment without undue sentimentality, transparency of sound, uplifting tensile grace. If the Munich Philharmonic cannot match the virtuosity of some of its more prestigious competitors on records, it has a superb sense of tradition and selfless, involved musicality. The orchestra produces a mature sonority: dark, lustrous, burnished, vibrant.

There is perhaps no more fitting tribute to Kempe's artistry than the Ninth Symphony in this set, in its way a perfect realization. The performance has a justness of proportion and a searching integrity that remind me of the famous Weingartner/Vienna Ninth, and there are strong similarities in tempo and phrasing. In the broad first movement, Kempe—like Weingartner—makes slight, not bothersome, ritards on the overlapping woodwind lines at bar 138 et seq., an idiosyncrasy rarely encountered in modern performances (though Reiner overdid the effect on his recording). The middle movements too recall Weingartner: The scherzo, after a slightly lethargic opening phrase, is sturdy in rhythm (and, like Weingartner, Kempe takes the first sectional repeat); the Adagio has wonderful elasticity of line and a winning sincerity and directness of utterance.

The finale is nothing short of cherishable. Kempe has the musical grasp and sense of proportion of a true classicist, and all the tempo relationships sound right to my ears. The allegro ma non tanto, for example, is rather brisk, but then the final prestissimos are even faster than Toscanini's. The contrabasses and triangles in the alla marcia are suitably weighty; the transition into the double fugue couldn't be firmer; the choral re-entry is full of fire and buoyancy.

Kempe spurs his singers along without driving them unmercifully. Baritone Donald McIntyre takes the "freudenvollere" in his opening solo in one breath and evokes the lyrical, unforced delivery of the great Richard Mayr (with Weingartner). Soprano Ursula Koszut and mezzo Brigitte Fassbaender are true of pitch and unpressured—truly joyous and unforced in their delivery; tenor Nicolai Gedda sounds slightly woolly (but that too is a tradition of sorts in German performances). The over-all effect is a grandeur and sense of organization rivaling Toscanini's, with an even greater fervor born of Kempe's deep understanding of the Schiller verses as well as Beethoven's musical directions.

Rudolf Kempe: A Fitting Memorial

Seraphim offers the first budget-priced American SQ release, Kempe's distinguished Munich set of the Beethoven symphonies.

by Harris Goldsmith
Almost as memorable is Kempe's Second. The introduction to the first movement is earthy yet poised; every detail is fitted carefully into an exceptionally coherent progression. In the allegro proper (without repeat), Kempe shows his instinct for a singing line and sensitive phrase shapes; he and his players avoid all the treacherous rhythmic pitfalls of this movement. The Larghetto, on the slow side, at one or two transitional spots verges on overpointing, but on the whole the rhythm is so poised, the shaping of melody with Alberti bass so intuitively expressive, that the movement is kept triumphantly aloft. The very fast scherzo is biting and precise, and the beautifully shaped trio is taken in tempo. The finale is paced more moderately, but it is full of biting accents and exciting dynamic contrasts. This is one of the best Seconds on record.

The First Symphony has a robust first movement, a communicative Andante (despite slightly sluggish timpani), a deliberate but swinging scherzo. The finale is soundly conceived but suffers a bit from less than precise staccato string playing and from the violins' lack of blend. Kempe takes the first- and last-movement repeats; like Solti, Karajan, and a few others, he makes a da capo repeat in the Menuetto not indicated by Beethoven.

Slightly unpolished playing keeps this Eroica out of the very top class, but the orchestra's work is always heartfelt and the basic sound is superbly melodic and impactive. If Pfitzner is momentarily suggested by a portentous broadening after the dissonances in the slow movement, this is on the whole a singing Eroica along the lines of Bruno Walter's. The Marcia funebris is gravely paced and eloquently allowed the first two movements to fit intact on one side. The three overtures receive admirable performances. Prometheus (filler for the Eroica) has a solid introduction, with the overture proper suitably light and energetic; the final chords are impressively imperious. Leonore No. 3 (following the Fourth Symphony) is robust, atmospheric, and, when appropriate, fiery. Egmont (following the Fifth), after a portentious opening, develops considerable thrust.

The sound of the Seraphim edition seems drab and muffled compared to my recollection of the British pressing (Robert Long had both versions on hand for his quadrophonic report; see below.) Ironically, in one or two places the dimmer sound yields musical gains: The string impregnations of the Fifth Symphony are less conspicuous, and the less full sound of the Seventh makes that performance sound less oppressive. The surfaces need watching too; my enjoyment of Kempe's splendid Second was partly spoiled in the Seraphim set by a cracking press.

Ernest Newman's admirable notes on the symphonies are reproduced from the Cluytens/Seraphim set. Pictures of Cluytens have been duly replaced, but purchasers are still advised to "see page 15" for notes on Egmont and Coriolan. That page has been omitted from the Kempe booklet, which is understandable since Coriolan isn't in this set anyway.

**BEETHOVEN: Symphonies (9); Overtures. Ursula Koszut, soprano*; Brigitte Fassbaender, mezzo*, Nicola Gedda, tenor*; Donald McIntyre, baritone*; Munich Motet Choir, Munich Philharmonic Chorus*; Munich Philharmonic Orchestra, Rudolf Kempe, cond [David Mottley, prod.] SERAPHIM SIH 6093, $31.84 (eight SQ-encoded discs, manual sequence).**


In quad: The quadrophonic concept is certainly (though not unequivocally) of the front-plus-amphion school. The equivocation is introduced by the high signal levels, particularly in the bass, with which the ambience is recorded, often giving the effect of an excessively reverberant hall. Worse, the back channels reproduce some sounds (timpani, cellos, brasses, occasionally fricatives from the whole string section on staccato attacks) in such a way as to give the impression from time to time that part of the orchestral sound originates from the back. That this is not an inherent property of the recording seems proved by its relative absence from the otherwise very similar sounding British issue. Only in parts of the opening movement of No. 5 and the last of No. 9 does the sound blur, to my ear (and with my equipment), the way it does here and there in all the symphonies heard via Capitol's remastering. The British pressings also have slightly fresher and more believable tonal qualities at some points, and such annoyances as noise and pre-echo are much more in evidence on Seraphim. While the set is sound similar when listened to carelessly, the demerits of the Seraphim issue pile up and ultimately become irksome under closer scrutiny.

ROBERT LONG
Reissue series from the Savoy, Verve, Bethlehem, and Center catalogues bring the jazz collector's "impossible dream" closer.

A New Era for Jazz Classics
by John S. Wilson

UNTIL A FEW YEARS AGO, most jazz followers were convinced that there would never come a time when the classic jazz recordings, much less a substantial body of the work of major jazz musicians, would be permanently available. Because jazz is essentially a performance art, they argued, it is vital to an understanding and appreciation of the music to be able to follow its development through the original recordings of every period. And, like books, these records should always be readily accessible.

There have been numerous starts toward potentially useful reissue programs—Victor's original Vintage series and Columbia's boxed sets were among the most hopeful. But in the Fifties and Sixties, when these attempts were made, the focus was on pre-World War II jazz material, most of which was controlled by RCA Victor, Columbia, and Decca, to whom jazz was a minor sideline. When their accountants looked at the bottom line and found sales falling below a cutoff point that did not necessarily relate to long-term catalogue items, that was the end of the reissue projects.

But reissues are moving into an era that might eventually approximate the jazz collectors' impossible dream. With thirty years of post-World War II jazz recordings to draw on, these have become the foundation on which reissue series are being built. And because most of these recordings were made by or are controlled by small companies that are primarily interested in jazz, the accountant mentality is more adjusted to their sales potential. The new era began with the twofers of Prestige—Fantasy and Blue Note, which included the World Pacific catalogue, and a single-record series from Trip, which had acquired the Mercury and EmArcy catalogues. This brought together a wealth of jazz recording involving most of the major names of the Forties through the Sixties. But even these re-releases left many of the essential records of those years unavailable.

Now the catalogues of three more labels—Savoy, Verve, and Bethlehem—are being reissued. In effect, this covers the postwar field. Savoy, which has been acquired by Arista Records, has some of the basic records of the bebop era and a strong catalogue of mid- and late-Fifties material; Verve, Norman Granz's prolific label that was bought by MGM in 1960 and has been taken over by Polydor, is a wild treasure chest of everything from traditional jazz to avant-garde during these same years.

Among the first releases from both Savoy and Verve are two-disc sets (both are concentrating on twofers) devoted to Charlie Parker and to Lester Young, the two most influential saxophonists of the Forties. The differences between each label's approach to these jazz giants—conditioned, of course, by what each has access to—is fascinating and instructive.

Savoy's Charlie Parker set (SJL 2201) is basic for any jazz collection. It consists of the master takes of the thirty studio recordings Parker made for Savoy between 1944 and 1948, a summation of the foundations and development of bebop. Starting with the Tiny Grimes session of 1944 in which Parker made his first recording with a small group and, a year later, his first session under his own name, which produced "Billie's Bounce," "Now's the Time," and the incredible "Ko-Ko," the collection moves on through a series of pieces that have become jazz staples ("Donna Lee," "Chasin' the Bird," "Half-Nelson," "Klaunstance," "Parker's Mood") as his style, already set in the Grimes session, grows in polish and assurance. This set can be considered the fountainhead of bebop and is marred only by the constant presence of Miles Davis, whose fumbling uncertainty on trumpet contrasts glaringly with the free flow of Parker's playing and the brief but positive appearance of Dizzy Gillespie's trumpet on "Ko-Ko."

The Verve (VE 2-2501) picks up where the Savoy stops, running from 1948 to 1950. It shows Parker capitalizing (if that is the proper word) on the reputation established during the Savoy period. It starts with a dreadfully pretentious bit of Hollywood background music by Neal Hefti, "Repetition," played by a huge studio band through which Parker suddenly glides, gracefully but completely out of place. Six of his ballads are backed up by strings, a dilution of his talent in spite of his desire to play with this kind of backing. A couple of ballads without strings and five bop pieces made in 1949 with groups that seem stiff and static compared to those recorded by Savoy are a slight improvement. But the meat of this set—and the reason for having it—lies in five 1950 recordings...
on which Parker is teamed with worthy peers: Gillespie, Thelonious Monk, Curly Russell, and Buddy Rich. There is a constant sense of challenge between Parker and Gillespie that reaches a peak in their exchanges on "Leap Frog." Despite this, Monk insinuates his piano in such a provocative fashion that he quietly takes the solo honors.

With Lester Young, the situations of the two labels are reversed. Savoy (SJL 2202) again has the earlier recordings, but it has had to stretch its limited material to such an extent that there are multiple takes (from two to four) on eleven selections, repetitions carried to an extreme that can interest only the most confirmed Lester freak. Two sides are devoted to the Basie band of 1944 without Basie and to a Johnny Guarnieri studio group, with Young a peripheral soloist in both. The best selections are from a 1944 session with the Basie rhythm section (including the Count this time) on which Lester responds warmly to the familiar surroundings. He is also in good form but in dull company leading his own 1949 group.

The Verve set by Young (VE 2-2502) is drawn from the years 1952 and 1956, when he was touring with Grant's "Jazz at the Philharmonic." On the 1952 recordings with a band that included Oscar Peterson and Barney Kessel, Young carries the group and does it quite successfully. But in 1956, with Teddy Wilson, Gene Ramey, and Jo Jones, he is in company that stimulates, supports, and challenges him. Wilson is a brilliant accompanist, and he is a far more provocative pianist when playing solos in an ensemble with a horn than he normally is alone or in a trio. Jones is an ideal drummer for both Young and Wilson, and, with Ramey's Kansas City background added, they mesh in the way that one always hopes a good jazz group will.

Other releases in the initial batch of Savoys cover both the label's early and later periods. Erroll Garner's 1945 session that was his breakthrough (including "Laura") and the more polished but still developing Garner of 1949 (SJL 2207), along with the mid-Forties collection "The Changing Face of Harlem" (SJL 2209) featuring a variety of small groups, most notably some of the best recordings made by Hot Lips Page; and, from the mid-Fifties, Cannonball Adderley's first recording date—1955 (SJL 2206), when he literally became a star overnight at the Cafe Bohemia. Yusef Lateef's earliest exploratory use of Eastern sounds and odd instruments (SJL 2205), and John Coltrane in his "sheets of sound" period (SJL 2203).

Verve has what could stand as a definitive set of Bud Powell's piano playing (VE 2-2506); a Billie Holiday set (VE 2-2503) that, despite one bland 1952 session, is mostly a warm, intimate projection (1952 and 1954) of a voice that is worn but still full of color and spirit, plus an additional lighter-voiced Holiday side (1946) in a set (VE 2-2504) that includes the original (1944) "Jazz at the Philharmonic" concert, filled with the brilliant piano work of Nat "King" Cole; and a 1957 Gillespie collection (VE 2-2505) that is worthwhile but scarcely as essential as the other Verves.

Bethlehem, a label that poured out a torrential mishmash of records in the Fifties, began its reissue series (distributed by Caytronics) at the end of 1975 with a set that, in some ways, reflected the strange thinking that went into some of the company's recordings: Porgy and Bess (3BP-1, three discs) with Mel Torme as Porgy, Frances Faye as Bess, various jazz musicians and groups singing and playing, and Al Collins needlessly narrating in blank disc-jockey prose. It is a pretentious disaster, although Faye is a better Bess than one might expect. Duke Ellington's orchestra is listed in the cast, but its contribution is only a single (undistinguished) chorus on "Summertime." Possibly to make up for this, the Bethlehem releases include a superb Ellington collection made in 1956 (BCP 6013), just before his "rediscovery" that year at Newport, in which the Duke reconsiders such classics as "East St. Louis Toodle-Oo," "Creole Love Call," and "Jack the Bear" in ways that show how unflagging his creativity was even when the material had long since seemingly been established.

"The Finest of Nina Simone" (BCP 6003), the 1958 Bethlehem LP that launched her career, has "I Love You, Porgy," which did the launching, but it also has "Plain Gold Ring," which was much more representative of her folk-jazz-mood style at the time. And for other memories of the Fifties—pleasant but not earthshaking—there are the two trombones of Jay and Kai (J. J. Johnson and Kai Winding) on BCP 6001 and the Australian Jazz Quartet (BCP 6002), in which Erroll Buddle brought the bassoon to jazz.

At the other end of the jazz chronology, Biograph Records has bought a New Orleans label of the 1960s, Center Records, and has reissued nine of its LPs (with seven more announced) just in time to coincide with the death in May of trombonist Jim Robinson, who is heard on six of them. Robinson's is a steady, strong, and consistent voice, which is more than can be said for some of the elderly New Orleans musicians on these discs. But, despite uncertainties, things manage to balance out. Young Orange Kellin's clarinet makes up for Tony Fougerat's vague trumpet on CEN 16, while Andrew Morgan (born 1901) on clarinet and Clive Wilson (born 1942) on trumpet support the unsteadiness of Louis James's violin and Ernest Rouleau's guitar on CEN 11. Kid Thomas (born 1896) plays a fiery trumpet in his several appearances, and De De Pierce is full of zest both vocally and on cornet on CEN 3. Celebrated clarinetist George Lewis is heard on many of the discs but is a subdued, thin shadow of his earlier musical self.

These releases, described as "The New Orleans Dance Hall Series," have the tubby echoing sound that might be found in a dance hall, and the selections lean toward the Twenties and Thirties pop tunes that these dance bands seem to love—"Red Sails in the Sunset," "When Your Hair Has Turned to Silver," "June Night," "Beer Barrel Polka," and even "Indian Love Call." Somehow they all come out sounding the same.

SAVOY JAZZ REISSUES. Various performers. SAVOY/ARISTA SJL 2201/8, $7.98 each two-disc set (mono).

VERVE JAZZ REISSUES. Various performers. VERVE/POLYDOR VE 2-2501/6, $7.98 each two-disc set (mono).

BETHLEHEM JAZZ REISSUES. Various performers. BETHLEHEM 3BP-1, $20.94 (three discs), and various single discs, $6.98 each (some mono; distributed by Caytronics).

CENTER JAZZ REISSUES. Various performers. BIOGRAPH/CENTER CEN 1/16, $6.98 each disc (some mono).
by Paul Henry Lang

Vivaldi the Vocal Innovator

An assortment of recordings from RCA, Orion, and Hungaroton documents Vivaldi's eminence among baroque vocal composers.

THREE NEW RECORDINGS of various Vivaldi works demonstrate how little we know about the music of the Bach era, for they disclose a vocal composer who belongs among the giants of the baroque species. Moreover, Vivaldi appears to be as seminal a figure in vocal as in instrumental music. Being the resident maestro at the girls' orphanage-conservatory, the Pieta in Venice, he was called upon to furnish music for the religious services in the school. We have many glowing contemporary descriptions of this music, as we have of Vivaldi's operas, but it was not until 1930, when a large body of manuscripts was discovered in Turin, that we even began to realize his stature as a dramatic vocal composer.

Much remains to be done before this marvelous hoard, which besides its hundreds of instrumental compositions contains nineteen Vivaldi operas and volumes of his church music, will be fully explored by scholars and carried by performing musicians into the bloodstream of our musical life, but certain conclusions can already be drawn, and they materially change our historical picture of the age. Let me illustrate this with a couple of examples.

The fact that violinists who were already considered masters of their instrument streamed from all over Europe to study with Vivaldi had consequences that we are just beginning to appreciate. Perhaps the most important of these pilgrims is Georg Johann Pisendel (1687-1755), the outstanding German violinist for whom Bach is supposed to have written his unaccompanied sonatas. He returned from Venice an ardent admirer of Vivaldi and, as leader of the Dresden court music, established a veritable Vivaldi cult in the Saxon capital.

Bach, visiting in Dresden, heard this music, as his transcriptions of Vivaldi's concertos and his own works in this genre conclusively prove, but the Turin manuscripts now show that Vivaldi's vocal music was equally attractive to Bach, as it was to Hasse and many others. There are startling structural, melodic, and rhythmic similarities between this music and Bach's church compositions. Other Vivaldi pupils returned to Austria, Bohemia, France, and elsewhere, and once more we discover that they acted to an astonishing degree as messengers of the new style.

Most of the arsenal of orchestral innovations attributed to the Mannheimers is present years before their time in the Turin pieces, and Vivaldi composed symphonies well ahead of Monn and Stamitz.

The manuscripts also show that he clearly demanded nuances in dynamics, tempo, agogics, and articulation, as well as string techniques that should warn the hard-bitten partisans of "historical accuracy" in performance that their history is not very accurate. The so-called terrace dynamics is a myth, and so is the steady rattling with grand détaché, the vigorous strokes of the bow with which notes with equal time value are bowed, heretofore considered the baroque way of playing string instruments. Both dynamics and bowing, precisely indicated in the scores, show great variety and many subtle shadings. How could it be otherwise? Vivaldi was an opera composer, and singers do not sing like machines.

The distinction of this music, and what made it irresistible to all musicians south and north, lies not only in the attraction of novel musical ideas, fine melodies, and exuberant kinetic energy, but also in the new organization of large-scale vocal works, the special combination of solo concerto and concerto grosso with the traditional vocal forms. The melodic and rhythmic relationship between orchestra and voices—now using common, now independent material—is continually changing, creating that new polarity between counterpoint and basso continuo. There are veritable aria concertos, yet equally adept choral polyphony, and the centrifugal force of imitation pulls together seemingly wayward elements. Vivaldi can manipulate long, harmonically static sections with superb coloristic effects, and his typical angularity in the instrumental concertos may give way to smooth melodic-vocal writing, even when the orchestra continues with its prancing.

The ponderous, relentlessly rolling bass of the baroque here yields to a much less linear design, and the sequencing, which in some of the instrumental concertos can be excessive, is greatly reduced, even in the purely instrumental ritornels. The tendency to elaborate coloratura, the highly expressive lyricism, and the over-all transparency of the texture are, of course, Italian to the core.
The Gloria (the only fairly well-known work on these discs) opens with tremendous vitality, but the dark mood of the immediately following "In terra pax," with its shifting tonalities, is the exact opposite. The "Laudamus," curiously Handelian, and the "Gratias" are both in the grand choral style of Gabrieli's Venice, and the fugal ending is splendid. The pastoral "Domine Deus" (taken from Vivaldi's Op. 3, No. 11) is a soprano solo with concertante oboe; the "Qui tollis" is bold, chromatic, dramatic, and superbly choral. In the "Quoniam" the exuberant mood of the beginning returns, then the double fugue of "Cum sancto spiritu" shows how intimately Vivaldi was acquainted with the stile olservato.

The Kyrie is prefaced by a contemplative Largo in the sepulchral manner, a dark introduction to an equally dark first "Kyrie" with evanescent harmonies that any nineteenth-century composer might envy; one cannot even be sure whether the cadences begin will end as they promise to do. The "Christe" is a melodious piece for a double duet, two sopranos and two altos, united in the four-violin concerto style, then the "Kyrie" returns, this time more agitated, ending in a grand double fugue.

The Credo (we are dealing in this recording with three different and independent pieces, not parts of the same Mass) shows clearly the amalgamation of the various stylistic principles. It has an energetic first and last movement framing two introspective pieces—one choral, the other fugal. The choral writing is most attractive, and the melodies, especially in the "Crucifixus," are of great beauty.

Michel Corboz, the conductor, shapes each of the many movements according to its mood and nature—no routine this. Jennifer Smith, the solo soprano, is a disciplined singer, if perhaps a little lacking in color; Hanna Schaer, the alto solo, is outstanding, notably in the "Qui sedes," which she delivers with nobility and a rich voice. The chorus is excellent, as is the orchestra, and the sound is remarkably good. RCA deserves censure, however, for not printing the text of these works, familiar though they may be to many. This should be mandatory with vocal music, especially with baroque works with their affective "interpretation" of even single words.

Beatus vir gives us the whole panorama of baroque music, from the splendors of the Venetian polychoral style to the virtuosity of the concerto. The nine numbers of this large cantata, held together by a little choral motto-ritornel inserted between the numbers, offer an admirable display of imagination and invention. There is the crotchety "Polens terra," its melodic line turning whichever way without ever a rest, a very modern piece; then there are movements where the choral trebles are supposed to be as fantastically agile as the racing violins—and they are! One piece features a concertante organ in a duet of virtuosity, with the trebles again matching the player's fingers with their larynxes, note for note; in "Pecetto videbit" the men are challenged to the same feats. But we also hear warm Pergolesian lyricism and nimble fugal writing.

Soprano Priscilla Salgo takes her fast "violin solos" without batting an eye, and the valiant chorus never flutters in negotiating the breathtaking convolutions. The orchestra is also good, as is the sound engineering. However, conductor Sandor Salgo is more a conscientious and capable caretaker than an imaginative leader; fortunately, this music just won't let routine stifle it.

Both the RCA and Orion recordings are deficient in the use of the continuo, which most of the time (except in the pieces with organ) is absent or inaudible, thus making the harmonies incomplete. Our conductors and engineers should read F.T. Arnold's monumental study, The Art of Accompaniment from a Thoroughbass, where they will find this unequivocal statement: "There is not a single indication in any of the contemporary treatises on the subject that the figured bass accompaniment was ever regarded as in any sense, optional." Finally, I must once more protest that vacuous notes our record companies insist on supplying instead of enlightening information. The thirteentold stories about the "red priest" do not tell us anything about these works, and we don't know what materials were used for the recording and what if anything was done to the scores. This amounts to a disregard, if not contempt, for the public that is intolerable in view of our present standards of musical literacy.

The three motets offered by Hungaroton carry us into an altogether different area of Vivaldi's art, for these motets (really solo cantatas) are frankly vehicles for extreme vocal virtuosity. Though some of the da capo arias, especially the sicilianas and the one with flute solo in Laudate pueri, are pensive, expressive, and of great melodic beauty, what intrigues the listener is the vocal virtuosity. The second of the cantatas, In furore, is a concerto pure and simple, except that instead of a solo violin we have a solo soprano, but the demands are the same.

Some of the Pieta's girls must have been singers of Faustina Bordoni's class, and Hungaroton produces a Faustina of its own in the person of Magda Kalmár, a phenomenal singer. This young woman has a beautiful and superbly trained voice. She goes through the hair-raising coloraturas without ever misplacing a single note throughout the entire recording; her intonation is infallible (the high notes are hit dead-center with bell-like accuracy); her legatos are wonderfully smooth, the runs scintillating, and the staccatos like needle pricks. Yet her performance is somewhat wanting in expressiveness and variety of color. This may be due partly to conductor Frigyes Sandor's lack of sense for breadth and serenity; he is a good technician and guides a fine little orchestra precisely, but at times one has the feeling that one is listening to a gorgeous exercise in vocalizing, so even and unchanging are pace and texture. The continuo is a bit weak, but the sound is excellent. The texts, quite unfamiliar except for the Laudate pueri, are again missing.

VIVALDI: Gloria; Kyrie; Credo. Jennifer Smith and Wally Staempfl, sopranos; Nicole Rosssier and Hanna Schaer, altos; Lausanne Vocal and Instrumental Ensemble, Michel Corboz, cond. RCA GOLD SEAL AGL 1-1340, $4.98.

VIVALDI: Beatus vir. Priscilla Salgo, soprano; Carmel Bach Festival Chorale and Orchestra, Sandor Salgo, cond. [Gieveon and Marion Cornfield, prod.] OHXOR ORS 75205, $6.98.


The Complete Cantata Edition continues with a run of five solo cantatas. Nos. 51, 52, 55, and 56 belong together, dating from 1726, as part of the third Leipzig cycle. No. 54 is earlier, probably from 1714. No. 53, the funeral aria with tolling bell, Schlage doch, gewünschte Stunde, is omitted from the series, as not being by Bach.

All five pieces are directed by Gustav Leonhardt. As I suggested when reviewing the previous three albums in the series (February 1976), Leonhardt, who is dividing the task with Nikolaus Harnoncourt, is the more deliberate of the two conductors and ever ready to sacrifice line to clarity and evenness of articulation. This does not matter when he is accompanying a soloist like Kurt Equiluz, who, when he utters a phrase like "If I take the wings of the morning, and remain in the uttermost parts of the sea" (in Cantata No. 55), takes wing himself; who is always supple and eloquent in his phrasing. But the word "liberating," rather than "deliberate," crossed my mind at moments during the first three cantatas.

For Jauchzet Gott, authenticity is forgotten for a while and a woman sings; perhaps it was difficult to find a boy who could range freely from middle C to high C. Marianne Kweksilber has a clear, steady tone and a boyish brightness. She sings boldly and truly but is apt to produce a succession of notes rather than phrases. There is a more "quicksilver" quality to Suzanne Schiff's bass (in No. 55); Michael Schopper, bass (in No. 56); Hannover Boys Choir; Leonhardt Consort, Gustav Leonhardt, cond. TELEFUNKEN 26.35504 (SKW 14), $13.95 (two discs, manual sequence).

No. 51. Jauchzet Gott in allen Landen; No. 52. Falsche Welt, dir trau ich nicht; No. 54. Widerstehe doch der Sünde; No. 55. Ich armer Mensch, Ich Sündenknacht; No. 56. Ich will den Kreuzstab gerne tragen.

As usual, miniature scores, texts and approximate translations (printed in run-on style with slashes, not as verse; "immerhin" rendered as "never fear"), and other useful information are provided (not, however, any indication of the relevant lessons for the day). The general essay is by Harnoncourt, on what Bach means by the nomenclature of his wind instruments. The English translator does not seem to have looked at the music and writes some nonsensical. (Bach himself recorded seven student songs. The two sets, Nos. 51-53, for Viola and Orchestra'. DersO SAWFISH: Concertos: for Piano and Orchestra', No. 3'; for Viola and Orchestra'. DersO Ranki, piano; Hungarian State Orchestra, János Ferencsik, cond. * Géza Németh, viola; Budapest Philharmonic Orchestra, Andrássy Korody, cond. [Andras Szekely, prod.] HUNGAROTON SLPX 11421, $6.98.

Some of the releases in Hungaroton's ongoing series of Bartók's complete works have been of great value for their inclusion of music not otherwise available on record—largely early works published posthumously. But where there is recorded competition, on the whole the Hungaroton performances have not seemed to me to measure up well. The present two discs continue that pattern.

The two sets of Hungarian folksong arrangements differ greatly in approach. The ten songs published in 1906 (with an additional ten arranged by Kodály) were intended primarily for "home use"—as a practical means of introducing the music to a larger public—and are of minor musical interest; the piano accompaniments are very simple, with the vocal melody always doubled in the keyboard part. The eight songs of the later set (1907-17), on the other hand, are concert pieces with elaborate piano accompaniments of considerable independence. (Bartók himself recorded seven of the eight, four with Mária Basilides, three with Ferenc Székelyhidy; these have recently been reissued on Quailton HLP S7K 3913.)

Eszter Kovács' voice is well suited to the simplicity of these folk melodies, which she sings in an attractive, unaffected manner. Unfortunately, she is less successful with the original songs, Opp. 15 and 16, the mature Bartók's only works in this genre (there are several student songs). The second set, both published in 1916, form a special part of the composer's output, not only because they are his only art songs, but because they are in many respects so different stylistically from anything else he wrote (al-
though one does hear certain correspondences with the opera Bluebeard's Castle). Kovács renders the music with considerable effect, but she is not always up to the difficulties of the vocal part. In particular, pitch definition is occasionally less than it could be. Julia Hamari's performances (DG 2530 405) are much better in this regard. Although they suffer from various problems. This work was left unfinished at Bartók's death and had to be completed by his student Tibor Serly (who also added the scoring of the final seventeen measures of the Third Piano Concerto). It has always struck me as a flawed composition, though it is certainly preferable. There are frequent intonational problems, and the general character of the reading is lifeless and dull.

As usual with Hungaroton's Bartók releases, the liner notes are both extensive and excellent. Especially valuable is the detailed discussion of editorial problems in the concertos by János Kovács (in the course of which Serly comes in for rather severe criticism for his contributions to the viola concerto). Most interesting, perhaps, is information about the identity of the poet of the texts of Op. 15. These have been variously attributed to one Béla Balázs and to Bartók himself; but it now appears that four of the texts were written by Klara Kommosy, a fifteen-year-old peasant girl who assisted Bartók in collecting folksongs in Upper Northern Hungary in 1915 and with whom he apparently had a rather more paternal relationship. (Most of this information appears in an appendix supplied by the Bartók scholar Dennis Dilie. Curiously, although the notes otherwise appear in four languages, this appendix is admitted undistinguished, they are of a remarkable provocative and erotic character, and this lends the whole affair a particularly lurid fascination. R.P.M.

CRITICS' CHOICE

The best classical records reviewed in recent months

BACH: Brandenburg Concertos (6). Leppard. PHILIPS 6747 166 (2), June.
BRAHMS: Symphony No. 1. Levine. RCA RED SEAL ARL 1-1226, May.
DUTTLEUX/LUTOSLAWSKI: Cello Concertos. Rostropovich, Baudo, Lutoslawski. ANGEL S 37146, June.

GERSHWIN: Porgy and Bess. Maazel. LONDON OSA 13116 (3), May.
HAYDN: La Fedelta premiata. Dorati. PHILIPS 6707 028, June.
MONTEVERDI: Vespri della Beata Vergine; other works. Schneider. ARCHIV 2710 017 (3), May.


SHOSTAKOVICH: Preludes and Fugues. Woodward. RCA RED SEAL CRL 2-5100 (2), May.
EARLY MUSIC QUARTET: Music of the Minstrels. TELEFUNKEN 6 41928, July.
LYNN HARRELL: Cello Recital. RCA RED SEAL ARL 1-1262, Apr.
JEFFREY SOLOW: Cello Recital. DESMAR DSM 1006, Apr.
The Waldstein retains its lucidity and proportion and seems a bit tougher and more characterful than its predecessor. Brahms generally occupies us in following the composer's controversial long pedal indications but keeps the resulting haze delicate. Textures are crystalline, and, particularly in the Adagio, the horizontal voice-leading is beautifully delineated. The Andante favori has airborn lyricism, precise aural glitter, suitably punctuated staccato, and a wide dynamic range. Both of these performances recall Gieseking at his best, and Philips' gorgeous sound is an adornment.

Brendel's Op. 110 is slightly cool, but with an attractive vein of philosophical introspection. The colors are again keen and assertive, the tempo proportions natural and well judged. I particularly like the way Brendel urgently realizes the direction "poi a poi di nuovo vivente" when the fugue returns, the music keeps growing, as it ought to but rarely does. My only quibble is that Brendel or a careless tape editor expunges a short repeat in the da capo of the scherzo. This Op. 110 joins those of Ashkenazy (London CS 6843) and Hungerford (Vanguard Cardinal VCS 10055) at the top of the modern list.

H.G.

BEETHOVEN: Symphonies (9). Overtures. For an essay review, see page 73.


This Op. 110 joins those of Ashkenazy (London CS 6843) and Hungerford (Vanguard Cardinal VCS 10055) at the top of the modern list.

H.G.


An entire record devoted to works for female chorus composed by Brahms around 1859-90, when he took charge of a women's choir in Hamburg, might seem to run the risk of monotony. There are exquisite touches all through these miscellaneous works, but they are not, after all, to be counted among the composer's most personal and interesting compositions. Yet, as it turns out, this recital is wonderfully engaging. For one thing, the program has been arranged and selected with great skill. The range is extensive, stretching from the elaborate polyphony of the Sacred Choruses to the lyric Romanticism of the Op. 17 songs, especially the last of these, to words by Ossian. Moreover, the progress from the Schutz-like setting of the Third Chorus to the glee with which it begins, to the folklike directness of the Songs and Romances, with which it closes, is very satisfying. The variety that is so pleasing a feature of this record is also exemplified in the accompaniment: organ for the Psalm and Ave Maria, two horns and strings for the Op. 17 songs, the rest unaccompanied. Apart from one or two moments when the sopranos fail to achieve a perfectly supported top line, the singing is first-rate—accurate, smooth, and expressive, more than equal to the range required by these various and varied pieces.

There are brief, helpful notes, but no texts. The sound is excellent. Highly recommended.

D.S.H.

Eugen Jochum
An engaging Elgarian

BRAHMS: Sonata for Violin and Piano, No. 2—See Prokofiev Sonata No. 1.


The surprise here is how engaging and sympathetic an Elgarian Jochum proves. He has long been a natural Brahmsian (a new set of the symphonies would not be amiss), and in the Brahms variations he can make even his slowish notions of vivace and presto work (i.e. in Nos. 2, 5, 6, and 8). The firmness and steadiness of his rhythmic stride prevent any hint of stodginess. In contrast to Monteux's softly contoured, buricolgio. Jochum's conception is grandly valiantly, and he gets from the LSO a bronzen sheen of sound and superb energy (note the clarinets in No. 3, the horns in No. 6).

The Elgar variations are just as good. Jochum molds the theme and Variation No. 1 as expressively as Monteux, though a trifle more strictly. Monteux's laterally divided violins are special assets in Nos. 2 and 11, while Jochum's performance of the latter compensates with the electrifying playing of the brass, winds, and timpani, just as the powerful rhythm and brass sonority on the new record are thrilling in No. 7 ("Tryste"). Jochum seems in something of a hurry for No. 5, which is marked moderato, though he keeps it light and airy as always. In the moving "Nimrod" (No. 9), Jochum and Monteux both go full measure of adagio. The former building a more stunning climax, the latter summoning more ethereal ppp playing at the beginning. In No. 13 ("Romanza"), the DG team has everly captured the effect (first occurring after cue 56) of side-drum sticks on the timpani. Except for a slow beginning, Jochum is even more into the ebb and flow of the finale, heeding particularly such markings as grandioso and stringendo.

The LSO over-all responds nobly to both conductors, with more supple bassoons for Jochum, richer and ducier violas for Monteux.

The most excitingly and tenderly characterized Enigma recording I know is the oddly underrated Beecham (available in EMI as CS 51660), despite its aging mono sound. (I much prefer it to the composer's own 1926 version, with its casual articulation, overuse of portamento, and breathless tempo.) Even before Beecham's recordings it is hard to find a really bad performance. while awaiting Solti and Stokowski from London Records. I would go with Monteux or Jochum.

A.C.


BRUCKNER: Symphony No. 9, in D minor. Chicago Symphony Orchestra, Daniel Barenboim, cond. [Gunther Breest, prod.] DEUTSCHE GRAMMOPHON 2530 639, $7.98.

This cautious and tender Bruckner repertory (three years between Masses for EMI and between symphonies for DG) is welcome. for it allows time for gradual maturation of musical impulse and technical means. And this E minor Mass contrasts pleasantly with his hideous recording of the F minor (Angel S 3692), May 1973). The performance reasonably reflects the music's expressive and dramatic range. The recording team and/or conductor have also balanced the choral/wind/band forces so there is none of the blurring of instrumental detail sometimes heard in more churchly recordings. Attacks and ensemble are well controlled most of the time.

Noneetheless, this release isn't up to the best of the competition, including other EMI recordings—Forster's and Gonenwein's—that Angel bypassed. The superb choral tone and aural abundance of the Gonenwein disc (available as an import) points up the occasional harshness of tone of the sopranos here, and the beautiful contouring of tempos and long phrases by Norrington (Argo) and Jochum (DG—not yet issued outside his box of Bruckner choral works available briefly abroad) places in bolder relief Barenboim's often choppy and overly distortional approach.

Barenboim has apparently modified his conception of the Ninth Symphony since his Boston performance some years back, described to me as crudely and zealously imitative of Furtwangler. Two important interpretative features of the new Chicago recording in fact seem modeled on Haitink's: the rather brisk treatment of the first movement's second theme (it is marked "slower" in Schonzeiler's edition of the original version) and the deliberate scherzo. In the first movement, though, Haitink was better able to manage the tempo changes.

Barenboim's caustic traversal of the symphonies would not he amiss). and in the large mass settings the conductor has also balanced the choral/wind/band forces so there is none of the blurring of instrumental detail sometimes heard in more churchly recordings. Attacks and ensemble are well controlled most of the time. Noneless, the release isn't up to the best of the competition, including other EMI recordings—Forster's and Gonenwein's—that Angel bypassed. The superb choral tone and aural abundance of the Gonenwein disc (available as an import) points up the occasional harshness of tone of the sopranos here, and the beautiful contouring of tempos and long phrases by Norrington (Argo) and Jochum (DG—not yet issued outside his box of Bruckner choral works available briefly abroad) places in bolder relief Barenboim's often choppy and overly distortional approach.

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The choice of material is excellent and does justice to the variety of Ives's output in this genre. Surely no composer has ever covered such a range of technical resources and stylistic approaches. There are simple, yet remarkably clever "party songs" (such as the first of the two "Memories"); reasonably straight chorale-type settings ("A Christmas Carol"); raucous marches ("The Circus Band"); brilliant "arrangements" — but they are really much more than that — of spirituals ("At the River"); entirely new settings ("Ann Street"); and "experimental" settings that defy categorization ("A Farewell to Land").

DeGaetani brings just the right tone to each song. She can sound childlike and silly when required (e.g., "Memories"), and she can project the kind of vocal simplicity that is necessary for the spiritual-based pieces, as well as for a song like "The Things Our Fathers Loved." She is able to take "Serenity," one of Ives's most beautiful and unusual compositions, at a sufficiently slow tempo for the music to stretch out into quiet, seemingly endless reaches of time and space. And she is completely in command of the more difficult works, such as "From Paracelsus" and "Like a Sick Eagle" (the problematic vocal "swoops" in the latter, for example, are wonderfully controlled).

There is little doubt that Jan DeGaetani is one of our finest interpreters of modern vocal literature, and one could go on about the many lovely details in her Ives readings. But it should suffice to say that this recording is a milestone, not only for those interested in Ives, but for anyone concerned with the development of "art" song (which, as Ives instructs us, is no longer so unequivocally that) in the present century. He was one of the true masters of the genre, and here we have performances of this literature that are capable of revealing its real qualities. DeGaetani explores both the depth and breadth of the music in a way that no other singer I have heard has yet equaled.

Much credit is also due to Kalish, already well known as a distinguished Ives interpreter (for example, for his brilliant recording of the violin sonatas with Paul Zukofsky, Nonesuch HB 73025). He is the perfect accompanist: properly subdued, yet always projecting a clear and distinct personality of his own.

Vivian Perlis, the noted Ives scholar at Yale University, has supplied excellent liner notes. And the recorded sound is fine.

My October 1974 Ives discography concluded with the hope that Jan DeGaetani, who sang the early "Song for Harvest Season" so beautifully on Nonesuch H 71222, might record an entire Ives disc. Now Nonesuch has answered that wish, and the result measures up to everything I had hoped for.

With pianist Gilbert Kalish, DeGaetani offers striking renderings of seventeen songs, bringing to this literature a depth of understanding that places her performances in a class of their own. The only real competition is the original Helen Boatwright/John Kirkpatrick offering on Overtone, which has been deleted for some time now. (Their newer collection, which appeared in Columbia, M4 32504, the five-record box commemorating the hundredth anniversary of Ives's birth, is unfortunately less good.)

But it should suffice to say that this recording is a milestone, not only for those interested in Ives, but for anyone concerned with the development of "art" song (which, as Ives instructs us, is no longer so unequivocally that) in the present century. He was one of the true masters of the genre, and here we have performances of this literature that are capable of revealing its real qualities. DeGaetani explores both the depth and breadth of the music in a way that no other singer I have heard has yet equaled.

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DeGaetani's Ives: Up to All Expectations

by Robert P. Morgan

Ives: Songs, Jan DeGaetani, mezzo-soprano; Gilbert Kalish, piano. [Marc J. Aubort and Joanna Nickrenz, prod.] Nonesuch H 71325, $3.96.

The House joint at Stockbridge: Memories; From Paracelsus; The Things Our Fathers Loved; Ann Street; The Innate; The Circus Band; In the Margin; Serenity; Majority; Thoraeu; At the River; The Indians; The Cage; Like a Sick Eagle; A Christmas Carol; A Farewell to Land.
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"Allison's letter concludes: 'The Magnuson-Moss Warranty Act gives the consumer some remedies against non-compliance that he did not have before and prohibits some deceptive practices in warranty statements.... It should be welcomed by every manufacturer who sincerely wishes to deal honestly and fairly with his customers.'

"Well said, Roy Allison. And congratulations to you and your company on apparently setting a precedent for the high fidelity industry."

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impact that was such a revelation in Haitink's recording (Bernstein too achieved this effect in his otherwise erratic version, Columbia M 30828.) Barenboim is a bit more impressive in the staccato articulation of the first four horns at letter E in Haitink has crisper pizzicatos at the beginning and provides a beautiful contrast with a bracingly vigorous trio.

Elsewhere, Barenboim fluctuates between drawing stylish and virtuosic playing from the Chicagoans and allowing some whiny violin passages in the first movement and some needlessly rhetoric (e.g. the premature ritard before the fermata at letter K in the finale). While the closing Adagio has some grand moments (the mighty brass fanfares first presented at letter A), the big lyrical tune that begins at letter C flows less smoothly and clearly than in the Amsterdam version.

Nonetheless, this handsomely engineered rendition has considerable virtues and surpasses many of those on record. Not, however, my top choices: Haitink, for the qualities already mentioned and many more, and Mehta, for the most successful account within a more conventional framework—monumental in the outer movements, brisker and lighter in the scherzo. Though dating back more than a decade, the Decca/London engineering is fully equal to DG's in detail, warmth, and massiveness of sonority, and the Vienna Philharmonic played its collective heart out for Mehta. A.C.

**BUCHT: Hund skenar glad**

"Dramma per musica"; Symphony No. 7; Dorothy Dorow, soprano; Swedish Radio Women's Chorus; Swedish Radio Symphony Orchestra, Stig Wasterberg, cond.; *Norrkoping Symphony Orchestra, SON, Okko Kamu, cond.* [Hakan Elmqvist, prod.] CAPRICE CAP 1076, $7.98 (distributed by HNH Distributors).

The music of Swedish composer Gunnar Bucht (born 1927), as heard on this disc, is of the variety that unfortunately is heard very rarely in concert halls. Not conserva- tion enough, nor avant-garde enough to appease the cultists. Bucht's music is nonetheless capable of making a deep impression on the open-minded listener both for its craftsmanship and for the richness of its dramatic content. It belongs, in fact, to a broad category I characterize as "expressionistic" because of the way in which musical realities appear colored by a dark, deeply personal inner vision. Note, for instance, the nightmare march in the Seventh Symphony's second movement, or the icy, otherworldly woodwind-harp duets that form the first move- ment's second theme.

In both the Seventh Symphony (1970-71) and *Dramma per musica* (1966), incidental music composed for Ibsen's *The Pretenders*, Bucht's orientation remains quite seri- ous. In spite of the rather sadistic French titles (Malgré tout and Trant mieux) given to the symphony's two movements, Moods recalling Berg and Ernst Toch prevail, with hints of later Sibelius in the way hollow instrumental solos grow out of gloomy orchestral musings. In the short 1961 chamber cantata *Hund skenar glad* (Dog Runs Happy), on a consumer audio product. The document begins: "Allison Acoustics has implemented the first full warranty, as the word 'full' is defined under the recently enacted Magnuson-Moss Warranty Act, that we know of on a consumer audio product. The document begins: "Allison Acoustics warrants that each of our loudspeaker systems will perform within ±2 dB for five years from the date of original purchase." It provides that the manufacturer will pay shipping both ways if it is necessary to return the equipment to the factory for warranty service. Abuse and damage resulting from unauthorized repair are among the few conditions omitted from coverage, and Roy Allison, president of the company, indicated in a clarifying letter to us that any reasonable doubt will be resolved in favor of the consumer. One provision of the new federal law is that a full warranty must be transferable with the ownership of the product, and that is fulfilled by Allison as well.

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"Well said, Roy Allison. And congratulations to you and your company on apparently setting a precedent for the high fidelity industry."

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While fine Donizetti operas like Belisario, Poliuto, and Pia de' Tolomei remain unrecorded (except on the pirate labels), the dup- lication of Maria Stuarda, as of Anna Bal- lena, can perhaps be gently regretted. On the other hand, since four of the world's leading ladies—Baker, Caballe, Sills, and Sutherland—all have taken up the leading role, some record rivalry was perhaps inevi- table. (And it might even be argued that what we really need is yet a third version, made by the best cast of all—which in my experience has been Caballé, Verrett, and Carreras.) Maria Stuarda has been much performed during the last decade: detailed annals up to 1973 appear in the first (1974) issue of Donizetti Society Journal. In New York, Queen Mary and Queen Elizabeth a soprano; elsewhere, vice versa. Moreover, different music is heard. Let me, with some inevitable simplifica- tion, explain, since neither the ABC nor the London album notes make things alto- gether clear.

Roughly speaking, there are four per- forming editions of Maria Stuarda going the rounds:

1) The "Bergamo" edition, launched at the first modern revival of the opera (Bergamo, 1959). This is based on an 1865 copy- score in Naples, its orchestration amplified by some unknown hand, then snipped and altered by a modern editor. Ca- ballé uses it.

2) The "St. Pancras" edition, by Jeremy Cocks and Geza Anda, launched at the 1968 St. Pancras (London) Festival. This corresponds to the printed vocal scores and the 1865 orchestration. It is used for the ABC recording, plus the overture from (3) below.

2a) A variant of (2) prepared especially for Dame Janet and the English National Opera. All Mary's music except the Dialogo

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Hirsch-Houck Labs put this way in Stereo Review: "A good preamplifier should have no sound of its own and many (including this one) meet that standard. Sill has more weight and force of tone, more feeling for words than she used to, but a less energetic rhythmic quality of the phrases. In long lyrical lines the timbre is apt to be cloudy. Moreover there is no longer the precision instrument it used to be. Sutherland begins the famous outburst in the dialogo-

- Impure daughter of Bolsey...
- Obscure, unworthy harlot.
- The English throne is profaned.
- Well, your fool—an octave higher than in the printed score. (Is this the Malibran version?) It spoils the climb of the furious passage. The main subjection of the dialogo is at both appearances so extensively rewritten—Tourangeau plucking down, Sutherland shooting up that Donizetti's original melody is not heard at all. The final aria del supplizio also appears in a much altered and I think less beautiful version.

Leicester brings us the "new" Pavarotti, a tenor of harder, tenser timbre than the limpid, lyrical Pavarotti who first won our hearts. It is rather as if a Gigli were trying to become a Caruso (or a Pavarotti a Domingo?). He is, however, very good—stronger than ABC's Stuart Burrows, if sometimes less graceful. James Morris is so good as to make one wish he had been entrusted with the larger role, Talbot. (Both are basso cantante parts, contposable by basses or baritones.) Roger Soyer is a satisfactory but not exceptional Talbot. Leicester's cabaletta and the strettas of the confessione duet are reduced to single stanzas. There are some other small omissions.

The ABC performance, in general, is livelier and more dramatic—crisper orchestral playing, more verve in Alde Ceccato's conducting, a more spirited chorus. Bonyng lays out the piece amply. His tempo is usually convincing, except in the preghiera, which is taken at an undonde commodo too rapid for the full effect to be made. At times a sharper definition of the instrumental playing is needed—in Leicester's aria, for instance. The opera was recorded in the Teatro Comunale, Bologna, in a voice-favoring balance. The sound is natural. There is no "spotlighting" of detail. But I would prefer a slightly sharper focus.

Maria Stuarda as a whole, despite its present-day popularity, cannot, I think, be counted among Donizetti's very finest operas. In Act I, the working of an orchestral tag during Leicester's cavatina and the hints of a duet provided by Talbot's interjections are ingenious; so, in Act III, is the continuation of a duet as a trio (a nice, though not uncommon, stroke). Mary's entrance aria in Act II is attractive, if unmemorable. The sextet is a good piece; the dialogo can be powerful if the queens make it so. Rather late in the day, in the second scene of Act III, Donizetti's musical imagination takes fire, as the orchestra prepares for Mary's confessione. The recitatives, for the heroine—confessione, preghiera, aria del supplizio, final cabaletta with a poignant major transformation of its theme—broken only by the carefully written inno della morte for the chorus, and it is all on a high level. If either ABC or London decides to issue a Stuarda "highlights" disc, I think it should consist simply of Sides 5 and 6, complete.

A.P.
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its Slavic zest and drive. The group has a thorough understanding of the work's formal proportions and plays with tonal solidity and rhythmic flexibility. If tempos are a bit on the leisurely side, the firm pointing of phrases keeps them from sounding stodgy. This is a recording I've been waiting for quite a while!

Dvořák's E minor Piano Trio is the last of its line in fact as well as spirit, and it has fortunately had less trouble than the C major Quartet reaching audiences, who delight in the sublime beauty of the slow-fast folk ballads that give the work its title, Dumky, and in the composer's masterly fitting of lines to the most seductive qualities of each instrument. This is a work so filled with love of all that is alive that I can never bear its coming to an end. If Smetana's only piano trio is not quite so miraculous a work, it too is a deeply sincere and personal utterance. Inspired by the death of the composer's daughter, seethes with tragedy and anger, though somewhat meanderingly. If less strongly crafted than the Dvorak's, it certainly makes a logical coupling.

The Yuval Trio has plenty of competition in the Dumky. I'm enormously fond of the pure and soaring Heifetz/Piatigorsky/Lateiner rendition (RCA LSC 3069), the immaculately polished and vibrantly dramatic work of the Beaux Arts (Philips 802 918), and the deeply spiritual kinship with the music displayed by the Suk Trio (a late-Fifties DG disc never released here). The Yuval players are good instrumentalists but not quite in that category, and in the Smetana too the Beaux Arts (Philips 850/133) manages greater subtlety and tautness of line. On the positive side, the Yuval's tempo relationships in the Dumky seem to me more correct than those of the three versions cited. And the Yuval version, offering two major works on one disc, makes a good practical choice, whatever its faults. A.C.

ELGAR: Enigma Variations—See Brahms: Variations on a Theme by Haydn.


In the nearly twenty years since the death of Manuel de Falla, his music seems to be losing rather than gaining favor. With the exception of Alicia de Larrocha's efforts on behalf of the piano works, recording activity has slackened considerably. Indeed, the present complete Three-Cornered Hat ballet is the first in a decade. It will be enough in itself, however, to turn the tide, for in this electrically vibrant performance (with the most hauntingly evocative singing to date of the brief vocal interlude) and in Columbia's kaleidoscopically glittering recording (scintillant in stereo only, incandescent in SQ-decoded quadraphony) the work's superb coloristic and balletic qualities are realized well-nigh ideally.

It's good to hear this music in its entirety rather than the usual Act II three-dance excerpts (less than one-third of the full score) or even with the addition of an Act I suite (as in the Bernstein/Columbia version of 1966), which adds less than another third. Some of the score's finest moments are the arresting opening with its fierce shouts and machine-gun castanets, the two vocal interludes, and some fascinatingly descriptive scene-settings—the latter invaluable for their mood-contrasts with the motoric drive of the dances themselves. Boulez makes the most of both elements: unexpectedly sensuous in the more pictorial and poetic passages, even crisper and higher in voltage than expected in the dynamic ones. Quite apart from the advantage of more vivid stereo technology, to say nothing of the still more spellbinding attractions of quadraphony, this version finally eclipses the memorable one by Ansermet (with Berganza), which for me had been unchallenged since 1961.

The neoclassical harpsichord concerto, commissioned in 1926 by Landowska and once recorded in the 78-rpm era by the composer himself, is uncharacteristically acerbic music for Falla. It has never been too well received by the public, but the ingenuity of its more-concertante-than-
concerto scoring (for harpsichord with a collaborating rather than accompanying ensemble of flute, oboe, clarinet, violin, and cello) has consistently fascinated musicians. That accounts for the relative frequency with which it has been recorded—and the briefness of these recordings' in-print life. Witness the recent withdrawal of the fine 1972 Puyana/Mackerras version for Philips. I don't have that at hand for comparison, and I haven't yet heard (or read any review of) the late-1975 Galliny version for Turnabout, but I doubt that either one can surpass the incisive yet saucy wit of the performance by Igor Kipnis and five Philharmonic first-desk men, much less compete with its ultravivid stereo in the almost impressively "present" quadrophonic recording. R.D.D.

HAYDN: Quartets for Strings: in D, Op. 64, No. 5 (Lark); in D minor, Op. 76, No. 2 (Quinten). Cleveland Quartet [Max Wilcox, prod.] RCA RED SEAL APL 1-1403, $8.98.

Haydn's Op. 64, No. 5, is called the Lark Quartet because of its mood of vernal charm and because the very opening—a magnificent burst of song—might well recall the lark's warbling on a quiet summer morning. The three lower instruments prelude for a few measures, then suddenly up high the first violin soars forth with a beguiling melody. The Adagio also sings fervently, and after its dark middle section the fervor is renewed in the radiant major key. The Adagio is hearty, peaceful-like, while the finale is a tumbling perpetuum mobile, its headless rush enhanced by the interspersion of a cloudly little episode in D minor.

Op. 76, No. 2, has also acquired a nickname, but this dark and introspective masterpiece could not be tied to a pleasant resemblance, so it was named (Quinten) for the extraordinariness terse motif upon which the first movement is based: two downward steps in fifths. Haydn is at the summit of his sonic textures.


JANÁČEK: Sonata for Violin and Piano—See Prokofiev: Sonata No. 1.


I missed the earlier releases of contemporary music for CRI by the Minnesotans and their conductor since 1972; the jubilant-trained Davies, so their Nonesuch debut all the more pleasantly alerted me to the possibility that we may have here potential American competition for Neville Marriner's Academy of St. Martin-in-the-Fields in England. Of course, neither the twenty-four-member St. Paul ensemble (augmented by five players for the present program) nor the thirty-two-year-old Davies as yet commands the flexible versatility, stylistic polish, or powers of personality projection of the seasoned British players and conductor. But their performances are distinguished by admirable crispness, buoyancy, and straightforwardness, particularly praiseworthy for the avoidance of the usual pitfalls of present-day interpreters of eighteenth-century music anachronistic "expressiveness," heavy-handedness, and overemphasis. Moreover, they are immaculately recorded in the most diaphanous of sonic textures.

This release is probably even more news-worthy for a program that couples the fourteen-year-old Mozart's precious first venture into the Final-Musik (cassation/serenade) genre with "his" so-called Symphony No. 37 (actually composed, except for the introduction, by his friend Michael Haydn) and a superb all-minor-key sinfonia by his early idol, Johann Christian Bach. These last two works are otherwise currently unavailable in American disc catalogues, although each represents an invaluable corrective for the generally lukewarm esteem in which its composer is held nowadays. Listening to the symphony—the heart-twisting slow movement in particular—it's easy to understand why Mozart wanted to copy, augment, and perform it himself and why for so many years it was thought to be entirely his own work.

The eight-movement Final-Musik (properly prefixed by its related march) is called a Cassation here, as indeed it was by young Mozart, but it is the Kochel and Schwann catalogues Serenade No. 1, currently represented only by a Boskovsky/London Stereo Treasury version released a little over a year ago in the U.S. The new version stands proudly on its own. Not the least of its merits are some fine quasi-concerto oboe and the "lark's" song is not warm enough, and repeatedly there is a soupcon of sliding. On the whole, however, this is a very creditable performance, and the sound is good.

P.H.L.

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horn playing and, as in the Bach and Haydn works, uncommonly deft, mostly sotto-voce continuo-harpischord playing by Layton James.

R.D.D.

**Mozart:** Idomeneo: ballet music, K. 367; Les petits riens (ballet music), K. 299b. Netherlands Chamber Orchestra, David Zinman, cond. Philips 6500 861, $7.98.

**Comparison—Les petits riens:**

Marriner/Acad. St. Martin

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Mozart composed his ballet music for *Idomeneo* in Munich during January 1781, after the completion of the rest of the opera and just a few days before the premiere. In this music we hear the master theater craftsman at work: the thematic material is a distinct cut above the ordinariness for conventional operatic ballets of this period, and the orchestra plays to the full use of the generative resources at hand. Many pages are symphonic in character and force. Unfortunately we have only fragments of the work, but the Munich producer inserted this ballet; hence its dependence on its own Kochel number, and modern theater producers must decide for themselves how (or whether) to use it. A separate recording in performance of this caliper has long been needed in the catalogue; the result reinforces the thesis that, no matter how much Mozart you know, there are always things worth discovering.

Les petits riens is another matter. Here the master craftsman, stuck in Paris in 1778, composed a sequence of dances to win the favor of director of the Paris opera with the hope (which proved vain) that he could go home to Papa with a fat French commission as proof of his success. The ballet was played a few times and dropped, and Mozart’s name was never even mentioned, a situation that makes at least a little better sense if we realize that seven of the twenty numbers were, as Wolfgang wrote home, “misérable old French airs.” Zinman records the twelve numbers most commonly taken as Mozart’s work. Neville Marriner and the Academy of St. Martin-in-the-Fields have added a thirteenth, an Andante that rates inclusion in Kochel but may be spurious. There are other textual differences between the two recordings—none of them, in my estimation, particularly grave.

If you have the Marriner record and want the Idomeneo music, the duplication of Les petits riens may be interesting. Zinman’s performance is very cool, dashing, and galant, which is probably what the French would have preferred. Marriner gives you a touch of Vienna, more warmth, greater attention to niceties of nuance and phrasing, but without any loss of the essential verve of the score. This is ideal summer music.

R.C.M.

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**RAVEL:** Orchestral Works, Albums 4–5. Aldo Ciccolini, piano (in the concerto). Orchestre de Paris, Jean Martinon, cond. [Rene Chailan, prod.] Angel S 37150 and 37151, $6.98 each, 4XS 37150 and 4XS 37151, $7.98 each. Westminster Gold disc has been incorrectly assigned a WCM (i.e., mono) prefix and consequently banished to Schwann-2; this is true, and excellent stereo. The more distant reproduction of the Mediolia/Angel live performances is incomparably better than that of the 1968 Oistrakh/Richter release of the Brahms D minor and Franck A major Sonatas; the piano has more range and color, the violin soars with less confinement.

H.G.
technical structure and more on the flow of the music and its thematic lines, often creating a sense of unbroken continuity.

This approach works with good effect in the orchestral part of the Ravel G major Piano Concerto. The second movement's bluesy lyricism ripples with dreamlike fluidity from start to finish. Martinon, furthermore, delineates the simultaneous instrumental levels with such clarity that certain contrapuntal effects in the third movement are heard more distinctly in this version than in any other. A certain detachedness, both from pianist Aldo Ciccolini and from Martinon, also gives the concerto what I would consider a more Ravelian flavor than most interpretations. The first movement, as an example, is taken somewhat more slowly than usual, but what is lost in dynamism and éclat in this movement is gained by the aural delights provided by the crystalline contours taken on by the music.

In the shorter pieces as well, notably the Menuet antique and the Alborada del graci, Martinon is able to shape the instrumental textures with extraordinary sharpness while avoiding the heaviness that sometimes mars Boulez' excessive attentiveness, voluntary or otherwise.


Sdegno la flamma estinte; Interi eri voi, lacrime mie; O sete, o fiamma, o ninfetta; O morte, agl' altri fosca; Or the da te, mio sene; Morir, mi dicon; Cor mio, deh non languire; Ars un temendo.

Though the "monic revolution" was particularly opposed to the polyphonic madrigal of the Renaissance, and after c. 1620 the great madrigal literature seems to have succumbed to the instrumentally accompanied vocal genres, the true Italian madrigal did not die. On the contrary, it had a second flowering far into the eighteenth century. Lotti, the elder Bononcini, Caldara, Stefani, and a number of other distinguished composers bequeathed us quite a few, though little of this post-Renaissance resurgence of the madrigal has been explored and published. Archiv now enables us to get a glimpse into this unknown land, and the view is as enchanting as the realization of what we have been missing is saddening.

In his multifarious activity, Alessandro Scarlatti composed eight madrigals, which Archiv has recorded from manuscript sources preserved in Naples, Vienna, and London. This extraordinary connoisseur of the beauty and potentiality of the human voice, on whose wondrous melodies rests much of the music of the eighteenth century, transplanted shoots from the sixteenth century that took root and bloomed. Perhaps the madrigal was out of date by 1700-10 (or whenever these were composed; the date is uncertain), yet Scarlatti remained loyal to his own time, for while the imitative counterpoint in the five parts is smoothly continuous, recalling the great masters of yore, the harmonies are bold, the chromaticism advanced, and the mixture of old and new exquisite. He sets typical madrigal texts, which are both the dream's sunlit domes and its ice caves; I must quote at least one of them to show the spirit of this languorous art.

Disdain extinguished the flame which scorched me.
Blunted the arrow which struck me.
And untied the bonds which fettered me.
The heart fears neither bonds nor flames.
And pays no heed to lightning.

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Arthur Fiedler—still authoritative and zestful in the Strauss waltzes.

Thou faithless one! When thine eyes are so serene,
Happy and free from love’s torments,
Thou canst be disdainful of the fire, the arrow, and the bonds.
The musical settings closely follow the texts, the intensity waxing and waning; the gentle sadness summons tears, and the ador warms the heart. If we turn to visual comparisons (since when describing music we must always resort to metaphors), we think not of glittering jewels, but of finely chased and gleaming silver.

The performance is superlative. The Hamburg Monteverdi Choir under the expert and loving direction of Jürgen Jürgens sensitively interprets the shimmering musical translation of the texts. They understand the sensuous appeal of the languishing suspensions and the magic of beautiful choral sound. I can think of none of the inevitable reservations without which a review is hardly respectable; here good taste, consummate musicianship, and beautiful sound reign. If this recording does not deserve some grand prix, I don’t know what would.

P.H.L.


Comparisons:
- Melos Qt (Nos. 9, 13): in DG 2740 123
- Guarneri Qt (No. 13): RCA LSC 3265
- Amadeus Qt (Nos. 9, 13): DG 139 194

A fascinating pair of Schubert performances, and ones that may stir controversy—not on the basis of skill (it is enormous!), but because of the extraordinarily silken, almost serpentine quality of the playing. No other versions of No. 9 or 13 in the catalogue approach the Berg Quartet in terms of fluidity, lyricism, elasticity of dynamics, and over-all velvety sheen of tone. This is, in fact, quartet-playing quite in a class by itself.

When taken side by side with competing performances, the Berg is so arresting that it tends to overshadow them all. With No. 13, for example, the Melos is by comparison simply stodgy, the Guarneri off and dreamy—slow-paced, syrup-drenched, and (I hesitate to say it) coarse-toned. The Amadeus stands up best, urgent and tightly-rhythmed—quite a bit tighter and more highly accented, in fact, than the Berg. Yet there is a liveness and elegance in the Berg that is unmatched anywhere. It is this very elegance that, after a bit, makes one begin to wonder if the Schubertian muscle isn’t being a little underplayed. The Minuet of No. 9 could do with a bit of the hump-tiousness that both the Melos and the Amadeus give it. The finale of No. 13 is carefully rendered by the Berg so that the accentuated quarter notes are very much part of the fabric, not too abrupt, not too unsettled; the Amadeus bites into those accents with an overt vigor.

Each makes its point. Schubert in the Berg’s hands is subtle, highly nuanced, beautifully articulate, always singing. It is an experience that will stand out amidst hours of listening to assorted other groups. Don’t miss it.

S.F.


Fiedler long has been the pre-eminent (if not only) American conductor with a sure command of authentic Viennese dance-music idioms and the one who, more than any other, has introduced American listeners to quite a few of the unfamiliar Strauss-family works. So Straussians are likely to be somewhat disappointed to find that his first new Strauss record in many years (his sec-
I rank Solti's Don Juan (recorded a shade less sumptuously in 1973 at the Krennert Center, previously issued in the "Solti: Chicago Showcase" collection) and his Also sprach Zarathustra close to, but just below, the best recorded editions. Both are magnificently ardent and infectiously high spirited, but both are perhaps too romantically expressive at times and certainly too episodic. Zarathustra is exceptionally and refreshingly individual, however, and at 30:30 (just a bit slower than the fastest-of-all Steinberg/DG version) it is unusually vivid. But it doesn't challenge the famous Reiner/KCA reading for somber drama nor my favorite Haitink/Philips version for magisterial eloquence. Nevertheless, Solti's fervency is mightily invigorating and the London sonics blaze incandescently, except for the engineers' or producer's odd—if perhaps not entirely unreasonable—decision to minimize the midnight chimes in the final climax.

The tape edition, included in London's first imported batch of British-processed Dolby-B musicassettes, is also a delight both to one's ears and musical sensibilities. But in direct A/B comparisons the cassette's high end is just a shade less brilliant than the disc's—a mellowing that some non-audiophiles may prefer but that isn't characteristic of the truly spectacular sonic qualities heard in the Herrmann "Mysterious Film World," the Mehta Scheheraze-

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It would be unfortunate if the gargantuan quantitative appeal of this Straussian cornucopia should be allowed to overshadow its qualitative significance. Yet one's first reaction is to be bowled over by the sheer amount of wide-range symphonic music—sixty-three minutes—that has been captured, without apparent crowding or inner-groove distortion, within the confines of a single disc. Apart from the economic advantage, this allows us to hear Zarathustra without a side break.

Musically, this release provides distinctively individual, unexpectedly romantic interpretations, with the Chicagoans at their Solti-led best, recorded in magnificently vivid yet warmly glowing sonics—especially the 1975 Medina Temple Zarathustra and Till. This Till, indeed, gives us conductor and orchestra at their Straussian finest. I can't think of any previous recorded version that better captures both the haunting folksong pathos and exuberant horseplay humor of this music.

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R.D.D
zude, and other new London cassettes.

R.D.D.


Comparison: Fournier, Sze0/Cleveland Odys. Y 32224

Rostropovich is so temperamentally and technically suited for the protagonist's role in what well may be the most imaginative—dramatically as well as sonically—of all the Richard Strauss tone poems that it's hard to believe he hasn't recorded it long before now. I can't trace any version, though there may have been one made in Russia sometime. In any case, there will be a lively welcome for his present characteristically rhapsodic performance, one ably supported by a properly less flamboyant Sancho Panza violist, by the virtuoso Berlin Philharmonic players, and by a conductor who seems much more personally involved than when he last conducted, far too blandly, a Don Quixote with Fournier a full decade ago. Add EMI engineer Wolfgang Gurlich's robust, lucidly detailed, yet gloriously warm recording, and this must rank as an outstanding version. (That's in stereo. In SQ-decoded playback, there is the usual expanded ambience but far less markedly quadriphonic effect than one might expect, or indeed almost demand, in music as dramatic as this.)

R.D.D.

STRAVINSKY: L'Histoire du soldat (complete; in English).

Narrator John Gielgud

The soldier Tom Courtenay

The Devil Ron Moody

Boston Symphony Chamber Players.

[Thomas W. Moorey (music) and Franz-Christian Wulff (text), prod.] DEUTSCHE GRAMMOPHON 2530 609, $7.98.

Schwann lists only one other recording of L'Histoire complete with text: Stokowski's Vanguard double recording—once in Ramuz' original French, once in English (though French-accented English). This new recording, with a new English translation by Michael Flanders and Kitty Black, is veddy, veddy British indeed, but the voices are neatly differentiated and characterized, and the recording of the instruments is superb. The conductorless Boston players provide as brisk and unsentimental an interpretation as Stravinsky could have demanded in his shrillest interview with Robert Craft, but at times this approach leads to a matter-of-fact style of playing that dulls the irony of the music. A.F.

VIVALDI: Vocal Works. For an essay review, see page 77

RONALD BARRON: Le Trombone Francais.

Ronald Barron, trombone; Fredrik Wanger, piano. [John Newton, prod.] BOSTON BRASS BB 1001, $5.75 postpaid (available from Ronald Barron, 18 Turner Terrace, Newtownville, Mass. 02160).


Boston Brass is a new independent label run by Ronald Barron, who has recently risen in the ranks to first trombone with the Boston Symphony. Hopes are high to record and issue more offbeat recitals by first-chair BSO brass players. Meanwhile, three of the younger members of that section are part of the Empire Brass Quintet, whose first record is due shortly from Columbia.

If trombone recitals don't crop up every day, it may have something to do with the scantiness of good music for that instrument. (It's not all that easy to write gracefully for.) Surprisingly, none of the material here is transcriptions and some of it is rather strikingly appealing: Joseph Guy Ropartz (1864–1955) was evidently very

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solid product of the French Romantic school, and his Piece breathes the darkly agitated mood of (with something close to a thematic quote from) Franck's piano quintet. The Boutry Capriccio is a catchy, often syncopated work of considerable rhythmic lability, and the Sacred and Profane Dances of Defayez are impressively sonorous. Saénz's Cavatine is perhaps of less interest than these. All the works are written with obvious flair for the instrument.

Barron is a consummately skillful virtuoso. (He plays two different trombones here.) The record is well named, for aside from the ethnic roots of the composers I would characterize the renditions as Gallic in style (judging from the one comparison I could make with another recording, Henry Smith's more weighty and Germanic version of the Guilmant Morceau symphonique on Columbia MS 6791). Fredrik Wanger is a capable accompanist, and the acoustics of the auditorium at the Boston Conservatory, on whose faculty Barron teaches, are highly congenial. The pressing is first-rate, and my only complaint is that the space on the jacket could have been used for more information on the pieces played and their composers, rather than bilingual notes of a more general nature. A.C.

Teresa Berganza: Spanish Songs. Teresa Berganza, mezzo-soprano; Felix Lavilla, piano. [Rainer Brock, prod.] Deutsche Grammophon 2530 596, $7.98

De Anchieta: Con amor de la madre; DE LA TORRE: Pálpamo verde; ESTEVE: Alma smamos! ORANADOS: Six Tonadillas; TURINA: Saeta en forma de Salve la Virgen de la Esperanza; El Fantasma; Cantares; GUIRÓ: Llamame con el pañuelo. No quiero tus avellanas; Como quieres que admiro! MONTALVATGE: Canciones negras.

Apart from the songs by Juan de Anchieta (1462-1523), memorably recorded by Vicente Berganza, mezzo-soprano, Felix Lavilla, piano, and Rafael Alberti's text has it, "SI became que adivine! Moons..." The evocation of a vanished Cuba (before, after 1870) is as powerful as ever. The record is well named, for aside from the ethnic roots of the composers I would characterize the renditions as Gallic in style (judging from the one comparison I could make with another recording, Henry Smith's more weighty and Germanic version of the Guilmant Morceau symphonique on Columbia MS 6791). Fredrik Wanger is a capable accompanist, and the acoustics of the auditorium at the Boston Conservatory, on whose faculty Barron teaches, are highly congenial. The pressing is first-rate, and my only complaint is that the space on the jacket could have been used for more information on the pieces played and their composers, rather than bilingual notes of a more general nature. A.C.

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HÅKAN HAGEGÅRD: Operatic Recital. Håkan Hagegård, baritone, Swedish Royal Court Orchestra, Carlo Felice Cillario, cond. [Håkan Elmquist, prod.] CAPRICE CAP 1062. $7.98 (distributed by HNH Distributors).

GLUCK: Iphigeneie en Tauride. Dieux qui me poursuivez; Dieux protecteurs; Gounod: Faust: Avant de quitter ces lieux; Leonce und Lena; Prologue; Mozart: Requiem a luis lo gugnato, K. 584; Tchaikovsky: The Queen of Spades: Yeletsky's Aria; Verdi: Rigoletto: Corigliano; will razza dannata. Don Carlos. A. noto appien; Per me guinto; Wagner: Tannhäuser: Wie Todesahnung. O du mein holder Abendstern; Werle: Tintomara: Ers excel-

Håkan Hagegård, the personable young baritone who sings Papageno in Ingmar Bergman’s film of The Magic Flute, sounds like a promising singer. But, though much of what he does on this recital is good, he seems at the moment to be in need of some technical direction.

When the voice is properly covered, the sound is smooth, firm, and highly attractive; when it is not properly covered, however, the sound is disturbingly brittle. Since the latter mostly occurs in music of a dramatic or passionate nature—when Hagegård, presumably, flings technical caution aside—the results prove very distracting. “Cortigiani” and the two Gluck arias are all rendered ineffective in this way. He also has recourse too often to aspirates to help him out in long or tricky phrases.

On the other hand, the Tannhäuser excerpt is beautifully managed, and so is the lengthy and impressive aria originally written by Mozart for Guglielmo in Cosi fan tutte but discarded before the premiere. In the latter music, moreover, Hagegård shows himself to be an intelligent actor, highly responsive to text and situation. The monologue from Lars Johan Werle’s Tintomara sounds similarly vivid, though without knowing in detail what is happening (the original Swedish is appended, but there is no translation) it’s hard to be sure. Tintomara, it might be added, was first performed only three years ago in Stockholm and concerns the bizarre adventures of a mysterious androgynous, who figures in the examination of King Gustav III, an infertile monarch who turns up in Verdi’s Ballo in mascherba. The music of Werle, born in 1926, is unoriginal, if thoroughly grateful to the vocalist.

But despite these signs of life, most of the arias sound undervitalized because of Carlo Felice Cillario’s slow, slack, and enervated conducting. Hagegård deserves to be heard under better auspices.

Notes and texts. With the exception of the Queen of Spades aria, the words of which are given in Swedish (though Hagegård sings it in Russian), the latter are supplied in the original—not, however, very accurately.

D.S.H.

VIENNA CHOIR BOYS: Serenade. Uwe Thierer, piano; Vienna Choir Boys, Hans GiIlesberger, cond., RCA RED SEAL PRL 1-9034. $6.98.


If the music on this recital never rises above the level of the elegant trifle, it nevertheless remains agreeable to listen to.

Apart from the excerpt from Josef Drechsler’s light opera, Der Bauer als Millionär, there has been only a minimal amount of arranging. “Zigeunerleben” and much of the Schubert group were originally written for vocal quartet and piano. All of the Mozart pieces were written for vocal trio and three basset horns, with the exception of K. 437, which was designed for vocal trio and two clarinets plus a single bassett horn. In the case of Schubert’s “La Pastorella,” a setting of Goldoni, the second of the composer’s two versions has been chosen, the one for contralto solo and female voices with piano. The reason, no doubt, is that the Vienna Choir Boys possess a superb alto (unnamed, unfortunately), who carries off the opening solo with great aplomb. In the Drechsler there is a fine duet for him and a striking soprano soloist (also unnamed), though the latter’s tone is sometimes piercingly white.

The choir as a whole sounds admirable. Though not the last word in precision, they sing with such clarity of texture and such lusty spontaneity as to disarm criticism. Inadequate notes, no texts. Clear, spacious recording.

D.S.H.

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If the music on this recital never rises above the level of the elegant trifle, it nevertheless remains agreeable to listen to.
Millie Jackson has a large cult of adoring fans. They've snapped up her 'concept' albums, "Caught Up" and "Still Caught Up" (where on one side she appeared as the wife and on the other as the other woman), and one suspects they will also snap up "Free and in Love." Jackson, after all, is an exhilarating soul songstress. She's raw, throaty, and yet believable.

The power of this recording artist is in her volcanic force. She paints with an exceptionally fine brush. M.J. says simple things simply, even, she never lets down. Songs such as "A Can Make It, Try Me, I Know We Can Make It; Intro: Prelude to Love, Could It Be Magic, Wasted; Come with Me. [Giorgio Moroder and Pete Bellotte, prod.] Oasis OCLP 5004, $6.98.

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Donna Summer is best known for her "Love to Love You Baby," a somewhat controversial, very long tune that surfaced a year ago and that was described in some quarters as "porno rock." Actually, the song was more in the line of soft-core soul, with lots of sweet and sexual implications.

Now Summer is back with another try at the same thing. She must like the subject. Johnny Cash has spent a lifetime singing about trains, so why not? The LP opens with a seventeen-minute track, occupying all of Side 1, called "Try Me, I Know We Can Make It, Try Me, I Know We Can Make It." The lyrics consist almost entirely of repetition of those words. The beat, like that throughout the album, is moderate-tempo rhythm-and-blues. The singing is wispy, sometimes little more than a whisper. The first side is just foreplay; when the needle is set down on Side 2, Summer gets down to business. "Intro: Prelude to Love" contains the start of the experience, and "Could It Be Magic" includes the orgasm, complete with grunts, groans, and a lot of melodramatic images of stallions, mountains, and suns. "Wasted" is the obligatory "he's left me" song. The final tune, "Come with Me," oddly enough turns out to be fairly general and not at all erotic. Some of the music on "A Love Trilogy" is, indeed, erotic, though Side 1 does get a bit tiresome after a while. Unless, of course, one is using the track merely as background music for lovemaking, which may be Summer's intention. "Could It Be Magic" and "Come with Me" are exciting enough to transcend the sexual elements.

Donna Summer is a decent soul singer. Her voice doesn't have a great deal of depth, but at least she doesn't howl offensively. The producers have gone a bit heavy on the echo effects, although I suppose it was necessary. The backup band is called the Munich Machine. "A Love Trilogy" was recorded in that city, which now can be identified in the American mind as having to do with things other than conferences and beer.

Heavy rock bands have gone somewhat out of favor in the major cities of late, though such practitioners as Bachman-Turner Overdrive (BTO) maintain a solid popularity in the provinces. James Rutledge is another fine heavy-rocker. In the grooves of "Hooray for Good Times" he creates a lot of uncomplicated excitement, with all the fire of Grand Funk Railroad and without any of its rough edges. The music is crisp, clean, and driving. "Brown Paper Bag" has an old-style rock and roll beat. "One Step Ahead of the Law" is heavy metal music reminiscent of Steppenwolf at its best, with lots of loud guitar chords and plenty of mucking about on the bass strings. Similarly, "Sole Survivor" is heavily dependent on its rhythm track for its effectiveness. Rutledge relaxes his grip on the steely and nasty for two tunes, "Star Trackin'": a familiar lyric about a groupie, and "I Can Fly." The latter is a ballad, both spacey and charming, which evokes such images as are suggested by the title.

By and large Rutledge deals in vast quantities of sound, delivered with precision and finesse. He works in bold colors, but he paints with an exceptionally fine brush.

Table of recording information:
- **Recorded tape:**
  - Open Reel
  - 8-Track Cartridge
  - Cassette

Explanation of symbols:
- * exceptional recording

Reviewed by:
- Morgan Ames
- Royal S. Brown
- Henry Edwards
- Mike Jain
- John S. Wilson

August 1976

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Shandi Sinnamon is a native Floridian who migrated to Los Angeles for the purpose of “making it” and apparently has taken a solid step in that direction. She has a pleasing voice and interesting delivery, and she ain’t bad to look at, either.

The problem is identifying where she’s at. At times she seems to be cut from the same cloth as Linda Ronstadt; at other times Cher is a more appropriate comparison. I’m not sure whether she expects to appear in folk and rock clubs, or in uptown, Vegas-style nightclubs. Her producer, Snuff Garrett, and arranger, Al Capps, have long been associated with such middle-of-the-road Vegas types as Cher. In fact, the arrangements on Sinnamon’s debut album would be perfectly good for Cher or, for that matter, Peggy Lee. The material offers little in the way of clues. Most of the songs are newly written, apparently for her. Little distinguishes most of them, and the most grappleable tune on the LP is “Will You Love Me Tomorrow?” the old Gerry Goffin/Carole King composition.

Shandi Sinnamon sings well indeed. But I think her producer might have included enough standards to tell us what sort of performer she wishes to be and how she handles it. As it stands, assessing Shandi Sinnamon is a bit like trying to guess what an athlete is a baseball or a football player by watching him play tennis.

Janis Ian: Aftertunes. Janis Ian, vocals; Tommy Gunn, drums; Greg Baze, bass and guitar; Back Like Me, Serious Blue Boy, Tear Gas; four more. [Mark Mangold, prod.] Columbia PC 33847. $6.98.

This trio plays hard rock of the sort produced by Emerson, Lake & Palmer. That is, it features large instrumental dominated by keyboards. Mark Mangold, the center of this ensemble, plays an even dozen different keyboard instruments, most of them of the synthesizer type. The vocals are throwaways, and the songs themselves are secondary to the instrumental fireworks employed in playing them.

Though this formula is oft-used and nearly always abused, American Tears does it well. I’m sure we will hear from the band again.

American Tears: Tear Gas. Mark Mangold, vocals and keyboards; Tommy Gunn, drums; Greg Baze, bass and guitar. Back Like Me, Serious Blue Boy, Tear Gas; four more. [Mark Mangold, prod.] Columbia PC 33847. $6.98.

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Janis Ian: Aftertunes. Janis Ian, vocals, guitar, piano; Jeff Layton, guitar; Larry Harlow, piano; Stu Woods, bass; Barry Lazarowitz, drums, vocal and instrumental accompaniment. Aftertunes; I Would Like to Dance; Love Is Blind, Roses; Belle of the Blues; Goodbye to Morning; Boy, I Really Tied One On; This Must Be Wrong; Don’t Cry, Old Man; Hymn. [Brooks Arthur, prod.] Columbia PC 33919. $6.98. Tape: **PCT 33919, $7.98; PCA 33919, $7.98.

It would be hard for Janis Ian to come up with an album that matches the majesty of her 1975 effort, “Between the Lines,” and in fact she hasn’t. Coming as it does while the memory of “Between the Lines” is still fresh, “Aftertunes” is something of a disappointment. However, Ian is at this point in the midst of a very creative period, so even her failures are, at least in equal, the best efforts of many other popular singer/songwriters.

Best on this recording is “Boy, I Really Tied One On,” an amusing if not unfamiliar piece about some of the consequences of excess. In this case, the consequences are waking up in a strange apartment in bed with the son of Frankenstein. “This Must Be Wrong” is also amusing, containing as it does a lyric that is scorrnt of the macho impulse in men. On the serious side, there is “Don’t Cry, Old Man,” a subtle, evocative, and humanistic song about the father not die until she straightens things out between them. “I Would Like to Dance” is a fairly standard statement about the feelings of a nervous novice, a character that crops up occasionally in Ian’s songs.

The best pop records reviewed in recent months

**COUNT BASIE AND ZOOT SIMS: Basie and Zoot. PABLO 2310 745. June.**

**TOMMY FLANAGAN: Tokyo Recital. PABLO 2310. May.**

**FOLK MUSIC IN AMERICA, VOLS. 1-2. LIBRARY OF CONGRESS LBC 1/2. July.**

**DOBIE GRAY: New Ray of Sunshine. CAPRICORN CP 0163. May.**

**BILLY PREVIN: We’re Children of Coincidence and Harpo Marx. WARNER BROS. BS 2908. June.**

**RAINTREE COUNTY. Original film score. ENTR’ACTE ERS 6503 ST. June.**

**D. J. ROGERS: It’s Good to Be Alive. RCA APL 1-1099. May.**

**PHOEBE SNOW: Second Childhood. COLUMBIA PC 33952. May.**

**RALPH TOWNER: Solstice. ECM 1050. July.**

**THE SEARCHERS, Vol. 2. The Searchers, vocals and instrumental. PYE 509. $6.98.**

**THE KINKS, Vol. 2. The Kinks, vocals and instrumental. PYE 508. $6.98.**

**MAHAVISHNU ORCHESTRA: Inner Worlds. COLUMBIA 37898. June.**

**TONY ORLANDO & DAWN: To Be with You. ELEKTRA 7 1049. July.**

**MAHAVISHNU ORCHESTRA: Inner Worlds. COLUMBIA PC 33998. May.**

**THE KINKS: Vol. 2. The Kinks, vocals and instrumental. PYE 508. $6.98.**

**GREAT BRITISH FILM SCORES. LONDON PHASE-4 SPC 21149. June.**

**PACIFIC OCEAN OVERVIEW: Original Broadway cast recording. RCA RED SEAL ARL 1-1367. May.**

**THE SEARCHERS, Vol. 2. The Searchers, vocals and instrumental. PYE 509. $6.98.**

**THE KINKS, Vol. 2. The Kinks, vocals and instrumental. PYE 508. $6.98.**

Further installments in Pye Records’ continuing “Pye History of British Pop Music,” and by now we are pretty well down to the bottom of the British barrel—not that record companies lack experience in barrel-bottom-scrapng. “The Kinks, Vol. 2” contains twelve songs, along a great deal of liner-noting only on the history of the Kinks, but on that of Pye Records as well. I can’t understand all the attention being given this second-rate group; the most exciting moment in my experience of the band was when Ray Davies fell over his amplifier and was onstage at the Fisher Hall. As for “The Searchers, Vol. 2.” a notation on the jacket pretty well tells the story: “To the listener: Shortly after the beginning of the selection ‘Sweets for My Sweet,’ there is a technical defect which results in a brief interruption of the recorded sound. This defect existed on the original master tape recorded by the Searchers. It has been included in this album in order that we may bring you this historic song.” In short, yet another evidence that the sun has set for good on the British Empire. M.J.

**JOHN DAVID SOUTHER: Black Rose.**

**JOHN DAVID SOUTHER: Black Rose.** John David Souther, vocals and instruments; strings, rhythm, horns, and vocal accompaniment. Banging My Head Against the Moon; If You Have Crying Eyes; Your Turn Now; seven more. [Peter Asher, prod.] ASYLUM 7 1059. $6.98. Tape **TC 1059, $7.97; ETB 1059, $7.97.**

Producer Peter Asher, who converted Linda Ronstadt into a recording superstar, has now turned his attention to J. D. Souther, a pleasant Los Angeles-based singer/songwriter whose fans have been shouting for the past few years that he has the potential to make it big. In his attempt to get Souther to achieve that goal, Asher has surrounded him with some expert sessions men as well as stars like Art Garfunkel, Joe Walsh, David Crosby, and Glenn Frey, who drop in for a musical moment or two.

Indeed, everything has been done to create orderly, slick, neat, professional bite-sized hits from Souther’s songs. But these tunes are at their core far from compelling, and their lyrics, while striving for an artless simplicity, are more ordinary than anything else. Souther’s folk-rock voice also on many occasions sounds like a road-company Neil Young, and this tentative vocal approach does little to hook the listener. Still, the Souther-Asher combination does make for some genuinely exciting
moments. "Midnight Prowl," with its insinuating rhythms and menacing guitar line, is eminently listenable.

"Black Rose" is an LP in which the producer does masterful things to bland material and achieves a fair result. Asher should have stood over Souther until they had ten songs—no matter how long it took—that were worth recording.

H.E.

STEVE GOODMAN: Words We Can Dance

To Steve Goodman, vocals and guitar; vocal and instrumental accompaniment. Roving Cowboy; Tossin' and Turnin'; Unemployed; Between the Lines; Old Fashioned; Can't Go Back; Banana Republics; Death of a Salesman; That's What Friends Are For: The Story of Love. [Steve Goodman, prod.] ASYLUM 7E 1061, $6.98. Tape: TC 1061, $7.97. ETB 1061, $7.97.

Steve Goodman is a fine singer/songwriter who has done a lot better than he does on this recording and, I hope, will do better in the future. The LP is an odd one, in a holding pattern between boredom and inconsequence.

Seven of the ten songs were written by Goodman in conjunction with an assortment of collaborators, and some of these are positively awful—"Banana Republics" and, even worse, "Death of a Salesman" head that list. The rest of Goodman's compositions are either uneven or too familiar. In "Between the Lines" (not to be confused with the Ian song of the same title), he tackles nothing less than the meaning of a man's existence. He gets off to a good start but very soon falls back on cliches about unmeant love and the idea that "old folks are wiser and sadder."

The three non-Goodman compositions are the album's best, including Mike Smith's "Roving Cowboy" and a congenial reading of the old rock-and-roll hit, "Tossin' and Turnin'."

ERTON JOHN: Here and There

Elton John, vocals and piano; Nigel Olsson, drums; Dee Murray, bass; Davey Johnstone, guitar; Ray Cooper, percussion. Skyline Phoenix: Border Song; Honky Cat; Love Song; Crocodile Rock; Funeral for a Friend; Love Lies Bleeding; Rocket Man; Bennie and the Jets; Take Me to the Pilot. [Gus Dudgeon, prod.] MCA 2197, $6.98. Tape: C 2197, $7.98. T 2197, $7.98.

Many rock performers, long accustomed to the luxuries of the recording studio, regard concert performances in a manner befitting James Bond—that is, they think they have a license to kill. The victims of that slaughter are usually their own songs. I am happy to report that Elton John, who has seldom failed to brutalize fashion, has not seen fit to do the same with his music.

This "live in concert" album is a good one, containing ten of John's best songs, each of them performed with intelligence and care. The first side was recorded at the Royal Festival Hall in London, at a benefit attended by Princess Margaret. The second side was taped during a Thanksgiving performance at Madison Square Garden in New York. One might quibble with one or two of the selections. I feel that "Love Song" (not a John composition) and "Fumbling for a Friend" aren't up to the standard of "Border Song," "Love Lies Bleeding," and "Take Me to the Pilot." But all in all, this is a worthy LP.

M.J.

NEIL SEDAKA: Steppin' Out

Neil Sedaka, piano and vocals; vocal and instrumental accompaniment. Sing Me; You Gotta Make Your Own Sunshine; I'll Be Around; Heartache; Steppin' Out; Love in the Shadows; Cardboard California; Here We Are Falling in Love Again; I Let You Walk Away; Good Times; Good Music; Good Friends; Perfect Strangers; Summer Nights. [Robert Appere and Neil Sedaka, prod.] ROCKET PIG 2195, $6.98. Tape: C 2195, $7.98. T 2195, $7.98.

Neil Sedaka has been withdrawn from the vault of rock and roll history, in which he sat for more than a decade, growing fat, losing hair, and presumably living off the royalties from such teenybopper hits as "Breaking Up Is Hard to Do." In his reincarnation, he appears not as a teenybopper idol so much as a serious rock singer who also happens to have a youthful, charming quality.

Recently Sedaka reissued "Breaking Up Is Hard to Do" in much the same manner as Barbra Streisand reissued "Happy Days Are Here Again"—as a pleasant cabaret song. Now, on "Steppin' Out," he continues this trend toward good, solid music. Most of the tunes are upbeat, happy rockers that are great fun to hear. High among them are "Sing Me," "Good Times, Good Music, Good Friends," but the best is "You Gotta Make Your Own Sunshine," with its old-fashioned rock and roll beat. The album also includes several ballads of note. There is a very good country song titled "#1 with a Heartache," a statement on the loneliness of the top recording star.

One tune does fall short. That is "Cardboard California," written by Sedaka with Howard Greenfield. It contains a pretentious, cliched lyric about the sins of Southern California and its "cold plastic people with phony facades." But one dead fish does not a bad album make, and overall "Steppin' Out" is of high caliber. Apart from Sedaka's enthusiastic and boyish voice, there is a great deal of good music.

Continued on page 104
Guy Clark—Making The Ordinary Extraordinary

by Mike Jahn

It's hard to praise this brilliant album too highly. Guy Clark is a singer-songwriter of immense talent who chooses to work in the margin between country music and traditional folksong. There are others with whom he might be compared: Kris Kristofferson, Jerry Jeff Walker, David Blue, Eric Anderson, and perhaps most of all Ramblin' Jack Elliott.

Several of Clark's songs have been recorded by others—most notably "Desperados Waiting for the Train" and "Like a Coat from the Cold"—but he is beyond a doubt his own best interpreter. He has a fine rich voice with the taste of hickory to it, and "Like a Coat from the Cold"—perhaps most of all Ramblin' Jack Elliott.

Some will complain that Clark's songs are depressing. Certainly they can be sad. But the sadness is appealing: It makes one think, and think primarily of how much meaning is kept hidden in the private lives of the ordinary people we seldom pick as our cultural emblems. And it makes us realize just how much meaning can be detected in our own lives, if we but stopped to look.

Guy Clark's "Old No. 1" is a landmark recording—the best I've heard this year and one that should be considered quite seriously.


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These same qualities pervade the score for Vincent Minnelli's The Bad and the Beautiful (1952). The "Acting Lesson" sequence (cut from the film), for instance, has a transparent poignancy similar to that in many parts of Forever Amber. In this score Raksin shows himself to have the same deep roots in Americana that can be found, in different veins, in composers such as Gershwin and Copland. This is made evident immediately in the bluesy quality of the main theme: but it also appears in a less tangible, more "classically" oriented fashion in the lean angularity of much of the remaining music.

As for the "Lauria" theme for Preminger's 1944 film, there is no question that its unique dream-blues flavor has made it not only one of the most envied (by other composers), but also one of the most uncannily appropriate film tunes ever written. This theme has been consistently mangled in countless rotten arrangements. Therefore it is a delight to hear it in its original instrumental and harmonic guises along with certain variations, including a gripping, expressionistic dream- Waltz version, that perfectly maintain the original mysterious obsessiveness.

As a conductor, Raksin's crisp and yet richly romantic approach to his own music strikes an interesting contrast to the immediacy of the "cinematic" effects and the much more broadly conceived symphonies of the suite. Raksin has, furthermore, provided highly anecdotal and fascinating notes complemented by additional remarks by Christopher Palmer.

Fortunately, this disc does hold over one personality involved in the "Classic Film Scores" series. Charles Gerhardt, who as a producer fully lives up to his usual standard of full-bodied, beautifully balanced sound. I certainly hope that Raksin will be allowed to follow up on these efforts with a second album that would include his music for Williams Wyler's Carrie (1952). And then how about some Leonard Rosenman? R.B.
Phil Wilson and Rich Matteson: The Sound of the Wasp. Phil Wilson, trombone; Rich Matteson, valve trombone, euphonium, and tuba; Jack Peterson, guitar; Lyle Mays, piano; Kirby Stewart, bass; Ed Soph, drums. Hassles, Another Balance; Red Flannel Hash; nine more. ASI 203, $6.98 (ASI, Box 22567, Minneapolis, Minn. 55422).

Phil Wilson and Rich Matteson, both trombonists who have been in music education for many years (Wilson at Berklee College, Boston, Matteson at North Texas State University), have put together a group that draws on the various facets of jazz education. Guitarist Jack Peterson teaches privately; drummer Ed Soph is a product of North Texas State, a veteran of the Woody Herman band, and a clinician; Lyle Mays and Kirby Stewart, the pianist and bassist, went straight from North Texas State to Herman's band in the spring of 1975 to provide the core of the best rhythm section Woody had had in years. (Wilson, it might be remembered, was a star of one of Woody's most brilliant bands, in the early Sixties.)

So much for credentials. The music—all originals, primarily by Wilson but with contributions from Matteson, Peterson and Mays—is fresh, provocatively swinging, and refreshingly varied. The bulk of the solo work is done by the two leaders, with the valve trombone, euphonium, and tuba providing rough-toned, deep-voiced contrast to the lighter, sleeker slide trombone. Wilson's almost incredible virtuosity, which sometimes got to be too much of a good thing when he was with Herman, is kept in balance on this set but is given a good showcase on the title tune, "The Sound of the Wasp," supported by Matteson's agile tuba and Peterson's bright rhythm guitar. Peterson has a few solo opportunities, most notably on his arrangement of Wilson's "A Breath of Fresh Air" which sometimes got to be too much of a good thing when he was with Herman, is kept in balance on this set but is given a good showcase on the title tune, "The Sound of the Wasp," supported by Matteson's agile tuba and Peterson's bright rhythm guitar. Peterson has a few solo opportunities, most notably on his arrangement of Wilson's "A Breath of Fresh Air" which sometimes got to be too much of a good thing when he was with Herman, is kept in balance on this set but is given a good showcase on the title tune, "The Sound of the Wasp," supported by Matteson's agile tuba and Peterson's bright rhythm guitar. 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