Introducing

Backbeat

a new 24-page section for today's pop-music maker and listener

This Month

STEVIE WONDER SAYS IT ALL

FLEETWOOD MAC: TENACITY REWARDED

CROSSOVER KING GEORGE BENSON IN THE STUDIO

NATALIE COLE: DECLARATION OF INDEPENDENCE
UNFORTUNATELY FOR THEM, THIS ONE SELLS FOR UNDER $300.
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SOUND AS GOOD
AS THIS ONE.
The average $600 receiver sounds as good as the new Pioneer SX-650 until you start listening to prices.

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PIONEER
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For informational purposes only, the SX-650 is priced under $300. The actual resale price will be set by the individual Pioneer dealer at his option.

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Read the whole evaluation report. Send for your free copy of the Stereo "Lab Test" reprint; write to Pickering & Co., Inc., 101 Sunnyside Blvd., Plainview, N.Y. 11803. Department HF

FREE!

CIRCLE 33 ON READER-SERVICE CARD

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BACKBEAT begins on page 125
Hello, Backbeat—Farewell, Lighter Side

With this issue High Fidelity makes the most radical single editorial change in our twenty-six-year history: an all-out expansion of our popular music coverage. We will not be slighting either classical music or audio, the traditional mainstays of HF. Rather, we are adding sixteen pages of material, which when combined with the pop and jazz reviews from our former “Lighter Side” department, gives us a new section of approximately twenty-four editorial pages devoted to the contemporary pop scene each month. And, as we have always done with our classical and audio coverage, we will deal with popular music intensively, envisioning a seriously interested reader.

The new section, Backbeat, will function almost like a magazine within a magazine. It has its own musical, music business, and audio features, columns, and reviews.

Audio features? Yes, for Backbeat is designed not only for those who wish to read about pop music, but for those who actively participate in it. My philosophy in editing HF has been based on the belief that our readership comprises special-interest groups: the minority of music-lovers whose passion is for the classics (and for whom we might devote six pages of discussion to a single thought-provoking recording); the minority of audio equipment owners who are sufficiently devoted to high fidelity to buy a publication about it (and for whom we have available the incomparable facilities of the CBS Technology Center); and now the minority of pop—including jazz—aficionados who are interested enough to become actively involved with it. We figure that there are a lot of equipment-crammed basements around the country where our readers make live recordings (which are hardly likely to be symphonic in scope) and that we can be of as much service to the active pop recordist as we have always tried to be to the classical music listener, whose recording activity has generally been confined to tapping off the air.

At the same time, we are expanding our “Equipment in the News” column to allow for more professional and semiprofessional equipment designed for the pop/jazz musician and recordist. Backbeat itself includes an instruments and accessories section to keep the reader up to date on the latest in electric keyboards and guitars, wah-wah pedals, and the like, while its review department covers records, folios, and appropriate books.

Editing the section is Susan Elliott, who up until now has been—would you believe?—managing editor of Musical America. That’s really not so extraordinary: Susan, a professionally trained musician and editor, is from the generation in which a commitment to the classics does not preclude an equally intense commitment to rock. (At our staff parties, the Musical America personnel always seem to be the wildest rock contingent; Backbeat, in fact, was conceived in a chat I had with Susan during a ten-minute band break at a staff bash.) She has long been a pop song-writer and knows the music business from the inside.

Theater and film record reviews will remain outside of Backbeat and will now follow the classical reviews. Gene Lees, who has made a career in these pages of attacking rock—and who, grinning slyly over the paradox, is now counting his money from the two rock songs he contributed to the Streisand A Star Is Born—will also appear outside the new section. In fact, this month Gene begins a long series of articles dissecting the various elements that led to what he feels contemporary pop has become: “An Art Gone Astry.” Never let it be said that we force our writers into any musical party line.

And now, whatever your musical predilections, I hope you find them fully satisfied in the enlarged High Fidelity.

Leonard Marcus
Howdy, pardner. I'm spreadin' the word about Akai receivers. Them there Akai receivers sound as clear and sharp as a cowboy playin' his getar by a prairie campfire. Why, they sound so powerful good, it's like bein' right there! Just consider the Akai AA-1050. It's got 50 watts per channel continuous output power at 8 ohms from 20 to 20,000 Hz with no more than 0.15% total harmonic distortion.

Ain't that an earful. And Akai stereo receivers go for $200 to $900 suggested retail price. Nobody, I say nobody gives you more for the money. So spread the word. Akai! A right fine name in stereo receivers.
COMING NEXT MONTH

For March our audio editors and CBS Technology Center are preparing Ten Lab Test Reports on Advent’s 300 receiver, Dynaco’s ST-300 power amplifier, Teac’s Micro-Send, Dual’s CS-704 turntable, and more of the current market’s popular and innovative models. In The Great Beethoven-Mozart Ripoff, our Berlin connection Paul Moor tells a tale of James-Bond-ish international musical skuldduggery with tentacles reaching into one of the U.S.’s most respected antiquarian collections. And Michael Riggs’s Boston: Hub City of American Audio scrutinizes the proposition that the New England capital is our fount of audio leadership. Plus BACKBEAT, Gene Lees, John Cuthshaw, King Kong, and much more.

SOLUTION TO HIFI-CROSTIC NO. 20

ALFRED O. TATE: Edison’s Open Door

It required constant urging to induce Edison to adapt the phonograph, for he regarded its exploitation as undignified. He despised his role to the production of useful inventions, and devices designed for amusement did not fall within this classification.

ADVERTISING


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Letters

Sound Concepts’ Time-Delay

I am disappointed by your description of the Sound Concepts SD-50 in “Devices to Put You in the Concert Hall” [October]. Specifically, your statement that the “signal is subject to some accumulation of noise and distortion, putting practical limits on the length of delay“ is almost a direct quote from competitive literature and, in lieu of measurements, indicates inferior performance when in fact the SD-50 has substantially lower noise and distortion than that manufacturer’s product. This is true even at the maximum delay time of 100 milliseconds, which is actually longer than the other unit, not “more limited.”

The maximum stereo mode delay was chosen to be 50 milliseconds since that is close to the threshold of the Haas effect, which psychoacoustically masks the "slap" effect of any echo whether natural or created. It is this same consideration that limits the major dimensions of a concert hall.

Since most program material contains sufficient ambience, the SD-50 is first and foremost a tuneable delay system capable of being operated without any added reverberation. The creation of cavernous sound with long delays and heavy amounts of reverberation is fascinating, but few will prefer to listen to it and its substantially uneven frequency response for long.

I would never argue with anyone’s sonic preference and wholeheartedly suggest that a potential buyer listen to all available units, preferably with his own familiar recordings.

Joel M Cohen

Sound Concepts

Brookline, Mass.

Rhapsody in Blue

Although I enjoyed David Hamilton’s review of our Rhapsody in Blue [December], I am somewhat distressed that the curiosity he evinces in the second and third paragraphs of page 102 could not have been satisfied by the simple expedient of a phone call before he went to print.

Mr. Hamilton refers to rehearsal number 14 of the Rhapsody where he notices that the printed piano part includes notes that he does not hear in the pure recorded versions of Gershwin’s piano rolls. He is quite right. The upward-bound appoggiature figure that occupies the first three quarters of each bar cannot be extracted from Gershwin’s rolls. The chord that forms the punctuation of the fourth quarter can be isolated, and indeed it is this single chord that is included in our recording. Mr. Hamilton notes that I don’t explain how I “managed to get” these missing notes “into the recording.” I applaud his vivid imagination, because these notes are not included.

“Nor does he explain how the playing speed was determined.” Every piano roll has printed on its opening tongue a number corresponding to the speed at which it should be reproduced. Apparently there was as much variation in the choosing of running-speeds in the production of these piano rolls as there is in these days of high fidelity recording: Some records play at 33 1/3 rpm, some at 45 rpm, some at 78 rpm; some tapes play at 7 1/2 ips, some at 15 ips, etc. It is merely necessary to adjust the reproducing instrument to correspond with the speed of original processing. This is interesting to note that the two rolls that make up the complete Rhapsody are to be reproduced at different speeds—much as if Side 1 of a record was intended to be played at 33 while Side 2 must be played at 45. I do not believe that this question of speed is a hit-or-miss proposition. Although some of Gershwin’s tempos seem unusually fast, others seem absolutely correct, and I believe that we have in no way misrepresented his intentions.

Andrew Kazdin
Executive Producer
CBS Masterworks
New York, N.Y.

‘Mr. Hamilton comments: It would indeed be a shame if these relatively minor points were to overshadow what I described as a “remarkably successful” achievement on the part of Mr. Kazdin and his colleagues. With regard to the matter of playing speed, the review specifically said, “I’m not complaining, just curious—the tempo of the performance, admirably synchronized, is perfectly plausible.” But there is some suspicion among piano buffs that the indicated playing speeds of piano rolls did not always correspond to the actual recording.

Agree with Us and Win a Free Subscription

This month we present the first in a series of paintings representing the four eras in the 100-year history of recordings. The dominant image of the first painting is, of course, Thomas Edison, who invented the phonograph. The subsequent paintings deal with the acoustic era, the pre-LP electrical era, and the current era from the introduction of the LP to the present. Each painting will be organized around the central image of a person or persons whose achievement symbolized the era.

The first to readers who can correctly guess our choice of the dominating personalities of each of the forthcoming paintings will receive a free one-year subscription to High Fidelity/Musical America, or a one-year extension of a subscription. Since the next painting will appear in our April issue, submissions will have to be postmarked no later than March 1. In cases where more than a single personality is in the dominating position, correct identification of one will count as a winner.
FISHER INTRODUCES THE WORLD'S FINEST RECEIVER.

This headline from any other manufacturer might sound like just so many words. But, it's by Fisher, the company that started the high fidelity industry back in 1937. And the company who introduced the very first AM/FM stereo receiver 18 years ago.

In a sense, we've been building the RS1080 for 40 years...researching, engineering, inventing, and refining our technology to finally develop what is surely the world's finest receiver at any price.

Our RS1080 is rated at an enormous 170 watts per channel, minimum RMS into 8 ohms, from 20 to 20,000Hz with no more than 0.1% total harmonic distortion. There is lots of pure, clean power to give you lots of pure, clean sound at any listening level. But power is only part of why the RS1080 is the world's finest.

Tuning. Precise, accurate tuning is a must for FM listening. And the RS1080 includes 3 separate tuning meters: signal strength, center-of-channel, and most important, a multipath meter with phase-locked-loop circuitry.

FM Dolby. For the ultimate FM listening experience, the RS1080 has built-in, factory calibrated FM Dolby decoder circuitry. This feature lets you hear the full dynamic range of Dolby broadcasted music. Another must if a receiver is designed to be the world's finest.

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Sure, maybe some late-comer audio manufacturers have good receivers on the market, but at Fisher, we are convinced that our RS1080, priced at $900*, is the world's finest. Look at and listen to the Fisher 1080. Available at fine audio stores or department store audio departments.

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At last. You’ve found them.


It took dedication, perseverance and the experience of three renown loudspeaker veterans to create this perfect marriage of beauty and beast (one was a designer, one an engineer and one a craftsman). Together they proved that technology didn’t have to be ugly. And that products that were both beauties and beasts could be built at an affordable price.

At Jennings Research we put a lot of beast in all our beauties. As we continue our search for technological perfection we create some of our own innovations. Here are a few.

**LPC (Linear Phase Coherent)**

The process of aligning the emitted sound of all the reproduers in the same plane is Linear Phase Coherent engineering. The result gives the listener voices with unparalleled clarity and the localization of musical instruments in sonic space. Most important, the listener hears sound phased in “real time,” as originally performed — not with the highs reaching his ears before the lows do (as is with loudspeakers that have a typical component array). See the Illustration. Both LPC and IAF are used in Jennings Research Vector Series and the Contrara Elan.

**IAF (Integrated Acoustic Foam)**

One of the recent innovations in Jennings Research engineering is the use of Acoustic Foam as a part of the cabinet enclosure. The foam which surrounds both high and mid-frequency reproducers controls random reflections and absorbs spurious sound. Since IAF becomes a part of the cabinet, it does not hinder the acoustical/mechanical operation of the reproducers. IAF has made possible the simplification of crossover electronics and the solution of the phase problem created in Linear Phase Coherent engineering. Other manufacturers have attempted to rectify this with excessive circuitry and marginally operational additional drivers.

**Passive Low Frequency Accenntuator**

All the models in the Jennings Research Vector Series make use of a rear mounted passive low frequency accenntuator which moves in phase with the low frequency reproducer and “shares the load.” The result is increased power handling capacity and increased bass clarity. Bass response is extended without the accompanying volume loss found in vented box loudspeakers. The accenntuator is mass loaded with a precision steel weight.

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Technics introduces a 321 element IC or, in plain English, more torque.

It's in the SL-1400. Technics' semi-automatic direct-drive turntable. With our latest advance: The one-chip 321 element IC with three high-capacity power transistors. Those 321 elements translate to one reason why the SL-1400 will reach the exact playing speed within 1/3 of a revolution at 33 1/3 RPM. That's torque.

But equally important, the SL-1400 has the Technics direct-drive system. The same system radio stations use. And discos abuse.

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You won't hear any rumble, either. Because our DC motor introduces so little vibration into the system that rumble remains inaudible (−70dB DIN B).

And load changes in AC line voltage or frequency won't affect turntable speed. The reason: A frequency generator servo control. But direct drive isn't all the SL-1400 has going for it. For outstanding low tracking error, there's an ultra-sensitive gimbal-suspended tone arm. With an effective pivot-to-stylus length of 9 1/4".

And all you do is place the stylus on the record and the SL-1400 does the rest. From auto cut. To auto return. To auto shutoff. You'll also get one anti-skating adjustment for all types of styli. Variable pitch controls. An easy-view strobescope. Viscous-damped cueing. Feedback-insulated legs. As well as a hinged detachable dust cover and integral base.

So get the SL-1400. And get the precision of Technics direct drive. The convenience of semi-automatic operation. And the advantage of increased torque.

Technics by Panasonic
speed (just as discs were sometimes recorded below 78 rpm so that when played back on a standard machine they would sound more brilliant). Evidently the producer of the Klavier dubbing of the Rhapsody rolls thought this, for his version is perceptibly slower than Mr. Kazdin’s and the Mark 56 dubbing. Having reviewed these other two dubbings (and not knowing which of them corresponded to the indicated playing speed), I am pleased to have the information in his letter; I still think it would have been desirable to include it in the liner notes.

The other point is more complex. Rather than hearing, in the Columbia recording, notes that aren’t there (that is, the arpeggiated figures), I was referring to the fourthbeat chords that are there. For whatever reason, the first of these chords is not audible in the Klavier dubbing of the roll (the one I used for comparative listening, since the other one, correct speed or not, gives me the jitters)—but on checking I find that it’s clearly present in the Mark 56 dubbing! (Whereas the opposite situation obtains with the second chord!) All of which leaves my faith in piano rolls even shakier than before.

Given the fact that Mr. Kazdin has produced a mammoth—and honest—fake, I would not have minded had he doctored the roll a bit to produce the correct pitches for every one of these chords, instead of making do with the available notes from the “orchestral” part. It’s hardly necessary to be excessively scrupulous about what is, after all, a technical-musical jeu d’esprit in which connection I might add that I can hardly subscribe to the “ethical” objections I’ve heard raised against this recording. Fitting the orchestral part to a piano roll may not be standard operating procedure, but I imagine that Mr. Thomas, in his regular work with orchestras, has more than once come up against a visiting celebrity pianist scarcely more flexible than a piano roll. Such concerto performances take place every week somewhere in the world, the only difference from the Columbia project being that the soloists appear to be still alive.

Johnny Mercer Remembered

Of the many concerts I have attended, none was more memorable than an afternoon at Town Hall when Johnny Mercer, accompanied by Jimmy Rowles, sang his own songs for more than two hours.

Of the many magazine articles I have read, none was more memorable than Gene Lees’ tribute [October] to this giant of popular song.

Les Line
New York, N.Y.

I just read “Greatness Was Too Easy” and had to tell you what a beautiful and moving tribute it was to a man I thoroughly admired and enjoyed over the years. Maybe Johnny wouldn’t agree, but I thought he was a great singer.

Dick Cuschen
Lebanon, Tenn.

I was saddened by the recent death of Johnny Mercer and peevd that most publications gave his passing such scant atten-

tion. That made the column about him by Gene Lees all the more gratifying.

David C. MacKenzie
Tulsa, Okla.

Toscanini and Philadelphia

In 1957 B. H. Haggin wrote in High Fidelity that there were “historic great performances of great works with which Toscanini was identified that RCA could and should issue”—such as the 1940 broadcasts of Verdi’s Requiem and Beethoven’s Missa Solemnis, which are “far greater (than the approved Requiem of 1951 and Missa of 1953) in the way Toscanini’s 1941 Schubert Ninth with the [Philadelphia] Orchestra is greater than his 1953 performance with the NBC Symphony.” And yet the public could get to hear these unique documents only through the record pirates. So now that one source of these performances is no longer in existence, I wonder how we will ever get to hear any of the great unissued broadcasts and concert recordings with not only the NBC Symphony, but also the Philharmonic and even the Vienna Philharmonic (from the 1937 Salzburg Festival performances of The Magic Flute, Falstaff, and Meister-singer)—especially since RCA doesn’t have permission to issue them.

Not too long ago I was informed by John Pfeiffer of RCA that the company “does not have permission to issue recordings which
and get studio quality live recordings with absolutely no audible tape hiss. Preserve the full dynamic range of the music. With dbx 122 noise reduction you get 30 dB better signal-to-noise ratio and enjoy the bonus of 10 dB extra headroom in recording. Use the dbx 122 to make copies on cassette that cannot be distinguished from the originals.

dbx 122 noise reduction nearly doubles the dynamic range, and increases the signal-to-noise ratio of any cassette machine by 30 dB, allowing cassette sound to approach open-reel quality for the first time. The unique dbx system prevents the normal high frequency tape saturation which plagues standard cassette recordings and transforms your cassette recorder into a genuine high fidelity instrument.

Ask the dbxpert at your dealer to show you how the dbx 122 noise reduction system makes a miracle machine out of your present cassette recorder. For complete product information and a list of demonstrating dbx dealers in your area, circle reader service number or contact:

dbx, Incorporated, 296 Newton Street
Waltham, Massachusetts 02154 • (617) 899-8090
CIRCLE 10 ON READER-SERVICE CARD

neither Maestro Toscanini nor his heirs approved.” Besides the 1940 Requiem and Missa, there are other great things such as the 1938 Brahms Third and Strauss Don Quixote (with Emanuel Feuermann); the 1939 Berlioz Harold (which Harris Goldsmith praised in these pages recently) and Mozart Prague; the 1940 Tchaikovsky Nutcracker Suite and Stravinsky Petrushka excerpts; the 1941 Strauss Heldeneiden, Haydn No. 99, and Mozart Sinfonia Concertante K. 364; the 1942 Brahms Fourth; the 1943 Haydn Nos. 94 and 104 and Mozart Concerto K. 595 (with Horszowski); the 1944 Mozart No. 29 and Haydn No. 92—all extraordinary and historic musical performances. RCA has never issued them, even in the face of repeated pleas from music lovers; but now it seems that RCA could not release them even if it wanted to, because the Maestro’s heirs are reported to have reacted with this attitude: “Why issue the Verdi Requiem of 1940, when there is already a Verdi Requiem?” If that is so—I would hope that it isn’t—then why did they give RCA permission to issue the Philadelphia performances?

Now that we finally have the Philadelphia recordings, RCA should turn to the matter of getting the permission of Toscanini’s heirs to issue the great NBC Symphony broadcasts.

Donald B. Drewes
Troy, N.Y.

“Postscript” Postscripts

To clarify a point raised in Conrad L. Osborne’s “Postscript” on the 1941 Met Tristan recording [November] for the benefit of those benighted High Fidelity readers who do not see Musical Newsletter, let me note that the passages inserted (from the 1940 broadcast) into this recording are as follows: Act II, Scene 2—after Tristan’s entrance, from “Bist du mein?” to “O [Wonne der Seele]”; and in Brangane’s Watch, from “[die den Schläfern Schlimmes] ahnt” through the bar before Isolde’s “Lausch’, Geliebte!”

I am informed by Mr. Dario Soria, managing director of the Metropolitan Opera Guild, that these insertions, involving only a couple of minutes, had to be made in order to replace dropped-out material in the 1941 broadcast, and that the booklets accompanying a second printing of the recording now in process will carry a note to that effect.

For the incredible truth about Bodanzky’s cuts in Tristan and other matters, however, your readers will have to consult my article in Musical Newsletter.

David Hamilton
New York, N.Y.

Conrad Osborne’s review of the broadcast recording of Tristan und Isolde [October] deplores the Metropolitan Opera’s “old” tradition of heavily cut Wagner productions. Far from being an “old” habit, most of those same cuts were being made in 1971 and 1973 while Leinsdorf was still the conductor. To distort Tristan by suppressing fifty or more pages seems unforgivable. Can anyone say when (if ever) New York audiences last heard a complete performance of this masterpiece? Nor is Tristan the only victim of the Met’s scissors. Siegfried had
Introducing Accutrac.
The only turntable in the world that lets you tell an LP which selections you want to hear, the order you want to hear them in, even how many times you want to hear each one.

Sounds like something out of the 21st century, doesn't it? Well, as a result of Accutrac's electro-optics, computer programming and direct drive capabilities, you can have it today.

Just imagine you want to hear cuts 5, 3 and 7 in that order. Maybe you even want to hear cut 3 twice, because it's an old favorite. Simply press buttons 5, 3, 3 again, then 7. Accutrac's unique infra-red beam, located in the tonearm head, scans the record surface. Over the recorded portion the beam scatters but over the smooth surface between selections the infra-red light is reflected back to the tonearm, directing it to follow your instructions.

What's more, it can do this by cordless remote control, even from across the room.
The arm your fingers never have to touch.

Since Accutrac's tonearm is electronically directed to the record, you never risk dropping the tonearm accidentally and scratching a record, or damaging a stylus.

And, since it cues electronically, too, you can interrupt your listening and then pick it up again in the same groove, within a fraction of a revolution. Even the best damped cue lever can't provide such accuracy. Or safety.

What you hear is as incredible as what you see.

Because the Accutrac servo-motor which drives the tonearm is decoupled the instant the stylus goes into play, both horizontal and vertical friction are virtually eliminated. That means you get the most accurate tracking possible and the most faithful reproduction.

You also get wow and flutter at a completely inaudible 0.03% WRMS. Rumble at -70 dB (DIN B). A tracking force of a mere 3/4 gram. And tonearm resonance at the ideal 8-10 Hz.

The Accutrac 4000 system. When you see and hear what it can do, you'll never be satisfied owning anything else.

Its father was a turntable.
Its mother was a computer.

The Accutrac® 4000
five minutes eliminated from Act III in both 1972 and 1975.

Perhaps there is a little hope. Critics such as Osbourne seem to be having an effect: After being dubbed in the Times and by critics in several tour cities for last season’s hatchet job on Die Meistersinger, the Met has announced that this season’s performances will be the first uncut ones in the company’s history. They should be billed as the Metropolitan premiere of the opera Wagner composed.

Yes, this season’s early performances of Meistersinger were uncut—until opera-house realities caught up, in the form of a town squeeze between the immovable 7:00 p.m. curtain (already moved up once, from the 7:15 starting time printed on the tickets) and the overtime witching hour of midnight. Small cuts were then re-introduced, but even so the resulting edition was one of the most nearly complete to be seen today. Indeed, while Mr. Osbourne’s comments implied no description of post-1941 practice, the situation is surely improving. A five-minute cut in Siegfried, however annoying (and for so little time saved, why bother?), is minor compared to the treatment usually accorded the opera. And witness this season’s Meistersinger, Lohengrin, and Walküre. (At time of writing, Erich Leinsdorf reportedly planned to conduct the latter’s late-January revival uncut.)

Bernard Herrmann

I would hate Royal S. Brown to go un-thanked for his splendid interview with the late genius Bernard Herrmann [September]. In probing Herrmann on his working relationship with Alfred Hitchcock and in stimulating him to expand on his over-all theory of film music, Brown covered ground that most other interviewers skirted over.

Craig Reardon
Redondo Beach, Fla.

More on Avery Fisher Hall

One sentence in Hans Fantel’s “Back to Square One for Avery Fisher Hall” [October] requires amplification. Bass instruments gain augmentation through a wood floor that acts like the sounding box of stringed instruments, so acoustician Cyril Harris “will install a wooden floor to act as a transmission surface for low frequencies.” Due to the lack of a proscenium arch and its attendant fire curtain in Philharmonic Hall, the old floor was so fire-proofed that it amounted to little less than marble. It was petrified wood; it should have been replaced before millions were spent and respent, and an auditorium gutted.

William Allin Storrer
Columbia, S.C.

Replacement Styli

I noticed in “News and Views” [October] that I.O.I. is discontinuing production of special styli for playing old records. A source that I have used and can recommend is Expert Pickups Ltd. I purchased one of each of its elliptical diamonds, which I use in my Shure M-44 cartridge with a Lenco L-75 turntable. The results are excellent.

Philipp Rochlin
Accokeek, Md.

Expert Pickups is a worthy firm with a long-standing reputation among collectors of antique records. But since it is overseas and specializes in replacing the tips on existing stylus assemblies (rather than supplying complete assemblies), American collectors may find it somewhat less handy to deal with than I.O.I. was. The prices we have seen run under $10 for conical tips and under $15 for truncated ellipticals or those for Edison Amberol cylinders; some complete assemblies do appear to be available at under $25 with the truncated tip for Shure M-44 series pickups. These prices do not include packing, postage, or bank clearance charges. Interested collectors can write to Expert Pickups Ltd. at P.O. Box No. 3, Ashford, Surrey KT21 2QJ, England.

Correction

The article “Ivan Berger Chooses a $1,000 System” [December] mentions the Hege-man H-1AV loudspeaker at $318 per pair. The Hegeman H-1AV is currently priced at $390 per pair. We would appreciate your calling this error to your readers’ attention.

Nanette Posner
Hegeman Laboratories, Inc.
East Orange, N.J.
We put Melissa Manchester to the Memorex test: was she listening to Ella Fitzgerald singing live, or a recording on Memorex cassette tape with MRX, Oxide?

It was Memorex, but Melissa couldn't tell.

It means a lot that Memorex can stump a singer, songwriter and musician like Melissa.

In fact, when you record your own music, Memorex can mean all the difference in the world.

MEMOREX Recording Tape.
Is it live, or is it Memorex?
Ever since the invention of the recorded disc annoying "clicks" and "pops" caused by scratches, static and imperfections have consistently disturbed the listening pleasure of music lovers.

Now, SAE introduces the unique model 5000, an Impulse Noise Reduction System which eliminates those unwanted sounds with no adverse effect on the quality of the recorded material.

This breakthrough in electronic circuitry is so demonstrably effective that the SAE 5000 is destined to become an essential part of any sound system.

The SAE 5000 is compact and sleek, built to SAE's exacting standards, and ready to enhance the performance of any system, from the standard receiver/turntable combination, to the most sophisticated audiophile components.

SAE is proud to add the 5000 to their broad line of Components for the Connoisseur.

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Los Angeles, Cal. 90060

Please send more information on the 5000.

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Address
City
State Zip

CIRCLE 39 ON READER-SERVICE CARD

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An Art Gone Astray by Gene Lees

Not so very long ago, anyone who went to a world's fair or some similar exposition was likely to see models of transportation of the future. They were wonders of bustling efficiency: tiny cars and trucks and buses and airplanes and boats hastening through tiny landscapes in the clean and adroit discharge of their mechanical duties.

Today we are cursed with clogged highways and the eye-smarting, lung-searing effluents of the realization of that horrendously clumsy system so cheerfully foreseen by myopic visionaries. To drive south from New York City through the stink of the New Jersey flats and view the hideous panorama of transport near Newark airport is to see that ancient expectation fulfilled, but the dream has turned into a nightmare.

The years since World War II have been an epoch of change so rapid and constant as to be dizzying. Our expectations, once aspirant and—as it seems from our present perspective—naively optimistic, have been honored chiefly in their disappointment. We expected the world to become continually better, politically freer, and socially safer and more equitable under the benign rule of an educated populace capable of more intelligent decisions about its own political, economic, social, and aesthetic evolution.

Instead, the young men coming home from the war found that a generation of somewhat older men, driven by an insecurity created by the soul-withering ordeal of the Depression, had taken effective control of the country's economic machinery and, by extension, of its political life. As a now-prominent attorney put it, "By the time we got back, it was too late."

The price we have paid, and are still paying, for the damage done to men's psyches by the Depression very nearly became the death of democracy in America. Indeed, it remains to be seen whether it can yet be restored to the health it enjoyed in the time before the computer tracking of almost everyone's life and the government's assumption that criminal activity was its moral right.

Chico O'Farrill, the brilliant Cuban-born composer, became known in the U.S. for his writing for Dizzy Gillespie, Stan Kenton, and Benny Goodman. Little of his symphonic music has been accessible in North America, though I have heard tapes of it made by the Havana and Mexico City symphony orchestras. O'Farrill's jazz alone, however, assures his position as a musician of stature. Like so many others of foreign birth, he has a far more acute appreciation of the valuable elements in the norteamericano culture than most native Americans.

When he was first writing for American orchestras, there seemed to be every reason to expect this country's musical culture to continue to transcend and exceed itself. But by the 1960s, O'Farrill was reduced to making a living (albeit a good one) for his family by composing television commercials and the background "pads" for rock record dates and the surprisingly large, though ghettoized, "Latin" music market.

During the Sixties, it was my custom to spend most Saturday evenings at O'Farrill's home. I would arrive about six or seven o'clock, and Chico would heave his weekly sigh of relief from the horrors of creating the highest-quality trash of which he was capable, for cynical admen and illiterate record producers who would proclaim him brilliant for the absolute minimum of his talent. He would break out the Scotch, then the Berg or Stravinsky or Debussy records, chuckle, and say, "All right, now let's listen to the real music." And for a few hours we would retreat into that firmament where music is art, not industrial artifacts.

On one such evening, Chico

Continued on page 19
When you're buying speakers, you want to talk specs. And we don't blame you. In fact, we encourage it. Because when you invest your good money in a pair of speakers, you want more than just a pretty cabinet.

Consider the new Jensen Spectrums. These good sounds didn't just happen. They're the result of extensive engineering efforts and exhaustive testing. Testing that ranged from exacting measurements in laboratory "live" rooms and anechoic chambers to in-depth consumer surveys.

Examine our Spectrum Model 540. It's an excellent example of the superb specs you'll find throughout the Jensen Spectrum Series.

The Spectrum 540 is a 3-way, 4 element system that is so efficient it can be driven with as little as 10 watts continuous power. Its maximum power rating is 75 watts continuous.

The woofer is a 12" long-throw, high-compliance design. Special acoustic suspension and infinite baffle enclosure give you extremely low distortion. And a high temperature voice coil affords high power handling. Magnet structure weight is a hefty 4½ lbs. with a Gap Flux Density of 10,000 Gauss.

Two 3½" cone midranges give excellent power handling and eliminate break-up in the critical midrange region. Tuned isolation chambers control response at the low end of the midrange spectrum. They also provide acoustical isolation in the cabinet between the midranges and the woofer. An edge damped rim suspension with specially treated molded cone offers sharp, clear, midrange reproduction.

A 1½" Mylar® rear damped hemispherical dome tweeter offers a dispersion of 170°. Its large-lightweight voice coil gives high power handling, yet maintains a low mass for good high frequency reproduction.

Tweeter and midrange controls allow you to adjust your Spectrum System to room conditions and listening preferences. Controls are front mounted for convenience, continuously variable, calibrated in db attenuation from a maximum, or flat, response.

FREQUENCY RESPONSE

About as flat as you can get...and that's good. The Frequency Response Range is an admirable 25 to 25,000 Hz.

TONE BURSTS

"Blurring" and "Overshoot" are reduced to a minimum in this acid test of transient response. The Spectrum 540 produces each waveform accurately with low distortion.

TOTAL HARMONIC DISTORTION

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Distortion is kept to a minimum in Jensen Spectrum Speaker systems.

The cabinet is built with solid walnut front moldings and walnut veneer on wood composition panels. All walnut surfaces are hand rubbed for a rich luster and beauty. The baffle is finished in an attractive, durable black pebble grain.

In short, Jensen Spectrum speakers aren't designed to put out the most amount of bass or the most amount of treble. They're designed to put out the right amount. We consider them to be the best speakers we've produced in 50 years. Simply because when it comes to sound reproduction, they're extraordinarily accurate. And that's what specs are all about.

For further information and name of your nearest authorized Spectrum Dealer, write to: Jensen Sound Laboratories, Dept.SF-27 4136 United Parkway, Schiller Park, Illinois 60176.
You may have noticed that few turntable manufacturers call your attention to the critical role of the tonearm in record playback. Dual is an exception. Whatever the shape, materials, or mechanics of a tonearm, the goal is always the same: to maintain the cartridge in the correct geometric relationship to the groove, and to permit the stylus to follow the contours of the groove walls freely and accurately. Whenever the stylus cannot follow the groove undulations, it will gouge its own way. And as we have frequently reminded you, there is no way to repair a damaged record. Every tonearm designer should consider geometry, mass, balance, resonance, bearing friction, and the accuracy and stability of settings for stylus force and anti-skating. However, despite the simple fact that the shortest distance between two points is a straight line, some designers are more concerned with appearance. Hence, the curved tonearm whose deviations between pivot and stylus simply add mass, reduce rigidity and increase the likelihood of resonance.

Dual engineers have always designed for optimum performance. The essential differences in approach and results are indicated below. You might keep all this in mind when you are considering your next turntable. Chances are you'll want it to be a Dual.

**Dual**

**United Audio Products**, 120 So. Columbus Ave., Mt. Vernon, N.Y. 10553

Exclusive U.S. Distribution Agency for Dual

The curved tonearm may appear longer than the Dual tonearm, but both actually have the identical effective length and horizontal tracking angle.

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**Actual size of Dual tube (A) and typical curved tonearm (B).**

For the same effective length, straight Dual tonearm has lower mass and resonance, yet greater rigidity.

---

**Dual 1249**: Single-play, multi-play. Belt drive. Fully automatic start and stop, plus continuous repeat. Mode-selector parallel to tonearm to record in single-play; 16% pitch control; illuminated strobe; cue-control w/cover-dampened in both directions; multi-calibrated anti-skating, less than $280.

**Dual 510**: Similar except semi-automatic. Lead-in groove sensor. Tonearm lifts automatically at end of play and motor shuts off, less than $280.

**Dual 502**: Semi-automatic. Less sensor, stroke and pitch-control. Less than $280.

---

**Specifications (DIN B):**

- Rumble, >86dB: Wow and flutter, <±0.05%
summed it all up in four words: "I am so disappointed."

The confession was so simple and heartfelt, and so perfectly expressed the malaise of so many fine musicians in the U.S., then and now, that I have never forgotten the moment.

There are among us many musicians who function in several genres and do not divide and subdivide music into categories. For men such as O'Farrell there are, in the aphorism variously attributed to Debussy, Richard Strauss, and Duke Ellington, only two kinds of music: good and bad.

There is a lot of bad jazz, but generally jazz has provided much of the best expression of our culture. Though one encounters on occasion excellent country and western music, the meaning of the genre is as banal, garish, and trashy as a neon-outlined roadhouse. (John Hartford's recording of his own 'Gentle on My Mind' is one of the fine moments in popular music. Jerry Reed's early recordings, such as 'Roving Gambler,' 'In the Pines,' and 'Georgia on My Mind,' are superb, but since attaining wide popularity he has let his work sink back to the mawkish level of most Nashville music.) Those with a true contemplative love of music are usually quick to appreciate excellence, no matter what the textbook label affixed to it. Thus the problem of American music is not one of categories or hierarchies.

Nor is it a matter of a person's age. I constantly encounter musicians in their early twenties, or even their teens, whose proficiency on their instruments surpasses that of artists of thirty years ago, just as 18-foot pole-vaulters make Cornelius Warnerdam's headline-making 15-foot jump into a footnote of history. And these young people have an odd wistful yearning for an era before their birth. Sitting at the piano, or trumpet in hand, reading through fake books, they discover in the harmonic richness of popular music in the Forties, Thirties, and even Twenties a modernism in poignant contrast to the music in the current period--to use Clare Fischer's apt phrase--"harmonic retrogression."

No, it is not a generation gap; it is a cultural gap. For there is a general feeling among the musically educated that we have failed our artistic destiny in this country, that our bright promise has gone astray and perhaps will never be fulfilled.

How did we come to this cultural disappointment? Many complex factors have acted within and upon our music to bring us to this condition, factors I propose to examine in the months ahead.

---

If you would like the kind of sound people associate with expensive combinations of separate preamps, power amps, and tuners, but your budget gets you barely beyond the lowest price class in receivers, the new Advent Receiver (the Model 300) is the thing to hear.

Within its power limits, the new Model 300 is designed to compare directly in sound quality with the most expensive separate-chassis components. But its suggested price, $260, is just a step above the "entry level" in today's receivers.

The Model 300 has a totally new phono preamp circuit (the Holman Circuit) that is equal or superior to anything you can find in the best separate preamps. Its tuner section will get as many FM stations clearly and free of noise as far more expensive tuners and receivers. And its power amplifier will drive virtually any loudspeaker (including all Advents) under most home listening conditions.

Unlike many present receivers, it will deliver its full rated power--15 watts per channel into 8 ohms, 40-20,000 Hz, with less than 0.5% THD--into actual speaker loads, not just into a resistor on a test bench. And the loudness it can achieve in actual use equals that of many units of twice its rated power.

For more information, please send us the coupon. Thank you.
Some $5 blank cassettes have the nerve to tinker with Beethoven. We think it's outrageous.
Beethoven, even when he was deaf, knew exactly how a piccolo sounded in relation to the rest of the orchestra. Some cassette manufacturers would just as soon forget. Their cassettes give the piccolo and other high frequency sounds a distorted prominence. They appear to do this deliberately, regarding absolutely natural sound as raw material to be improved upon.

At BASF, we think this is an abomination. We're purists; we stake everything on total accuracy of sound reproduction. You will never encounter artificially enhanced high frequencies in our cassettes. We believe that if you care enough to buy an expensive audio system, the last thing you need is a cassette that imposes its own dubious tastes upon your sensitive ears.

Faithful reproduction entails more than miracle ingredients and fanciful initials on a cassette label. At BASF, we begin with the best quality ferric oxide. We mill it by a patented process to achieve maximum packing density and uniformity of coating. We use an exclusive chemically cross-linked polymer binding which will never deteriorate and cause head-related frictional noise or wow and flutter.

We use a unique multi-stage polishing process, and our slitting technique results in an edge that's clean even when viewed under a microscope. Even our cassette case is different, incorporating our patented Special Mechanics, designed to assure smooth tape feed for years of dependable performance.

Is completely natural sound worth that kind of effort? To people who know the difference, it is.

At BASF, we're purists. We've been obsessed with total accuracy since we invented magnetic tape back in 1932. There are no short-cuts to perfection. But you knew that when you planned your own audio system. We'll give you no reason to compromise when you buy our cassettes.

Our Promise: the purest, most accurate sound that tape can reproduce.
Which would give me the best sound: a pre-recorded, Dolby-processed cassette, or a cassette tape recorded from a turntable myself? I use TDK SA C-90 tapes and a Marantz S420 deck. Also, once I've recorded a tape, do I lose any fidelity by erasing and recording on that same tape?—Byron Roloff, Corvallis, Ore.

We'd love to be proved wrong, but right now we'll bet on the disc copied at home—if your disc-playing equipment is up to snuff and your deck correctly adjusted for the tape. While Dolby cassettes represent a great step forward, their manufacture still requires more tape transfers than that of a disc. Before re-using an already recorded tape we prefer to bulk-erase it, rather than relying solely on the deck's erase head. This usually makes a small improvement in signal-to-noise ratio. But in practice there should be no difference between the recorded sound on the re-used tape and that on a new one of the same type.

I hereby denounce the plastic dust cover so commonly used with turntables—even the top models on the market. It is highly susceptible to static. I checked its effect on tracking on a dry day. Using the Shure stylus gauge, I found that the closed cover reduced tracking force by ½ gram. In New York City, closing the cover during play is a must. I find myself rubbing water on the cover prior to every play. Isn't there a better way?—William Chan, Brooklyn, N.Y.

For the reason you indicate (which can be obviated as we explained in the October 1975 "News and Views," with the Zerostat static-neutralizing "gun"), as well as susceptibility to acoustic feedback, we recommend that such plastic covers, at least on single-play turntables, be removed entirely while a disc is playing—even in New York City. The health of the disc can be best attended to by cleaning it carefully before and after each playing.

I possess Bang & Olufsen equipment consisting of an amplifier, open-reel tape recorder, turntable, and speakers. I am considering adding a tuner and stereo microphones to this system, although I have not yet decided on any particular brands. My problem is that all the models I have looked at have single-pin sockets, whereas my B&O equipment has five-pin DIN sockets. Is there a product on the market that will enable me to connect a tuner and microphone with single-pin connectors to my amplifier?—David Brocklebank, Grand Blanc, Mich.

Most well-equipped audio dealers (especially those who sell equipment using DIN plugs) stock DIN-to-pin adapters. They should do the trick, though levels may not be well matched between components and either insufficient gain or input-stage overload can result if the mismatch is severe.

I have owned a Thorens TD-124 turntable since it first came out. Over the years, whenever I thought of modernizing or upgrading, I came back convinced I could not do any better. But one thing has disturbed me, and that is rumble level. I like to play my symphonic music, etc., loud—but the rumble level militates against it. The "low filter" helps somewhat but not enough.

Is it possible to have a filter built to cut down the specific frequencies at which the rumble appears? If so, do you know what that frequency is? Could it be designed with narrow enough discrimination not to affect the over-all sound?

If it helps, I have an Ortofon cartridge (newest elliptical) with Ortofon arm, McIntosh 250 amplifier, Dynaco PAT-4 preamp, and a pair of 15-inch Tannoy speakers. (Great sound)—Walter E. Judelson, Bronxville, N.Y.

A specially designed filter of the type you suggest would probably cost more than a new turntable—and it's not likely to work too well since you would almost certainly lose music with the rumble. We suspect that your ancient Thorens is worn out and due for replacement.

I have a Pioneer PL-71 turntable and SX-950 receiver. I am contemplating buying an Audio-Technica AT-20sia cartridge. Can you tell me if this cartridge is compatible with my equipment? Does two-channel stereo reproduction suffer when using a cartridge designed for CD-4?—M.J. Churchich, Omaha, Neb.

The Audio-Technica AT-20sia will probably work in the PL-71 tone arm, but the low-frequency resonance of the combination could get very close to the frequency of record warps—which could impair the tracking of discs that are not perfectly flat. CD-4 cartridges are perfectly capable of tracking two-channel discs, and, though their extended frequency response sometimes results in a slightly bright high end, the seriousness of
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Every Fuji cassette means beauty and purity in sound. No hiss, no dropouts. Widest frequency response and dynamic range. Total reliability. Fuji high-fidelity cassettes such as the FX will give you the best performance possible on your tape recorder. Already widely recognized by experts as the finest cassette in the world. Fuji. The cassette of the pro.
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It's Add 'N Stac® the world's only expandable cassette and 8-track storage system. Expandable because it provides as much tape storage as your collection calls for. Add 'N Stac® is a module, so you can buy only one or a few at a time. Each module has a patented interlocking device on all four sides. As your collection grows you simply lock one module into the next and—Presto!—expansion space.

Add 'N Stac® is available in either cassette or 8-track size. Both come in a selection of colors to help you match your decor or color-code your collection by category. Pre-drilled mounting holes let you create a striking wall unit, or if you prefer, stack an arrangement on a table or shelf.

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What you don't know about effective tip mass won't hurt you, just your records.

You can find out what you don't know by contacting us for our comprehensive cartridge brochure.

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CIRCLE 36 ON READER-SERVICE CARD

this effect varies from model to model and depends in part on the high-frequency behavior of the speakers you use. If, however, you do not intend to use the CD-4 capability, the extra expense for a cartridge of this type is probably not justified. Should you wish to avail yourself of the advancements in stylus design prompted by CD-4 while keeping a two-channel system, the new Pickering XSV-3000, which offers a unique combination of a new stylus design, optimization for stereo, and a price lower than that of most top-of-the-line CD-4 cartridges, could be your best bet. See this month's test reports.

My system contains an early model Garrard Zero 100 turntable with a Shure M-95ED pickup tracking at 1.5 grams. My primary source is recordings that I care for (perhaps to extremes) with a D-stat mat, a Zerostat gun, Sound Guard, and Dishwasher. While the quality control of recordings is variable, I feel that some of the problems I encounter may be more the fault of the changer (used only in the single-play mode) than of the pressings. I had the Garrard tested locally and found that it tracked well all but the most difficult areas of the test record. Still, certain records produce excess surface noise, pops, skips, and sticking on a groove. I also sense a shifting of dominance from channel to channel. In records that arrive warped, the tracking is erratic and the sound distorted.

I am trying to decide whether to replace the Z-100, and, if so, with what. I tend to prefer either radial or articulated arms, to minimize tracking error. My first choice would be a B&O, but I find it difficult to justify $750 for a turntable unless the difference in quality is that great. I also am considering the Rabco ST-7 and the new Garrard GT-55. With all of the claims made for the various turntables, however, I find it difficult to decide between them.—Dr. James S. Reid, Vienna, Va.

It seems to us that you have not yet made sure that the Zero 100 was at fault. What we suggest is that you take the records that are giving you trouble and play them on other turntables (particularly the ones you are interested in) and see if you get an improvement. Then you can decide what to do. And check your stylus. We have not reviewed the Rabco ST-7, but the Garrard GT-55 is reported on in this issue.

My Rectilinear XL-A speaker came with the duct port stuffed with sound-absorbent material. I have seen a photo of the speaker with grille removed, and it showed the port wide open. I removed the stuffing, and the bass response was better, but Rectilinear advised me that the port should be left sealed with the material as it "tunes itself." It said that using the speaker with the port open risks damaging the woofer from excessive cone excursion. Could you comment, please?—Peter Bourneuf, Hudson, Mass.

Clearly there is no point in creating a port and then literally sealing it again, but that is not what the sound-absorbent material does. Rather it provides damping at the low frequencies at which the port is effective. In cases like this, it's best to heed the manufacturer's advice. After all, Rectilinear designed the speaker.
The A-400.

"It should start designers at other companies rethinking many of the truisms of their craft."* 

We went to a front-loading design for the A-400 not to make it pretty, but to make it more functional. *High Fidelity* Magazine called it "...the most thoroughly satisfactory front-loading well design we have yet tested: practical, easy to use, unencumbered by 'extra' mechanisms that are potential troublemakers."*

Proven reliability. And typically TEAC performance. Whether you want the twang of a country guitar or the smoothness of a slap bass, the mellow sound of a ballad or the thrilling power of an opera, audition the A-400. You'll agree with the critics. It is something to think about.

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The leader. Always has been.

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Empire's Blueprint for Better Listening...

No matter what system you own, a new Empire phonograph cartridge is certain to improve its performance.

The advantages of Empire are threefold:

One: your records will last longer. Unlike other magnetic cartridges, Empire's moving iron design allows our diamond stylus to float free of its magnets and coils. This imposes much less weight on the record surface and insures longer record life.

Two: you get better separation. The small, hollow iron armature we use allows for a tighter fit in its positioning among the poles. So, even the most minute movement is accurately reproduced to give you the space and depth of the original recording.

Three: Empire uses 4 poles, 4 coils, and 3 magnets (more than any other cartridge) for better balance and hum rejection.

The end result is great listening. Audition one for yourself or write for our free brochure, "How To Get The Most Out Of Your Records." After you compare our performance specifications with those of other cartridges, we think you'll agree that, for the money, you can't do better than Empire.

Empire Scientific Corp., Garden City, New York 11530

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<td>I M DISTORTION</td>
<td>2% 2KHz-20KHz</td>
<td>2% 2KHz-20KHz</td>
<td>2% 2KHz-20KHz</td>
<td>0.8% 2KHz-20KHz</td>
<td>1% 2KHz-20KHz</td>
<td>1.5% 2KHz-20KHz</td>
<td>2% 2KHz-20KHz</td>
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<td>STYLUS</td>
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<td>30 x 10⁻⁶ cm/µN</td>
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<td>30 cm/sec @ 1 kHz</td>
<td>30 cm/sec @ 1 kHz</td>
<td>30 cm/sec @ 1 kHz</td>
<td>30 cm/sec @ 1 kHz</td>
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<td>30 cm/sec @ 1 kHz</td>
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<td>within 1/2 dB @ 1 kHz</td>
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<td>within 1/2 dB @ 1 kHz</td>
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<td>100K ohms/channel</td>
<td>100K ohms/channel</td>
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<td>TOTAL CAPACITANCE</td>
<td>under 100 pf/channel</td>
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<td>under 100 pf/channel</td>
<td>4.5 mV/channel</td>
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<tr>
<td>OUTPUT</td>
<td>3 mV/channel</td>
<td>3 mV/channel</td>
<td>3 mV/channel</td>
<td>4.5 mV/channel</td>
<td>4.5 mV/channel</td>
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CIRCLE 14 ON READER-SERVICE CARD
**Kenwood's 600-T—a Supertunable Supertuner**


Comment: The word "supertunable" in our headline refers to the 600-T's front-panel switch labeled IF BANDWIDTH and its three positions: NARROW, NORMAL and WIDE. Kenwood's engineers have decided to attack one of the fundamental problems in FM tuner design: the fact that selectivity and low distortion are mutually antagonistic. If one is improved, the other is degraded. Why this is so is explained for the technically inclined reader in the box that appears with this report; for the home user, the reasons are less important and the practical effect fairly easy to evaluate. NORMAL represents the best compromise between selectivity and distortion, and is the best place to leave the switch if you just don't want to be bothered; NARROW is the setting to use for fishing one station out of a crowd (if you can stand a tiny bit more distortion); WIDE will give the best sound of which the tuner is capable—if you're tuned to a fairly strong station that dominates its section of the dial.

The measurements made at the CBS Technology Center concentrated on the NORMAL setting. Suppression of noise by 50 dB in mono is achieved with a mere 12½ dB of input signal. At slightly above that level noise alone becomes the limiting factor; distortion is so small as to be swamped. A 19½-dB signal causes the 600-T to switch automatically to stereo, and that, for us, is a little too soon. Fortunately, at 34 dB, still a very modest level of input signal, noise in stereo is suppressed by 50 dB. At levels of 55 dB and above, the stereo signal-to-noise ratio is in the neighborhood of 67 to 69 dB. Even when distortion is taken into account the total quieting is well in excess of 60 dB, so that in most cases the quality of the broadcast itself will be the ultimate limitation. Separation—just about the best we've seen in a tuner—is far beyond that which the FCC demands of broadcasters.

Kenwood has provided the 600-T with a generous as-
sortment of front-panel indicators. In addition to the usual signal-strength and channel-center meters (the latter has unusually good resolution), there is a meter that reads percentage of modulation. At the touch of a button, this same meter indicates multipath. Instrumentation such as this makes the scope outputs provided on the back seem almost redundant.

Beyond the measurable effects of the IF BANDWIDTH switch in reducing distortion and improving capture ratio ever so slightly when set to the wide position, this control makes a difference that is subtle but definitely audible. With the wide bandwidth, the Kenwood delivers a listening quality that we judge superior to that of a tuner costing $100 more. Using the narrow IF, it is not quite the sonic equal of this reference tuner in devoting exclusive attention to one of a group of closely spaced stations, but with the 83 dB alternate-channel selectivity attained in this mode, it comes awfully close. In being as selective as all that, the NARROW position squeezes the signal a tiny bit out of shape and elicits protests in the form of slightly increased distortion (which is extremely low to begin with), with the greatest added distortion at very high signal strengths. It never becomes really serious, but the effect is sufficient, we think, to prompt an attentive listener to prefer the NORMAL and WIDE settings whenever they can be used successfully.

Looked at in toto the Kenwood 600-T is a true super-tuner. Its performance alone justifies inclusion in the class, and its instrumentation and control features are unusually comprehensive—even in such exalted company. While an experienced hand helps to get the best out of these controls, it is by no means required. And if you feel that, having paid a good deal of cash, you're entitled to keep your fingers unsullied by anything but the tuning knob (which is conveniently placed, even for southpaws), set the IF to NORMAL and relax. You won't get the very best the machine can deliver, but what you do get will be awfully good.

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Tuner Bandwidth and Distortion: What's the Story?

Soon after a radio-frequency signal appears at the input of an FM tuner, a circuit known as a converter shifts this RF so that it is centered at 10.7 MHz, the intermediate frequency—not the original, tuned frequency, and not yet audio. It is in this form (dubbed IF) that most of the signal amplification inside the tuner takes place.

It may seem that since the frequency deviation of ±75 kHZ is the normal maximum used in FM (stations sometimes overmodulate briefly), an IF bandwidth of 150 kHz is all that is necessary to recover the carrier. Mathematical analysis shows that this is not so and that in theory side bands exist at frequencies infinitely remote from the nominal carrier frequency. Fortunately, the side-band energy falls off rapidly enough that practical IF bandwidths give very fine performance with adequately low distortion.

But there is another problem: It has been shown that, when the high-order side bands (those near the edges of the IF bandpass) are shifted in phase with respect to the carrier, distortion is increased. Filters that cut off sharply characteristically cause more phase shift at the edges of their bandpass than toward the center. So while a sharp IF cutoff is necessary to prevent interference from stations near the one to which the apparatus is tuned, it inevitably increases distortion. Hence the inherent tradeoff in all FM tuners: selectivity vs. distortion.

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<th>INPUT IN MICROVOLTS</th>
<th>0.55</th>
<th>1.7</th>
<th>5.5</th>
<th>17</th>
<th>55</th>
<th>170</th>
<th>550</th>
<th>1.7K</th>
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<th>17K</th>
<th>55K</th>
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<td>FM SENSITIVITY &amp; QUIETING CHARACTERISTICS</td>
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<tr>
<td>19.5 dB (5.2 V) at 90 MHz for 14 dB quieting</td>
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<td>19.5 dB (5.2 V) at 90 MHz for 14 dB quieting</td>
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<td>STEREO NOISE &amp; DISTORTION: 30 dB for 9 dB</td>
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<tr>
<td>34 dB for 19 dB</td>
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<td>MONO S/N RATIO: 69 dB</td>
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<tr>
<td>STEREO S/N RATIO: 69 dB</td>
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AC OUTLET

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Variable Output Connections

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Output Connections

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Antenna Connections

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Scope Outputs (Det. Out.)

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Fixed Output Connections

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ON READER-SERVICE CARD

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28
Teac’s Entry in the Road/Home Deck Sweepstakes


Comment: It is sad but true that relatively few Americans have yet discovered the joys of “sound collecting” (as the PC-10’s manual calls it) with a portable recorder—preferably a high-quality cassette deck like this one. The Japanese, who are not nearly so shy about documenting aural events, have created the genre and the equipment for it; battery portables good enough to be used as home decks as well. When other companies have brought such decks into this country, reader interest has run high (surprisingly high, considering how little sound collecting seems to be done here), and now it’s Teac’s turn. The PC-10 is no-nonsense in appearance, sturdy in construction, and (at a hair over 9½ pounds without the six D cells) only moderately hefty for this class. Its transport controls (which follow the scheme of the A-400, on which we reported in May 1976) are unconventional and, at first glance, may seem relatively difficult to operate with the deck slung over one shoulder. On the contrary, we find that with a little practice you can get it even into the recording mode with one hand and practically no fuss. The fast-wind lever’s central position is a STOP—as is the left-hand position of the upper lever, for normal transport speed; these two are interlocked so that one must be in the STOP...
position if the other is to be activated. In one fast-wind mode the lever can easily and unintentionally be pushed right through STOP to the other extreme when, say, you're hurriedly trying to rescue the tape—a minor (but material) inconvenience, at least for one-hand-on-location work.

The PC-10 has no ON/OFF switch; engaging the transport controls automatically turns on the electronics. There is a recording pilot next to the REC button. Presumably to minimize battery drain, Teac has used no light here (simply a window through which a red flag shows when the button is pressed in), which makes it a bit hard to spot, depending on ambient light. The travel of the REC button is great enough, however, that you can check it—by eye or by touch. The light in the meters is normally out; in battery operation you can illuminate the meters momentarily by pressing the LIGHT button; in AC operation (or when meter visibility is more critical than battery drain) you can turn this button clockwise with a fingertip to lock the light on.

The meters follow Teac's usual scheme: They read average values but are equipped with a light-emitting diode to show when instantaneous signal values are in excess of 6 dB above the meters’ 0 VU. When the limiter, which is "downstream" of the meters and LED, is switched in, it will drop off any instantaneous signal values above about +3 VU on the meters (it is not a level-altering AGC) with surprisingly little compromise in sound quality even when driven hard. Since the metering is unaffected by the limiting, you can always tell how hard the limiter is being driven. So while most recordists will avoid using the limiter, at least for music, this one is particularly efficient and well suited to field use.

### Teac Model PC-10 Additio

| Speed accuracy | 0.13% slow at 105, 120, & 127 VA’2 |
| Wow and flutter | playback: 0.07% record/play: 0.10% |
| Rewind time (C-60 cassette) | 85 sec. |
| Fast-forward time (same cassette) | 82 sec. |
| S/N ratio (re 0 VU, Dolby off; un-weighted) | 80 dB |
| Erasure (333 Hz at normal level) | 65 dB |
| Crosstalk (at 333 Hz) | 40 dB |
| Sensitivity (re DIN 0 VU) | L ch: 120 mV R ch: 115 mV |
| Meter action (re DIN 0 VU) | L ch: 4 dB high R ch: 3.5% and 3.5% |
| Maximum output (re DIN 0 VU) | L ch: 1.5 V R ch: 1.5 V |

Other nice touches, especially for one-hand field recording in poor light, are the color coding of the channel elements (red for right on the outer ring, green for left on the central knob) in the recording level control and a stud on the ring that helps override the friction clutch for resetting one channel with respect to the other. The PC-10 does not permit mixing; the switch near the (phone) mike and (pin) line jacks selects one input pair or the other. A built-in monitor speaker is disabled in recording (to prevent accidental feedback) and reproduces the tape (in mono) on playback. Its level control can be turned all the way down when you are using headphones, which of course are live during recording as well as playback.

The data from CBS Technology Center confirms that technical performance is at least as good as the external suggests—and as one might expect from Teac. Distortion is very low. So is noise, though the lab made all its measurements with the AC power supply. (This is, in theory, worst-case because any AC supply will introduce some hum. Though spectrum analysis shows that 60-Hz and 180-Hz hum are present, they are less than in typical home decks and so small that their removal should produce little if any measurable improvement in weighted S/N ratios.) Motional stability also is excellent—thanks, presumably, to the DC servo drive that makes the transport speed independent of supply voltage (at least within the acceptable range
shown on the battery-check metering) and the transport stability free of the inertial effects introduced (when a portable is moved about) by the flywheels of garden-variety drive systems.

The tapes used to test the PC-10 were Maxell UDXL-I ferric and Fuji chrome. Frequency response is excellent with chrome tapes despite a slight rise in the midbass. Response is similar, though not quite as extended on the high end, with ferric tape. When the Dolby circuit is switched in, it shaves a bit off the treble, making the numerical performance characterization appear poorer, though the actual difference is slight.

Teac's switching (again, like that of the A-400) offers two options for bias and a similar pair for equalization. On both switches the "1" position is appropriate for chromium dioxide (or chrome-compatible ferricobalts like SA or UDXL-II), the "2" position for ferrics—preferably, on the basis of the lab data, the "energetic" types like UDXL-I, but the manual lists a number of more mundane formulations that would be appropriate for saving money at the expense of some high-frequency performance. For ferrichromes (Quad and Classic) Teac suggests the ferric bias position and the chrome equalization.

We find that personal feelings about what makes for an ideal battery-portable recorder run high and vary widely from one recordist to the next, so it would be foolhardy to make any across-the-board recommendation among the decks available for this purpose. It seems to us, however, that whatever an individual recordist's predilections, the PC-10 has to be among the major contenders for his ad-ration. The monitor speaker, while obviously not a paragon of audio, is a distinct asset in the field; the switching and other controls are exceptionally well thought-out in many respects; insofar as we can judge it, the unit seems unusually durable; performance is excellent.

CIRCLE 135 ON READER-SERVICE CARD

Pickering's Stereohedron—
New Shape for Stereo


Comment: Whatever the fate of CD-4 in the audio marketplace is to be, it must be credited with bringing about improvements in the design of phonor pickups. To achieve the wide bandwidth necessary for proper carrier reproduction, while maintaining stylus bearing pressures low enough to avoid scrubbing away the carrier, is in itself no mean feat, and to maintain accurate performance in the baseband region (that used for two-channel stereo) at the same time is harder still. The designers at Pickering accomplished these aims in the XUV-4500Q (their top model, intended for optimum performance with all discs including CD-4) and in the process became convinced that the special Quadrilateral stylus shape developed for the XUV performed better than an elliptical with two-channel material. Since the Quadrilateral style assembly is costly and represents an overdesign for stereo (including matrixed quad), some simplifications could be made. The result is the Stereohedron style, which is making its first appearance in the XSV-3000 pickup.

In the testing at the CBS Technology Center, the new cartridge presented some surprises, first by managing the required obstacle course with a vertical tracking force of just 0.4 gram. This is slightly less than that required by the XUV-4500Q, despite the fact that the recommended range of VTF is higher for the XSV-3000. (The balance of the tests were, however, carried out at 1½ grams VTF, the center of Pickering's recommended range.) The pickup is also somewhat more sensitive than its precursor and generally produces less harmonic distortion. Tested for maximum tracking levels, it gives data identical to those for the XUV-4500Q.

The frequency response is flat within ±1 dB up to 7 kHz, where it begins to rise into a familiar-looking high-end peak that is somewhat less prominent than that of the XUV-4500Q. Separation is 20 dB or better from 20 Hz to 20 kHz, reaching close to 35 dB at midband. IM distortion is slightly higher than that of the CD-4 cartridge, but still very low.

A 1-kHz square wave is reproduced very well by this pickup. The scope trace shows very slight overshoot with ringing (all ultrasonic) controlled unusually well. The low-frequency resonance, tested in a 12-inch SME arm, is between 7 and 8 Hz, indicating that, for best tracking of warped discs, the cartridge would prefer a less massive arm. The stylus tip has good geometry and alignment.

The sound of the XSV-3000 is, as one might expect, very similar to that of the XUV-4500Q, which is to say that it is very fine indeed. Instrumental timbres are well defined without becoming brittle, and there is a good stereo perspective with a nice sense of depth. Also, the relatively high output—measuring 1.24 millivolts per centimeter per second at 1 kHz in the right channel and ¾ dB less in the left—allows the user to keep gain lower, thereby improving attainable signal-to-noise ratio.

Pickering, as is customary for that company, has equipped the cartridge with a brush that rides ahead of the stylus to clean the groove. Proper tracking thus requires that an extra gram of VTF be added to compensate for the force exerted by the brush. We have found, however, that removal of the brush is sometimes advantageous (for the small reduction in mass, if nothing else) when it becomes necessary to play badly warped discs.
In all, we feel that Pickering has done very well in introducing the XSV-3000. The new unit offers the stereo performance of the XUV-4500Q (or perhaps a little better than that) at a lower price. It seems hard to go wrong with such a combination.

CIRCLE 131 ON READER-SERVICE CARD

Garrard’s Second-Generation Tangent-Tracking Automatic

The Equipment: Garrard GT-55, a two-speed (33, 45 rpm) automatic record changer with tangent-tracking tone arm and optional base and dust cover. Dimensions: 17 by 15¼ inches (top of base), 8½ inches high with dust cover closed, 18¼ inches clearance required with dust cover fully open. Price: chassis, $249.95; base, $15.95; dust cover, $9.95; deluxe base (includes dust cover), $39.95. Warranty: “limited,” one year parts and labor. Manufacturer: Garrard Engineering, Ltd., England; U.S. distributor: Plesey Consumer Products, 100 Commercial St., Plainview, N.Y. 11803.

Comment: When first introduced in the Zero 100, Garrard’s pivoted tangent-tracking tone arm constituted a breakthrough in accurate record-playing. At that time the tracking error measured by CBS labs was ±0.25 degree, and HIGH FIDELITY’s review called the new device “probably the best arm yet offered as an integral part of an automatic player.” But the arm had its drawbacks: It was fairly massive, and the multiplicity of pivots needed to maintain the tangent geometry resulted in relatively high friction, especially in the horizontal plane. The arm offered in the GT-55 has solved both of these problems neatly. Measured friction is now negligible in both planes, and a good deal of clever engineering has gone into reducing effective mass to a small figure—with a cartridge and counterweight in place.

Replacing the synchronous motor and rim drive of the Zero 100 is a new DC servo-controlled motor and belt drive. Speed change is now accomplished electrically rather than mechanically, which should result in greater long term reliability. Like its predecessor, the GT-55 maintains exactly speeds that are set at 120 VAC supply voltage when the voltage is changed to 105 and 127. The range of speed control exceeds the manufacturer’s spec (about a quarter tone in either direction) by a handy margin, and flutter, measured with ANSI/IEEE weighting, is 0.04%, well into the inaudible range. Total audible rumble measures −56 dB, using the ARLL weighting developed by CBS—better than acceptable in an automatic player.

Numerical documentation of the reduction in tone-arm mass is provided by the 7-Hz resonance measured with the Shure V-15 Type III cartridge. (The Zero 100 arm had a 6.5 Hz resonance with a less compliant cartridge.) In the present arm, the resonance is exceedingly well damped, showing a mere 1½-dB rise. Automatic tripping is accomplished with a stylus force of 0.2 gram, below the range where even feather touch fanatics attempt to track. The indicators for stylus force and antiskating force are right on the money, and a Garrard spokesman informs us that the antiskating is designed to adjust automatically for the change in angle as the arm moves across the disc. The rate at which the damped cueing control operates is adjustable from fast to slow. Slow is very slow indeed (4 seconds or more from release of cue to contact of the stylus with the disc) and can lead one to suspect that the unit has cycled off with the arm stuck up in the air, when such is actually not the case. The action is gentile in all cases.

Gentle also describes the way in which the GT-55 changes records. The fact that the controls are mechanically part of the system that supports the platter means that they must be worked with a very light touch if the tracking of the tone arm is not to be upset. Likewise, care must be used when adding a record to the stack while an-
The new 9090 DB is not only Sansui's new top receiver. We believe it is the finest on the market. Read its description and we believe you will believe as we do. Imagine yourself at the controls of the Dolbyized® 9090 DB just as you see them, lifesize, on these pages. As you touch them in real life you will be thrilled at the beautiful way the 9090 DB responds to your every wish. You will love how the controls give you a sense of power, and how this magnificent receiver permits that instant surge, that instantaneous response you want to hear through your speakers.

The built-in Dolby® Noise Reduction System does more than correctly equalize and decode Dolby® FM. With it you can make and play your own Dolby® processed tapes from any source, even if your recorder lacks its own Dolby circuitry. The 9090DB's triple tone controls give you a choice of 2 different frequencies where the treble and bass action begins, as well as a studio-type equalizer for the vital "presence" midrange. And our easy-to-read twin power motors show you at a glance just how much power your speakers are getting.

Look at what the Model 9090 DB stereo receiver offers. Even better, listen to it for yourself at your nearest franchised Sansui dealer.

### Audio Section

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<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Output:</strong></td>
<td>120 watts/6 channels, 92 watts/both channels driven into 8 ohms from 20Hz to 20kHz, with no more than 0.1% total harmonic distortion.</td>
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<tr>
<td><strong>IM Distortion:</strong></td>
<td>Less than 0.1% at rated min. RMS power output (70Hz - 7kHz = 4.1, SMPTE method)</td>
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<tr>
<td><strong>Frequency Response (1 WATT):</strong></td>
<td>150Hz to 30kHz ± 2dB from Aux to speaker terminals</td>
</tr>
<tr>
<td><strong>RIAA Phono Equalization:</strong></td>
<td>± 2.5dB, 500Hz to 30kHz</td>
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<tr>
<td><strong>Phone 1, 2 Sensitivity/Impedance:</strong></td>
<td>5mV/50k ohms</td>
</tr>
<tr>
<td><strong>Phone 1, 2 Maximum Input Capability:</strong></td>
<td>35mV at 4kHz, less than 0.1% total harmonic distortion</td>
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<tr>
<td><strong>Harmonic and Noise:</strong></td>
<td>Better than 80 dB (Aux, tape Monitor) better than 70 dB (Phone)</td>
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### FM Section

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<th>Feature</th>
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<td>9 kHz (1.7uV)</td>
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<tr>
<td><strong>50 dB Squelch Sensitivity:</strong></td>
<td>Mono: 12 dB (3uV)</td>
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<td><strong>Stereo: 25 kHz (6.5uV)</strong></td>
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<td><strong>Signal-to-noise ratio:</strong></td>
<td>Better than 70 dB</td>
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<td><strong>Input Harmonic Distortion:</strong></td>
<td>Mono, less than 0.2%</td>
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<tr>
<td><strong>Stereo, less than 0.3%</strong></td>
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<td><strong>Alternate Channel Selectivity:</strong></td>
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<td><strong>Spurious Response Ratio (IHF):</strong></td>
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<td><strong>Stereo Sensation:</strong></td>
<td>Better than 40 dB</td>
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<tr>
<td><strong>Frequency Response:</strong></td>
<td>50kHz to 5kHz, ± 0.5 dB, -0.2 dB</td>
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</table>

A whole new world of beautiful music.

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**Sansui Electronics Corp.**
Woodside, New York 11377 - Gardena, California 90247

**Sansui Electronics Co., Ltd., Tokyo, Japan**

**Sansui Almex HiFi S.A., Antwerp, Belgium**

In Canada: Sansui High Fidelity Distributors.
other is playing. Other than that, the player is quite simple to operate. It can be used manually, manually with automatic start and stop, automatically as a changer, or in its REPEAT mode (which will play a side over and over until you push the STOP button). The entire change cycle takes 12 seconds. A set of accessories is provided, including a short single-play spindle, a long spindle for multiple play, a single-play adapter for 45-rpm discs, and an overhang gauge.

In sum, we find the GT-55 a worthy successor to the Zero 100. Nowhere does it fall short of good mechanical performance, and its inherent flutter is about the lowest we have ever measured in a changer. As was the case with its predecessor, its particular strength is its tone arm, which provides accurate tangent tracking at a down-to-earth price. It looks as if Garrard has done it again.

CIRCLE 14 ON READER-SERVICE CARD

**Akai’s Deck**

**Is Stacked—**

**In Your Favor**


Comment: Cassette decks with three heads are not your common, everyday components, and the reason is not at all obscure. Simply, the opening of the front of a compact cassette gets a nite crowdsed when it has to accommodate the extra head. But the problem can be solved—and, as the Akai GXC-570D proves, in first-rate style. Few parts have been spared to stack the deck with just about any feature a recordist might want.

As inveterate readers of these pages know, we have expressed reservations about front loading because of the extra complications that often attend it. The 570D’s “well,” is, however, on a par with top loaders in this respect. I lead cleaning is not particularly easy despite a remov-able door panel, but it is not particularly hard either.

Under the transparent plastic door that extends across the top of the deck are the less often used controls. So that you can impress your friends (says Akai), or possibly to keep fingerprints off the plastic, the door is opened and closed by a motor controlled by a front panel button—but working it manually does no harm.

The transport controls are a set of capacitance switches (which barely need finger proximity—much less a positive push), triggering solenoids. This gives the deck an elegant operational feel quite unlike that of most competing units. Each of the buttons (except stop) has a lighting indicator to show when it is engaged. There is an interlock—via a “logic” system—so that you can go directly from a fast wind mode to PLAY, but the deck will pause for an instant before the drive actually engages, to prevent tape damage. The only way we could find to confound the logic was to press the EJECT button during fast wind (which we don’t recommend, even to impress your friends). In one of a number of times we startled a tape. Using the slowest wind speed might have prevented this, but as the lab data show, the wind speed is fairly zippy at any setting of the control.

This control scheme does impose on the user some operating habits that might not otherwise be required. First, the sensitivity of the switches makes it easy to trigger fast wind when you reach for the sensitive switch. (We learned this the hard way—by running a few recordings.) Second, the solenoid operation is so quick that the PAUSE offers no particular advantage in stop-go operations. Moreover, the PAUSE leaves an audible click on the tape during recording, which the STOP and RECORD/PLAY do not. Since incoming signals can be metered by setting the MONITOR switch to SOURCE without setting the deck to record, we suggest that users simply ignore the PAUSE for most purposes.

The MONITOR switch (used with care) is one of the things that makes recording with this Akai deck so much. You always know exactly what is going onto the tape and how it sounds coming back off. A headphone output is provided (with a moderate, nonadjustable drive level) so that you can retain this capability while recording live. The meters are large and have scales that extend to +40 dB. They also are switchable to either peak-reading mode or normal VU (averaging) characteristics. Measurements made at CBS labs show that the calibration is such that DIN VU level reads out at +2 dB in peak mode and +6 dB (beyond the meters’ calibration range) in VU mode, an arrangement that strikes us as very sensible, since in the faster mode the extra 8 dB of headroom can easily be dispensed with. The meters track each other just about perfectly in
Big as life.
either mode, as do the steppled recording controls. Line and mic inputs (black-panel pin jacks and front-panel phone jacks, respectively) have separate pots for each channel and can be mixed. A single knob controls the output level for both channels and does not affect meter readings. The limiter does what it should, but we feel that it would be a shame to use it as anything but a method of last resort. With a signal-to-noise ratio exceeding 60 dB (with Dolby), the 570D has sufficient dynamic range for most recordings; but the limiter should be useful for recordings (of live-music events, for example) in which peak levels can’t be predicted, where (as in conference recordings) levels are all over the lot, or in situations that require the recording to be occupied elsewhere instead of monitoring the controls. For this last situation, the optional RC-18 remote-control unit ($50, not tested), which plugs into the back panel, may be particularly handy.

The tapes with which the lab tested the 570D (at Akai’s suggestion) were Fujifilm’s (its lower-pitch formulation) in the Low noise position, BASF Chronoid in Chrome, and Sony Dual Ferrichrome in FE2. Of course the accessor REC calibration controls, plus the monitoring head, make this deck unusually easy to readjust for other tapes that differ from these three only in sensitivity; we were able to get excellent results with a number of alternate tapes. And, as the graphs show, response is unerringly extended on the high end (if a little peaky in some curves at the extreme top), very flat throughout the midband, and rolls off just a bit in the bass. Playback response from the DIN test tape is unusually flat throughout the range. Distortion figures are fairly typical of current cassette equipment of good quality with midband harmonic distortion commendably low.

Speed figures are shown with the inCh control adjusted for correct speed at 120 volts. With this control (which has an adjustment range of about ±2%) set at its central click-stop, the deck measures 0.6% fast. Comparison of this figure with those for measurements made at other line voltages suggests that Akai has designed for correct speed at the click-stop and a line voltage somewhere between 105 and 120 VAC (the condition one encounters most often in typical home conditions) with only negligible variation as line voltage changes within accepted limits. This plus the excellent wow and flutter figures add up to fine motional stability.

The Akai GX-570D strikes us as a most appealing cassette deck, suitable for live recording as well as the mundane work of dubbed and preserved ephemera from FM. In most respects it is convenient to operate and performs at a high level close to the state of the art. Cheap it is not, but then decks so stacked (with features) do have a way of costing money. There’s no card sharp here, so the deal works in your favor.

**CIRCLE 193 ON READER-SERVICE CARD**

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<th>FREQUENCY</th>
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<th>50</th>
<th>100</th>
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**HARMONIC DISTORTION CURVES**

- **LINE INPUT**
  - L ch: 130 mV
  - R ch: 130 mV
  - Total harmonic distortion (THD): 0.07%
- **REMOTE CONTROL**
  - L ch: 1.5 V
  - R ch: 1.5 V

**RECOMMENDED USE**

- **LINE INPUT**
  - L ch: 3.5 mV
  - R ch: 3.5 mV
  - Total harmonic distortion (THD): 0.07%
- **REMOTE CONTROL**
  - L ch: 1.75 V
  - R ch: 1.75 V
  - Total harmonic distortion (THD): 0.07%

**SPECIFICATIONS**

- **Power Output Min RMS per channel, both channels driven into 8 ohms at rated Total Harmonic Distortion:**
  - 125 watts @ 0.1% THD
  - 85 watts @ 0.2% THD
  - 40 watts @ 0.5% THD

**INPUT/OUTPUT LEVELS**

- **LINE INPUT**
  - L ch: 3.5 mV
  - R ch: 3.5 mV
  - Total harmonic distortion (THD): 0.07%

**RECORDER PLAYBACK RESPONSE**

- **LINE INPUT**
  - L ch: 1.5 V
  - R ch: 1.5 V
  - Total harmonic distortion (THD): 0.07%

**DIN PLAYBACK RESPONSE**

- **LINE INPUT**
  - L ch: 1.5 V
  - R ch: 1.5 V
  - Total harmonic distortion (THD): 0.07%

**CHARACTERISTICS**

- **Wow and flutter**
  - Playback: 0.04%
  - Record: 0.06%

- **Rewind time (C-60 cassette)**
  - L ch: 6.3 s
  - R ch: 6.3 s

- **Fast-forward time (same cassette)**
  - L ch: 6.3 s
  - R ch: 6.3 s

- **Signal-to-noise (S/N) ratio (0 dB)**
  - Playback: L ch: 56 dB
  - Record: L ch: 51 dB

- **Wow and flutter (0 dB)**
  - Playback: L ch: 41 dB
  - Record: L ch: 41 dB

- **Error (333 Hz at normal level)**
  - 70 dB

**CROSSTALK**

- **Line input**
  - L ch: 1.3 mV
  - R ch: 1.3 mV
  - Total harmonic distortion (THD): 0.07%

- **Remote control**
  - L ch: 1.3 mV
  - R ch: 1.3 mV
  - Total harmonic distortion (THD): 0.07%

**SPEAKER IMPEDANCE**

- **LINE INPUT**
  - L ch: 1.3 mV
  - R ch: 1.3 mV
  - Total harmonic distortion (THD): 0.07%

- **REMOTE CONTROL**
  - L ch: 1.3 mV
  - R ch: 1.3 mV
  - Total harmonic distortion (THD): 0.07%

**METER ACTION**

- **Remote control**
  - L ch: 2.0 dB
  - R ch: 2.0 dB
  - Total harmonic distortion (THD): 0.07%

**IM DISTORTION**

- **Record/playback**
  - L ch: 0.7 db
  - R ch: 0.7 db

**MAXIMUM OUTPUT (NEO 3 V)**

- **Remote control**
  - L ch: 1.5 V
  - R ch: 1.5 V

**Note**

- **SN ratio**
  - L ch: 56 dB
  - R ch: 56 dB

**SENSITIVITY**

- **LINE INPUT**
  - L ch: 1.3 mV
  - R ch: 1.3 mV
  - Total harmonic distortion (THD): 0.07%

- **REMOTE CONTROL**
  - L ch: 1.3 mV
  - R ch: 1.3 mV
  - Total harmonic distortion (THD): 0.07%

**Maximum output (DIN 3 V)**

- **LINE INPUT**
  - L ch: 1.5 V
  - R ch: 1.5 V

**Note**

- **SN ratio**
  - L ch: 56 dB
  - R ch: 56 dB

- **SENSITIVITY**
  - L ch: 1.3 mV
  - R ch: 1.3 mV
  - Total harmonic distortion (THD): 0.07%

- **REMOTE CONTROL**
  - L ch: 1.3 mV
  - R ch: 1.3 mV
  - Total harmonic distortion (THD): 0.07%
Meet Your Record Collections’ New Best Friend—

TOTAL CONCEPT!

Fine recordings have many enemies. The moment a recording is taken from the jacket, it must face them—dust, dirt, grime. All do their best to turn your new recordings into old, worn-out ones. That's why Audiotex Laboratories developed Total Concept—specially formulated record care products for your record collection. Products designed to prolong the life of your records. So get acquainted with Total Concept: With all the dust, dirt, and grime that's around, your records need all the friends they can get.

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All the record maintenance accessories you need for total record care. Kit contains one each of Record Plus, Record Basic, Record Purifier and Blue Max.
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Record Basic
Aerosol foam dissolves hardened contaminants and restores records to original condition. Simply spray on record, allow to bubble, then wipe dry with Record Purifier.
Cat. No. 30-8530

Record Purifier
Cat. No. 30-8535

Blue Max
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CIRCLE 5 ON READER SERVICE CARD
JVC Looks at Binaural Hearing

Apparently dissatisfied with the extent to which word of its technological research was reaching the public, JVC America invited us and other members of the press to its New York headquarters and showed us some of the things it has been working on. This gave us a rare opportunity to peep over the shoulders of some research engineers, and one of the subjects that really struck our fancy was JVC’s investigation of binaural hearing.

It has been known for some time that material recorded through microphones positioned so as to act as the “ears” of a dummy head can, when played back via headphones, create an uncannily realistic representation of the original sound field. What is not understood, however, is why this effect does not always work quite properly and how and why it varies from one person to another. JVC, it appears, would like to perfect binaural localization via headphones and also via loudspeakers, if that is indeed possible.

One of the shortcomings of conventional binaural listening is that some subjects find it difficult to distinguish sounds occurring directly in front from those that occur directly in back. This is not easy to do in all real situations, but most of us can accomplish it fairly well. On the hypothesis that sound waves impinging on the skin of one’s face might constitute one directional clue, the JVC engineers have designed a headset that projects sounds above 500 Hz from outboard transducers located several inches forward of the listener’s face and those at lower frequencies from drivers set above (but not on) the ears. For us, the effect of this prototype—which is not scheduled to be introduced as a product—was astounding: We could almost have sworn that we were where we were not. It was disappointing to learn that the system still does not work as well for everyone.

What astonished us even more is that binaural listening can be synthesized without headphones—that is, using loudspeakers. The conditions under which this can be done are rather special, requiring a fairly “dead” room, controlled directional characteristics in the loudspeakers, electronically processed program material, and careful positioning of the listener in the room. But it does work. It is positively unsettling to have a disembodied voice whisper to you from a point just a few inches from your ear, especially when the sensation—not just the sound, but the tingling of the outer ear as well—is so convincing that you are relieved that the “ghost” didn’t eat onions for lunch. This bit of conjuring can be done using two or four channels, the major advantage of quad being that localization of sounds coming from the back is more accurate than with two channels.

Obviously, this system is still far from the marketplace, so neither we nor JVC can tell you when you can buy one—or even, for sure, what it will be called. But we had a lot of fun seeing and hearing the binaural tricks that can be played in the lab right now.

Pioneer Supports Live Music

U.S. Pioneer has announced that its program of matching contributions to the New Jersey Symphony has succeeded in raising more than $7,000. According to Bernie Mitchell, president of the company, the program was initiated to assist the financially pressed Symphony and maintain it as a strong cultural force in the state. Mitchell, who had personally solicited all New Jersey audio dealers, said in acknowledgment of cooperation received from them and others outside the state: “We are delighted we could provide this support. We owe a great deal to music, and this seemed like the ideal way for Pioneer and its dealers to show that appreciation.”

Buoyed by this success, Pioneer is planning a nationwide matching-funds program in support of the Metropolitan Opera.

And . . .

- The IM Fried Products Company of Philadelphia and IMF Electronics Ltd. of Great Britain have announced a settlement of their legal tangle regarding the trademarks IMF and IMF International. According to the agreement, the
Wolfgang Amadeus Mozart—music's greatest natural genius—divinely gifted beyond any other musician who ever lived! And into his six greatest symphonies he poured a multitude of his most astonishingly beautiful, incredibly moving inspirations!

Symphony No. 41, “Jupiter”
Symphony No. 40 in G-minor
Symphony No. 39 in E-flat
Symphony No. 38, “Prague”
Symphony No. 36, “Linz”
Symphony No. 35, “Haffner”
Extra! Symphony No. 32

Now you are invited to hear these miraculous works in their finest recording... interpreted with extraordinary empathy by Karl Böhm... played to perfection by the Berlin Philharmonic Orchestra... captured in unsurpassed stereo realism by Deutsche Grammophon. So outstanding is this recording that it has won three of the music world's most eagerly sought honors: the Grand Prix International du Disque, Edison Award and Deutsche Schallplatten Prize! In addition, you will also receive Mozart's Piano Concertos Nos. 12 and 26, “Coronation,” superbly performed by soloist Geza Anda with the Salzburg Camerata Academica—winner of the coveted Grand Prix des Discophiles.

Now enjoy and keep these 4 superb albums for less than the price you pay for 1!

Because these magnificent recordings have met with almost unprecedented acclaim, they have been chosen to introduce you to The Great Awards Collection, a totally new concept in home listening. You may enjoy all eight masterpieces, on four superb-quality, imported records, for 10 days absolutely free. Then keep all four, if you wish, for only $6.98 (that's less than the price you pay for just one record)!

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Here's how the program works...

As a member of The Great Awards Collection you will receive only the finest recordings of prize-winning concert performances by preeminent orchestras, conductors and soloists. There is no minimum number of recordings you must buy. And you can cancel your membership at any time. What's more, every superb recording you choose to examine comes to you on a free 10-day trial basis. So you'll never waste a penny on disappointing purchases!

Approximately 14 times a year you will receive the current issue of our Great Awards Collection Bulletin highlighting an exceptional Selection of the Month and other brilliant classical releases recommended by a distinguished jury of musicians, scholars and musicologists. If you want to examine the Selection of the Month you need do nothing. It will be shipped to you automatically. If you want any other selection, just mark your choices on the order card you will receive and return it by the date specified. If you do not want any selection, just check the proper box on your order card and return it by the date specified. It's that simple!

Special half-price bonus offer saves you money!

In addition to great music, you'll enjoy great savings with our half-price bonus plan. For every record you buy at our low members' price (always well below suggested retail), you may choose another one from a list of award-winners and other critically acclaimed LPs and pay just half that price! A truly economical way to build your library of superb classical recordings.

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How many records are you committing yourself to buy when you return the attached coupon? None at all! Even your introductory set of Mozart's Six Greatest Symphonies and Piano Concertos 12 and 26 comes to you on approval. Audition it free for ten days, then either return it—or keep it for only $6.98 for all four records (plus a small postage/handling charge). Here at last is the ideal way to acquire a connoisseur's record library in easy stages. You listen at home to every award-winning selection you elect to examine before deciding whether to buy it! Please act today! Begin your money-saving, no-obligation membership in The Great Awards Collection by mailing the coupon for your free trial, with four -for-less-than-the-price-of-one purchase option of this essential collection of Mozart's Six Greatest Symphonies and exquisite Piano Concertos Nos. 12 and 26.

Eight ways The Great Awards Collection helps you enjoy fine music more than ever!

1. The greatest music by the world's immortal composers.
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British company may call itself IMF Electronics and use that designation on its loudspeakers. The American company is permitted to use the style Fried Products Company and the mark FRIED on its loudspeakers. Neither will use the initials IMF alone.

- Henry E. Kloss has resigned his position as director of research and development for Advent Corporation of Cambridge, Massachusetts, the company he founded in 1967.

- Audio-Technica U.S. recently signed an agreement with Nimbus 9 Productions, Ltd., a Canadian recording company, for exclusive rights to import and distribute its Umbrella label of direct-to-disc record albums in the U.S. Like the celebrated Sheffield direct-cut discs, the Umbrellas bypass tape recording in their manufacture for superior dynamic range and clean transients with reduced noise and distortion. The limited-edition discs, which are individually numbered, will retail for about $12.95.

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**Equipment in the News**

**Advent's successor to the 201**

The Model 201A cassette deck from Advent is the successor to its Model 201. The updated deck features a new record/play head made of Sendust alloy, which combines the best characteristics of permalloy and ferrite, and a headphone amplifier. It retains the 201's Dolby system and equalized peak-reading metering, and so on. Frequency response is rated at 28 Hz to 15 kHz ± 2 dB. Wow and flutter, according to Advent, is less than 0.15%. Fully automatic end-of-tape-shutoff is provided in the Model 201A, which costs $399.95.

**Bose advances with Series III**

The Bose 901 Series III is completely re-engineered from the original 901 using new techniques and materials. One result, according to Bose, is more than 5 dB greater efficiency. Recommended amplifier power range is from 10 to 70 watts (10 to 18½ dBW). The new driver has an injection-molded plastic frame, which is said to eliminate leakage of the magnetic field. A larger cone is specially shaped for extended high frequency response, and a helical aluminum voice coil is edge-wound in a single layer for greater density of conductive material in the magnetic gap. The enclosure, called Acoustic Matrix, is designed to reduce cone motion and distortion. Suggested price is $750 per pair including equalizer.

**Arp Minus Noise Mixer**

The Model 8 from Arp is an 8-channel stereo mixer designed for in-performance use and billed by the manufacturer as a Minus Noise Mixer. To get less noise out than goes in, Arp first designed a mixer with super-low-noise, direct-coupled, balanced-input circuitry; preamplifiers with selectable gain; and EQ and control sections constructed of high-grade, low-noise components. The Minus Noise then adds the Arp Dynamic Noise Filter, which is said to analyze the whole signal and decide what is music and what is noise. Levels can be monitored with a peak reading LED display. A sequenced power supply keeps the mixer silent when it is turned on and off. Built-in LED channel indicators blink to let you know what instrument or mike is connected to which slider. The price is $895.
AUDUA is one of the world’s finest cassette tapes. But it’s not the best cassette tape made by TDK.

Our SUPER AVILYN (TDK SA) has the edge. And that’s only if you’re using the special bias/equalization setting on your tape deck.

However, if you’re using the normal or standard setting, you’ll have to settle for AUDUA—second best.

Chances are you won’t find anything better, or with more consistent sound quality, for decks with normal tape selector settings. In other words, even if you don’t own extravagant equipment, with AUDUA you can still hear extravagant sound reproduction.

You see, because of AUDUA’s superior dynamic range at the critical high-end, you’ll hear any music that features exciting “highs” with an amazing brilliance and clarity you won’t get with any other tape. (And when it comes to open-reel tape, you’ll probably find nothing comes close to AUDUA open-reel for reproducing highs.)

Whatever AUDUA you use—cassette or open-reel—you’ll hear your system like you’ve never heard it before.

But there is something else you should hear before you try AUDUA. The price.

Unlike other so-called “super premium” cassettes, AUDUA’s price is down to earth. (That should make AUDUA sound even better.)

Compared to what others consider their best, there’s just no comparison.

So try the second-best cassette we’ve ever made.

You won’t find much better.

TDK Electronics Corp.,
755 Eastgate Boulevard,
Garden City, New York 11530.
Also available in Canada.

Wait till you hear what you’ve been missing.
New tweeter in EPI speaker

EPI Loudspeakers, a division of Epicure Products, has announced the EPI-101, which has a one-inch air-spring tweeter with a phenolic cap support that is said to reduce distortion. Linearity of the 8-inch woofer is increased by using a light, stiff cone and an improved spider and voice-coil assembly. Recommended amplifier power range for the speaker is 12 to 75 watts (11 to 19 dBW). Frequency response is rated at 46 Hz to 20 kHz. The EPI-101, in a wood-grain vinyl cabinet with bronze trim, is priced at $119.95.

Analogue 520 preamp

Analog Engineering Associates of Florida has begun marketing its line of audio products with the Analogue 520 modular stereo preamp. Features include two tape monitor circuits, continuously variable Summation Filter loudness compensation, the Multi-Path Feedback circuit credited for the unit’s low transient distortion, and a phono section with three gain stages. Analog Engineering claims an RIAA frequency response of 20 Hz to 25 kHz (+0, -½ dB) and total harmonic distortion of less than 0.005% at any frequency from 10 Hz to 20 kHz. The Analogue 520 costs $590.

MXR's Comander

The MXR Comander, according to MXR Innovations, Inc., is capable of doubling the dynamic range of most open-reel and cassette decks. The noise-reduction device compresses the dynamic range of signals during recording and expands them during playback. This process, says MXR, reduces noise sufficiently for the quietest passages to be heard while musical peaks are reproduced without distortion. The Comander is also said to eliminate the need for level adjustments by processing all frequencies at all levels in a similar manner, and it can be used with DBX-encoded recordings. The price is $129.95.

Economy speaker from Jensen

The Model 20, a compact, two-way speaker from Jensen Sound Laboratories, uses an 8-inch woofer and 2-inch cone tweeter. Maximum power rating is 40 watts (16 dBW), and frequency response is rated at 35 Hz to 20 kHz. The Model 20 has a wood cabinet covered in walnut-grain vinyl and costs $59.95.

Servo-motor cassette deck from Sony

The premiere model in a series of Sony servo-motor cassette decks introduced by Superscope is the TC-206SD. Like other recorders in the group, it is equipped with Dolby, Dolby FM, ferrichrome equalization, and a peak limiter. The TC-206SD, a front-loading deck with mike/line mixing, costs $349.95. The other units in the line range in price from $199.95 to $299.95.
The Test of Time.

Critics were most generous in their praise when the Shure V-15 Type III phono cartridge was first introduced. The ultimate test, however, has been time. The engineering innovations, the uniform quality and superb performance of the V-15 Type III have made it the audiophile's choice as the source of sound for the finest music systems both here and abroad.

Consider making the relatively modest investment of a new cartridge to upgrade the performance of your entire hi-fi system. It will make a difference you can hear!

The original manuscript by J. S. Bach shown is reproduced by kind permission of the Trustees of The British Museum.

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TECHNICONNER
MODEL V-15 TYPE III
Tracking Force Range: 3/4 to 1 1/4 grams
Frequency Response: 10 to 25,000 Hz
Typical Tracking: (in cm/sec peak recorded velocity at 1 gram)
400 Hz: 26 cm/sec 1,000 Hz: 38 cm/sec
5,000 Hz: 35 cm/sec 10,000 Hz: 26 cm/sec
Channel Separation (Minimum): 25 dB at 1 kHz, 15 dB at 10 kHz
Stylus: Model VN3SE Biaxial Elliptical, 5 x 18 microns (.0002 x .0007 inches)
Also available: Model V-15 III G with the VN3 G Spherical stylus, 15 microns (.0006 inches)
Model VN78E Biaxial Elliptical stylus, 13 x 63 microns (.0005 x .0025 inches) for mono 78 rpm.

MANUFACTURERS OF HIGH FIDELITY COMPONENTS, MICROPHONES, SOUND SYSTEMS AND RELATED CIRCUITRY.

February 1977
**Tandberg's Fasett speakers**

The Fasett speaker is a bass reflex system whose multifaceted enclosure allows unusual versatility of placement and angling. The perforated front plate is said to allow the highest audible notes to pass unhindered. Impedance is rated at 4 to 8 ohms, frequency range at 50 Hz to 20 kHz, and maximum continuous power at 25 watts (14 dBV). The Fasett is available in black, antique white, and orange and costs $160 a pair.

**New mixer from Tapco**

The latest entry in the Tapco mixer line is the 6200 six-in, two-out, PA recording mixer. Each channel includes a pan pot, high and low equalization, effects send, and rotary volume pot. Two additional switched equalizations affect both output channels: The microphone equalization provides a rising response with 9 dB of treble boost at 20 kHz; a rumble filter effectively provides 6 dB per octave of rolloff and is 6 dB down at 100 Hz. The master section provides a separate effects control for each output and can be used to drive a mono PA without interfering with the stereo buses. Frequency response is rated at ± 1 dB, 15 Hz to 40 kHz; harmonic distortion at 0.06%; equivalent input noise at -128 dBV. The 6200A (unbalanced mike inputs) sells for $349, the 6200B (balanced mike inputs) for $454.

**Barzilay's expandable entertainment center**

New from Barzilay is a three-piece entertainment center, designated the EEC-1. Its end elements can be pulled away from the central unit, increasing its length from six feet (as shown) to ten feet and tailoring it to a wide variety of home entertainment systems. The cabinet is finished in walnut veneer with solid walnut moldings. The center section includes a record rack and has tambour doors that open and close together and disappear into the cabinet when open. The EEC-1 will sell for about $400.

**Dubie Recording Control System**

The Dubie Tape-Aid Corporation of Oklahoma has introduced its Recording Control System, a combination mixing/fading console. The Dubie Model CD-5, which can accept up to three tape recorders with one amplifier, has multitrack, sound-effect, and editing applications. Monitoring switching is provided, and fading controls allow professional fade-out from one sound source to another. The CD-5 costs $69.95.

**Peavey's portable microphone mixer**

New from Peavey, the 600S is a portable stereo mixer that features six channels, each with a high- and low-impedance mike input, variable input attenuator, separate bass and treble equalization, a stereo pan pot, independent monitor send, independent effects send, and a slide-control output fader. There are four aux inputs as well. The master section provides separate low and high EQ for the A and B stereo outputs. Master-section controls include effects level, reverb contour, effects return, and effects pan. Three slide faders control the A and B and monitor output levels. Frequency response is rated at 20 Hz to 20 kHz with less than 0.1% harmonic distortion, equivalent input noise at -123 dBV, output at 5 volts rms. The price is $424.50.
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Indianapolis, Indiana 46268

February 1977

49
HiFi-Crostic No. 21

by William Petersen

**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. 21 will appear in next month’s issue of High Fidelity.

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**INPUT**

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 1 | F | 2 | N | 3 | U | 4 | O | 5 | Y | 6 | W | 7 | S | 8 | M | 9 | T | I | 10 | X | 12 | Q | 13 | N | 14 |

---

**OUTPUT**

| 196 | 180 | 75 | 212 | 150 |
| 171 | 101 | 53 | 144 | 37 | 178 | 21 | 195 |
| 115 | 18 | 184 | 64 |
| 183 | 83 | 41 | 20 | 202 | 109 | 2 |
| 201 | 30 | 166 | 120 |
| 105 | 54 | 158 | 136 | 192 | 71 |
| 80 | 121 | 69 | 200 | 130 | 31 | 97 | 223 |
| 114 | 52 | 140 |
| 72 | 172 | 110 | 62 | 221 | 25 |
| 34 | 81 | 188 | 160 | 214 |
| 156 | 70 | 107 | 45 | 147 | 168 | 226 | 213 |
| 88 | 166 | 17 | 35 | 94 | 131 | 77 | 161 |
| 14 | 152 | 55 | 66 | 43 | 210 | 218 |
| 116 | 3 | 23 | 196 | 46 | 174 | 103 |

---

**INPUT**

A Jazz trumpeter (1906-54), had own band in the 1940s
B German opera producer (1888-1971) who, after Hitler’s rise to power worked in England and then in Latin America (full name)
C Reduced, i.e., arranged from a larger score (f.)
D Dutch-American jazz accordionist (1924)
E French violinist and composer (c. 1661-1755)
F Libretto by Metastasio first set to music by Niccolò Contorio
G Sign indicating very staccato
H Handel oratorio
I With Word $ Debussy pretude (2 Fr. wds.)
J One thousandth of an inch, used to specify size of a stylus
K British choreographer (b. 1906) On dine Fa
cade
L Polish-American soprano who created role of Turandot at La Scala
M English composer (1905-71), Julian Bream recorded his Elegy for Guitar
N Bellini opera based on Shakespeare’s Romeo and Juliet (5 fr. wds.)

---

**OUTPUT**

196 180 75 212 150
171 101 53 144 37 178 21 195
115 18 184 64
183 83 41 20 202 109 2
201 30 166 120
105 54 158 136 192 71
80 121 69 200 130 31 97 223
114 52 140
72 172 110 62 221 25
34 81 188 160 214
156 70 107 45 147 168 226 213
88 166 17 35 94 131 77 161
14 152 55 66 43 210 218
116 3 23 196 46 174 103

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**INPUT**

O After La, ballet with music by Henri Sauquet, based on Aesop fable
P English organist/composer (1679-1774) SIX SELECT Odes
Q In ballet, jumps in which the dancer lands with feet together, having joined them in the air
R Congregational replies to the officiant
S See Word I (3 Fr. wds.)
T Indication to play in an undertone (2 Fr. wds.)
U Mendelssohn’s Fifth (3 wds.)
V Practice performances
W Ballet with music by Liszt, orchestration by Gordon Jacob
X Butterfly’s aria (4 Fr. wds.)
Y Won, as a tournament without losing a game (slang)
Z Atmospherics

---

**OUTPUT**

38 187 155 5 197 137
129 26 182 198 111 175 207 73
190 65 227
27 118 86 179 57 13 141 209
96
127 187 40 89 206 104 8 185 132
49 164 117 204 102 8 185 132
68 149 224 173 11 125 84 205
139
208 191 15 162 24 113 42 78
219 146 32 99 169 189 90
63 157 177 4 139 223 216
22 74 154 33 199 145 133 98
122 165
142 211 59 163 28 50 128 67
7 85 222
12 100 143 79 170 19 225 219
124 153 92 60 181 112
95 6 126 220 51
58 91 193 44 108 217

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**Solution to last month’s HiFi-Crostic appears on page 6.**
JVC builds in what other receivers leave out.
A graphic equalizer.

The only way you can equal the realistic sound capability of JVC's modestly priced S300 stereo receiver, is by adding an expensive, but highly versatile graphic equalizer, to another receiver.

For the price of a conventional receiver in its price range, the S300 has built-in JVC's exclusive graphic equalizer system. With five zone controls to cover the entire musical range. While most high priced receivers offer bass and treble controls, and some include a third for midrange, none approach the precision and flexibility of the SEA graphic equalizer system developed and patented by JVC.

371,293 ways to hear better sound.

By adjusting the five detent tone controls covering the frequency range at 40Hz, 250Hz, 1,000Hz, 5,000Hz and 15,000Hz, you can create 371,293 different sounds. A feat never before achieved (with a stereo receiver) outside a professional recording studio. But then, the S300 is a JVC professional.

Get better performance from your components and listening room.

Why do you need such tremendous variations in tone? Quite simply, they help you to overcome the shortcomings of the acoustics in your listening room; they also can help you to compensate for the deficiencies in old or poor recordings.

Finally, they can do wonders for the frequency responses of your speakers, and where you place them.

SEA is really quite easy to use. For example, the 40Hz switch reduces record rumble and can add greater clarity to the ultra low bass of an organ. The problem of booming speakers is simply handled with the 250Hz switch. And in the important midranges, the 1,000Hz control adds new dimension to the vocals of your favorite rock performers, while the 5,000Hz switch brings out the best in Jascha Heifetz. You can even reduce tape hiss and diminish the harsh sound of a phono cartridge at high frequencies, with the 15,000Hz control. Then, to double check any adjustment, SEA works with a tone cancellation switch which permits you to instantly compare your setting with a perfectly flat response.

SEA adjusts the sound of your system to the size of your room.

You see, small rooms tend to emphasize high frequencies, while large ones accentuate the lows. But the ingenious SEA allows you to compensate for room size and furnishings — so your system can perform the way it was meant to, wherever you are.

While most manufacturers reserve unique features for their top of the line model, JVC has included SEA in three of its receivers. The S300, the S400, and, of course, the top professional — the S600.

When you hear these receivers at your JVC dealer (call toll-free 800-221-7502 for his name), think of them as two components in one. In fact, it's like having all the benefits of a graphic equalizer... without buying one.
RTR sound is a singular creation

Like the human voice and all things striving for perfection, RTR sound systems have only one maker. Each critical component is designed and manufactured by RTR. From hard-wound voice coils to hand-rubbed cabinetry, everything fits and operates as one. Thus RTR systems approach the perfection of realistic sound.

Few others are so dedicated. They create systems from the components of many manufacturers—often including transducers built by RTR. Though they build fine speakers, they build only finite systems. That is the law of group creation.

If you strive for realistic sound at a sound price, seek your nearest franchised RTR dealer. He will show you a singular solution.

ED MILLER

Fourteenth in a series

To most people who know something of the history of the audio industry, the name of Ed Miller is associated with Sherwood Electronic Laboratories, Inc., which he helped to found in 1955. But Miller had already made his mark nine years earlier, at the age of twenty-five, at Radio Craftsmen—a manufacturer of truly classic components, though the name is virtually unknown to current audiophiles of less than middle age. It was there that he solved the "drift problem" then plaguing FM tuners by introducing an automatic frequency control into the circuit. The basic idea behind AFC was already in the engineering textbooks, but he was the first to incorporate it into an FM tuner.

Born in Cincinnati, Miller earned a degree in electrical engineering at the University of Cincinnati in 1943. Even as a student, he was a radio hobbyist with a penchant for FM. He held various jobs, including some time with Stewart-Warner, a stint as laboratory engineer with Naval Ordnance, and a period in the research labs of General Electric, before he joined Radio Craftsmen in Chicago in 1945. As he rose to vice president and director of engineering, he was largely responsible for that company's entry into the manufacture of high fidelity tuners and amplifiers, and by the mid-1950s it was among the largest producers of FM tuners. But it was apparent that the distribution setup was ailing. A brief attempt to bypass retail dealer outlets and sell by mail order was unsuccessful, and Radio Craftsmen folded.

Miller then joined forces with Emil Plank, John Snow, and John Clark of Elrad, a radio coil manufacturer. They started Sherwood—named after the Chicago suburb of Sherwood Forest where Miller lived—as a subsidiary of Elrad. (Today Sherwood is the owner of Elrad.) Snow and Clark have continued in administrative posts; Plank, who served as production chief, died in 1967. Miller, as vice president and general manager, proceeded to direct the engineering and production of a long succession of tuners, amplifiers, and receivers that quickly gained a reputation as being among the best available. Providing the best possible value to the music-lover, rather than the best attainable performance in absolute terms, was the philosophy behind this reputation.

The distinctive styling of the products was among Miller's contributions. At a time when most audio components still looked as if they belonged more properly in a studio than in a living room, Sherwood began using a low-profile design with startling white front panels that framed colorful controls and tuning dials. The components also came "prewrapped" in finished cases (no tubes or transformers were visible) that could be set right on a shelf or cabinet top. Some models eventually were offered with color options so they could be tailored to room decor. This emphasis on decorative appeal...
Experience the genius of the "great musician of all time"—as you may never have experienced it before

**The Definitive Beethoven Collection**

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**THE BEETHOVEN BICENTENNIAL SERIES**

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10-day free audition: To introduce you to this incomparable collection we invite you to audition Volume I, the first six symphonies plus the popular Leonore Overture No. 3, for 10 days FREE. These selections were performed by the renowned Berlin Philharmonic Orchestra under the direction of Herbert von Karajan. Highlighted in Volume I are:

- **SYMPHONY NO. 3** in E Flat Major—the "Eroica."
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- **SYMPHONY NO. 6** in F Major—the "Pastoral."

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---

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This huge, handsomely commemorative volume—now out of print—covers the master and his work in rich detail. Includes much material never available to the public before. 267 pages, 268 illustrations in color, and black and white—music scores, paintings, drawings, manuscripts, etc.

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Yes, I would like to examine the first album of the **Beethoven Bicentennial Collection**. Please send it to me—together with my free $29.50 Beethoven book—for 10 days' free examination and enter my subscription to the **Beethoven Bicentennial Collection**. If I decide to keep the first album, I will pay $19.95 plus shipping and handling. I then will receive future albums in the Beethoven Bicentennial Collection, shipped an album at a time approximately every other month. Each is $19.95 plus shipping and handling and comes on a 10-day free-examination basis. There is no minimum number of albums that I must buy, and I may cancel my subscription at any time by notifying you.

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The phono cartridge that doesn’t compromise any modern record.

AT15Sa

Choosing an AT15Sa can add more listening pleasure per dollar than almost anything else in your hi-fi system. First, because it is one of our UNIVERSAL phono cartridges. Ideally suited for every record of today: mono, stereo, matrix or discrete 4-channel. And look at what you get.

Uniform response from 5 to 45,000 Hz. Proof of audible performance is on an individually-run curve, packed with every cartridge.

Stereo separation is outstanding. Not only at 1 kHz (where everyone is pretty good) but also at 10 kHz and above (where others fail). It’s a result of our exclusive Dual Magnet design that uses an individual low-mass magnet for each side of the record groove. Logical, simple and very effective.

Now, add up the benefits of a genuine Shibata stylus. It’s truly the stylus of the future, and a major improvement over any elliptical stylus. The AT15Sa can track the highest recorded frequencies with ease, works in any good tone arm or player at reasonable settings (1-2 grams), yet sharply reduces record wear. Even compared to ellipticals tracking at a fraction of a gram. Your records will last longer, sound better.

Stress analysis photos show concentrated high pressure with elliptical stylus (left), reduced pressure, less groove distortion with Shibata stylus (right).

The AT15Sa even helps improve the sound of old, worn records. Because the Shibata stylus uses parts of the groove wall probably untouched by other elliptical or spherical styli. And the AT15Sa Shibata stylus is mounted on a thin-wall tapered tube, using a nude square-shank mounting. The result is less mass and greater precision than with common round-shank styli. It all adds up to lower distortion and smoother response. Differences you can hear on every record you play.

Don’t choose a cartridge by name or price alone. Listen. With all kinds of records. Then choose. The AT15Sa UNIVERSAL Audio-Technica cartridge. Anything less is a compromise.

was complemented by controls that avoided unnecessary technician-oriented complications found on many competing designs.

In 1970, Miller left Sherwood, partly because of a yearning for a change of scenery: He and his wife, Nan, decided they wanted to live in California. Another reason was a disagreement with Sherwood stockholders over their intention to move manufacturing facilities to the Orient.

The two forces coalesced into a decision when Miller was approached by Morris Kessler, president of a small company in Los Angeles known as SAE (Scientific Audio Electronics, though the full name is seldom used), whose ten employees produced a line of amplifiers, preamps, and equalizers. Miller designed its FM equipment and a digital tuner, and soon became head of the SAE engineering department.

He left for a year to become engineering manager of Acoustical Control, reportedly the third largest manufacturer of public-address and music-performing amplifiers in the U.S. But the seeds planted at SAE bore fruit; the company grew, and he was asked to return in 1973. For a time he worked with a young engineer named James Bongiorno, who had replaced Miller during the year-long break from SAE and who designed its present line of amplifiers. They were a formidable team of technical talent.

In late 1974, Bongiorno decided to go out on his own. The first product of his Great American Sound Company (he has neither confirmed nor denied that he chose the name for its acronym GAS) was a kit for building a high-powered amplifier. A year later, he succeeded in persuading his old working partner to join him at GAS. There was a brief period when Miller worked for both companies at the same time, which probably is something of an innovation in a highly competitive industry and also perhaps indicative of a new spirit of technical fraternity abroad in the audio field in recent years.

GAS has since ceased to make kits and is now making fully assembled preamps and power amps, of which the Ampzilla (definitely intentional humor) is probably the best known. Miller reports that the company, of which he now is part owner, “is growing like wildfire” and may produce a tuner in the foreseeable future.

Tall, lean, and athletic at fifty-five, Miller retains all the enthusiasm for high fidelity sound that drove him in his salad days. His sole hobby is botany, and the results of his work in this area enhance his reputation as a man with an exceptional ability to make things grow.
The Sensuous Speaker.

Yamaha’s new two-way beryllium dome NS-500.
A very responsive speaker with a rich, luscious sound. A deeply involving sound.
Highly defined, finely detailed.
The NS-500 is created from the same advanced beryllium technology that’s made Yamaha’s revolutionary NS-100 Series speakers, in the eyes and ears of many audio experts, the highest standard of sound accuracy. (Specific benefits of Yamaha’s beryllium technology have been documented in a paper presented to the 52nd Convention of the Audio Engineering Society.)
With the NS-500 you get all of beryllium’s advantages: transparency, detail, and lack of distortion that go beyond the best electrostatic speakers, but at a price roughly half that of the NS-100C. Only $500 the pair, suggested retail price.

The joy of beryllium.
The ideal dome material for a high frequency driver must respond instantly to changes in amplitude and frequency of the input signal. So the ideal dome material must be virtually weightless as well as extremely rigid.
Beryllium is the lightest and most rigid metal known. Its density is less than two-thirds that of commonly used aluminum, and its rigidity is almost four times as great—thus preventing dome deformation and consequent distortion. What’s more, beryllium’s sound propagation velocity is twice that of aluminum.
The beryllium dome found on the NS-500’s high frequency driver is the world’s lightest—about half the weight of one petal of a small sweet-scented rose. Which is one of the reasons for this speaker’s exceptional sensitivity and response. And for its sensuous sound.

A closer look.
To be able to offer the sophistication of beryllium at a more affordable price, without sacrificing quality of performance, Yamaha designed the NS-500 as a two-way bass reflex system. This gives the NS-500 a trace more emotion at the low end than the resolutely objective NS-1000. But it also gives the NS-500 more efficiency—91dB SPL at one meter with one watt RMS input. Which means you don’t have to invest in the highest powered amplifiers or receivers in order to drive the NS-500 to its full rated output.
For an apt num match with the beryllium tweeter, Yamaha developed a very light, very rigid "shell" woofer. And a special hermetically-sealed air core LC crossover with a carefully selected 1.8kHz crossover point.
As a result of these design parameters, the NS-500 boasts an insignificant 0.2% THD below 50 dB SPL, from 40 Hz to 20 kHz making it the perfect complement to Yamaha’s state-of-the-art low distortion electronics.
Underneath the sleek monolithic styling of its solidly crafted enclosures, the NS-500 is full of many exclusive Yamaha features and distinctive Yamaha touches of craftsmanship.
But to fully appreciate the beauty of the NS-500, you really should visit your Yamaha Audio Specialty Dealer.
Which brings us to something else.

Something more than just another speaker pamphlet.
Yamaha’s Reference Handbook of Speaker Systems is a very thorough guide encompassing all aspects of speaker design, performance, and evaluation. Starting with a detailed explanation of speaker design principles, the discussion then turns to a solid base of objective criteria, written in easily understood language, to help you properly evaluate any speaker in any listening environment. Already a much sought-after reference work among audio professionals, Yamaha’s Reference Handbook of Speaker Systems is available at your Yamaha Audio Specialty Dealer.
At $5.00 a copy, it’s well worth the cost. However, if you clip out the coupon in the bottom corner of this page, take it to your Yamaha Audio Specialty Dealer and hear a demonstration of the exciting NS-500 or any other Yamaha speaker, the book is yours for half the price.
And if you’re not familiar with the name of your local Yamaha Audio Specialty Dealer, drop us a line. In turn, we’ll also send you a free preprint of the Audio Engineering Society paper on Yamaha beryllium technology mentioned above.

This coupon is worth $2.50 off the $5.00 suggested retail price of Yamaha’s Reference Handbook of Speaker Systems, when presented to any participating Yamaha audio dealer, with a demonstration of any Yamaha speaker system.
Offer expires March 1, 1977.

YAMAHA
P. O. Box 6500, Buena Park, CA 90622

CIRCLE ON READER-SERVICE CARD
Most tests of cassette quality concern themselves with the tape itself; in fact, they concentrate almost exclusively on the thin layer of magnetic material on one surface of that tape. In one sense, this is as it should be. A cassette is only as good as the electromagnetic performance of its oxide. But in another sense it also is only as good as its shell, because a tape that jams or skews excessively or breaks will not deliver the performance that the oxide is capable of.

Testing the mechanical parts of the shell is far more difficult than testing oxide performance, however. There are few accepted standards; mechanical behavior of the shell depends in large part on the transport in which it is used; and some properties—jamming, for example—are a question of probabilities, rather than repeatable and therefore measurable behavior. So while there are some important clues by which the prospective purchaser can assess the likelihood of mechanical misbehavior, there are no "figures of merit" by which he can compare cassettes—nor even any firm consensus about optimum design in some respects.

Unlike open-reel tapes, whose mechanical handling is performed entirely by the recorder, cassettes become an integral part of the tape-drive system once they're inserted into the transport.

A frequent contributor to both consumer and professional audio journals, Robert Angus was the author of a historical survey of record piracy in HF's December 1976 issue.

The pressure to hold the tape against the magnetic heads comes not from the deck, but from a pressure pad built into the cassette. Some of the guides that help line up the tape for correct azimuth are built into the cassette shell. The shell determines just how freely the tape can move from one hub to the other. And so on. Experienced cassette users, armed with this understanding, have learned that a careful physical examination can lead to some educated guesses about how well, and how long, the cassette is likely to perform.

There are twenty-three parts, more or less, in a well-made cassette. (The exact number depends on who made the cassette and who's doing the counting.) There are legitimate differences of opinion within the tape industry about how these parts should be made and about which ones aren't absolutely necessary.

For example, is a cassette whose two halves are screwed together better than one that is sonically welded? Most premium-priced cassettes use screws, and most quality-conscious tape buyers believe that screws are superior to welding. The reasons are obvious: It's possible to remove screws to make internal repairs when necessary. Or, if you're simply curious about how well the cassette is put together, you can take it apart and see for yourself. But sonic welding is more than a technique for hiding defects or an economical shortcut. Ed Hanson, the technical manager of North American Philips (Philips introduced the cassette,
and Hanson probably knows more about its internal workings than any other man in the U.S.), points out, "There is no doubt that sonic welding results in a stronger, mechanically more precise cassette—but only if several contributing details and parameters are met." Those parameters include precision molding of parts, proper design of stiffening ridges within the cassette shell, and choice of material to prevent plastic flow. But Hanson notes, "Should the pressure and time cycle of the welding process be incorrect, the result may be either a cassette that is mechanically weak or, at the other extreme, insufficient clearances for the tape and stresses within the welded parts."

Columbia Magnetics feels that the inaccessibility of the interior of a welded cassette is a positive rather than negative feature since it prevents idle fingers from tampering. A spokesman for Memorex adds that when screws are not tightened evenly they are more likely to cause bowing of cassette shells than an even sonic weld along the entire seam. Toyota Cassettes says that this possibility is overshadowed by the greater likelihood of overpressing the sonic weld in the sealer, causing the cassette to exceed mechanical tolerances—something far less likely to happen with screws.

But generally the experts are agreed on one point: The presence of screws alone really tells you very little about cassette quality. The possibility of repairing a jammed screw-closure cassette, but not one that is welded, remains.

The physical appearance of the shell itself tells you more than the method of closure does about potential mechanical failure. Is the molding of good quality? Are there rough edges or bits of excess plastic in any of the holes on the front edge of the cassette or along the seam? These bits of plastic, known as flash, are the hallmark of sloppy molding (and hence poor mechanical tolerances). So are gaps between the upper and lower halves along the front edge. The edges of the openings at the front of the cassette should be straight and seams should be joined tightly.

Styrene is the basic ingredient of most cassette shells, but the exact type and grade vary from one manufacturer to another, and some producers add chemicals to overcome some of the material's shortcomings. General-purpose styrene has the advantage of being transparent, making it possible to mold the viewing window as an integral part of the cassette shell. Among the manufacturers who use it are Scotch, Audio Magnetics, and Intermagnetics. The main problem with general-purpose styrene is that it tends to shatter easily, so most manufacturers resort to a medium-impact or high-impact styrene for their better cassettes. The trouble with these materials is that their natural color is an opaque ivory (though pigment can be added to the styrene during molding to change its color without altering other properties), so you no longer can see the tape through it.

Pure styrene does have a tendency to lose dimensional stability under some conditions. One of them is heat. If you want a cassette you can leave safely on top of a radiator, it will have to have something added to the styrene. The most common additive is polycarbonate, a surface coating that not only retards warpage due to heat, but also makes the shell less shatter-prone. No matter how closely you examine a cassette, you have no way of knowing whether or not it contains this sort of stabilizer.

Cassette manufacturers make their shells rigid by using the maximum thickness of plastic permitted by the technical specifications and by molding interior ridges and supports to stiffen the shell against warping or bowing. The intent is to keep the top and bottom from pressing inward, which would inhibit tape movement and misalign the relative positions of the shell, the tape, the recorder's heads, and the drive system.

Windows to permit viewing of the tape pack are generally conceded to be necessary, and most makers feel they should be as large as possible. When it comes down to particulars, however, consensus weakens. Windows integral to the shell win hands-down approval from most, even though they can be fabricated only in shells of general-purpose styrene. Manufacturers using other styrenes must glue or weld the panels or resort to flexible polyester—actually part of the slip sheet. Some cheap designs use a narrow open slit that offers neither good visibility nor protection from dirt. The rigid window, integral or inserted, offers greatest protection, but there always is the possibility that inserted windows will fall out—or that sonic welding or inexact insertion will create a protuberance inside the cassette.

While most cassette-shell halves look identical, they actually are not. "Whether the halves are asymmetrical or symmetrical doesn't affect the cassette performance if both molds are made with a great deal of care and attention to the accuracy of the tape guiding surfaces," advises John Taylor of the 3M Company. Virtually all manufacturers have found that dissimilar halves facilitate cassette assembly, circumventing problems of tape spill and damage.

There is heated controversy among cassette makers as to whether a resilient foam pad glued directly to the shield or a felt pad glued to a metal spring provides better tape-to-head contact. Even the engineers within BASF are split down the middle on this question; those in Europe are convinced that the small felt pad outperforms a larger foam block, those in the U.S. prefer foam. Memorex, a major advocate of foam, points out that spring pads are more easily damaged. Measurements made by BASF (in this country) show that
foam produces more uniform tape-to-head contact. Norelco notes that "either type of pressure pad can create or cure problems," and 3M in effect concurs, indicating that both types can be designed to meet Philips specifications.

From the consumer’s point of view the important variables (beyond the materials used) appear to be the size of the pad; the care with which it’s centered on the tape path; the weight of the spring, if any (metal fatigue can be a problem); the quality of adhesives used; and the frictional characteristics of the pad. For example, some felt pads are actually a thin layer of felt glued to an undercushion on a copper or beryllium strip. There’s some indication that these combination pads produce greater tape-to-head pressure—with resulting friction—than pure felt.

Foam pads, according to their critics, have several drawbacks. They tend to flop over in the direction of tape travel, thus increasing drag and impairing tape-to-head contact. Foam pads—though, like most plastics, they have a restorative "memory"—tend to become deformed over a period of time and exert less pressure against the head. And, says Teac, they may wiggle back and forth during playing. TDK says its tests show that felt is more durable.

All of this may leave you with the feeling that the choice of pressure-pad design is pretty much of a tossup. To a large extent this is true, particularly since you normally have no opportunity to view its construction in advance of purchase. But there is an important moral to be learned: Make a habit of inspecting the pad before you use the cassette, particularly with the more easily damaged spring type. Deformation of the assembly—let alone a pad that has come unglued—means loss of head contact and consequent loss of fidelity.

Behind the pad, whether foam or spring-mounted, is a mumetal shield designed to confine the magnetic field created at the recorder head. Absence of a shield almost certainly would increase noise levels on the tape pack inside the cassette. Some of these protective devices are simply rectangular plates, while others are C-shaped, with brackets to support the copper or beryllium spring. Memorex and Maxell (in UDXL) use a bathtub-shaped shield. Indications are that all of them do the job and that the bathtub type is not measurably more effective than a well designed and installed rectangle.

When Audio Magnetics introduced leaderless XHE cassettes, some tape hobbyists raised eyebrows. Wouldn’t the tape tend to stretch at the end of fast forward or rewind? Actually, a number of tape experts—including several who sell cassettes with leaders—agree that there are advantages to the XHE approach. Says Norelco’s Hanson, "Leaderless cassettes have been found acceptable for average-length (up to twenty-three minutes) re-

When a cassette shell of almost identical external appearance is opened (this is from KDK—see "News and Views," January 1977), a number of significant differences are apparent. Stainless axle has been replaced by a plastic pin (A) molded integrally with shell. Idler (B) has no flanges; slightly wasp-waisted contour is relied on to keep tape centered. Tape clamp (C) is same design as that in TDK, but fit is not nearly as precise. Window (D) appears to be carelessly hand-glued, which can result in bumps to impede tape motion—particularly since slip sheet (which otherwise would appear at E) has been omitted.

Typical quality construction is visible when this TDK cassette is opened. Tape pancake (A) feeds past molded stud (B) and idler assembly (C), which consists of a stainless-steel pin or axle (D) and a flanged plastic wheel (E). Screws (F) hold shell halves together via molded holes. Hub (G) has, in this case, a C-clamp tape-end lock (H). Shield (I) is a plain rectangle of mumetal; pressure pad (J) is felt, mounted on a metal spring assembly. Viewing window (K) is a separate piece of clear plastic, neatly and securely attached to shell. Slip sheet (L) covers all of both pancakes, with cutouts only for hubs and window. Ribs (M) not only stiffen shell, but help guide tape onto idler wheel.
corded music cassettes. Moreover leaderless cassettes up to sixty minutes in length (whose tape thickness is 10 microns) offer very few problems. As the tape thickness decreases to 12 microns or less, however, there can be severe looping problems with cassettes that have low internal friction. It's interesting to remember that the original function of the leader, specified as 1.5 mils thick, was to prevent the capstan in a battery-operated recorder from grinding through the tape, should the machine be left on at the end of the run."

An Advent spokesman adds that all leader tape is more abrasive than recording tape, so eliminating it should increase head life slightly. Audio Magnetics points to some other advantages: the recordist can begin recording immediately without precueing to the end of the leader or guessing when it has run out; there are no splices—which can be subject to failure.

If leaders cause so many problems, why do most manufacturers use them? Because the public expects them, says Advent. The longer the leader, the smoother the tape pack, claims Toyota, because this thicker tape covers the notch or bump at the point where it's attached to the hub. With thin, leaderless tape, pressure of layers above can cause indentations and deformation of the tape itself by the hub. Memorex and Maxell rely on their leader tapes to sweep the heads of iron oxide particles, while 3M notes that leadered tape is less likely than leaderless to pull up over the tape pack, causing a jam, when the cassette suddenly reaches the end in fast forward or rewind. The best reason of all for leader, says a Certron spokesman, is that it increases tape strength at the hub, where breakage is most common.

Also of importance is the way in which the tape or leader is fastened to the hub. Aside from the obvious possibility of failure at this connection, poor design here can affect the entire tape "pancake" and contribute to drag and jamming. The most common fasteners are pins, C-clamps, and one-piece latch clamps. To visualize the difference, consider the hub, a perfect circle, with a small notch cut out of it. The leader fits into the notch, and a pin is inserted to hold the tape. Or consider the hub with a cutout area roughly resembling the letter C. A corresponding clamp fits into the space, anchoring the leader at both ends of the clamp. The one-piece latch looks somewhat like a C-clamp except that one end is hinged to the hub itself.

Most automated cassette assembly facilities find the pin the easiest to insert. It provides secure attachment and good leader alignment, but it can form a bump that may deform the tape around the hub. Advocates of the C-clamp point to the advantages of anchoring the tape in two places, not just one. However, if the pin or clamp doesn't fit tightly, the tape can pull out; if the fit is too tight, it

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Quality cassettes need not be screw-closed, as explained in the text. This one, from 3M, is welded and demonstrates a number of other alternate designs. Pressure pad (A) is large and mounted on foam "spring." Idler and guide stud are replaced by large, metal-clad stud (B). Tape clamp (C) is integrally molded with hub.

When Memorex entered the cassette market, it designed its own shell from the ground up, with results that are still unique in some respects. Foam-mounted pressure pad is housed in "bathtub" shield (A) for maximum protection of tape head from stray hum fields. Molded axle (B) holds oversize, flanged idler (C). Tape clamp (D) is pin, held in narrow notch. Huge window (E) offers tape visibility exceeded only by transparent-shell cassettes and requires specially shaped slip sheet (F).
So-called special mechanics (a term actually introduced by BASF for a different design) are introduced into this Audio Magnetics cassette as a "floating" plastic guide (A) that travels in slot between two ribs (B) and guides tape between pancake and idler wheel. This is one of the leaderless designs in which tape end (C) is attached directly to hub. Window (D) is distinguished from rest of transparent shell—of which it is an integrally molded part—only by relief "frame" that surrounds it. To preserve transparency, small slip sheet (E) also is made of clear plastic.

can cut the leader during assembly. 3M's solution is a one-piece latch that eliminates possible differences in the dimensions of pin or clamp and hub by making both part of the same mold.

Just inside the left and right front corners of the cassette shells are two very important little subsystems for tape guidance. The main element of each generally is an idler or flanged wheel, riding on an "axle" that may be a separate metal pin (usually of stainless steel) or a post molded as part of the shell. Just "beyond" the idlers—that is, toward the hubs and away from the head openings in terms of the tape guidance path—there generally are two fixed posts over which the tape must pass on its way from the hub to the idler.

Some manufacturers use a fixed post instead of the idler wheel. 3M is one company that uses both: While an idler assembly, plus controlled drag to prevent slack tape on the supply-hub side, is used in its more expensive products, its least expensive ones have fixed posts that guide the tape and contribute the needed hold-back drag. Both types can be made to meet international specification limits, says 3M, as long as the post is designed with a sleeve or other modification that will provide the accuracy of guidance and drag required. Recorded cassettes often get away with a simple, unmodified post—but only because they contain significantly less tape than a C-60.

Norelco's Hanson believes that there is only one answer to this design question: flanged rollers of Delrin or Celcon on stainless-steel axle pins. Recently, however, there have been flanged rollers mounted on triangular molded plastic pins that ride on a larger center hole and, Hanson finds, meet high fidelity requirements.

The flanges on the roller must be wide enough to permit the tape to move freely, while also keeping it in proper position relative to the recorder head. The size of the flange, the angle at which it's tapered and the precision of the molding all are important. The diameter of the roller, too, is a factor. Capitol, for example, uses oversize rollers to smooth tape movement. Roller problems may occur when the axles are either plastic or conventional, nonstainless steel. It's virtually impossible, some manufacturers believe, to mold plastic pins to exact tolerances; and conventional steel rusts, causing friction. The opposite camp counters that even stainless pins can be mounted so that they're not perpendicular, resulting in extra friction and in tape skewing, and that integrally molded axles are always the same from sample to sample.

Finally, there's the matter of the slip sheets—the plastic sheets that fit between the tape pack and the cassette shell. Their function is to remove static charge and to control the movement of the tape within the cassette by exerting just enough pressure on the pack during play or fast wind to keep it flat. Antistatic electrical conductors like graphite and films like Teflon and polyester frequently are used, with graphite-loaded Teflon the most widely accepted. Its frictional characteristics are uniform, and it provides a cassette with long-term stability under a wide range of storage and operating conditions. Philips in Europe, and Capitol in the U.S., use pleated slip sheets to control the tape for flatter pancakes than are otherwise
possible. (Special mechanics—floating guides built into the shell itself by BASF and Audio Magnetics—attempt to do the same thing.) In addition, they lessen the tension at the end of the tape during fast winding. Some manufacturers use paper slip sheets; Certron’s have silicone impregnation.

Which is better—Teflon, paper, or polyester film? Opinions vary with the manufacturer, who must consider factors like the low cost of paper, the greater stiffness and resistance to wear of polyester, the desirable electrical and frictional properties of Teflon. Since graphite may rub off on the tape pack and find its way onto tape guides or recorder parts, some manufacturers use slip sheets with the graphite impregnated in, rather than coated on, the outside.

The amount of tape inside the cassette shell plays an important part in the over-all design. Again, you can get away with things in a C-30 (or a thirty-minute recorded cassette) that would never work in a C-90 or C-120. TDK has taken advantage of the extra space inside its C-45 cassettes to experiment with an oversized hub that provides lower torque than the conventional hub, for gentler tape handling.

TDK also addresses itself to the opposite end of the duration spectrum. Its C-180 looks to the untrained eye like a well-designed C-60 or C-90, even when you take it apart. If there is a difference between this and other cassettes, it’s in the slip sheet: a piece of high-density graphite-impregnated polyethylene. Despite the absence of any special mechanics, TDK has had virtually no complaints of jamming or other mechanical problems with these cassettes.

If that’s the case, why are tape dealers so reluctant to recommend and hobbyists so reluctant to use C-120 cassettes? “Bad early experience,” answers Advent. “Today, a properly designed and manufactured C-120 is almost as reliable as a C-90.” Radio Shack points out that the thinner tape coating puts a limitation on recording level, particularly in low frequencies; Maxell adds that there’s greater printhrough; Capitol says that the thinner tape is much more likely to stretch when subjected to undue stress.

There are, in sum, reasons for avoiding the longer cassettes: somewhat restricted electromagnetic performance and somewhat greater chance of mechanical failure by contrast to C-90s and, especially, C-60s. But the present C-120s (and C-180s) hardly merit the outright embargo so often placed on their use as a result of past waywardness. And the improvement is not necessarily in the cassettes themselves; a fragile cassette is less likely to misbehave in a modern deck with well-controlled transport mechanics than in the relatively crude designs that once were common—though such designs linger on in inexpensive decks and battery portables.

But usually fragility is not what makes one “major brand” less desirable than another in terms of mechanical performance. The criterion today is not whether the tape will move, but how accurately it will move. As a gauge of this, there is growing concern with tape skew.

All cassette tapes skew; that is, they “wiggle” as they pass the heads so that tape-to-head alignment varies, in both azimuth and height, from moment to moment. If all elements over which the tape passes in moving from supply hub to take-up hub are perfectly aligned in a single plane and introduce no wobble or other motion of their own—and are consistent in the friction they present to the tape—skew should remain at a minimum. Skew is affected by all of the design considerations discussed in this article, and therefore its measurement might be expected to serve as an index of the cassette’s mechanical quality.

Unfortunately, it can only be measured in an operating deck (for example, by comparing phase between channels with an identical test signal recorded on both), and that means that any measurement perforce includes skew induced by the deck itself. In other words, two cassettes that display identical skew on one machine might not be equally good when measured on another. And no standard method of measuring skew or expressing the results of those measurements has been adopted by the industry. But there is hope for the development of an acceptable cassette-measurement technique along these lines.

In the meantime, the prospective purchaser must base his assessment of mechanical performance on two primary factors: his experience with a given brand in his own recorder (just because one brand behaves itself in your neighbor’s is no guarantee that it will in yours) and an examination of those visible details that bespeak care or sloppiness in design and assembly. Imprecise molding does show: as flash, as poorly mated parts, as unevenly shaped surfaces. Look also for pressure pads that are askew. Even carelessly affixed labels bespeak a want of craftsmanship. If all else fails to show up a winner in a comparison, try shaking the cassettes. Hubs and other free parts will clatter about to some extent in any cassette; but if the ones you are testing sound like a child’s rattle, you can be reasonably sure that internal tolerances are too great for reliable performance.

The acid test, however, is use. Because your deck interacts mechanically with the cassettes you use, each is only as good as its performance in combination with the other.
Will the Elcaset Make It?

Assessing the future of the newest tape format

by Larry Zide

It is 1977, and the folklore that forecasts the introduction of a new tape format every few years has once again been fulfilled. Rumors had begun to sprout as early as late 1975, and by mid-1976 there was little doubt about what was to come. It was, of course, the Elcaset.

What is an Elcaset? To the eye, it is simply a large cassette, and its very name reflects that fact—"El" (L) for large, plus a simplified spelling of "cassette." The volume of its casing is such that it would hold just about four standard cassettes.

Like a standard ("compact") cassette, the Elcaset plays or records in a transport designed for it. But beyond that, most things are different. For one, the tape travels at 3 3/4 inches per second, twice the speed of the cassette's tape. For another, the tape is a full quarter-inch wide, approximately twice as wide as that for cassettes. Further, the tape is pulled out from the front by the transport to contact the heads and drive mechanism and then returned to the shell. Thus the transport, and not the shell, becomes the arbiter of how precisely the tape moves and contacts the heads—much as with open-reel tape.

Like the compact cassette, the Elcaset is a four-track record/play format. Two tracks make a stereo pair, and four tracks conceivably can be used to create quad. But the Elcaset has two additional narrow tracks down the center of the tape (between the stereo pairs of audio tracks), where cueing information can be recorded. This gives the Elcaset a potential versatility comparable to that of ADC's new Accutrac record-playing equipment.

An old saw—and a valid one—in tape recording states: Anything you can do at one tape speed, I can do better at twice that speed. First, at double the speed the signal-to-noise ratio improves by some 3 dB. And the higher speed allows high-frequency response with less recording equalization, which in turn means less distortion. Also, since the recorded wavelengths are longer, there is less potential problem with self-erasure at high frequency. Being twice as wide as a regular cassette, the Elcaset gains another 3 dB or so in S/N ratio, which makes it a total of about 6 dB quieter. So it would seem to have a lot going for it.

Yet the new format remains controversial within the audio industry. To find out what the brouhaha is all about requires a long careful look at the compact cassette. From its humble beginnings in dictating machines just a decade ago, the cassette has grown to the stature of a true high fidelity product—this we can agree on. But just how good is a cassette? How good can it be?

The answer depends on what you want from the tape medium. If you want to copy precious discs or record valuable broadcasts, you can hardly surpass the regular cassette. There are numerous cassette recorders that can make such copies altogether indistinguishable from the original. The bandwidth and dynamic range of the cassette medium is about as good as (and often better than) that of the source material, so using a more capable format would yield little or no benefit. But, if live recording is your bag and you have good microphones and mixers, you will find a noticeable sonic difference between a cassette and open-reel tape at 7 3/4 ips. You will even find a substantial dif-

Larry Zide, an audio writer based in New York, makes his own tapes for his weekly radio show Adventures in Sound for station WQXR.
Some salient features of the Elcaset are shown here: The A recesses are keyways for automatic switching of such things as tape-matching circuitry, noise reduction, and erasure prevention; B is a release for an automatic reel-braking system; C, keys for automatic tape-side sensing; positioning hole D doubles as access for a photoelectric end-of-tape sensor; tape protector E actually is a gate that is pulled open to give the transport free access to a loop of tape, which it pulls out of the Elcaset in use—allowing freedom in drive/ head-complement design and insuring that as the tape passes the heads it is independent of the Elcaset housing.

ference between 7 ½ and 15 ips. The reason is largely one of the increased headroom the higher speed gives you. Again, higher speed gives better S/N ratios and permits the recording of high frequencies with lower distortion.

Quality tape recording entails more than this simplified outline suggests, but the point is that anything the cassette can do, the Elcaset system can do better—much better. High-speed open-reel tape is better still, of course, but not by all that much, as we will see.

One of the less obvious advantages of a tape format that uses a fixed speed is that the tape itself can be optimized for performance at that speed, whereas the designer of an open-reel tape must compromise to make his product usable at two or possibly more speeds. This is one reason why a cassette recorder of reasonable quality sounds better than an open-reel machine operated at 1 ½ ips. A similar relationship can be presumed to exist between an Elcaset recorder and an open-reel machine at 3 ¾ ips.

But there is more to the Elcaset than its performance. The new format has automation capabilities exceeding those of any previous consumer tape system. In addition to the cue-track coding mentioned earlier, the casing (like that of recent chrome cassettes) can be coded according to the type of tape it contains, so that the correct bias and equalization will be set automatically. Like the compact cassette, the new system has keyways that can provide erasure protection; however, the Elcaset’s keyway is closed not by a plug that must be broken loose, but by a plastic “gate” that you
can reset at will. The same keyway can be used for DBX noise reduction, rather than Dolby, if the deck's designer prefers it. Another similar keyway can be used to set the recorder for Dolby or non-Dolby recording or playback. None of the transports currently available or soon to be offered incorporates all the corresponding sensors for these features. A fully automated cueing Elcaset machine will probably not appear before 1978—and when it arrives, its price is expected to top $2,000.

While considering costs, we should take a look at the prices of raw materials. A high-quality C-60 compact cassette sells for about four dollars, an Elcaset of similar running time for two to three dollars more, and a sixty-minute 7-inch reel of tape for about a dollar more than that. Prices, therefore, seem reasonably consistent with the record/playback performance that can be expected from the various media. Elcasset that run for ninety minutes, L-90s, will also be available at competitive prices.

A new product's marketability concerns not only its promoters, but its purchasers. Nobody likes to find that his new piece of equipment is about to become obsolete. The Elcaset will surely not be wanting for marketing effort. With three large companies (Sony, Teac, and Technics/Panasonic) and some of their smaller relatives (Aiwa and JVC, for example) behind the venture, it's not likely that there will be a shortage of recorders or of promotion on their behalf. What may be in less than copious supply, however, is blank tape. Sony makes blank Elcasset, and if its production—and that contracted for by other members of the consortium—is inadequate to supply the demand, the system will be in great trouble. Unfortunately, the situation involves a chicken-and-egg bind: Tape manufacturers are reluctant to tool up for a new item until they are sure that a market exists, but at the same time their very caution acts to retard the growth of that market. What, after all, can you do with a recorder and no tape—or tape and no recorder?

There has been some buzzing in the industry about the possibility of commercially recorded Elcasset. JVC, which has a vast catalogue of classical and popular music from Japanese and international (including American) sources, appears to be interested. But is there a market for such tapes? The consensus is: No. The compact cassette is too firmly entrenched.

To be sure, an audiophile market willing to pay a premium for music tapes of better quality exists. But this market is as rarefied as it is fussy, and since it has proved barely large enough to support even limited production of recorded open-reel tapes, it is unlikely to do any better for the Elcaset. Further, it's a safe bet that an Elcaset with the equivalent of an LP on it will have to cost twice what the LP—or, for that matter, the cassette—does. So the prognosis for recorded music in this format appears dim at best.

Open-reel adherents have argued that the Elcaset lacks editability. But anyone who examines it will see that there is no more difficulty editing this tape than any other tape at the same speed. The hub is held by a brake that is readily released, allowing the tape to be pulled out, edited, and reeled right back in. And a standard quarter-inch splicing block will do the job.

If the first decks will lack some automatic features of the future models, they will have the automatic switching of bias and equalization for the three types of tape to be made available: low-noise high-output ferric, chrome, and ferrichrome. Prices for the first generation of decks probably will fall between $600 and $900.

Crystal-Balling It

What follows can be described only as my own prognosis, after having observed the Elcaset's progress for perhaps six months. I do not believe there will be any significant dent in the cassette market. The compact cassette offers a relatively high performance at a very economical price. Even if you pay $1,500 for your cassette deck, you will still pay only a few dollars for a blank cassette.

As a medium for live recording, the Elcaset system can go far. The speed is adequate for all but critical uses (mastering, for example), and the convenience of a slip-in container can be invaluable for making quick tape changes in the middle of a performance. This should take about five seconds on the Elcasset machines available, and to unthread and rethread an open-reel machine in that time is a virtuoso stunt—if it can be done at all. Certainly, an Elcaset deck will prove no more expensive to run than an open-reel machine at the same speed; as the system catches on, it may become even cheaper.

The brightest future for the Elcaset, I believe, lies not in consumer audio, but in audio-visual use, where the cue-track capability is important, and in automated radio station operation, where it is paramount. An Elcaset changer can expand the format's potential radically. Semipro users may be the first to demand changers, but if they are successful, changers would soon filter down to the consumer level.

Still, one must consider whether another system is needed. Ultimately the consumer will determine that by his buying decisions. I don't doubt that a system as well thought-out and as powerfully introduced as the Elcaset will be given serious consideration by the industry and consumer alike—particularly when some of its salient features are truly unique among tape formats.
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100
Years
of Recording

A series of four original acrylic paintings by Jim Jonson

Inspired by the centennial of the phonograph and planned by High Fidelity's editors, this series of four originals will be published during 1977. The series will depict the development of recording through its leading figures in music and the recording business, its dominant means of sound reproduction, and its principal innovations in audio technology.

Jim Jonson, a Connecticut resident, has produced paintings for Saturday Evening Post, Sports Illustrated, Fortune, Reader's Digest, Boys' Life, and other journals and has fulfilled commissions for corporations ranging from Capitol Records to American Airlines and the Ford Motor Company. His work has been exhibited in the Denver Art Museum, Art Museum of Sport, and the Los Angeles County Art Museum, among others, and his one-man shows have been seen in many major galleries. A portfolio of Mr. Jonson's drawings and paintings was recently published by Prentice-Hall.

The Discwasher Group is proud to present the first of this distinguished artist's portrayals of "100 Years of Recordings."

Part I: The Cylinder Era
The Cylinder Era  The spirit of Thomas Edison dominates the opening quarter-century of phonographic history, and in this—the first of a series of paintings illustrating that history for us—artist Jim Jonson has represented Edison, the central figure, much as he appeared in the Brady Studio portrait taken in Washington, April 1878. Edison had gone there to demonstrate his tinfoil phonograph to President Rutherford B. Hayes and other political and scientific dignitaries. The Brady photograph does not show the lock of hair falling across Edison’s brow; most other photographs do.

The drawing at the top center is the true original sketch of the phonograph, dated November 1877; the more familiar “August 1877” sketch was drawn later and the date added only in 1917. To the right is the invention’s first commercial embodiment: a talking doll. Continuing clockwise, we see violinist Albert Spalding, a stalwart of the Edison stable well into the disc era, recording simultaneously into three horns (the only method short of pantographic mechanical copying by which identical copies of a given performance could be produced until Edison introduced the molding process). An artist might spend an entire day continuously recording a single selection, only to do so again if stocks ran low.

Below the Edison laboratory in Menlo Park, New Jersey, is the original hand-cranked tinfoil phonograph built by John Kruesi on December 6, 1877, using Edison’s sketch. Later models had flywheels to smooth out the cylinder’s motion, clockwork drive (like the model at the bottom right), or even battery-powered electric motors.

As the fame of the wonder of the age grew, demonstration-lectures became a popular entertainment. The traveling lecturers were superseded, before the turn of the century, by the nickelodeons: early models used listening tubes to prevent dissipation of the feeble sounds from the wax cylinders.

While the Edison Company concentrated on popular ballads and comedy routines, one Gianni Bettini was applying the cylinder to higher callings. He began by making mechanical improvements on Edison’s cylinder recorder. With it he recorded some of the most eminent voices of his age—including diva Nellie Melba, who is shown here listening to herself on the Bettini equipment.

Most early vocal recordings were accompanied by piano, often an upright mounted on a high platform for best pickup by the horn. The pianist here is imagined as the child prodigy Josef Hofmann, who did record Edison cylinders, though not in the studio and presumably not on such a piano. Edison sent him a water-powered phonograph on which he made cylinders at home in Berlin. Hofmann appears again in the group of five figures at the top. Next to him is George Washington Johnson, whose “Laughing Song” made him the first black recording star, although blackface routines were commonplace among white performers, such as W. F. Denny, at the center of this group. All three were Edison artists. Recordings of Pope Leo XIII were made by Bettini after he had begun distributing his cylinders commercially. Beside the Pope is diva Marcella Sembrich. One of her Bettini cylinders was discovered in New Zealand a few years ago and issued on disc: the only accessible surviving memento of musical importance by which modern ears can assess the quality of Bettini’s contribution and the tragedy of its almost total destruction.
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In 1933, after five years in Paris, Edgard Varèse returned to the U.S., his adopted country. In an excerpt adapted from the as yet unpublished Volume II of her memoir, Varèse: A Looking Glass Diary, his widow tells of the consequent developments in his composing career.

As we steamed up the bay on October 14, 1933, Varèse, standing on the forward deck, waved his hand toward the skyscrapers sharply silhouetted against the clear (as it used to be) blue sky and once more took possession: "My New York," he said.

Paraphrasing Socrates, Varèse used to say, "Fields and trees teach me nothing, but the sounds of New York City do," for his constant concern was sound, not, like Socrates', people. He was elated to be back in "his" city; it acted as both balm and stimulant. "The air of New York," he told everybody, "is the elixir vitae."

Our first night we went to Romany Marie's for dinner. The minute someone caught sight of him in the doorway, there were cries of "It's Varèse! Varèse is back! Varèse! Varèse!" Of the old friends who crowded around him, I remember John Sloan, the painter of the so-called Ashcan School, with his little Dolly, sculptor William Zorach, poet Alfred Kreymborg, and—almost hidden by Arctic explorer Vilhjalmur Stefansson—Frederick Kiesler,

Edgard and Louise Varèse in the garden of their house in New York City in the Thirties.

Varèse in
New York
From Ecuatorial
to Intégrales

by Louise Varèse
architect of “endlessness.” But from the noise of voices echoing in the ears of memory, there must have been many more.

And now at last Varèse would meet Martha Graham, a meeting he had been anticipating ever since 1929, when I had brought back to Paris from a brief visit to New York my enthusiastic impression of the young dancer and when Carlos Salzedo had written that she was “even greater than Nijinsky.” It will be remembered that Salzedo, composer, harpist, and all-around musician, was cofounder with Varèse of the International Composers Guild in 1921, the first society for modern music in New York. It was Salzedo’s idea that Martha Graham should dance to Varèse’s music, and during that 1929 trip he arranged for her to see me about such an eventuality.

Varèse had a definite plan for two programs in the spring: a concert of music by members of the Pan-American Association of Composers and a Graham recital with interludes of works by the Pan-Americans. The three PAAC members then in New York, Henry Cowell, Wallingford Riegger, and Adolph Weiss, were enthusiastic. Cowell immediately went off to talk to Charles Ives, who was not only an honorary member of the society, but its good angel as well. That was before he had been discovered by the great music world, which is now doing him belated justice. He had become interested in the PAAC through his friend Cowell and had more than once saved it from dissolution from lack of funds. He had twice sponsored concerts abroad led by the group’s official conductor, Nicolas Slonimsky, to educate Europe as to what the avant-garde composers of the Americas were doing. I remember the amazement and admiration among the musicians and critics of Paris as they heard for the first time Ives’s many anticipatory modern inventions in his scores.

Varèse promised a new work for the first concert, one he had begun in Paris and christened Ecutorial—or Equatorial. (He wavered between the two until finally settling on the Spanish spelling.) The text that inspired it (if I may be permitted so weary a word) is a Maya-Quiché invocation he came across in Leyendes de Guatemala by his friend Miguel Angel Asturias, who was to be awarded the Nobel Prize in 1967 for his stark and lyrical books, all impregnated with the “greenfire” of his country and his hatred of dictators.

As Ecutorial called for electronic instruments, Varèse went to see Léon Theremin. The young Russian electrical engineer/inventor was one of the three most important inventors of sound-producing instruments, along with Maurice Martenot (ondes martenot) and René Bertrand (Dynaphone). Theremin had built three different models, all on the same principle—fingerboard control, keyboard control, and space control.

Since 1930 he had been giving concerts with the mystifying third model, which Varèse described for one of his lecture audiences: “The space-control type was sensationalized as ‘music out of the air’ because the player took the instrument producing music without any visible contact with it—magically as it seemed—waving his hands in the air. Technically what happens is that conditions in an electromagnetic area around the instrument are altered by introducing into this area an electrical conductor (the human body). This functions as a regular capacitance in a portion of the circuit and so achieves change in pitch, timbre, and volume. As the right hand approaches the vertical rod of metal, the pitch of tone becomes higher, and as the hand draws away, it becomes lower. Similarly, the intensity of tone is regulated by approaching or withdrawing the left hand on a metal ring on the left of the apparatus.”

Coming away from one of those recitals of “ether-wave music” (to quote the program), Varèse vehemently protested, “What a misuse of means!” For out of the air came music by eighteenth- and nineteenth-century masters that somehow sounded unfamiliar—“impostors.” Varèse said. Thankful though he was for these first devices that would liberate music from the tempered system, he condemned the use that was made of them. He once wrote, “So far, they have been stupidly exploited by ineffectually imitating existing instruments. Their true function is not to reproduce sounds, but to produce sounds that manpower instruments are incapable of producing. They have been used as stunts instead of composers’ tools.”

Léon Theremin manipulates his invention at a concert of “ether-wave and electrical music” in the early Thirties. In 1933 Varèse worked with the inventor at his New York studio.
What with the joy of working with an engineer in a well-equipped laboratory, of composing with the certainty of performance, and so without those too frequent “what's-the-use” stoppages. Varèse was in a mood to enjoy everything that winter of his return to New York. Even formal occasions were without the usual traumatic preludes of wrenched collars and ties and the mot de Cumberonne in three languages. They must have been frequent, those black-tie events, for Varèse later wrote Salzedo, “My tuxedo is on vacation after its winter at hard labor.”

The winter included a concert in honor of Arnold Schoenberg, who had been teaching in Boston since his arrival in America. Mrs. Blanche Walton (Cowell’s patroness) gave a luncheon for him in her apartment on Washington Square. Besides ourselves, there were Charlotte and Carl Ruggles and Cowell—other guests, if any, I have forgotten. I had expected an arrogant Schoenberg because of the tone of a letter he had written in reply to Varèse’s request for permission to perform his Pierrrot lunaire at a concert of the International Composers Guild in the Twenties. On the contrary, he seemed that day a modest, quiet little man. He was probably bewildered by Ruggles' bawdy limericks in English and the hilarity they engendered. Several years later, I discovered a very different Schoenberg—neither arrogant nor quiet—in the lively humorous host who greeted friends every Sunday afternoon at his home in Brentwood, California. When someone complimented him on owning such a beautiful house, he said with a twinkle, “Yes, I now own almost one window and a half.” Of course, if it was a question of his music, arrogance was and is the appropriate description.

In the spring, Slonimsky came down from Boston to rehearse the PAAC concert. Varèse was delighted with his “Mécanicien”—which in French connotes both mechanic and engine driver—as, with his penchant for nicknaming, he called Slonimsky. There was a minimum of those nerve-racking stoppages and repetitions at the rehearsals of Ionisation, and Varèse’s suggestions were surprisingly few. This would be Slonimsky’s third performance of the score for percussion and two sirens. He had given its premiere in February 1933 in New York and a second performance soon after in Havana.

The score of Ecuatorial, however, had not been finished in time for him to study it in advance. He was quick to understand the quiddity of the work and did his best to mold his ensemble to its exigencies, and the two violinists, including Charles Lichter, gave generously of their time in learning to play the theremins. (The score also called for four trumpets, four trombones, organ, percussion, and bass voice.) In spite of these efforts, the sessions were pretty grim. One trouble was that Varèse had written Ecuatorial with Chaliapin’s voice in his ears and Chaliapin’s gift of dramatic characterization in his memory. It is probably more important for Varèse’s conception of this work that the singer be able to dramatize the text than that he have an exceptional voice. I have heard only one singer, Thomas Paul, who understood this desideratum.

In a letter, Asturias had explained the origin of the portion of Leyendes de Guatemala that Varèse set to music. It was the “invocation of the tribe lost in the mountains after abandoning the city of abundance,” he said, and was taken from the Popol Vuh, the sacred book of the Quichés. Some of the lines of this profoundly poetic and intensely dramatic supplication follow:

O Builders, O Moulders! You see. You hear. Do not abandon us. Spirit of the Sky. Spirit of the Earth. Give us our descendants, our posterity as long as there are days, as long as there are dawns. May green roads be many, the green paths you give us. Peaceful, very peaceful may the tribes be. Perfect, very perfect may life be, the existence you give us. O master Giant, Path of the Lightning, Falcon! Master-magi, Powers of the sky. Procreators. Begetters! Ancient Mystery. Ancient Sorceress, Ancestor of the Day, Ancestor of the Dawn! Let there be germination, let there be Dawn.

Later Varèse wrote a kind of directive for conductor and singer: “The title Ecuatorial refers to those regions where Pre-Columbian art flourished. The character of the music is intended to convey something of the elemental simplicity and fierce intensity of those primitive sculptures, and the singer should keep this in mind, as well as the legendary character of the entire work. The execution should be dramatic and incantatory, the singer guided by the imploring fervor of the sacred Maya-Quiché text. The dynamic indications of the score must be closely followed. . . . As for the organ, as all organs are different, it is left to the conductor and organist to decide the registration that should coincide with the ensemble. In any case voix humaine or similar effects must avoided.”

The concert took place at Town Hall on April 15, 1934. The large audience was made up mainly of listeners eager to hear Varèse’s music again or those who anticipated more of the liveliness of the earlier International Composers Guild concerts. The music to be performed was by—besides Varèse—Ruggles, Salzedo, Ives, Weiss, Amadeo Roldán, Roy Harris, and Colin McPhee. There was an atmosphere of anticipation.

Ionisation was enthusiastically received at this, its second hearing in New York, and a repetition was clamorously demanded. As for the response to Ecuatorial, though the Varèse fans clapped vigorously, there was not the same spontaneous outburst that had greeted Ionisation. Even one of the critics most favorable to Varèse’s music called it...
"a doubtful success." Another critic complained of the "raucous cacophony that almost drowned out the fine voice of Mr. Boromeo"—excellent perhaps for the oratorios he understood, but that evening he seemed to me, rather than singing, to be muttering to himself in his beard (if he had worn one) like most basses. There was another reviewer who, though admitting that there were "many pungent massively expressive measures," objected that "the music seemed more fitting to a text more minatory" and who may be excused for his mistake because the performance lacked the coherence Slonimsky so valiantly struggled to obtain. The music of Ecuarial has two distinct and opposite characteristics, the one grave and supplicating for the setting of the invocation, the other as menacing as those old divinities, so fierce and feared by primitive imaginations, who were in the habit of bringing down disaster out of the skies and, as Varèse remarked, were in no way related to the good Lord of the Protestant preachers.

Only Harrison Kerr—a composer, let it be noted—sensed the essential quality of the music through the disarray of the performance. He wrote in the magazine Trend, "No description could convey any idea of the primordial cataclysmic power of the work. Certain imperfections in the still new theremins marred the ensemble now and then, and technical difficulties muddied occasional passages. But these were faults in performance, not in conception."

Because of his dissatisfaction with this first performance of the invocation by a single bass, at the next performance twenty-six years later Varèse entrusted it to eight basses. If he counted on eight bass singers adding up to one Chaliapin, his arithmetic was faulty. It was Boromeo multiplied by eight.

The rehearsals for Intégrales with Martha Graham had already begun. She gave the work a subtitle, "Shapes of Ancestral Wonder." "Beautiful and epic," Varèse said, "though it is obvious that Intégrales directs the imagination in the opposite direction, toward the wonder of an astronomical future rather than to an ancestral past."

One session I remember vividly—a special one with the conductor, Albert Stoessel, and Graham meeting to go over the score together. The get-together soon turned into a tug of war. In the five years since I had met her, the earnest young woman had become New York's prima donna of the dance, and a dance prima donna has the same prerogative as any other to be temperamental and indulge in tantrums. That morning Martha indulged.

With Stoessel at the piano, she began moving through the patterns she had invented, and as I watched I marveled at her technical mastery. Stoessel's role—or so he thought—was to elucidate the music for her. Soon he was stopping her every two minutes. Angered by his criticisms, Graham stopped dead, threw up her arms, stamped, and stormed in a fury of frustration. She shrieked insults at Stoessel until he too became angry, left the piano, and started for the door, saying he was through and would not conduct for her. Varèse stopped him and put a hand on his shoulder. Since I cannot endure scenes, I slipped out of the room and paced the corridor until I heard the piano again and went back. The rehearsal was quietly underway, and though Stoessel still looked grim I saw Martha flash Varèse one of her luminous smiles that said either, "Forgive me my outburst," or "I forgive you your undanceable music." I later learned that Varèse had put the rehearsal back on the track by saying to Martha, "Very well, I shall announce that Miss Graham found the music too difficult for her and that Intégrales had to be canceled."

In his Sullivan Street studio Varèse often stood at a work table while he committed his musical ideas to score paper.
The next exciting event in that spring of 1934 was the recording of Ionisation. It was a memorable occasion, not only because Ionisation was the first of Varèse’s works to be made available on a disc, but also as an impressive manifestation of generous cooperation and musical comradeship. For the Columbia Phonograph Company agreed to bring out the record after a preliminary recording had already been made and, if satisfactory, to return the cost of the recording to Varèse. And that is how it happened that Ionisation’s forty-instrument percussion orchestra was manned gratis by Varèse’s professional colleagues—composers and virtuoso performers. Unfortunately, I am unable to name all thirteen musicians. With my own memory reinforced by Varèse’s old Berlin friend, the violinist Egon Kenton, who himself handled the maracas, the guiro, and the whip, I recall Georges Barrère, who played the Chinese blocks; Salzedo, who manipulated the two sirens; and Stoessel, Cowell, and Weiss, each playing one or more of the other instruments. Roy Harris was in the control room, and of course Varèse’s “Mécanicien” conducted.

The critics, even those still recalcitrant to Varèse’s music, took a lively interest in the recording and spent many words on it. There was a marked change of tone from the jocularity of the Twenties, all of the critics now treating Varèse seriously, if only as the bellwether of the left. For example, this comment appeared in Phonograph Records: “The makers of Columbia records evinced an interest in contemporary music sometime back, yet the current publication of a single disc containing Edgard Varèse’s Ionisation represents pioneering of unusual intrepidity because it marks a full turn on behalf of the most radical leftist functioning today in the music of any nation.” And from the San Francisco Chronicle: “A quiet little succès de scandale is being registered by Columbia Phonograph Company with its new recording of Ionisation by Edgard Varèse. The tiny little blue record came out a few weeks ago and already is a sort of national legend.”

Though Varèse was far from satisfied with this mechanized Ionisation, with all its technical faults, its importance for him was his belief that it was the beginning of a wider dissemination of his music. He also enjoyed the stir it aroused. He wrote André Jolivet, the French composer, then still his pupil, “Glad that Ionisation interests you. Try to hear it on a good machine—one of Bertrand’s machines, if possible. The result of the recording would have been better if the engineers had followed my advice. Though, as it is, the disc is very much in demand. It would appear that its amazing how many records have been bought by composers and jazz arrangers and orchestrators. While they continue to plunder me, they prepare the way and the public. They are sowing for me.”
"I Want to Encompass Everything That Is Human"

What interests me about Varèse is the fact that he seems unable to get a hearing... The situation... is all the more incomprehensible because his music is definitely the music of the future. And the future is already here, since Varèse himself is here and has made his music known to a few.

Henry Miller: The Air-Conditioned Nightmare

Miller's words on Edgard Varèse, written in the early 1940s, have been impressively borne out by recent music history. Perhaps no composer of his generation—including such figures as Schoenberg, Stravinsky, and Webern—has made a more profound influence on compositional developments in the years following World War II. Yet despite his more recently acquired significance, Varèse remains curiously apart from the main currents of earlier twentieth-century music.

At the age of thirty-two, having established himself as a successful young composer and conductor, Varèse migrated to the U.S., where he remained—except for temporary visits to Europe, including one lasting five years—for the rest of his life. This journey to a new world appeared to symbolize his desire to make a fundamental break with the past, to explore freer and less circumscribed musical territories.

Robert P. Morgan is a regular record reviewer for HF.
In a 1916 interview, three months after his arrival in America, Varèse commented: "Our musical alphabet must be enriched. We also need new instruments very badly. . . . Musicians should take up this question in deep earnest with the help of machinery specialists. . . . What I am looking for are new technical mediums which can lend themselves to every expression of thought and can keep up with thought." The U.S., relatively unencumbered with the burden of the European musical past and favorably disposed toward the development of new technologies, seemed the place to undertake the search.

All of Varèse's mature works were written after his arrival in this country. Those composed earlier were destroyed, either by fire or by the composer's own hand. In this sense too he came to us without roots: With the exception of a single brief impressionist song written in 1906 and recently rediscovered in Paris, we have no firsthand knowledge of his youthful compositions.

Varèse called the first work completed in his new country Amériques. The title was not to be taken in a purely geographical sense: He noted that it was "symbolic of discoveries—new worlds on earth, in the sky, or in the minds of men." Finished in 1921, Amériques is scored for a very large orchestra (originally comprising approximately 140 players, but later reduced by fifteen wind instruments and several percussion), which seemingly places it in the late-Romantic tradition. Indeed, critics have often remarked that the work reflects the influence of early Stravinsky, particularly Le Sacre du printemps. Yet despite undeniable similarities between the two scores, their differences are more interesting and fundamental. Amériques, in fact, contains the essential elements of the mature Varèse.

The opening unaccompanied alto-flute solo, superficially similar to the bassoon passage that opens Sacre, is set out in a purely Varèsean manner, alternating in sudden juxtaposition with several orchestral interpolations, which serve to expose the over-all dimensions of the musical space and define the chief formal property of the composition: abrupt cross-cutting between flat, essentially static orchestral planes. Whereas in Sacre Stravinsky's textural layers accumulate into an ever richer orchestral mass, eventually leading to an almost Wagnerian climax, Varèse's planes remain determinedly "neutral"—nondevelopmental in this traditional sense.

The juxtaposed segments of Amériques do not cohere into climactic moments; nor do they fit into, and thus become only part of, a larger, forward-directed motion. Rather, Varèse's materials constantly combine and interact with one another while preserving their absolute identity. This quality, which supplies one of the most important components of Varèse's program for "the liberation of sound," explains why one likes to speak of his materials as sound "objects."

Only in the final section does one plane (in the low brass) achieve some degree of domination, extending itself over a lengthy portion of the composition. It is the most Stravinskian passage of the score; yet even here the importance of the plane is defined more by Pure extension than by a heightening of tension through such forward-directed developmental techniques as rhythmic compression and acceleration. Moreover, it is always heard simultaneously with other orchestral layers attempting to assert their own priority.

A rhythmic flow is produced (although "flow" is misleading, since one is conscious of sudden and unexpected jerks), far removed from the post-Renaissance ideal of Western music. If the latter seems "organic," with its alternation of moments of tension and release recalling the process of human breathing, Varèse's music (or "organized sound," as he preferred to call it) appears "inorganic," pieced together out of a sequence of violent confrontations. One event does not serve to prepare the next, nor does a second serve as a resolution or consummation of its predecessor.

There is thus a sense of almost unrelieved tension, which means, paradoxically, that the music is basically static in conception. This characteristic, perhaps more than any other, accounts for the difficulty Varèse's music poses for traditionally oriented listeners, who tend to have expectations inappropriate to its underlying mechanisms. It may also explain why his earliest supporters were more often writers and painters than musicians.

Amériques was the first of nine works written between 1921 and 1936 that constitute the entire output of Varèse's principal creative period. With the exception of two pieces for full orchestra (Amériques and Arcana), all are relatively short, ranging from approximately five to eleven minutes, and are scored for small instrumental forces. None is written for a standard combination, and Varèse's choice of instruments reflects his special sonic interests: One piece is scored solely for percussion (Ionisation), one for solo flute (Density 21.5), one for seven wind instruments plus double bass (Octandre), and two for combined ensembles of winds and percussion (Hyperprism and Intégrales). The remaining two pieces, Offrandes and Écutorial, are vocal and also feature instrumental combinations with a large contingent of percussion.

Noticeable in this listing is the absence of strings. Although the two orchestral works contain extended passages of string writing, among the chamber pieces only the vocal Offrandes, the earliest nonorchestral composition, uses strings. The preference, then, is for instruments with sharp and precise attacks and cutoffs.

Varèse's wish to exploit the entire compass of
available sound is reflected in the employment of instruments with extreme ranges (for example, piccolo and contrabass trombone define the opposite poles of the tonal field of Intégroales); in the frequent use of sirens, the only “instrument” available at the time that could produce an uninterrupted pitch continuum; and in the appearance of two theremins, among the earliest purely electronic instruments (later replaced by the more reliable ondes martenot, also electronic), in Écua-

vador.

Finally, all of the works except Octandre and Density 21.5 require a large percussion section. Unlike the other instrumental groups, the percussion had not benefited from the general expansion of orchestral resources in nineteenth-century music. Mostly instruments of indefinite pitch, they were of limited interest to composers working in a pitch-dominated style. But for Varèse the percussion offered a source of variety in timbre far exceeding that of the other available instrumental types. Moreover, it had the advantage of being unburdened with the inevitable associations of musical Romanticism. (Conversely, such associations were especially strong in the strings.)

Two principal points should be noted about Varèse’s percussion writing: the number and variety of instruments employed, far beyond the practice of any of his contemporaries, and the way they are used. Whereas traditionally the percussion had functioned mainly to emphasize points articulated by pitched instruments, in Varèse they project independent voices on an equal footing with those of the pitched members. The originality of his achievement—and its importance for subsequent compositional thinking—can scarcely be overemphasized.

The basic factors of Varèse’s style are evident in all of the works written in the Twenties and Thirties. Like Amériques, most open with an exposed motivic figure in a single instrument that is developed and juxtaposed with contrasting elements. These figures are usually grouped around a single pitch, functioning as a kind of gravitational force that draws divergencies back into its field of control. This, plus the fact that the principal means of musical progression is repetition, lends the music its strongly rhythmic character. Thus the motives tend to be perpetuated through reiteration, particularly of the central pitch; and on a more extended scale, phrases (or “cycles”) is perhaps a better designation here) are delineated by recurrences of previously interrupted motivic units over larger time spans.

Yet Varèse’s repetitions rarely result in simple restatements. Motivic recurrences are usually varied; and the repetitions of the various layers that make up the total fabric are not synchronized but drift in and out of phase with one another so that their interrelationships undergo continuous meta-
morphosis. (This recalls Varèse's definition of rhythm as "the simultaneous interaction of unrelated elements that intervene at calculated, but not regular, time lapses.") Searching for visual parallels, one thinks of a mobile—a reordering of more or less fixed objects in ever-changing combinations—or a kaleidoscope—images that preserve that paradoxical Varèsean conjunction of constant transformation and stasis.

Following the completion of Arcana in 1927, there was a notable decline in Varèse's compositional activity. Ionisation appeared in 1931, Écutoirial in 1934, and finally, the brief solo flute piece Density 21.5 in 1936. Then complete silence descended for almost twenty years, the only exception being a compositional fragment, Étude for Espace, that was performed in 1946 but never completed.

The reasons for Varèse's inactivity are no doubt many and complex. Part of the problem was apparently personal in nature, and the changing social situation brought on by the Depression—and the consequent conservative musical climate—had its effect. But Varèse was also increasingly dissatisfied with the musical materials available to him. The plans outlined in that 1916 interview, including collaboration with "machinery experts" to create new musical instruments, had been consistently frustrated. In 1930 he observed: "We are still in the first, stammering stages of a new phase of music."

Somewhat later (1939) he spoke of the gains to be derived from the development of electronic instruments: "liberation from the arbitrary, paralyzing tempered system; the possibility of obtaining any number of cycles or, if still desired, subdivisions of the octave, consequently the formation of any desired scale; unsuspected range in low and high registers; new harmonic splendors obtainable from the use of subharmonic combinations now impossible; the possibility of obtaining any differentiation of timbre, of sound combinations; new dynamics far beyond the present human-powered orchestra; a sense of sound-projection in space by means of the emission of sound in any part or in many parts of the hall as may be required by the score; cross rhythms unrelated to each other, treated simultaneously ... all these in a given unit of measure or time which is humanly impossible to attain."

Varèse's words, which today read like a catalogue of some of the principal compositional concerns of the past quarter-century, fell on deaf ears. Not only were his musical contemporaries unconcerned with these possibilities, but the technicians of the time showed little interest in developing the means for their realization.

Only after World War II, when tape machines became commercially available, was Varèse able to take the first steps toward achieving these compositional goals. Moreover, the general musical atmosphere had again become more conducive to experimentation with new resources. It is certainly no coincidence, then, that Varèse recovered his voice at this time or that his first work in eighteen years made use of new electronic possibilities.

Déserts, premiered in 1954, uses an ensemble of wind and percussion instruments similar to those of the earlier works: but the instrumental music now alternates with taped sections to form a seven-part composite. This was the first such work to be composed; and it was created by a man approaching seventy.

Although the instrumental portions of Déserts preserve techniques established by Varèse in the Twenties and Thirties, one can discern greater refinement, particularly in timbre and dynamics. The metamorphosis of instrumental color on a single pitch reaches an unprecedented degree of differentiation.

Especially telling is the use of the piano (an instrument previously avoided) to emphasize attacks and, since the piano sound decays quickly, then allow the sustaining wind instruments to emerge. A related factor is the extraordinarily precise indication of dynamic levels, always a Varèsean preoccupation: In places in Déserts, dotted lines are even drawn for each beat, so that the point where crescendos or diminuendos reach a given dynamic level can be exactly specified.

The tape portions are made up entirely of "natural" sounds that have been recorded and then electronically manipulated. It is not surprising that this type of electronic composition, known as musique concrète, should appeal to Varèse, as he was always disposed to work with sounds as "objects" arranged in complex spatial-temporal patterns. Although electronic music was still in its early stages in 1954, the taped segments of Déserts have a remarkable vitality; and heard in conjunction with Varèse's instrumental music they take on added meaning, the two types of music interacting with one another in mutual transformations.

Déserts was followed by the Poème électronique, a purely electronic composition created for the Philips Radio Pavilion at the Brussels Exposition of 1958 at the request of its architect, Le Corbusier. The most sophisticated electroacoustical equipment of the time was placed at Varèse's disposal, enabling him to continue to develop unexplored sonic possibilities. The Philips Pavilion contained some four hundred speakers, with the necessary equipment to route the sound to any or all speakers at a given moment. Varèse could thus realize one of his most important theoretical formulations: the projection of music in space, which enabled the motion of the sound to become an essential compositional component. As in Déserts, Varèse used natural sounds, including such specifically musical ones as male and female voices, per-
cussion instruments, and organ, but these were now combined with purely electronic sound sources such as oscillators.

Poème électronique, performed in conjunction with projected visual images chosen by Le Corbusier, was heard by more than two million visitors to the Philips Pavilion. For the first time, Varese was the center of widespread attention and acclaim, but by then he was aging and no longer in good health. He was, however, able to complete the major portion of a final work and to leave sufficiently detailed sketches of the remainder for his student Chou Wen-Chung to supply a convincing ending.

This composition, Nocturnal, is scored for soprano, male chorus, and chamber orchestra. As in Ecuatorial, the chorus is treated in a stark, incantatory manner, with numerous indications for special vocal effects. In both works one finds the embodiment of Varèse’s wish for “an exultant, even prophetic tone...” Also some phrases out of folklore, for the sake of their human, near-to-earth quality. I want to encompass everything that is human, from the most primitive to the farthest reaches of science.” The elemental primitiveness of Ecuatorial and Nocturnal, again anticipating a direction that has since acquired importance, provides yet another indication of Varese’s efforts to transcend the Western musical tradition, to move into a musical future that was, in his words, “open rather than bounded.”

In 1965 Varese was dead. Today his ideas continue to live in the works of countless younger composers. But as Henry Miller had observed some twenty-five years earlier, the future was already here.

The Recordings of Edgard Varèse

1. Amériques
2. Offrandes
3. Hyperprism
4. Octandre
5. Intégrales
6. Arcana
7. Ionisation
8. Ecuatorial
9. Density 21.5
10. Déserts
11. Poème électronique
12. Nocturnal

Outside of his soundtrack for a film on Joan Miró, all of Varèse’s completed works are available on record. Since with few exceptions the compositions are on discs completely devoted to Varèse, with the selection of works varying considerably from disc to disc, the best approach is to compare performances of each individual piece. Nevertheless, it seems advisable to say something about the collections as a whole.

By far the best, I feel, is the Weisberg/Nonesuch offering of four of the chamber works (two with voice), which provide an excellent introduction to Varèse. The performances are generally accurate and are well balanced. The most widely representative collection, however, is the Craft/Columbia two-record set (also available on individual discs), which includes all but three of the composer’s works; but here the quality of the performances is very uneven.

The Abravanel/Vanguard disc is especially valuable: Two of the works it contains are not otherwise available, and Ecuatorial, performed with chorus, is recorded elsewhere only in the version for solo voice. Mehta’s three readings on London are disappointing and, except for Arcana, clearly outclassed by those on other discs.
The two remaining collections feature European ensembles—Die Reihe and the Paris Instrumental Ensemble for Contemporary Music—that have a rather different approach to this music. The tempos tend to be slower and the playing less rhythmically aggressive. The Candide disc deserves particular consideration; although Die Reihe’s performances seem to me on the whole less successful than Weisberg’s, they are for the most part quite good and the selection of pieces is wider.

**Amériques (1921)** The Abravanel performance, the only one available, was made before the appearance of the new edition brought out by Chou Wen-Chung, and there are some textual problems (such as the trumpet F, instead of F, four measures before No. 6). Although far from perfect, the performance is nevertheless a forceful one that conveys the explosive character of the piece very well.

**Offrandes (1921)** DeGaetani’s beautifully warm and communicative version with Weisberg is unsurpassed. The unidentified singer on Candide also does an excellent job, although her lighter vocal quality is less suited to the work. On the Craft set, Precht sings consistently below pitch, and the ensemble playing is not always secure.

**Hyperprism (1923)** The best of the three versions is Die Reihe’s, although it suffers from slow tempos, particularly in the pesante section. The Craft reading is livelier but marred by inaccuracies, as is the slow and studied performance by the Paris Instrumental Ensemble.

**Octandre (1923)** Although none of the three versions is ideal, the Weisberg is the most consistent. Craft’s reading is also good, perhaps the best of his Varèse performances. Ensemble Die Reihe plays with a softer edge than do the American groups; despite many subtleties, there is a lack of tension in their performance.

**Intégrales (1925)** Here again I prefer Weisberg. He is particularly good at making the all-important connections between instruments sustaining the same notes and in keeping the various textural components clearly separated. Mehta’s performance is dull and fragmented; and the two European groups are below their normal standard.

This work provides interesting examples of textual problems in Varèse: Three of the five versions (Craft, Mehta, Die Reihe) have a percussion part different from the one in the score just before No. 16; and three (Craft, Weisberg, Die Reihe) have a B natural in the first trumpet four measures after No. 19, instead of the notated B flat, resulting in an uncharacteristic octave with the second trumpet.

Given this consistency of error, there must be mistakes in the parts. Or are they mistakes? The old Waldman version, recorded in 1950 under Varèse’s supervision (and scheduled for reissue by Finnadar), contains both of these discrepancies.

**Arcana (1927)** Neither the Craft nor the Mehta version is really adequate. Mehta is clearer and more accurate, but Craft has more intensity. Unfortunately, the old Martinon/Chicago Symphony release on RCA, which is considerably better than either of these, is no longer listed. (A Boulez recording is planned by Columbia.)

**Ionisation (1931)** Here the choice is clearly the Nonesuch version with DesRoches and the New Jersey Percussion Ensemble. This is one of the best Varèse performances on disc and warrants purchase even if one is not interested in the other pieces. Of the all-Varèse discs, Craft, Mehta, and Die Reihe are about equally good. The Lylloff version on Cambridge is extremely poor.

**Ecatorial (1934)** The two versions offer a distinct choice, in that one (Weisberg) uses solo bass, while the other uses male chorus. (Varèse allowed for both possibilities.) See “Varèse in New York” elsewhere in this issue—Ed. | find the version with chorus more consistent with the general quality of the piece, but unfortunately the small group on the Abravanel recording is very uncertain. Bass Thomas Paul turns in a fine performance on Nonesuch.

**Density 21.5 (1936)** The best account, by Sollberger (Nonesuch), is in a non-Varèse collection. But Sollberger is the only flutist on records who really tries to project the dynamic levels given in the score and who differentiates sufficiently between the two alternating tempos.

Of the others, the unnamed flutist on the Craft set is best, followed by Helmut Reissberger on Candide. Michel Debost’s Angel reading is very disappointing, even containing a wrong note resulting from failure to remember a previous accidental. (Actually, this raises a question concerning Sollberger’s reading: Should the last note in the first main section be B natural, as he plays, or should it be B sharp, as indicated on the previous grace note?)

**Deserts (1954)** The tape parts differ: On Columbia the sounds move from channel to channel, while on Angel and CRI they remain stationary in each speaker. Since Varèse was consulted for the Columbia disc, presumably this is what he wanted, and the sound rotation does bring added life to the tape portions.

As for the instrumental segments, Wuorinen’s reading with the Group for Contemporary Music is much the tightest and most accurate, although it is a bit on the stiff side. The Craft is lively but lacking in nuance, with the complex dynamic relationships particularly suffering from a lack of differentiation. The Paris Ensemble is better in this latter aspect, but its tempos are much too slow. (The second instrumental section seems interchangeable.)

**Poème électronique (1958)** This work, which is purely electronic, is available only on Columbia. (The music is, of course, limited by the two-channel format.)

**Nocturnal (1961)** The Abravanel version is the only one available, but fortunately it is the best of his three Varèse performances. The chorus, apparently the same as on Ecuatorial, is much better here; and both the soprano (Ariel Bybee) and the instrumentalists perform accurately and sensitively.
Copland's second Third. On his recent European tour, Aaron Copland re-recorded his Third Symphony, which he first did for Everest some fifteen years ago with the London Symphony. The orchestra this time was the New Philharmonia; the CBS producer was Roy Emerson.

During the sessions, we're told, Copland reported a recent unexpected visit he received at home from Mstislav Rostropovich. Copland warmly accepted Rostropovich's offer to play for him (he had his cello in tow), but the composer hasn't yet responded affirmatively to Rostropovich's urgings that he write a cello concerto for him. Rostropovich is known for his powers of persuasion; we wish him well in this pursuit.

DG's operatic schedule. Deutsche Grammophon has resumed an active operatic schedule. Current projects include Verdi's La Traviata and Nicolai's Merry Wives of Windsor, Ileana Cotrubas, Placido Domingo, and Sherrill Milnes are the Traviata principals, with Carlos Kleiber conducting. Bavarian State Opera forces. Edith Mathis and Hanna Schwarz are Nicolai's merry wives, with Kurt Moll as Falstaff, Bernd Weikl as Ford, Helen Donath as Anne Page, and Peter Schreier as Fenton. Bernhard Klee conducts the Berlin State Orchestra.

In Vienna, DG will press Karl Bohm and the Vienna Philharmonic into the service of Mozart, recording Idomeneo (with a largely Salzburg-based cast including Schreier, Julia Varady, and Donath) and La Clemenza di Tito (recently recorded by Colin Davis for Philips). DG is also planning to record Bohm's Salzburg Don Giovanni live (Milnes is slated for the title role), as was done with his 1974 Costas tu tte.

Haitink's Beethoven. Having completed his Philips symphony cycle with the London Philharmonic, Bernard Haitink moves to his other home base, Amsterdam, to complete the Beethoven concertos. For the triple concerto, the soloists are the members of the Beaux Arts Trio. The piano concertos with Alfred Brendel (the second cycle for both pianist and conductor) are scheduled for completion in April, when the Second Concerto and Choral Fantasia are to be taped. (For the record, Haitink has recorded the violin concerto not once, but twice in the last two and a half years, both with the Concertgebouw—first with Henryk Szeryng, then with Concertgebouw conductor Christian Thielemann. Krebs, a formidable artist and conductor, is now actively pursuing a solo career, has also recorded the Brahms concerto with Haitink and the Mozart Nos. 2 and 4 with David Zinman and the Netherlands Chamber Orchestra. Released at midprice in Europe, these excellent records are unfortunately unlikely to be released domestically.)

EMI and DG in Chicago. Carlo Maria Giulini and the Chicago Symphony have recorded the Mahler Ninth Symphony, the Prokofiev Classical Symphony, and Mussorgsky's Pictures at an Exhibition for Deutsche Grammophon; for EMI they were scheduled to record the Bruckner Ninth Symphony and, with Itzhak Perlman, the Brahms violin concerto.

DG has also recorded the Mahler Resurrection Symphony with the Chicago Symphony, conducted by Claudio Abbado. It was planned to follow this with another Abbado Mahler symphony recording: the Third, with the London Symphony.

The operatic Schumann. EMI and East Germany's Deutsche Schallplatten have continued their adventurous collaboration with the first recording of Schumann's only completed opera, Genoveva. Kurt Masur conducts the Leipzig Gewandhaus Orchestra, with a cast headed by Edda Moser, Dietrich Fischer-Dieskau, and Theo Adam.

Another coproduction, Carlos Kleiber's Wozzeck, was delayed by the conductor's indisposition. In its place, the Dresden sessions were turned over to Richard Strauss's comedy Die schweigsame Frau, with Marek Janowski directing a cast headed by Jeanette Scovotti, Hermann Prey, and Adam.

Mahler's opera. One of the more remarkable operatic hybrids, Mahler's realization of the sketches left by Weber for Die drei Pintos, has been recorded by RCA. Gary Bertini conducts the Munich Philharmonic and a cast headed by Lucia Popp, Werner Hoffweg, Hermann Prey, and Kurt Moll.

Dresden Bruckner. With his London Philharmonic, Brahms symphonies now complete and his London Symphony Beethoven symphonies well begun, Eugen Jochum has added a
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Trolius and Cressida. After more than twenty years, William Walton’s Trolius and Cressida has finally been recorded complete. EMI taped four performances of the new production at Covent Garden last November, for which Sir William "substantially revised" the work, first heard (also at Covent Garden) in 1954. The title roles are taken by Richard Cassilly and Janet Baker; the cast also includes Elizabeth Bainbridge, Gerald English, Robert Lloyd, and Benjamin Luxon. The conductor is Lawrence Foster, who replaced an ailing Andre Previn. (The first-night audience, too, had health problems. "We have taped the coughing in the highest fidelity," producer Christopher Bishop told HF's Edward Greenfield.)

First edition. Our spies who regularly comb the Neiman-Marcus catalogue report news of a First Edition Symphony Collection offered by the giant department store in collaboration with RCA. The four-disc set includes previously unreissued (and even some unissued) performances by Leopold Stokowski and the Philadelphia Orchestra (on 1931 Beethoven Fifth Symphony and Brahms Fourth), Serge Koussievitky and the Boston Symphony (Strauss's Don Juan, 1946), Eugene Goossens and the Cincinnati Symphony (Respighi's Fountains of Rome, 1946), Artur Rodzinski, Pierre Monteux, Charles Munch, Ians Kindler, and Karl Krueger. The price is $31.20 postpaid, from Neiman-Marcus, Box 2968, Dallas, Texas, 75262.

Rostropovich's Tchaikovsky. In an October blitz Mstislav Rostropovich has recorded all the Tchaikovsky symphonies (including Manfred) with the London Philharmonic for EMI. He even found time to record a group of Russian songs with his wife, soprano Galina Vishnevskaya.

The Rostropovich Tchaikovsky cycle has no effect on the one Riccardo Muti will be doing for EMI with the New Philharmonia. Scheduled for November sessions was Romeo and Juliet, to be coupled with the Second Symphony.
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Wagner's Masters Get Their Due

Jochum (DG) and Solti (London) preside over outstanding accounts of Die Meistersinger, each with distinctive strengths.

by David Hamilton

How wonderful to be confronted with two fine recordings of Wagner's rich and searching comedy at once—and how frustrating!

Wonderful, because both of them seem to me markedly superior to any recording of the score made in the last two decades. Frustrating, because this circumstance inevitably means they have had to be heard, and must be written about, in tandem, as in some sense competitive, each coloring one's impressions of the other, raising questions, pointing up deficiencies. And frustrating also, I must add—in fairness both to the recordings and to myself—because each has taken time from further hearing of the other, further hearing that might have made me more confident about expressing my conviction as to which would be more likely to go with me to that desert island the BBC used to maintain for record reviewers, complete with gramophone and a shelf just wide enough for ten records.

To devote half of such an allotment to a single work may seem extravagant, and in truth I would be hard put to decide between Meistersinger and Tristan, right up to the departure of the boat (although for Tristan, at least, there would be no problem about which recording—the Furtwangler, naturally). But since the boat isn't leaving just now, I'm not
about to "check rate" one of these two new Meistersingers. (If you're in the "best buy" market, however, the Knappertsbusch set, Richmond RS 65002, would be my strong recommendation—mono sound, not always well balanced, and a trying Walther, but fine work from Gueden, Schoeffler, and Dönch, plus Dermota's still unsurpassed David and genial pacing from the venerable maestro.)

The Jochum recording followed performances at the Deutsche Oper Berlin, with Placido Domingo and Catarina Ligendza, among others, imported for the sessions. Perhaps for this reason, it has an easier, more natural sense of being played as a drama; there is a spontaneity and warmth here that is less often evident in Solti's more concertlike version. The latter's strengths are in the big scenes—especially the gathering of forces in the Festwiese—and, throughout, in the orchestral playing. The Berlin orchestra, unfortunately, just isn't as good as the Vienna Philharmonic—notably a frowsy first horn, interminently troublesome at the start of "Am stillen Herd," in the Fliedermonolog, and in the Act III prelude. In all fairness, though, most of their work is accomplished enough, full of style and spirit.

Surprisingly, Jochum is usually more successful than Solti at keeping the piece moving; his tempos, chosen down the middle of tradition's road, are less often and more subtly modified. Take the Sachs/Walther dialogue in Act III: Both conductors start off with a nice swing, but with Solti the poco ritenuto at the end of Sachs's first speech assumes major proportions, the contrast between his genial music and Walther's less active material so overdrawn that by the end of Walther's third speech ("ich fürcht' ihn mir vergeh'n zu seh'n") motion has almost entirely disappeared. The scene goes on like this, and cannot help but seem fragmentary, whereas Jochum merely distends his basic tempo slightly and lets the contrast that Wagner has already written into the material do most of the work.

On Jochum's side, too, is a slightly drier, cleaner sound for the orchestra, allowing the rhythmic activity to speak more effectively; the little episode between Sachs and David just before the Fliedermonolog is a good example of this, with very little musical difference between the two performances—yet the Jochum sounds steadier, more focused, because the repeated rhythms in the orchestra are more explicit (in truth, the snappier delivery of Dietrich Fischer-Dieskau plays a role in this too).

On the other side, though, are such matters as the rich, warm Vienna brass, who help Solti make something ravishing and memorable out of the Act III prelude, the superb winds of the end of Act II, the full panoply of virtuosity pulled out for the interlude and final scene, where Solti's wonted vigor is very much in evidence and very relevant. The Berlin chorus is quite fine, but the Vienna one is better, while Solti boasts the additional refinement of a boys' choir for the apprentices—and very good they are.

But before totting up pluses and minuses in earnest, we had better consider the casts. The most newsworthy aspect of these recordings is the appearance of Fischer-Dieskau as Hans Sachs, so let me say right off that it seems to me a very great success. Not, of course, in the tonal tradition of Schorr and Bockelmann: he doesn't have the right resources for that. I suspect he has been studying the part for a long time, for it is a fully formed, highly detailed performance, every line "read" with understanding, every phrase sharply and accurately limned. The voice is light, to be sure, but is used with great skill, so that the climaxes really do count, and the delicate moments are unforgettable: Surely the Midsummer Eve passage in the Wahnmonolog has not been sung so beautifully in decades (the orchestral playing here is really deft, its lightness and wit, too). He's very much "with" Jochum's rhythmic approach to the score, aiding and abetting the conductor's swing and keeping the textures precise and clear.

London's Sachs is Norman Bailey, a thoughtful and sensitive performer whose voice is, I fear, simply not a very attractive instrument: a thorny, constricted sound that never succeeds in getting free of some apparent jugular impediment. Most of the time, the notes are there, although he falls my standard test phrase for intonation, "sänge dem Vogel nach" in the Fliedermonolog with its alternating Gs and G sharps (need I say that Dieskau passes this with flying colors?). And the delivery of lines is warm, intelligent, if not as detailed as that of the native-German-speaking baritone; on-stage, Bailey is an always interesting performer in this part—but on records he is only partially successful.

Perhaps the greatest surprise is DG's casting of Placido Domingo as Walther, and I think this justifies itself. Even though he did not sing—and never has sung—the part on-stage, he evidently knows quite well what it's all about; he never blunders into a line so that you think of John Culshaw's anecdote about the novice Jago who, halfway through a recording, asked, "What's all this about a handkerchief?" The German is oddly formed at times, with over-trilled r's and "Quell" pronounced as
“kwell” rather than “kvell,” but this is a small price to pay for such firm tone, accurate musicianship, and often elegant phrasing. By contrast, René Kollo’s portamentos and scoops grow rather trying, and he seems to be driving his voice even higher than in the second Karajan recording (Angel SEL 3776, December 1971).

There are few complete failures in these cast, but I’m afraid that DG’s Ligendza is one of them: this blowzy sound simply isn’t an Eva voice, and she detracts from every one of her scenes by singing pretty consistently out of tune; the quintet is thus rendered fairly excruciating. When reviewing the Varviso/Bayreuth set last year (Philips 6747 167, April), I suggested that Hannalore Bode’s “Batness at the beginning of the quintet could doubtless have been avoided in a studio recording”—and the London set proves it: she makes a much more effective Eva here, if not quite up to the historic heights of Müller (with Furtwangler in 1943, EMI Odeon IC 181 017/979/901, September 1976), Schwarzkopf (with Karajan in 1951, Seraphim JE 6030), and Gueden.

Both Beckmessers own rather imposing voices, not at all the buffo sounds that we have sometimes been offered. DG’s Roland Hermann actually sings everything in the role full voice, without resorting to falsetto even for the top A, and London’s Bernd Weikl also eschews most of the traditional squeaks and squawks. I’m all for Beckmesser looking—and sounding—like a fairly normal exemplar of the human race (else how would he have become town clerk?), but Hermann plays it so straight that the choral amuse-ment upon his mere appearance for the song contest becomes scarcely credible. Weikl offers just enough spluttering rage in the exchanges with Sachs to suggest that the deep end is well within Beckmesser’s reach. “Lug und Trug! ich kenn’ es besser” in Act III, Scene 3, is a good test line: Hermann isn’t nearly ap-plectic enough, Weikl gets the right tone.

The rich sound and apt conversational tone of Peter Lagger (DG) promise well for Pogner’s address, but a severe wobble invades his voice above middle C, and the honours go to Solti’s very solid Kurt Moll. Conversely, DG’s Gerd Feldhoff makes an acceptable Kohner, London’s Gerd Nienstedt an unpleasantly out-of-tune one.

And that brings us to the below-stairs couples. Horst R. Laubenthal, Jochum, and the Berlin orches-tra among them give such a loving, lovely account of the modes that Adolf Dallapozza’s merely efficient David is left far behind, and although the Magda-lenes, Christa Ludwig and Julia Hamari, are not easy to choose between in most of the part, DG’s Ludwig is the one who can really deliver in the riot scene. This episode is well done in both recordings but sonically articulated with greater clarity by DG—you can actually hear a startling number of the solo lines—and Jochum saves a little extra for the climax, when the Midsummer’s Eve motive soars out in the orchestra, making it overwhelming instead of merely exciting.

As I’ve suggested, I prefer the DG sound for its clarity, which is enough to compensate for a characteristic bias in favor of the voices by comparison with London’s balance. London’s stronger bass register is often a plus factor, save when it reproduces all too clearly what seems to be the stamping of Solti’s foot.

I don’t find any credits for the players of Beckmesser’s lute, but the anonymous DG lutist, with a gut-stringed instrument, discovers some touches of humor in this part that have escaped all his predecessors, as well as his new rival, whose metal-stringed instrument is less attractive and less audible.

One minor matter: The London Nightwatchman, billed as “Werner Klumlikoldt,” proves to be two people; Kurt Moll at ten o’clock, Bernd Weikl at eleven. The name, as Alan Blyth in Gramophone has pointed out, is an anagram of the two. If you want to explore their work in these parts further, Moll sang the entire role in the second Karajan recording, Weikl in the Varviso.

Most of the side breaks are standard, and reasonably chosen, but I prefer DG’s choice in Act II (after the Nightwatchman has sung and sounded his wrong note) to London’s (after his first note, but before the new key to which pivots has been established). Both booklets include interesting illustrations based on the original 1968 Munich production; as usual, London’s printing is poor enough to reduce their value, though fortunately not bad enough to render illegible a fine introductory essay on the op-era by the late Deryck Cooke, more detailed and searching than the interesting but briefer one by Martin Cooper in the predictably handsome DG booklet. Peter Branscombe’s good translation, already used by Angel and Philips, turns up again for DG, while London offers a new, uncredited one (not the same as that produced in 1967 to go with the Richmond reissue of Knappertsbusch); I haven’t had time to vet it thoroughly, but a quick check has turned up no major absurdisties. Neither company, strangely, includes a word about any of the numerous performers.

From all of this, it is doubtless evident that I find Jochum’s reading the more charactertful, the more general—but I could quite understand an honest preference for Solti’s more reserved and magisterial approach. Both are remarkably fine accomplishments.

WAGNER: Die Meistersinger von Nürnberg.


(2) Gumpoldskirchner Spatzen, Vienna State Opera Chorus, Vienna Philharmonic Orchestra, Georg Solti, cond. [Ray Minshull, prod.] LONDON OSA 1512, $34.90 (five discs, automatic sequence). Tape: OSAS 1512, $39.95 (four cassettes).

FEBRUARY 1977
New Life for Louise

by Conrad L. Osborne

It has been a pleasure to encounter again this lovable and touching opera. The present recording has its drawbacks as well as some important strengths; the real point is that it puts a sonically up-to-date, complete performance of Louise into the catalogue.

Louise is the only successful example of French verismo, if by this term we mean to identify not only works of realistic background and psychological truth-to-life (Carmen would certainly qualify) or shock-operas whose dramatic outlines and musical gestures remind us of Cav and Pag (La Nuvorraise), but works that seek to dramatize the conditions and aspirations of every ordinary people, and to convey these concerns in a language of popular immediacy.

There is much about Louise to remind us Americans of our own socially committed theater of the 1930s, and it has been the opera’s recent fate to fall victim to some of the same careless habits of thought we tend to apply to plays of that genre: We see them as bound to the social and political specifics of their time, to a tract mentality, and to an expressive naiveté we enjoy looking down upon. And so some of them are. But (as I was reminded last spring by the McCarter Theater’s superbly cast and directed revival of Awake and Sing) the best of these works are grounded in a truly sensitive observation of ways of human interaction which, if not “universal,” are certainly common to cultural donnees we have by no means sloughed off.

Thus, Louise is in part about the lot of the urban workingman; in part about a young woman’s difficulty in establishing an identity vis-a-vis restrictive parents or a dominant lover; in part about the overwhelming nature of the modern city, whose powers of magnetism and alienation seem so tightly knit together; in part about the qualities of what we now call the nuclear family and the patterns of tyranny and rebellion we so often see as native to it; and in part about the very perplexing question of just what does constitute personal “freedom.”

Columbia restores Charpentier’s treasurable working-class drama to the catalogue with Placido Domingo aptly cast as Julien.

The basic conflict is the classic one of father vs. suitor for the love and loyalty of a daughter. To sharpen it, Julien is represented as an outsider to, and rebel against, the world of the parents, someone they cannot understand and who does not meet their canons of “respectability.” In the early scenes, the father is shown to be capable of some tenderness and understanding; he is a man of feeling, who acts as mediator between Louise and the mother, who is quite unsympathetically shown (her overriding intent is the preservation, by harsh means, of a ritual familial togetherness). We appreciate the touches of delicacy and humor in the father’s character, sympathize with his bitterness over an aging laborer’s lot, and feel that the love between him and Louise is genuine.

But because the father’s feelings are accessible, it is he who finally drives Louise from the house, despite the mother’s efforts to calm him (she even calls him “Pierre” twice—the only time in the opera that anything so personal as a first name passes between the parents). Along with Louise’s rightly famous aria “Depuis le jour,” long stretches of the father’s role
February 1977

Discographically, there is not much to report about 
Louise. The touchstone recording, dating from the 
early 1960s, is an abridged version (extended ex-
cerpts, really) made by Columbia in Paris. Well con-
ducted by Eugène Bigot, and featuring three ad-
mirable French artists (the soprano Ninon Vallin, 
trusted, and bass-baritone André Per-
net), it should be heard by anyone who loves either 
Louise or French lyric art: but with its cuts and its 
tubby sonics it is hardly satisfactory as a complete 
performance of the opera. Once available on LP in 
the Entre series, it has more recently been imported 
as EMI Odeon 2C 153 12035/6. A complete perform-
ance (actually embracing a few cuts totaling perhaps 
six or seven minutes) was released here on Epic in 
the mid-Fifties. It had a solid conductor (Jean Fourn-
et), good French veterans as the father and mother 
(Louis Musy and Solange Michel), and strong work in 
some of the small roles. But it also had edgy, cramped 
mono sound and lead singers who were scrappy but 
rather fatiguing to the ear.

The current recording thus the first in stereo, and 
the first to take on an international aspect in its cast-
ing and provenance (it was recorded in London, with 
English orchestra, chorus, and supporting singers). 
I cannot summon much real enthusiasm for either per-
formance or recording, but I am sure it is good 
ough to convey the essential qualities of the work; 
its failures are largely those of omission.

I suppose it is futile to pine over the absence of 
forces that have Louise in their blood—even in 
France, the piece has dropped from the repertory, 
and the international houses no longer tackle it 
(though the New York City Opera revives it from 
time to time, and to good audience response despite 
mediocre casting and production). Still, it is clear 
that what is missing from this production is the kind 
of grasp that goes with familiarity.

A good conductor can study and master a score 
technically, a good orchestra can read it and get on 
top of its notes, good singers can learn roles and sing 
them in vocally, and a producer can look through a 
score and come up with casting that approximates its 
requirements, and all this will add up to a good, pro-
fessional start on an opera. The lessons learned from 
the experience, the flexibility gained from repetition, 
the adjustments made after the initial act—all these 
constitute the very real strengths of “tradition,” of 
classical repertory, and they pay off disproportionate-
ly in a special piece like Louise. Contemporary 
recordings seldom have the benefit of such a history, 
and it’s becoming a scarcity in the theater too.

The one real casting inspiration is Plácido Do-
mindo as Julien—the role and the voice are made for 
that other, and he gives a splendid first performance. 
He is in his best voice here, and the music is perfectly 
set up to take advantage of his rich middle, vivid ring-
ing G-to-B-flat top, where he tirelessly pours out ex-
citing, refulgent sound. The role demands little of the 
delicacy of most French writing—a good romantic/ 
heroic voice and a decent basic legato will produce a 
big effect in the part, and Domingo certainly obliges. 
It is clear it’s not under his skin yet, for he does little 
with the character, with words or real finish of phrase—there is hardly a change from his declara-
tions of love for Louise to those of his contempt for 
her parents and back again. That will come with di-

("Les pauvres gens peuvent-ils être heureux?". "Voir 
notre une enfant," and the moving Berceuse) con-
tain the most deeply felt music in the opera, and the 
last confrontation between father and daughter can 
be wrenching.

It is always interesting to observe where a plot 
stops. In this case, it is at the point where Louise van-
ishes into the city night, and the father, stretching out 
his fist at the suddenly extinguished mirage of noises 
and lights that has lured her away, despairingly 
-names his true antagonist: "O, Paris!" For the city, 
with its “apotheosis of light,” its variegated and 
anonymous ways of existence, its sensuality, is a 
metaphor for the life of choice, of adulthood. And we 
are reminded we have watched only the first exciting 
but terrifying step of Louise’s life, for which Julien is 
merely the catalyst. To this point, she has simply 
substituted his catechism for her parents: She can 
do no better than to answer her father’s arguments by 
quoting Julien, and the “freedom” which Julien 
claims for her against the father is that of “el ecting 
the master of your destiny.” So, while Julien is the 
bold and flattering first lover who lends Louise the 
courage for her necessary first step, it is inconceiv-
able to us that her growth should stop here. Finally, 
the father is right—it is not so much Julien she 
chooses, but the “Paris” of infinite possibilities, 
plesant and otherwise.

Living stuff for our audiences, I should think. And 
Charpentier’s score has such a wealth of harmonic and 
orchestral color—as descriptive theater music, it 
is truly expert and sometimes magical. While the 
lyrical spans are generally short, their employment as 
motivic devices is shrewd and often haunting. This is 
true not only of the vendors’ cries that recur to such 
 atmospheric effect (and almost always avoid the 
cliché moment for doing so), but of such simplicities 
as the little flourish for the goat-herd’s flute, which 
at first seems purely a dab of primitive hue, à la Cante-
loube’s orchestrations of Auvergne songs, but then 
quickly unexpectedly puts a breathtaking crown on 
Louise’s first confession of love (“... je serai ta 
femme! Julien! mon bien-aimé.” near the end of 
the first tableau in Act II), wonderfully sweet and melan-
choly.

The vocal writing is always competent from a 
technical point of view (though challenging), but is 
uneven in its effectiveness. In dialogue exchanges, 
especially of the more vehement sort, the composer 
tends to fall back on solutions that are not quite con-
vincing either as “unending melody” or as “extended 
speech”—these passages have a dogged, forced 
air that reminds us all too much of more recent works. 
But in sections of a more tender or charming nature, 
we are reminded, in a most positive way, of the Mas-
senet heritage, and when Charpentier sets himself 
his biggest challenge—the latter portion of the Act III 
love duet with the city visually and aurally present, a 
dangerous concept—he rises to it thrillingly.

The choral setting is splendid almost throughout: 
The Bohemians have exhilarating moments with 
their rauco song in Act II, and again in the full-
blown march and pompous presentational music of 
the Coronation of the Muse. I have also come to 
value the loving musical drawing of a chatty work-
day at the dressmaker’s, which at one time seemed 
quite banal and incidental to me.
rection and stage performance, in the unlikely event that ever happens.

Ileana Cotrubas is a new artist to me except by reputation—I hadn’t caught up to her previously, live or recorded. She has a pretty lyric soprano voice with a warm, floaty timbre in the middle. Like so many modern voices of this type, it is rather weak in the lower-middle area, and somewhat restricted in color, so that the over-all effect in this demanding role is a bit careful, though attractive in a general way. A basic musical sensitivity comes through, though not much individuality or dramatic vitality. Like most sopranos (including Vallin), she is extended by the final scene, and happier in the purely lyric portions. Altogether, an equivocal impression, though by no means an entirely negative one.

Gabriel Bacquier and Jane Berbie are obvious choices for the father and mother, but in the event neither turns out especially well. Bacquier is a fine artist still, but has been recorded late in this role, which poses major singing demands. The casting of the father has a strange history, ranging from the lightest of French baritones (e.g. Fugere, Gilibert) to true basses (Pinza, Rother), with a number of the French light bass types in between (Vanni-Marcoux, Dufranne, Pernet) as well as more straightforward medium-weight baritones (Musy, Brownlee). The singer is expected to have clarity and strength in the occasional high stretches, but to spend most of his time below middle C; what is suggested is a baritone with a classically French lucidity of tone in the lower range, the sort that will carry without becoming weighty, or else a bass with an unusually easy and commanding top.

Bacquier is a baritone, but one whose top has grown increasingly chancy and whose tonal color has become prevalently dark; he has the drawbacks of the bass without the advantages. He sings the role gently and makes a lovely expressive effect at such moments as the conclusion of his plea to Louise in Act I (“O mon enfant, ma Louise!”) or at the opening of “Voir naître une enfant”; at these points, his artistry tells. But he hasn’t really the solidity or bite to bring the stronger side of the character to life, and he evades the top at several key points. Musy, recording the part at a comparable stage of his career, was more able-bodied.

Berbie is another good artist who doesn’t seem at her best. The voice sounds a bit stiff and narrow, and does not sit comfortably on the low-lying tessitura. She rather forces the more vehement declamations, but makes a better effect with the plea to Julien at the end of Act III.

Among the army of supporting singers, the outstanding impression is made by Michel Sénéchal in his double assignment. For the King of the Fools, one could wish for a little more vocal heft, but he brings an easy expertise to both parts. In general, the men make a somewhat better impression than the women, for the simple reason that almost all the female parts require projective strength in the lower range, and are cast with singers who don’t have it—they’re singing in the cracks. Eliane Manchot, the Camille, sounds charming until required to sing above the staff near the end of her song. Meriel Dickinson and Shirley Minty make positive effects as the Forewoman and Gertrude.

The men are also cast on the light side, but get away with it better. The very important role of the Ragman, for example, should be a true bass—this is suggested by the nature of the character, by the tessitura he sings, and by the constitution of the accompaniment (brass and low woodwind). John Noble is a lightish baritone, but colors and inflects well enough to be acceptable. Still, Epic’s casting of Gérard Serkowyan demonstrates the difference, and in fact the older recording has a greater general righteousness in these roles than the new one.

Georges Prêtre, whose reputation has fallen on evil days, is nevertheless an interesting and often effective conductor who has been responsible for some excellent recordings. He is erratic, however, and a recurrent problem seems to be a reluctance to trust the music rhythmically in more subdued or sustained passages. For me, for instance, he seriously compromises the opening of Act II by adding a stringendo to the crescendo in the fifth bar of the awakening motif (an andante tranquillo e maestoso, and both those qualities are effectively banished, for no good musical reason that I can see). Throughout, there is a tendency to skulk impatiently through such moments without giving them time to unfold, to assume their proper weight.

On the other hand, he is one of the few contemporary conductors with an ear for lusciousness of color, a sensitivity to the textures of this sort of music, and as a result there are some quite gorgeous moments. The more vital, extroverted passages have some real excitement, and he secures a lovely delicacy and transparency when needed. The orchestra plays very well for him, and the choral singing is first-rate.

The recording of course captures more of the score’s color and fullness than do the older ones, but it is only fair by current standards, missing any real breadth or weight of sound. I do not at all care for the runny textures and strange balances of the street scene—the vendors’ voices do not sound off, but only separate (the same is true of the supposedly distant chorus in Acts III and IV), the worst instance being that of the Carrot Vendor: The whole point is that he is crying out at the top of his lungs, but at a considerable distance (I suggests Charpentier), whereas he is clearly not more than two feet away, crooning. All the staging here sounds more like mixing, and it’s pretty unconvincing. Some detail is dropped out entirely—the sound of the sewing machines in Act II. Scene 2, is hardly distinguishable, for instance. Too much electronic sophistication, too little dramatic and musical common sense.

The accompanying booklet offers a stilted translation and sketchy notes; if you can, dig up Epic’s, with a stilted translation and far more complete notes, including a very good biographical essay by Joan Desternes.

Charpentier: Louise.

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Ambrosian Opera Chorus, New Philharmonia Orchestra, Georges Prêtre, cond. [Paul Myers, prod.] COLUMBIA M3 34207, $20.96 (three discs, automatic sequence).
How Do You Like Your Liszt?

Carlo Maria Giulini's conducting and the pianism of Horacio Gutiérrez, Gyula Kiss, and Lazar Berman highlight a worthy crop of concertos.

by Harris Goldsmith

We have an event surely worthy of some note: three new discs that include the Liszt First Piano Concerto, all warmly recommendable.

The new contenders are: from Angel, Horacio Gutiérrez and Andre Previn (with the Tchaikovsky First Piano Concerto as coupling); from Hungaroton, Gyula Kiss and János Ferencsik (with the Liszt Totentanz); and from Deutsche Grammophon, Lazar Berman and Carlo Maria Giulini (with the Liszt Second Concerto).

The young Cuban-American Gutiérrez deserves pride of place, since he is making his recorded debut. He sounds like an impressive virtuoso, with a lean, silvery tone, an acute sense of line, and, when appropriate, caressing rubato. His tempos are generally brisk, but there is much expressive leeway too.

The Liszt concerto gets an interpretation in the best conventional manner. The Tchaikovsky concerto is trim, elegant, often exciting, and pleasingly (not sloppily) expressive. The octave passages carry a demonic energy reminiscent of Horowitz, in that electricity and edge, rather than bronze weight, animate them. This is a most impressive introduction to a new artist, and I look forward to hearing Gutiérrez in other literature. He seems to have grown immensely since I heard him in recital at Hunter College some years back.

Previn supports both concertos admirably: The London Symphony's work is supple and finely nuanced, and all I can cavil at is a tendency for rhythm to go slack. This is most apparent in the second movement of the Tchaikovsky, which Previn moulds according to casual "tradition" rather than according to the composer's Andante semplice marking. Angel's sound is of the moderately distant variety, but clarity and detail are not harmed by the reverberant ambience.

The Hungarian Gyula Kiss is a more Beethoven-oriented sort of Lisztian. Particularly in the concerto's slow movement, he gives the music a kind of passionate vehemence and angularity, and in general his approach seems to be harmonically oriented—in other words, he maintains a firm underpinning instead of going wherever a melodic flourish leads him. It works well, for Liszt did indeed have a certain rigor in his musical makeup, deriving from Beethoven and leading to Bartók. The Kiss/Ferencsik Totentanz is interesting: a strong, clean-limbed interpretation lacking the breathtaking velocity of the Watts/Leinsdorf (Columbia M 33072) but with a compensating sober intellect that is, in its way, equally persuasive.

Hungaroton's recording is easily equal to that of the others in this group—a firm, plangent, mellow piano; closeup instrumental perspective (the triangle, very close, has unusual body as well as brilliance); and silent surfaces. My only criticism, which applies to the Angel as well, is that the piano occasionally blots out an important woodwind solo, though never to a musically offensive degree.

With all due respect to Berman, who plays both Liszt concertos with taste, color, and superb every-note-in-place command, it is Giulini's orchestral contexts that give the new DG disc its strong character. One does not think of Giulini as a Lisztian, and it is therefore a pleasure to hear how explicit his direction is. Tempos are rather slow, with a firm, constant pulse taking precedence over garish outbursts. Both concertos as a result emerge in a dignified, structural manner suggestive of the best Klemperer. The instrumental detail is marvelous, the result of musical intent rather than merely skillful microphoning. The Vienna Symphony is not the glossiest of orchestras, but it gives its utmost under Giulini's inspired guidance.

It is unusual to hear conductor-dominated performances of the Liszt concertos, but when the piano-playing is so accomplished and put to such good use, the adjustment is quickly made. Nevertheless, I must note that Berman's pianism seems a shade stolid, lacking that last touch of magic that Richter and Vasáry, to name just two of the really memorable recorded interpreters of these concertos, achieved.

Perhaps some of the constraint is due to the recorded sound. While very clear, it has a problem rather opposite to that of the Angel and Hungaroton engineering: The piano seems to have been artificially limited to prevent its swampng orchestral instruments at climaxes.

Still, whatever the cavils, all three of these records warrant attention for the seriousness and quality of both playing and recording.

**LISZT:** Concerto for Piano and Orchestra, No. 1, in E flat.

**LISZT:** Concerto for Piano and Orchestra, No. 1, in E flat: Totentanz. Gyula Kiss, piano; Hungarian State Orchestra, Janos Ferencsik, cond. [János Mályás, prod.] HUNGAROTON SLFX 11792. $5.98.

**LISZT:** Concertos for Piano and Orchestra: No. 1, in E flat; No. 2, in A, Lazar Berman, piano; Vienna Symphony Orchestra, Carlo Maria Giulini, cond. [Gunther Breest and Werner Mayer, prod.]. DEUTSCHE GRAMMOPHON 2550 770, $7.98. Tape: ● 3300 770, $7.96.
BARTÓK: Bluebeard’s Castle, Op. 11.

Judit Tatiana Troyanos (ms)
Bluebeard Siegmund Nimsgern (b)
BBC Symphony Orchestra, Pierre Boulez, cond. [Paul Myers, prod.] COLUMBIA M 34217, $6.98.

Compositions
Ludwig, Barry, Kertész
H pledged, Korah, Susskind

Single-opera composers are not necessarily victims of their own incomptence, giving up a difficult genre after one unsuccessful shot at it. On the contrary, some great composers whose gifts did not lie in that direction have gone on pursuing it for years (think of Haydn), while others, having once and for all said something central in this very specific form, have passed on to other things with scarcely a backward glance. Beethoven is the obvious example; it’s true that he was tempted by other operatic projects after Fidelio, but significant. I think, that none of them ever came to anything. Bartók is another, and on a scarcely less exalted level.

Quite what crises or pressures lie behind the somber drama of Bluebeard’s Castle, which he composed at the age of thirty, seems not to have emerged as yet, but something much must have been, for this one opera of his, with its parable about the essential self-destructiveness of human relationships, has the unmistakable ring of a personal statement. A statement of such importance, too, that it demanded and produced its own distinctive musical language. Most of the harmonic procedures in Bluebeard’s Castle may be found in miniature in the piano music of the immediately preceding years, but here, suddenly, the amalgam of Strauss and Debussy and Hungarian folksong is deployed with complete confidence on a far larger scale, and with a new individuality that transcends all questions of derivation. It can hardly be an accident that Bartók’s next stage work, the ballet The Wooden Prince, should seem like a step backward: the pressures had been diffused, and the amalgam that works so perfectly in Bluebeard has begun to separate.

Nor is it an accident that the only opera of this very private man should have been set in the small but distinguished tradition of interior drama, which stems from Wagner’s Tristan, passes through Debussy’s Pelléas, and takes on a more specifically Central European cast with Schoenberg’s two dramas, Erwartung and Die glückliche Hand. Perhaps the relation of Bartók’s operas to these last would have been more obvious had he called his two characters The Man and The Woman, but artistic tact prevented him from asserting quite so blatantly the universality of what he had to say. He and his librettist Bela Balázs chose to associate their drama with the traditions of French symbolism, in which the general is clothed in the particular, rather than that of German Expressionism, which proclaims its universality to the world.

Even so, the scenic realization of the work is vulnerable, particularly to the efforts of busy producers who cannot trust to the simple symbolic action, and above all the sequence of simple lighting effects (a literal spectrum of experience) that the score specifies. Rejected by the prize committee that was originally set to judge it and little played between the wars, Bluebeard has been steadily winning a place in the repertory—but this is largely due to the LP record, which leaves us free to imagine the work as it was originally conceived, and to concentrate on the changing nuances of the relationship between Bluebeard and his young bride Judith without worrying where they are or straining for their words, as we usually have to in the theater.

No, I do not understand Hungarian, but another advantage of having Bluebeard on records is that with a translation in hand we can all follow the action in detail without losing the very individual sound, and above all the individual rhythms, of the Hungarian text. And whether or not Tatiana Troyanos really knows Hungarian, I have to say at once that she is the best Judith I have ever heard; no less intense an interpretation than Christa Ludwig’s (on the London recording), but even more finely shaded, and with a controlled plangency of timbre that I find quite thrilling. For nearly twenty years I have cherished an admiration for Judith Helmig’s performance on the mono Bartók Records set, but she was really too much of a soprano for this mezzo role; Troyanos manages to get altogether more character into the lower part of her range. Indeed, the only fault I can find with her is that she clings too long to the astonishing (and astonishing) top C with which Judith reacts to the opening of the fifth door, the revelation of Bluebeard’s power. Ludwig does the same—but then, I suppose it’s natural that mezzos should want to make the most of a high C if they have one.

As Bluebeard, Siegmund Nimsgern, a young German baritone who has worked a good deal with Boulez, and whom U.S. collectors may know from his appearance in Schoenberg’s Gurre-Lieder as well as in several Bach cantatas, is scarcely less good than Troyanos, in a part whose passivity makes it all the more difficult to charac-

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Explanation of symbols

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Pierre Boulez—a genuine involvement with Bartók’s score

BRAHMS: Concerto for Piano and Orchestra, No. 1, in D minor, Op. 15. Claudio Arrau, piano; Philharmonia Orchestra, Carlo Maria Giulini, cond. SERAPHIM S 60264, $3.98 [from ANGEL S 35892, 1961]

Fantastic as it is that Arthur Rubinstein can still play the Brahms D minor Concerto as well as he can, his earlier recordings make it impossible to ignore the substantial decline, both pianistic and dramatic. Zubin Mehta is a considerate partner, much more accomplished technically and attentive to Rubinstein's rubato than Barenboim was in the pianist's recent Beethoven cycle (RCA CRL 5-1415, May 1976), and he begins the performance auspiciously with an introductory tutti of compelling power. As soon as the pianist enters, though, the pulse slackens, and despite many golden moments of broad lyricism and arching grandeur only the slow movement really comes off. One textual note: Rubinstein now follows Backhaus and Brendel in interpolating a low B flat in bars 238 of the finale, overlapping the first note of the orchestral fugato.

For the broadly lyrical approach to this work, the choice lies between Rubinstein's
recording with Leinsdorf (RCA LSC 2917 or VCS 7071) and the newly reissued Arrau/Giulini. Though Claudio Arrau recorded the D minor Concerto before and after, this middle version is the one that preserves this master Brahmsian's greatest achievement with the demanding score. Carlo Maria Giulini’s framework, lyrical but intense, creates interest as Haitink’s (Philips 6500 018) does not. Arrau is obviously caught up in an emotional experience here, and his loud, strong account of the solo part has far more meaningful arching continuity than in the other versions. Compare the flow in the left hand at bar 123 of the first movement with the heavy, plodding détache in the Haitink performance. Arrau stretches phrases characteristically, and in truth I would prefer the finale’s second theme played more in tempo, but for all that the reading has lyricism and grandeur.

Seraphim’s transfer is brighter and more vivid than the 1961 Angel original. The sound lacks the immediacy of the more recent Philips engineering, but it is kind to both piano and orchestra.

My own preference in this work has always been for performances that reflect the then twenty-five-year-old composer’s emotional stride—among current recordings, the Fleisher/Szell (Y 31273) and Serkin/Szell (Columbia MS 7143 or MC 31421). Bruno Leonardo Gelber’s 1986 version is of this type, and I am even more impressed with it on re-hearing. The Argentinian pianist, twenty-five at the time, balances astonishing power with impeccable legato and beautifully controlled voicing. His octaves are perhaps the most gripping on record, and energy is always tempered by weight and breadth.

Franz-Paul Decker doesn’t quite clarify the brass details in the first-movement introduction as Szell always managed to do, but he provides energetic musician support with the Munich Philharmonic. Conductor Seiji Ozawa’s new transfer has opened up the Orson original; the slight tubbiness I noted then has disappeared entirely. H.G.


At twenty-nine, the Riga-born Gidon Kremer, a one-time student of the late David Oistrakh, has racked up an impressive list of credentials, including a number of Soviet recordings not yet released here. Violinistically, at least, he is an accomplished player, with a suave, rather luscious golden tone that recalls both Oistrakh and Viktor Pikaizen, another Oistrakh pupil. His intonation is excellent, his bow control reliable. Yet I confess to disappointment. I rather like a leisurely approach to this massive concerto—as exemplified by the superb Oistrakh/Szell recording (Angel S 36033)—but more intimate and arching continuity than he seems unable to direct it in any meaningful, compelling manner. A case of mine fright, perhaps?

Karajan and the Berlin Philharmonic give considerable backing, although I find their framework for Ferras (DC 138 930) more sinister and aristocratically shaped. Anigel’s sound is massive and a shade mushy in its ambience. H.G.

CHARPENTIER: Louise. For an essay review, see page 92.

DUFAY: Missa “Se la face ay pale”—See Recitals and Miscellany: David Munrow.

FRANCK: Symphonic Variations—See Liszt: Hungarian Fantasia.

GLAZUNOV: Chant du ménestrel—See Shostakovich: Concerto for Cello and Orchestra, No. 2.

GRIEG: Concerto for Piano and Orchestra—See Liszt: Hungarian Fantasia.


What distinguishes Haydn’s Prussian Quartets, composed (in 1794–47) shortly after Mozart dedicated six quartets to his much-admired elder friend, is the marvelous thematic elaboration and motivic logic, which nevertheless does not change or diminish the natural flow and simplicity of the texture. Even in the tumultuous and scintillating presto finales, Haydn creates fascinating little nooks in which wondrous tiny intimate aside appears.

Space does not permit the analysis these six quartets deserve, but I must at least mention the dark F sharp minor, No. 4, whose pregnant opening theme shows an obvious kinship with the “fate” motif of Beethoven’s Fifth. It was in the finale of this same quartet that Haydn once more essayed a fugal finale, but while the fugues in his Op. 20 are vigorous and clearly baroque-inspired pieces, this one is gently elegiac, pure chamber music. In the finale of No. 6 Haydn uses homilagque, the rapid repetition of the same tune but alternating on two strings; the witty piece is composed with a dazzling virtuosity that demands the same quality in the performance.

The Tokyo Quartet is a first-class group, and Deutsche Grammophon records the musicians and their magnificent matched Amati instruments (what a viola tone!) to perfection. They have a lively sense of style and tempo, their ensemble work is elegant, and except for a few pinched high notes in the first violin, their tone is attractive. If they learn to distinguish a little more positively between portamento and nonlegato and similarly between staccato and simply detached tones, they will be well-nigh impeccable.

It is surprising, though, that even such fine musicians do not know the really simple rules of ornamentation in the Haydn era. Appoggiaturas are not infrequently accentuated on the wrong note; sometimes the distinction between embellishment and integral melodic notes is hazy; trills are a bit perfunctory and begin with the wrong note. I do not mean to single out the admirable artists of the Tokyo Quartet, for few of their brethren in chamber music know how to execute such things correctly. A quartet playing Haydn and Mozart could easily make a one-page digest of the common embellishments and their variants; that’s all they would need for correct realization of admittedly vague eighteenth-century musical orthography.

P.H.L.
Leonard Bernstein, cond. [Richard Killough, prod.] Columbia M 34126, $6.98. Tape:

MT 34126, $7.98.

Leonard Bernstein has always seemed to me to be at his very best in Haydn symphonies, which call forth his own innermost musicality and humanity. He responds spontaneously to Haydn, apparently without feeling the necessity to gild this particular lily.

This is far from the traditional "classical" eighteenth-century approach, yet I find nothing offensive to taste. The impressive emotional and dramatic impact of the slow movement of Symphony No. 100, something Bernstein finds in the music, not something imposed from without. In both symphonies here, as elsewhere in his growing Haydn discography, there is a joie de vivre shared instinctively by a great composer and a great conductor. Now past midway through his gradual traversal of the Haydn "London" symphonies, Bernstein continues to probe into the humanity of this music; as few other conductors have managed; indeed I find this record the richest in the series to date, not only for the more profound No. 99, but also for the recognition that No. 100 is more than "military" high jinks.

The New York Philharmonic plays extremely well here, its articulation quite up to some of Bernstein's bracing tempos. Classical purists will not hear the polished sound Szell's remarkable Haydn performances with the Cleveland Orchestra, but his was a totally different approach. Surely there is a place for both.

P.H.

Haydn: Variations in F minor—See Mozart Sonatas for Piano.

Liszt: Hungarian Fantasia*; Totentanz*; Paginni Etude No. 3 (La Campanella); Waltz from Gounod's "Faust"*; Gyorgy Cziffra, piano; Orchestre de Paris, Gyorgy Cziffra Jr., cond.*. CONNOISSEUR SOCIETY CS 2092, $6.98.


The most satisfying of these records is the Liszt collection. Cziffra plays the Totentanz with a kind of manic intensity and discreetly gauges his interpretive liberties in the showy Hungarian Fantasia. His cavalier approach is perfectly valid, though there are other, equally effective ways of dealing with this material—e.g., the patriarchal Solomon and Campanella versions of the Fantasia and the much swifter, straighter Watts/Leinsdorf Totentanz. La Campanella is a bit broken up at the end, but Cziffra's trills are indeed consummate.

The old Petri and Barere accounts of the Faust paraphrase may have more sweep and continuity, but neither matches Cziffra's delicacy and atmosphere in the fragrant middle section. (Elsewhere, though, his sonority is flinty and jangling.)

The Franck/Grieg disc can also be recommended. Along with the extremely rhetorical, gesturesome phrasing there is craft, incisiveness, and fire. Certainly this Grieg concerto is (appropriately) more restrained than Cziffra's previous recording, with Vandernoot.

The Rachmaninoff C minor Concerto must be approached with caution. The opening movement proceeds at a small's pace, encumbered with overrich sound and irrelevant details. For no discernible reason, the development section suddenly accelerates to something approaching normal tempo, only to fall back into lethargy. The lovely slow movement is stiffly phrased, which does not, however, preclude a liberal indulgence in tortured rubato. The difficult finale takes off in a cloud of gravel (though many notes in difficult passages are jetisoned). All told, a hopefully disjointed reading, in no way comparable to the similarly broad but well disciplined (and better played) Rubinstein/Sim/Ormandy version (RCA ARL 11031).

The encore's are better: The Rachmaninoff C minor Prelude is broadly accented and strongly projected; the Bizzet-Rachmaninoff L'Arlésienne Minuetto is full of interesting contrasts and chiaroscuro. Only in the Mendelssohn-Rachmaninoff Midsummer Night's Dream Scherzo does Cziffra's floridly, self-indulgent rhythm hurt; this piece requires the utmost in symmetry and digital precision, as heard in the recordings of Rachmaninoff himself, Moiseiwitsch, and Bolet.

Gyorgy Cziffra Jr. continues to impress as an ideal accompanist. Even in the hopeless Rachmaninoff concerto he follows his father uncannily, and he gives ample evidence of interesting ideas of his own—note how he grades and shades the tutti in the third movement of the Grieg concerto, with a less-than-virtuosic orchestra. The engineering is spacious and attractive throughout, and my copies were exceedingly pressed.

H.G.

LISZT: Concertos for Piano and Orchestra; Totentanz. For an essay review, see page 95.


Of the four quartets recorded here, K. 499 (1789) falls between the six dedicated to Haydn and the last three, so-called "Prussian" quartets; it follows Figaro and precides the Prague Symphony. In an age when quartets were composed in sets of six, such a single, isolated work is bounded to have characteristics of its own, and indeed this one does differ from its neighbors. It is much more relaxed, in a generally gay mood, and, because of the not uncommon notion that artistic value is lowered by playfulness, this quartet has been somewhat neglected.

The little canonic interwavings in the opening Allegretto and its wealth of ideas, the fine contrapuntal needlework in the minuet and trio, the broad smiling themes in the Adagio, and the spirited motive play in the andante all place this quartet at the peak of the art of chamber music. And there are varied secret connections between the movements, too, unexpected patches of development, motifs that seem insignificant when first presented suddenly appearing as major entities; in other words, what strikes the uncritical mind as carefree erriment is in reality a highly sophisticated and artful creation.

The three "Prussian" quartets of 1789-90 (a set of six was originally contemplated) were composed for Friedrich Wilhelm II, king of Prussia, who was a good cello player. This commission of course demanded that the cello part of the quartets should be prominent and elaborate, and Mozart obliged. But he also turned to a new and unusual quartet style of soaring melody combined with contrapuntal splendor. The magnificent opening melody of K. 575 is the motto for the whole group. Not only does it engender the subsidiary themes, but its influence is still felt strongly in the finale: even the minuet is a finely stylized echo of this original theme. The procedure, though perhaps not so concentrated, is the same in the B flat Quartet. K. 589; on the other hand, the curve of tension mounts higher than in the previous quartet, and the counterpoint becomes passionate, the whole reaching its climax in the last movement.

The third quartet, in F, harks back to the theme of the first work in the trilogy, but by the simple device of making forte what was piano in that original theme, and vice versa. Mozart gives it an altogether new physiognomy. Since he now concentrates on the faster-moving tail end of the theme, what was before an appendix turns into the principal idea. Here again it is the finale that crowns the composition, yet this time it is

Leonard Bernstein
Responding spontaneously to Haydn

February 1977
not the usual rondo, but a spacious sonata structure. Particularly attractive in this quartet is the symbiosis of simple homophony with highly mobile polyphony. All three quartets have minuets of unusual weight, length, and elaboration.

The Juilliard Quartet, heard in its first recording since Joel Krosnick replaced cellist Claus Adam, clearly perceives that K. 499 is really a divertimento in an artistically heightened quartet style and plays it accordingly: the syncopation dance-like, the firework in the pleasant Adagio delicately flowing, and the multiple themes in the finale neatly delineated. In the first “Prussian” quartet, the performers never lose sight of the importance of the first theme; in the B flat Quartet they shrewdly recognize that the first movement is a quasi-minuet and avoid dramatizing. In the Larghetto, Krosnick plays the royal cello part nobly; the linearity of the trio is brought out with clarity; the turbulent rondo is plain-spirited music-making as it was intended to be. The Juilliard ensemble continues this genial playing in the last quartet, properly carrying the same spirit even into the songlike portions, while dealing with the coquetish staccatos and splashing garlands of upbeats and ornaments with finesse; their grace notes and trills are exemplary.

This is chamber music playing at once aristocratic and easygoing that gives the listener undimmed pleasure. The sound is unexceptionable.

P.H.L.


De Larrocha’s sparkling tone, lively rhythm and tempos, and uncommonly good articulation bespeak a natural affinity for Mozart’s world of sound. Her intuitively musical work would, however, be even more compelling if she would delve a bit deeper into detail.

It may seem picayune to carp about lifting the left hand before the first rather than the second of the three repeated E flats in measure 14 of K. 330’s second movement, but scrupulous attention to such fine points of part-writing can immensely enhance the harmonic tension of this sparely poignant music. Similarly, the occasional substitution of a dominant-seventh chord for Mozart’s plain dominant (an unreliable text?) can dilute the composer’s typical lack of sentimentality. I do not wish to imply that these are inadequate, or even seriously flawed, performances. But it does seem a shame that so memorably endowed an artist doesn’t make that extra little effort to come closer to the music’s letter—and, by inference, its spirit.

The Haydn F minor Variations are if anything even more gorgeously played than the Mozart works. All are crisply, glisteringly reproduced.

H.G.

**MOZART:** Zaide, K. 344 (with Symphony No. 32 in G. K. 318; March in D. K. 335, No. 1). Zaide Giomatz Edith Mathis (s) Peter Schreier (t)

**NIELSEN:** Orchestral Works. Danish Radio Symphony Orchestra, Herbert Stock. A l i c i a d e L a r r o c h a , p i a n o . [ M i c h a e l W o o - Z a i d e E d i t h M a t h i s ( s ) M o w n M o z a r t w o r k s . A l l a r e c r i s p l y , g l i s t e n i n g l y z a r t ’ s p l a i n d o m i n a n t ( a n u n r e l i a b l e t e x t ? ) m u s i c . S i m i l a r l y , t h e o c c a s i o n a l s u b s t i t u - o f p a r t - w r i t i n g c a n i m m e n s e l y e n h a n c e t h e t h e s e c o n d o f t h e t h r e e r e p e a t e d E f l a t s i n t h e p l a i n t i v e - a m o r o u s N e a p o l i t a n v e i n , t h e s e r i a s t y l e , a r e s p a c i o u s a n d m e l o d i o u s , i n a t t e n s i o n a t h e b a s s ; L o n d o n S y m p h o n y O r c h e s t r a , C o l i n k l e e . T h e H a y d n F m i n o r V a r i a t i o n s a r e i f a n y - t u r e . S m i t h h a s p l a u s i b l y s u b s t i t u t e d o n e o f t h a n f o r t h e t h r e e l i t t l e b u f f a s , a n d s o m e o f t h e m m u s i c - m a k i n g a s i t w a s i n t e n d e d t o b e . T h e a r t i s t ’ s p l a i n d o m i n a n t ( a n u n r e l i a b l e t e x t ? ) m u s i c . S i m i l a r l y , t h e o c c a s i o n a l s u b s t i t u - o f p a r t - w r i t i n g c a n i m m e n s e l y e n h a n c e t h e t h e s e c o n d o f t h e t h r e e r e p e a t e d E f l a t s i n t h e p l a i n t i v e - a m o r o u s N e a p o l i t a n v e i n , t h e s e r i a s t y l e , a r e s p a c i o u s a n d m e l o d i o u s , i n
Blomstedt, cond. [David Mottley, prod.] SERAPHIM SIC 6097 and 6098, $11.94 each SQ-encoded three-disc set (manual sequence).


Comparison—symphonies:

Schmidt/London Sym. RHS 324/30

Less than a year after Unicorn released the first integral Nielsen symphony cycle (reviewed at length in April 1975), EMI issued an eight-disc set (SLS 5027 in England) containing the six symphonies, the three concertos, and a number of shorter works. With the new Seraphim issue of the first half-dozen discs from that package (comprising everything except the concertos and the early Symphonic Rhapsody), one can buy the symphonies (plus five filler works) for half the price of the fillerless Unicorn box (which does, however, include a bonus disc—Robert Simpson's illustrated lectures on the symphonies).

Although Herbert Blomstedt is in fact Swedish, he has since 1967 been chief conductor of the excellent Danish Radio Symphony, which has this music in its bones in a way that Unicorn's London Symphony didn't, despite the presence of the Danish conductor Ole Schmidt. The meticulous and sonorous DRSO is also more evenly-handedly recorded; Unicorn's engineering remains superlatively vivid and warm, especially rich in the bass, but it does slight the woodwinds and violins. Unicorn offers a brilliant and enveloping illusion of front-back depth that the EMI engineering, at least in two-channel playback, cannot match.

Blomstedt opens Symphony No. 1 with weight and vehemence, building to an exciting crotchet in the first movement's coda. Schmidt is less firmly profiled here, though the two conductors are well matched in the second and fourth movements. The scherzo's trio benefits from the more austere recording of the Danish brass. In No. 2 (The Four Temperaments), Blomstedt chooses tempos that seem uniformly leisurely, vitiating even more than Schmidt the stark movement contrasts. The problematic drum roll in the Andante malinconico—one of the triumphs of the Unicorn recording, with its lovely birch-twist—is all but inaudible here. The DRSO passes all the minor hurdles over which the LSO stumbled, but I still prefer the Garagely version on Turnabout (TV-S 34049), which is fortunately an inexpensive supplement.

The new No. 3 (Expansivo) has some surprises. Blomstedt whips through the first movement with enormous gusto (the marking is Allegro expansivo), stressing the trumpet punctuations in the transition to the second theme in a way that makes the opening rhythmic motif a kind of obsessive idle fixe. In the pastoral second movement, the wordless solos of soprano Kirsten Schultz and baritone Peter Rasmussen are recorded more backwardly than I've ever heard, almost blending into the instrumental lines instead of floating freely above them. In the finale, Blomstedt reverses the recent trend (cf. Bernstein, Schmidt, and François Huybrechts—the latter on a British Decca disc not released here) toward a broader tempo.

Blomstedt's No. 4 (Inextinguishable) may be the version we've been waiting for. (Schmidt, in fairness, had fewer conspicuous failings than his predecessors, and the recording is still of demonstration caliber.) The discipline and detail of the contrapuntal riots in the outer movements easily outclass all the previous recordings. Pulse and intensity level are nicely matched in the middle movements. And nobody—not even the pioneering Grondahl with the DRSO—has made such sense of the final coda; the diminuendo and slowdown are for once a grandly valedictory gesture rather than an anticlimax.

No. 5 is outstandingly rendered in both sets. Schmidt remains exhaustedly fecund, with nonpareil percussion effects. Blomstedt is a bit steadier and cleaner, like Horenstein (Nonesuch H 71236) slightly more aloof and objective in conception. No. 6 (Semplice) too is something of a standoff. Unicorn's sonicists have the edge for sheer color and presence, and Schmidt has the jollier time with that nasty little Humoreske, whose trombone glissandos seem apologetic under Blomstedt. But in the slow movement, the opening viola passage gets a darkly resonant tone with the DRSO lacking with the LSO—Blomstedt generally approaches this movement more grimly. In the bizarre finale, Schmidt maintains a giddily quality of desperation, while Blomstedt's irony is more of the velvet-glove variety.

Most of the Seraphim filler works are not otherwise represented in Schwann. The Andante lamentoso (subtitled "At the hier of a young artist") is perhaps less effective in its string-orchestra form than in the wind version recorded by the West Jutland Chamber Ensemble (DG 2530 515, April 1976). The Bohemian-Danish Folk Melody, though a late work, is an innocuous trifle. In the well-known Helios Overture, a piece of immense grandeur, Blomstedt carefully controls the archlike shape and regal pride.
avoiding the excitable excesses of the deleted Martinon/RCA and Ormandy/Columbia versions.

Blomstedt’s rendition of Soga Dream, that strange combination of Sibelian late Romanticism and Nielsen’s own late-period acerbic surrealism, has more mobility, cohesion, and atmosphere than Horenstein’s (the filler to his Nonesuch Fifth Symphony). Blomstedt has the field to himself in both Pan and Syrinx (another mini-tone poem of oddly mated sonorities and the Rhapsodic Overture (which could pass in spots for a nineteenth-century Russian work), though both were played with more aggressive brilliance by the Philadelphia Orchestra on Ormandy’s deleted Columbia disc of the First Symphony.

If all the above suggests that these Sera- phim sets belong on your must-buy list, let me enter a caveat: It is not certain that An- gel will issue the remaining material—the three concertos (which are excellently per- formed, especially the flute concerto)—and the first recording of the Symphonic Rhapsody (composed three years before the First Symphony). For those who want to be sure of having all this material, I can add that the English pressings are slightly brighter and more open than the Sera- phim. A.F.

RACHMANNINOFF: Concerto for Piano and Or- chestra, No. 2—See Liszt. Hungarian Fan- tasia.

ROSSINI: Elisabetta, regina d’Inghilterra. For a review, see page 106.


The music of the Finnish composer Aulis Sallinen (born in 1935, studied at the Si- belius Academy under Aarre Merikanto and Jooms Kokkonen, the latter a composer who deserves exposure) communi- cates immense expansion and unity, as if musical time were being slowed down to such an extent that it defines itself in almost spatial terms. Basic: musical ideas are re- duced to a bare minimum, with thematic: and rhythmic motives rarely lasting more than a few seconds before being picked up and obsessively repeated in orchestral con- texts that very slowly metamorphose into new tonescapes.

Sallinen is a master of mood. His intense, extraordinarily orchestrated Sinfonia (1971) has its spiritual roots in the Sibeli- lius Fourth Symphony, that masterpiece of Nordic gloom and atmosphere, yet the style remains unique and quite modern. The opening idea, a bleak F sharp minor chord repeated in the strings, hauntingly re- peats throughout this single-movement work until it is finally boiled down to an ominous F sharp unison. Confronting frag- ments in the winds weave in and out among linear string figures, joined Expressionisti- cally in the final third by a clock-chime motive and a grotesque waltz beat.

Mstislav Rostropovich
Authentic Shostakovich

Choral (1970), for thirty-five wind instru- ments, harp, celesta, and percussion, is a more austere piece, with chorale-like themes used more for contrapuntal poten- tial than for chorale-style harmonies. The three-movement Sinfonia III (1974–75) breaks with Sallinen’s preference for a single continuous pulse, but here again motivic fragments are repeated, overlap, wind in and out of other configurations, and ultimately accumulate to form an ex- pansively cohesive whole. Stock musical figures are sometimes suggested, but then transformed: the ostinato that opens the second movement, for example, lead into string passages of deep, lyrical expressiv- ity.

As amply displayed here, Paavo Berg- lund and Okko Kamu are two of the day’s most promising conductors. Both can bring out the full dramatic potential of this kind of music, and both are helped by excellent, taut orchestral playing (and brilliant engi- neering). Kamu works up his Finnish Radio Symphony to an almost terrifying frenzy by the end of Sinfonia III. This disc should appeal to anyone interested in contemporary music.

R.S.B.


The three Shostakovich works on these discs share a gloomy, even morbid quality especially characteristic of the composer’s later years. Even the sometimes dazzling in- strumental effects of the Second Cello Con- certo, completed in 1966 just before Shosta- kovich suffered a major heart attack, mitigate neither the dark solemnity of the opening nor the black humor of some of the later sections. As instances of the con-. certo’s brittle acidity (the scoring features a large percussion contingent, with a brass section reduced to two horns), one thinks of the three cadenzalike passages, each scored for solo cello plus a percussion instru-
STAMITZ, J.: Concerto for Clarinet and Orchestra, in B flat,* Symphonies: in G; in D, Op. 3, No. 2; in D, Op. 4, No. 2. Alan Hacker, clarinet; Academy of Ancient Music, Christopher Hogwood, harpsichord and cond. [Peter Wadland and Raymond Ware, prod.]
OISEAU-LYRE DS05, $6.98.

Though recent research no longer upholds its primacy in the formation of the classical style, the Mannheim School and its chef d'ecole, Johann Stamitz (1717-57), remain a distinguished chapter in the history of music.

Of the works recorded here, the early G major Symphony is negligible, but the Symphony in D, Op. 4, No. 2, is genuine symphonic writing—original, with good ideas, and with a nascent sense for thematic development. The Symphony in D, Op. 3, No. 2, gives us the full Mannheim treatment: the rolling crescendos, the "rockets," and that rising excitement so typical of the classic symphonic allegro. In both of these symphonies, the sonata idea is present in practically all movements except the minuets, which are not the French dances from the old suite, but typical Austro-Bohemian orchestral pieces.

The B flat Clarinet Concerto takes us close to the world of Christian Bach and the young Mozart, but it is short-winded when compared to the works of those two. Curiously, Stamitz makes no attempt to exploit the magnificent low register of the clarinet: Vivaldi's clarinet concertos, which anticipate Stamitz's (pace Christopher Hogwood, this is not "the earliest known concerto for the clarinet"), require far more from the soloist. Alan Hacker plays nicely on an old clarinet—his jerky trills and grace notes may result from the instrument's lack of keys.

The performances by the Academy of Ancient Music, using "authentic" instruments exclusively, are anything but deadly "historical." Though the players observe all the strictures of the new cult, they play not only with precision, but with feeling, verve, and expression. The tiny orchestra of fourteen strings and the usual number of winds sounds fine, though the authentic flutes and oboes are mostly covered even by this small body of strings. One may ask, of course, how this miniature band is reconciled with Daniel Schubart's famous description of the Mannheim orchestra: "its forte is like thunder, its crescendo a cataclys.

A large bag of the best sunflower seed to the Lyre Bird for the intelligent and informative little pamphlet written by Hogwood that accompanies this well-engineered recording.

STRAUSS, J.: Die Fledermaus.
Rodilinde Adele
Julia Varady (s) Luca Popp (s)

The new
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Also New This Month:
ARL1-2083 Emanuel/Ax/Beethoven: "Waldstein" Sonata; "Eroica" Var. & Fugue
ARL1-2044 Reiner/Rubinstein/Brahms: Concerto #1 in D Minor/Chicago Sym.
ARL1-1882 Tashi/Schubert: "Trout" Quintet
FRL1-5468 Paillard/André/Pachelbel: Canon; Fasch: Concerto & Sinfonia/Paillard Chamber Orch.
ARL1-1959 Ormandy Conducts Bach/Philadelphia Orch.

CIRCLE 35 ON READER-SERVICE CARD
she first came to our attention, is a pleasant change, if hardly as characterful a chambermaid as Karajan's Erika Köth.

The promising newcomer in the cast is Julia Varady, an uneven but vivid Rosalinde. At times her sound is forced, and in the third act her upper notes thin out a bit. But she enters well into the spirit of the piece, spreading a gentle parodic portamento over the farewell trio in Act I (an exaggeration that the orchestra cheerfully seconded) and dropping into her third-act denunciation of Eisenstein with a nice edge. Less successful is the apparently-intended-to-be-humorous whooping in the Friska of the Czardas, which one is inclined to interpret as an admission that she can't quite cut it straight. There's lots of characterful singing here, however, and one looks forward to hearing Miss Varady again.

In two previous recordings (the deleted Danon RCA set and the recent Bohm on London), Eberhard Wächter failed to make a convincing case for a baritone Eisenstein. Hermann Prey actually manages to sing everything as written, right up to top A, and with a good deal less effort than Wächter. Despite this improvement, the idea still remains without discernible merit: the Falke/Eisenstein duet in Act I is bereft of tonal contrast when Prey confronts the similar voice of Bernd Weikl (a solid enough Falke), and the ensembles and dialogues of the second act really want at least one bright male timbre.

That's a poor idea, but there is worse to come: Orlofsky is impersonated by the Russian Yma Sumac, Ivan Rebloff, singing—no, uttering—pitched sounds—in the original mezzo range. I've been searching for metaphors to characterize the noise he makes: an owl howling? an aged soprano making falsetto off her now baritonal range? a whistling teakettle? Whatever it is, it ain't singing. It doesn't sound masculine, even faggy masculine; it certainly doesn't sound feminine either. In fact, it barely sounds at all. "Chacun un son goût" done in this manner might pass as a comic turn on New Year's Eve, but Orlofsky also takes part in important ensemble material: When this Orlofsky leads off the ensemble section of "Brüderlein," musical continuity is torpedoed, and Kleiber is faced with the near-impossible challenge of balancing a raft of REAL voices against this flimsy neunter wheeze. A really off-the-wall piece of mis-casting, this.

Since Alfred's attraction for Rosalinde is supposed to be based on his voice, Rene Kollo, whose sustained notes quaver in the breeze, is hard to accept—and also hard to listen to, trying our patience with much slighter and out-of-tune singing. Human Kusche isn't very steady either, but then Frank's part is predominantly patter, so he manages to bring it off.

A medley of dialogue, spoken quite well by the singers, provides sufficient dramatic continuity as well as "air space" between and filling in the party scene, and digging into the party scene with a gently scampering sound track. The original ballet music is replaced by a rousing, pointed playing of the polka Uter Donner and Blitzen. The standard cuts are made, and the music is intense disappointment; won't someone, just once, give us the whole score?

For all the promise in that overture—frequently upheld later in the playing and pacing, and occasionally in the singing—this Fledermaus doesn't really come off as a consistently absorbing theatrical or musical experience. For that one must turn to the Karajan set [London OSA 1249 or, with an amusing if irrelevant "Gala Sequence," OSA 1319]. And for the lightest, most stylish musical performance, I still find myself returning to the dialogueless Krauss [1319] of a quarter-century ago (Richmond RS 62006, mono).

Ormandy's earlier Columbia versions of all three favorites are still in print (Don Juan in MS 6324 of 1962; Till and the Rosenkavalier Suite in MS 6678 of 1965), and I suspect that only his devoted fans continue to prefer his readings of the two tone poems. For me, his Don lacks impetuosity, his Till folkish humor, and both veer between extremes of over-intensity and over-indulgent expressiveness. Even the incomparable tonal magic of the Philadelphians, radiated so magnetically throughout, especially by the wind players, is betrayed in the ff high-register string passages. Surely the sumptuous Philadelphia strings have never sounded that harsh in live audition! (The recording-quality unevenness is just as evident in the cassette edition, which was removed from the cassette edition, which in all respects apart from the non-Dolby tape-surface noise seems an aural mirror image of the disc.) There is no real competition here: sonic or interpretative, for the recent Solti-Chicago Don and Till (London CS 6596, 8 March 1976) in either disc or cassette editions.

A better case can be made for the Rosen-
the site (Paris) and with the conductor (Pierre Monteux) of the work’s scandalous 1913 premiere.

I’ve long preferred Monteux’s Paris version of this last, to those from San Francisco and Boston. Its gaunt, monolithic line, its freedom from rhetorical distortion, its dryness of over-all ambiance recall the composer’s 1940 New York Philharmonic recording, for me unrivaled by his stereo remake. The late-Fifties Paris Conservatory Orchestra was no virtuoso world-beater, and indeed some of the playing (e.g., the opening bassoon solo) is execrable. Yet crudeness as such doesn’t have to be a liability in this work, if the playing is idiomatically crude, as it is here. Monteux’s Sacre remains an important part of the work’s performing tradition, and its competitive appeal is enhanced by left-right separation of first and second violins and the budget price. Both of those niceties also grace Boulez’s Parisian version (Nonesuch H 71093), a taut and savage reading alongside which his later Cleveland recording (Columbia MS 7263) seems pretty bland stuff.

It seems unlikely that Lorin Maazel, the Vienna Philharmonic, and the latest London recording crew are familiar with any of those recordings—or with the Sacre performing tradition in general. Despite the score’s “dissonance,” for example, most conductors (and/or balance engineers) use their judgment or musical instincts to tease out melodic lines from among subsidiary voices, even if all are marked with similar dynamics. In the present rendition, a certain equality of chording occurs in such places as the brass calls at No. 44 (“jeu du rupt”) or the strings and winds in the opening measures of Part II. One might praise the performance for “laying bare the richness of the harmonic texture,” but to us traditionalists it all sounds haphazard and meaningless.

A second major problem is tempo: Maazel often exaggerates score directions into plain caricature. The poco rit. before No. 54 in the “Rondes printanières” is elephantine, quite aside from starting a page or so too soon. The accelerando into the “Glorification de l’Élue” is italicized (interrupted?) by a measure of unmarked pesante that rendered this listener limp with hysterical laughter. Maazel’s idea of rhythm verges on a “cool” kind of “swing” more appropriate to Broadway than to the Champs-Élysées. The rubato at the outset is more pronounced than I’ve ever heard. The Vienna players run into countless problems with attacks and tonal quality—to say nothing of breath, of which the clarinetist runs out in the thirteenth measure of the “Action rituelle des omenettes” and which the flutist keeps stealing in the extended sixteenth-note figurations that follow.

After all this, Abbado comes as a refreshing breath of spring. Tempos are nicely judged, changes and contrasts stated calmly rather than announced with hortatory zeal. It all works in an integrated way, and there’s a sense of both driving momentum and choreographic freedom. The LSO is absolutely on the mark all the time, as witness the acute rhythmic judgment of the timpanist in the “Dôme sucré” or the flutes’ flutter-tonguing twenty-one measures before the end of the “Jeux des cris rivaux.” The DG team has provided some of the most transparent sonics the work has yet had. The guéro is as clear at No. 70 as in the Leinsdorf recording (London SPC 2114), but without the gimmickry or overloaded typical of Phase-4.

Abbado’s Firebird/Jeu do cartes coupling does full justice to both dance scores. The 1919 suite from Firebird compares interestingly with Stokowski’s Phase-4 version, also with the LSO (London SPC 21026—the venerable maestro’s eighth recording of music from this ballet). The violin tone Stokowski coaxes near the beginning of the “Ronde des princesses” is ravishingly su-s-try. Abbado secures cooler string sonorities but brings to wind and brass passages a more limpid and plangent refinement. Stokowski, Abbado, and Bernstein (Columbia M 6014) are my current favorites in the 1919 suite; of the three, only Abbado includes the modulating chorale passage connecting the “Dôme sucré” to the “Berceuse.”

In jeu do cartes, Abbado is brisk and witty and characterizes the various episodes no less vividly than the composer (Columbia M 31821); the LSO even manages nearer string playing than Stravinsky’s Clevelanders, a telling feat.

A.C.

TCHAIKOVSKY: Concerto for Piano and Orchestra, No. 1. For an essay review, see page 95.

Continued on page 108
Rossini’s “Romanticism of the Soul”  
by Andrew Porter

"Elizabeth of England," Chorley once remarked, "has never been fortunate as an opera heroine."

Time has proved him wrong. He wrote apropos of Donizetti’s Roberto Devereux (1837), an opera that, like Britten’s Gloriana, is about Elizabeth and Essex. Elizabeth and Leicester figure in Donizetti’s Elisabetta al castello di Kenilworth (1829) and Maria Stuarda (1834) and are also the leading figures of Rossini’s Elisabetta, regina d’Inghilterra (1815). But whereas in Maria Stuarda the queen’s rival for the tenor’s affections is Mary Stuart, in Rossini’s opera it is—oh, indignity!—a daughter of Mary Stuart, a daughter unknown to history called Matilda. Leicester, campaigning in Scotland, finds her in a cottage, and, since “to see and love her was the work of an instant,” he married her.

The Phillips album note, like Weinstock, repeats Stendhal’s assertion that the source of Giovanni Schmidt’s libretto was Scott’s Kenilworth—but Kenilworth was published only six years after the opera appeared; the matter was provided by a play by Carlo Federici, apparently based on a novel called Sophia Lee, The Recess. The plot can quickly be told: Matilda, disguised as a youth, and her brother Henry (a tiny role) have, to Leicester’s dismay, turned up in London amid a band of Scottish hostages. Leicester confines his secret to the treacherous Duke of Norfolk, who immediately revolts it to the queen. Furious, she imprisons her favorite—but then comes to visit him. "as Elizabeth, not the queen," to show him a secret passage through which he can escape. During their colloquy Norfolk’s perfidy is revealed. He steps forward from one hiding place to stab the queen, Matilda and Henry advance from another to save her life, and Elizabeth pardons the lovers. Henceforth cares of state, not those of the heart, will be her concern.

Elisabetta is an important opera. Tancredi and L’Italiana in Algeri (both 1813) had established Rossini’s fame in veins both serious and comic throughout Italy—except in Naples, where no opera of his had yet been heard when the impresario Barbaja engaged him, in 1815, as musical director and resident composer of his two theaters there. Rossini stayed in Naples until 1822 and composed ten operas, nine of them serious, for Barbaja. Elisabetta was the first of them.

As a foreigner from the north, Rossini had to prove himself to the proud, patriotic townsman of Cimarosa, Paisiello (still living, in retirement there, until 1816), and Zingarelli (then head of the Conservatory). He studied his means, and he triumphed. The delicacy and pathos that are to be found in Tancredi and the sophisticated play of musical wit in L’Italiana and Il Turco are largely missing: power and brilliance were the forte of the Neapolitan company, and to these he catered.

His own brilliance and boldness are very much in evidence. Nothing is carelessly composed. The instrumentation is always considered, and often of great beauty. The harmonic progressions are sometimes surprising, and on occasion can seem more “sought” than easy and natural. The ornamentation of the melodies is written out so fully that there is little more to be added. All recitatives, for the first time in Rossini, are string-accompanied. The forms take some unexpected turns, which did not pass unnoticed by Donizetti and Verdi.

Once Rossini’s position was assured, he could—in the third act of Otello (1816), decisively in Mosé (1818)—tackle the “reforms” by which he recast opera seria in the more romantic and more dramatic mold that ensured its survival well into the nineteenth century, and could do so with a new brilliance and power deriving from Elisabetta. Masiolo Mila has remarked that, while we look to La Donna del lago (1819) for the romantic expression of nature that was to reach its climax in Guillaume Tell, “in Elisabetta we find the beginnings of a ‘romanticism of the soul’ that was subsequently to nourish the operas of Bellini, Donizetti, and Verdi.”

In the coronaon year of Queen Elizabeth II of England, the Italian Radio presented the BBC with a performance of Elisabetta (Maria Vitale its heroine) that was often broadcast. The Phillips recording might be regarded as a preliminary fanfare for Elisabetta Seconda’s jubilee. During her reign there have been several revivals of the piece. The recording derives from a production at the 1975 Aix-en-Provence Festi-
grandeur,” and that of Norfolk for Manuel Garcia. Carreras sings the former with the expected dash and charm. How astonishingly swift has been this young Spanish tenor’s rise to the top, from his Barcelona debut six years ago. In the Salzburg Festival Don Carlos he takes the part that was once Domingo’s; at Covent Garden, he assumes the repertoire that was once Pavarotti’s. Some Italian critics have begun to cry beware: He is doing too much too soon! I hear no sign of it yet—but only an increasing fire and power achieved with no loss of charm or flexibility. Question marks in his performance here are only over the tuning of some notes in the recitatives.

Ugo Benelli’s timbre has dried. There is some sense of strain in the way he hits the accents of the short solo set within the introduction. But Norfolk, the villain of the piece, does not really need charm, and Benelli does give him liveliness. He is vivid in the fine aria of Act II. This good tenor piece is followed by one even better, for Leicester in prison. (Imprisoned tenors visited by visions—Florestan, Jacopo Foscari, Dalibor—seem to have provided a regular source of inspiration to composers.) As Leicester falls asleep, cor anglais and flute voice his troubled dreams. Then the two tenors come together for an animated duet, which is in far too trippingly lush a vein for the situation but provides a very happy example of Rossini’s skill in spinning out an accompaniment figure through one key after another.

Gianfranco Masini’s conducting is graceful, elegant, excellently poised, and powerful where it needs to be. The score of Elisabetta has a good deal of careful instrumental writing in it (Rossini’s early study of Mozart seems to be bearing fruit), and by the London Symphony Orchestra it is bewitchingly played. The versatile Ambrosian Singers are in top form. The recording, lively and clear, represents a nice easy balance between voices and orchestra. The stereo placement becomes perhaps a shade obvious in the “asides,” from various places of concealment, in the prison scene.

A few pages of recitative are cut, but otherwise the opera is given complete. There are too few appoggiaturas, in my view; Carreras is especially prone to sing “blunt endings” as written where one expects an approach from the note above or from a fourth below. There is a slip or two in the English translation of the libretto.

ROSSINI: Elisabetta, regina d’Inghilterra.

Elisabetta Montserrat Caballé (s)
Eliza Wilma Lippert (s)
Enrico Valerio Mastandrea (b)
Lecister Jose Carreras (t)
Naples Ugo Benelli (t)
Guglielmo Neil Jenning (t)

Ambrosian Singers. London Symphony Orchestra, Gianfranco Masini, cond. [Erik Smith, prod.] Philips 6703 067, $23.94 (three discs, manual sequence).
Wagner: Die Meistersinger von Nürnberg.
For an essay review, see page 89.


Angél was the first to remind present-day listeners that Waldteufel should rank not too far below the Strausses in the pantheon of great dance-music composers. But its fine 1958 waltz program (S 35426) by Henry Krips and the Philharmonia Promenade Orchestra has been lamentably out of print for some years now (it has recently turned up as an EMI import), and the only recent all-Waldteufel program, last October’s London collection of seven familiar and unfamiliar waltzes in Gamley’s caricature arrangement-performances, does the composer scant justice. Hence, the time is overdue for Angél to come to the rescue once again, this time by calling on the expertise of one of today’s leading symphonic dance-music specialists, Willi Boskovsky.

He does both Waldteufel and himself proud from the very beginning by programming not only the composer’s three best-known waltzes (if rarely in versions as enticing as these), but also one almost never heard nowadays: the yearningly sensuous, hauntingly lovely Acclamations. Even better still, Boskovsky interlaces these waltzes with lighter dances that have been left almost entirely forgotten (and unrecorded): a dashing galop and three polkas, at least one of which, the now bubbling, now suavely chiming Minuit, is a little masterpiece of its genre. Boskovsky even succeeds in making the Monte Carlo Opera Orchestra sound better than I have ever heard it before—and the recorded sonics are exhilaratingly big and rich in stereo, still more expansively auditorium-authentic in quad.

It has been a long wait. Waldteufelians, but Boskovsky and Angél make that wait worthwhile. Now let’s pray that they turn their attention to some of the other eighteen waltzes once recorded in the pre-LP era, as well as to more polka and galop discoveries.

David Munrow—an astonishing legacy of early-music recordings


Jerome Bunke is a young clarinetist of impeccable technical and tonal mastery who as yet plays with such imparturbably cool objectivity that he projects scarcely any distinctive personality—a lack emphasized by the decisiveness and individuality of pianist Hidemitsu Hayashi and by the vivid engineering.

There is still recorded competition in two works: Bernstein’s rather synthetically conceived early (1941) sonata (Drucker and Hambro, on Odyssey Y 30092) and the Weberian Adagio attributed to Wagner (two different Brymer versions, with string-ensemble accompaniment). Argo ZRG 604 and Vanguard VSD 71167. The most significant repertory contribution here thus becomes the work by Jan Vanhal (1739-1819), one of the earliest clarinet sonatas. It’s agreeable, even mildly Haydnesque music of scarcely more than historical consequence.

On the other hand, the six Vaughan Williams Studies, originally for cello and piano, are alone deletable enough to warrant the present disc’s purchase. These miniatures take up a bare seven minutes, but every one—perhaps most of all the haunting No. 5—is sheer delight.

Lawrence Moore: A Procession of Voluntaries. Lawrence Moore, organ of St. Mary’s Church, Rotherhithe (London). Cambridge CRS 2540, $6.98.

Most Americans, unless they attend Episcopal churches strongly influenced by Anglican musical traditions, are unlikely to be familiar with the extensive literature of organ voluntaries—formally loose, relatively short compositions, usually in two movements, which are played as church-service preludes and postludes. Ironically, the best-known example in this country, Jeremiah Clarke’s Trumpet Voluntary (long attributed to Purcell), is usually heard only in an orchestral transcription with real trumpet lead. (A trumpet or cornet voluntary, by the way, is one featuring trumpet or cornet stops—those organ pipes that imitate the timbres of the trumpet or cornetto families.)

The great period of English voluntary composition was the eighteenth century, so it’s appropriate that one of the first two all-voluntary programs I’ve encountered on American records (there are many in England itself) represents both a batch of the leading representative composers of that era and an organ dating from 1764 and 1800 that has been restored, as far as possible, to its original specifications. It’s a sonically lovely instrument, enchantingly recorded in a warm, not-too-large church ambience.

The present program includes the music of two groups of notable fine voluntaries by William Boyce and John Stanley. Not all the music is of comparable quality, however. The other examples—one each by John Alcock (1715-1808) and William Walbold (c. 1725-70), and even the two by the better-known Maurice Greene (1685-1755)—are inconsequential at best. Nor is their paucity of musical interest compensated to any marked degree by Moore’s consistently unmanipulated but never really arresting or gripping performances.

Nevertheless, I still can commend this release with fewer reservations than I have with the only competitor I have heard: the all-voluntary program played by Haig Madrirosian on the organ of the Lutheran Church of the Reformation, Capitol Hill, Washington, D.C. (MHS 1854). There the playing itself is more spirited, and the nine selections (none duplicating Moore’s) represent William Goodwin, Thomas Roseingrave, John Travers, and John Bennett as well as Boyce, Stanley, Greene, and Walbold. But the instrument used—anachronistically nineteenth century in tonal character—is neither musically appropriate nor pleasing in itself.


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Of the many new stars that have appeared in the early-music field during the past decade, none burned more brightly than that of David Munrow, wind player extraordinary and founder of the Early Music Consort. Too brightly, perhaps, for last May at the age of thirty-three Munrow took his own life, leaving us with an astonishing legacy of twenty-eight recordings (many as yet unreleased here) and the tragic promise of even greater performances to come.

As an instrumentalist, Munrow came to early music at a most propitious time. Scholars and performers were just beginning to explore the vast range of instrumental color and the seemingly limitless opportunities for virtuoso improvisation available to the medieval or Renaissance musician. Instrument makers were being persuaded to try to construct authentic replicas of shawms, viols, krummhornis, and lutes. Munrow's skill (he seems to have been able to learn to play almost any wind instrument remarkably well in a very short time) and his rich musical imagination found a fertile field waiting. Drawing together similarly talented musicians like keyboard player Christopher Hogwood, lutenist James Tyler, countertenor James Bowman, and string player Oliver Brooks, he founded the Early Music Consort, a marvelously musical ensemble with a repertoire that spanned four centuries, from the music of the Crusades to the court of Henry VIII.

At the same time, Munrow's interests led him back to the instruments themselves, not only to museum antiques and modern restorations, but to folk survivals similar to the pipes and harps heard in Western Europe during the Middle Ages. He and his colleagues amassed a formidable collection, read everything they could find on the subject, and, most remarkable, mastered more than seventy instruments from the bagpipes and the cowhorn to the racket and the tromba marina. The result of this research is a two-disc album, "Instruments of the Middle Ages," issued by Angel together with a hefty ninety-seven-page booklet also available separately from Oxford University Press for $12.95. The package is sure to become a classic and a standby for music-history classes, but the casual listener should not be put off by these formidable academic credentials. The set also makes a perfectly delightful introduction for the uninitiated and a source of endless fascination for the amateur enthusiast.

Unlike many collections of examples, the discs make excellent listening on their own. Munrow has recorded complete pieces that are independently satisfying, bringing them together with an ear for total effect as well as didactic purpose. One disc is devoted to the Middle Ages, one to the Renaissance, with each group's examples of woodwinds, keyboard, brass, and strings illustrating different instruments. Solo sounds, often from modern folk instruments like a dulcimer from Hong Kong, Andean pipes, or an oud from Damascus, are featured on the medieval disc. The Renaissance fondness for families of instruments gives the listener an opportunity to hear full complements of such exotica as four rattets or a family of rauchsplofen.

The pictures that illustrate Munrow's lucid, lively, and informative prose add an extra dimension to the listener's pleasure. The author suggests you may prefer just to look and listen, and indeed the text takes more time to absorb than the music. Nevertheless, the book is more than a bargain, especially in conjunction with the recordings.

Most fascinating of all are the sounds of the instruments: the sweet watery tone of the g促使horn, the serpent's baying growl, the raucous swirling cadence of the Oriental shawm, or the tang of the wire-strung bandura. Many of the medieval selections draw on melodies for troubadour songs, which sound a little odd without the words but make admirable vehicles for displaying the variety of sounds our ancestors may have heard. One of my favorites was a perky tune by Thibault of Navarre played on a six-holed Peruvian pipe accompanied by the cheerful jangling of the jew's harp.

If the complete Angel package is out of your price range and you would still like a taste of Munrow's inimitable style, you might enjoy a sort of sample of the Early

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Music Consort’s wares on Nonesuch’s “Pleasures of the Royal Courts.” Snatches from the troubadours, the courts of fifteenth-century Burgundy and sixteenth-century Germany combine with lusty dances and carnival songs enjoyed by the Medici and selections from sixteenth-century Spain. Howman joins Brookes, Hogwood, Mary Remnant, and Munrow, who plays several recorders in addition to the gemshorn, krummhorn, kortholt, shawm, and dulcian, on this program of easy-listening entertainment.

If it is the instruments themselves that intrigue you, you may want Oryx’s “The Medieval Sound,” which features Munrow alone playing various early woodwinds. The plan of the disc is somewhat similar to the Angel album, but the selections are completely different, and Munrow even introduces some other instruments—a Chinese shawm, for example. There’s no booklet, although the jacket has some nice pictures, but Munrow himself explains the instruments between selections on the first side. The other side is devoted to suites of popular songs and dances from the times of Henry VIII and Elizabeth I. The whole disc is most delightful, and it occurs to me that the combination of information, good humor, and the clear playing would make it an ideal gift for a young person beginning to play the recorder.

Delightful and various as the instrumental sounds of early music may be, the most important music—one might say the only important music—before 1600 was written for the voice. This great tradition is continued in the three volumes of selected works by Solage, Hasproux, and Matheus de Persusio, composers whose exotic harmonic and rhythmic experiments are so akin to our own time that they sometimes share space on programs of twentieth-century music of the avant-garde.

Munrow’s choice to emphasize the Avignon repertoire rather than the contemporary Parisian scene makes the shift to the smooth tunes of the Burgundians on the final disc a bit abrupt. Despite the presence of some genuine masterworks, notably Dufay’s “Vergine bella” and his lament over the fall of Constantinople, this section seems a little lightweight after the richness of the preceding music.

For a glimpse of the conductor Munrow might have become, Seraphim’s release of Dufay’s Mass Se le face oy pole is more revealing. This is a luminously clear work of balanced proportions and beautiful lines. Munrow’s reading is classical, in perfect harmony with the dawning Renaissance of Dufay’s music. Although he chooses to use cornets and sackbuts to reinforce the eight-man choir, the instrumental color never intrudes, supplying only a lining of sound to clarify the relationships among the four voices. In the sections for a reduced number of parts, viola accompany the solo singers. Tempos, dynamics, and scoring are handled with a restraint that never lapes into dullness in a most satisfying performance of this wonderful work.

On the disc devoted to Machaut in “The Art of Courty Love,” Munrow has included one piece by another composer, a ‘deploration’ on the death of the great musician to a text by Eustache Deschamps. “So rare and fine a talent,” sings the poet. “Who will take your place? Surely I do not know him.” Those of us who still enjoy the music of Machaut and his followers because they are brought alive by musicians as sensitive and knowledgeable as the late David Munrow must also lament the passing of so rare and fine a man.

S.T.S.

DON SMITHERS AND WILLIAM NEIL: The Trumpet Shall Sound. Clarion Consort (Don Smithers, clarino and piccolo trumpets and cornetto; Michael Laird, clarino trumpet; Janet Smithers, baroque violin and viola; William Neil, organ). PHILIPS 6500 926, $7.98.

This admirably recorded sequel to the same artists’ “Bach’s Trumpet” program (6500 925. November 1976) similarly mixes trumpet originals and transcriptions with pieces that let Smithers demonstrate his prowess on the cornetto and that give Neil solo opportunities on the fine baroque-styled organ of Oxford University’s New College Chapel.

The originals are the opening and closing Polish time-telling fanfare Hynaj Krokowski. Fantini’s two-trumpet Sonata detta la Guicciardini, and a Biber two-trumpet suite—all played on clarino instruments. The transcriptions for trumpet are the familiar Pertinax (Barber) Trumpet Tune and Air and Cebell, the Stanley (organ) Trumpet Voluntary in D, and Handel’s...
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First Oboe Concerto in B flat. The cornetto transcriptions are two of the two-part fantasies included in Morley’s First Book ofanonetis. Campian’s air “Never weatherbeaten sail,” and Dowland’s “Flow, my tears.” The organ solos are John Blow’s Fugue in F and Frescobaldi’s Cupriccio sopranoun soggetto. All of which makes for an ala poriera indeed—but one ingeniously designed to tackle the palate of nonpurist old-music connoisseurs.

R.D.D.

Frederica von Stade: French Opera Arias.
Frederica von Stade, mezzo-soprano; London Philharmonic Orchestra, John Pritchard, cond. [Paul Myers, prod.] Columbia M 34206, $6.98


Von Stade’s first solo recital provides welcome evidence of her developing skill. While “Connais-tu le pays?” is less convincing than it might be and both Offenbach pieces strike me as downright failures, the rest is mostly impressive.

Von Stade has an individual timbre, is well schooled, has a feeling for drama, and is intelligent without any loss of spontaneity. The variations of emphasis

Frederica von Stade
Potentially important, outstanding already

she makes in the aria from Berlioz’ Beatrix et Benedict immediately mark her as a genuine talent, as does the captivating change of tone color she uses for the middle section of the aria from Gounod’s Romeo. The Werther Letter Scene is even better, a moving account of beautiful music, with the voice darkened expressively, the rhythms vivid, the verbal inflections illuminating. Also very fine is the charming excerpt from Massenet’s hardly known Cendrillon.

Technically, Von Stade is well equipped. She has an excellent command of legato, a well-controlled vibrato, and a wide range of vocal shadings. She can sing fioritura and has a trill (at least in the Gounod; that in the Huguenot aria is less satisfactory). Her only real fault is that she tends to leave the voice insufficiently supported at the end of long phrases that end quietly.

Interpretively she can encompass both Berlioz’ betrayed, distraught Marguerite and Meyerbeer’s perky page boy. But it is in matters of interpretation that she still needs to mature. That there is too little liveliness in the Meyerbeer, for example, is partly the fault of John Pritchard, who provides leaden accompaniments throughout, but a lot of the blame must go to the singer, who, especially in ebullient music, tends to be heavy-handed. In the Offenbach pieces she exaggerates the comedy and sounds unconvincing. Another kind of stylistic problem obstructs in the Mignon aria, where she is far too fussy in music that requires, above all, a simple, direct lyricism. Finally, though Von Stade’s French is very good, it could still stand improvement: She needs to distinguish the open e from the closed e and to work on her pronunciation of the mute e, which at the moment is often annoyingly incorrect.

Von Stade is potentially an important singer and must, it seems to me, be judged by the highest standards. However, even by those, such performances as the Letter Scene are outstanding already. Good sound; texts and translations.

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Critical opinion on both sides of the ocean was very kind to Side by Side by Sondheim, a London-based musical collage of some of Broadway composer/lyricist Stephen Sondheim’s best efforts. There are fewer more ardent Sondheim fans than I, but I must say that I found this album somewhat of a disappointment.

No doubt acquaintance with the originals has hampered my ability to appreciate the vastly different sound of these snatched-out-of-context excerpts. Indeed, Sondheim’s unique feeling for over-all context is one of the reasons I admire his work. He himself has said, “I’m not particularly interested in art songs or pop songs that stand on their own.” which should provide a clue to the general feeling of nakedness this album communicates. Furthermore, the show suffers from what to me is an insurmountable drawback, namely the threadbare, two-piano accompaniments, which make the whole thing sound rather like a glorified rehearsal. It may work as cabaret entertainment, but it makes a considerably less than satisfactory impression on disc.

Some of the songs are sung with fine style, particularly those done by David Kernan. “You Must Meet My Wife” from A Little Night Music has a delightful ironic tilt, and Kernan proves a gifted balladeer in the poignant “I Remember” from Evening Primrose, a once-showed TV musical. The husky-voiced Millicent Martin gives a droll rendition of “I Never Do Anything Twice,” a song Sondheim contributed to the film The Seven Percent Solution.

The rarities—incuding “Can That Boy Fox-trit” and “There Won’t Be Any Trumpets” (quite a lovely piece) cut from the final versions of Follies and Anyone Can Whistle, respectively—may make this set indispensable for some. As for me, I’ll stick to the original-cast albums. thank you just the same.

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There is potently persuasive new evidence for this claim, including the first two Q-reel releases from the reactivated (and now Dolbyizing) Stereotape/Magtec Company. One of these might have been created with quadraphony specifically in mind: Certainly stereo-only recording and reproduction never can do justice to the complexities of Charles Ives' Fourth Symphony. The 1974 Serebrier/London Philharmonic stereo version has been widely acclaimed, to be sure, for the clarity of its tempo and texture differentiations. But how relative that clarity actually is becomes apparent only when you turn to the Dolby-B Q-reel edition of the same performance: RCA/Stereotape ERQ 1-0589, $12.95. Ives' free-for-all rowdiness and his rhythmic and harmonic intricacies obviously aren't made easier for tender-eared listeners (the "sissies" Ives despised), but here they do become even more intelligible than in the concert hall. And given the instant-replay advantages of any recording, Ives is enabled to argue his own case more eloquently than ever before.

The other new RCA/Stereotape Dolby-B Q-reel (ERQ 1-1151, $12.95) is of Prokofiev's Alexander Nevsky in its 1975 Ormandy/Philadelphia version. Somewhat less demanding than the Ives symphony in its sheerly sonic needs (although those are considerable), this vividly depictive film score asks even more in scene and mood evocations. In the earlier non-Dolby stereo cassette edition, the same performance lacked dramatic conviction, for me at least, whereas in Q-reel playback it achieves irresistibly gripping power and grandeur.

Both works also are available in RCA's own Q-8 cartridge edition, but without the Dolby quieting and notes of the Q-reel productions. I should note, too, for the benefit of potential purchasers unfamiliar with the current mail-order situation, that the principal—if not only—open-reel retailers remaining are two specialist mail-order companies: the four-year-old Barclay-Crocker (11 Broadway, New York, N.Y. 10003) and the recently established Reel Society (Box 651, Arlington Heights, Ill. 60005).

Sonar (and other) repertory expansions. Pending the imminent arrival of the first stereo reels from London/Stereotape and the Musical Heritage/B Barclay-Crocker series, Q-reels continue to fascinate me. There are four new state-of-the-art examples on the technologically perfectionist (and correspondingly expensive) Sonar label. Vols. 1 and 2 of each double program also are combined on a single stereo reel, but I've heard only the quad editions.

In one of the double programs, Sonar expands its impressive series of quad demos to represent pipe organs as played by Yale professor/organist/designer Robert Baker. Vol. 1 (QR 1160, $19.95) features the two-section Austin-Baker organ of the First Church of Christ, Wethersfield, Connecticut: Vol. 2 (QR 1161, $19.95) the unitary Austin-Baker instrument of the First Presbyterian Church, New York City. Each is a modern design admirably free from nineteenth-century overromantic and excessively "symphonic" tonal qualities—particularly well suited for the Brahms Prelude and Fugue in G minor on Vol. 1 and the Reger Introduction and Passacaglia in D minor. Myron J. Roberts' Novo, and Franck Chorale No. 3 in A minor on Vol. 2. But Baker discreetly lightens his registrations for the baroque-era works: Ernst-Bach S. 592 Concerto, Bach S. 546 Prelude and Fugue, and Purcell Voluntary for Double Organ (Vol. 1); the Harvey Grace arrangements of the sinfonias to Bach's Cantatas Nos. 18 and 106 (Vol. 2). The performances themselves are routinely straightforward, but the sonic realism more than atones in rousing dramatic effectiveness—not least in the synthetically pretentious Novo's exploitation of frequency-spectrum extremes.

The imaginative chamber orchestra/concerto proponent (in Vol. 1, QR 1150, $19.95) the first recording of the original 1924 version of the rock-ribbed Ruggles Men and Moun-

tains and Mozart's original Salzburg version (without first- and last-movement flutes and clarinets) of his Hoffner Symphony, both played by the New Hampshire Music Festival Orchestra under Thomas Nee. Don't let these little-known names scare you off: The ensemble proves itself not only professionally skilled, but tactfully controlled and zestfully inspired by its young conductor. Yet of course it's the arresting vivid immediacy and presence of the quad sound that gives both works their exceptional distinction.

That's also true of the familiar Teleman concerto for trumpet, two oboes, and continuo on Vol. 2. The piece never has been heard before in a recording that captures as piquantly the true brilliance of the trumpeter's (Thomas Lisunbee's) clarino register or the spiciness of the oboes and of the bassoon, which here shares the continuo part with a harpsichord. In the coupled Vitaldi P. 79 Concerto, however, the same sonic transparency reveals only too candidly that even Leone Buyse's virtuosity can't justify the "paoky peeping of the piccolo" as a satisfactory substitute for the original Vitaldian soprano recorder. And here the accompanying string playing is barely adequate.

Harold in (a too sunny) Italy. Turning reluctantly from quadraphony to stereo and from reels to cassettes, I'm obliged to report that aficionados of the great Colin Davis Berlioz series may be disconcerted by its latest addition, the Op. 16 work for viola and orchestra. They certainly will be if their earlier model of Harold in Italy is the memorable Cooley/Toscanini or Primrose/Toscanini version. Yet others may bask delightedly in the rich warmth of this mainly relaxed and suave performance by the London Symphony with the enchanting Japanese violinist Nobuko Imai (Philips 7300 441, Dolby-B cassette, $7.95). For ideal concertante balancing of viola and orchestra and as a tonally magical experience this version is unique. What it lacks is vitalizing Byronic/Berliozian impetuousity and fire.

Postscripts. The sonically impressive Barenboim/Chicago Saint-Saens Organ Symphony (October 1976) is almost as impressive in Dolby-B cassette, Deutsche Grammophon 3300 619, $7.98. The Karajan "Adagio" program (November 1973) is just as good in DG 3300 317, $7.98. And the Melkus Ensemble's novel "Viennese Dance Music, Classical Period" (November 1975) is even more delightful in Archiv 3310 182, $7.98.
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Natalie Cole: Producers’ Puppet, Father’s Daughter, or the New Queen of R&B?

by John Storm Roberts

The skeptical may attribute her success to her father’s fame and the fact that 1975 was an off year for pop. But the achievement of winning two Grammy awards with her first album, at the age of twenty-five, remains remarkable. Still more remarkable, it came only five years after her first public performance, and to cap it all, she hadn’t—she claims—intended to go into music at all.

In fact, Natalie Cole says she got very little musical prodding from her father, Nat “King” Cole: “That was his life, and I think he wanted us to know and be interested in what he was doing. But he never encouraged or discouraged any of his children to become involved in music.”

She did appear with him when she was eleven, in a summer theater production of a black variation on the Gigi story called I’m with You. She was also involved in a teenage group with Carmen Dragon’s and Nelson Riddle’s sons. “We took piano lessons from the same teacher, and we formed a little combo, doing Ella and things like that.”

But Natalie was neither aimed at a professional career, nor inclined to one. “I took piano lessons for two years, and it was just a drag for me,” she says. “If I’d taken the kind of music my father played, I probably would have enjoyed it a lot more!”

All that changed in her junior year at the University of Massachusetts, Amherst, where Natalie took a degree in psychology. She got a job working as a waitress at a local club in 1971 and was soon singing with the band there on weekends. Within two years she was working the East Coast circuit—New York, Miami, the Bahamas. TV’s Mike Douglas and Jack Paar shows. Then, in late 1974, she met her present producers.
Editorial

In the words of the immortal Chuck Berry: "Just give me that rock & roll music/Any old way you choose it/It's got a backbeat, you can't lose it..."

That was 1957. Perhaps Chuck didn't realize how prophetic he was at a time when rock & roll was still in its adolescent stages. For the backbeat grinds on eternal, to a point where today its derivatives all claim first discovery rights. Early rock & rollers still call it their favorite mode of rhythmic propulsion. Roberta Flack compositional analysts say it's her invention, and mid-'70s jazz aficionados claim it as a jazz-derived drumbeat. And now, to add to the confusion, Backbeat is a magazine.

A magazine is its writers. This month the very British John Storm Roberts starts us off with Natalie's story. An ex-BBC radio producer, Roberts is the author of Black Music of Two Worlds, and U.S. rock press salsa expert. Aside from being a former New York Times jazz critic, Don Heckman is a onetime a&r chief from RCA and producer of gold albums for Blood, Sweat & Tears. John Rockwell's name you've no doubt seen before: He's a former classical reviewer for High Fidelity and the pop critic for The New York Times. Our audio consultant Fred Miller is an engineer by trade and a writer by gunpoint. He'll be reviewing and field-testing various new gadgets for both the professional and semi-professional engineer and performing musician.

Moving on to the record reviews, Stephen Holden—also an ex-RCA a&r man—has written for Rolling Stone and the Village Voice, among other publications. Nick Tosches, our Nashville honcho, edits the record reviews for Country Music and has just completed a book on the subject scheduled for publication by Stein and Day next summer. Sam Sutherland, formerly with Elektra/Asylum, is the West Coast editor of Record World. Kit Rachlis, recently returned from cross-country freight train excursions, writes for various rock publications. Rolling Stone and New Times among them.

John Wilson continues to offer his expertise in the standard jazz area, with Heckman covering the contemporary end. Jim Melanson, previously with Billboard, is our "man on the street"—i.e., he keeps us plugged in to what's happening.

Book reviews this issue are contributed by Fred Miller and R. Serge Denisoff—journalist, college professor, and author of many books, including Solid Gold and Sounds of Social Change. Elise Breton gives a close ear and eye to the folio marketplace: she's a transcriptionist/lead sheet autographer for some of New York's major music publishers.

I believe we've put together the essential ingredients for a vital music publication. But rather than hypervessel, I'd prefer to send you plowing through these virgin pages, mad with curiosity as to what Backbeat is all about since The Editorial didn't tell you. Go to it.

SUSAN ELLIOTT

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Electro-Voice, Inc., a Gulton company 619 Cecil St., Dept. 274H, Buchanan, Mich. 49107
Chuck Jackson and Marvin Yancy, who had had a string of gold albums with the Independents on the small r&b label Scepter.

“We went into the studio in December and did some demos with full orchestra,” she says. “We didn’t sign with a record company until the following year, so we really were taking a chance. But I believed in them that much—I liked what they did for me. I liked the way I sounded singing their material, and they liked the way I sounded, so when I went to sign with Capitol. I said, ‘I want Jackson and Yancy with me.’”

That was a decision nobody was to regret. A year later, Natalie Cole had carried off two Grammys with her first Capitol album, “Inseparable,” for Best New Artist and Best Female R&B Vocal Performance on the soul-style single This Will Be. Within a few months she was headlining on the supper-club circuit, on even terms with the likes of Debbie Reynolds, Manhattan Transfer, Liza Minnelli, Gladys Knight and the Pips, B.B. King and Bobby “Blue” Bland, the Spinners, and Roy Clark. And getting over musically: When she first appeared at New York’s Beacon Theater, the prevailing judgment of a hip and musician-heavy audience was favorably summed up by a woman sitting next to me: “How bad is ba-a-a-d?”

These two poles—the supper clubs and the “ba-a-a-d” Beacon performance—pretty much bracket Natalie’s style as well as her public. When talking influences, she tends to dwell on “singer” singers, mostly from jazz, mostly from the past. Ella Fitzgerald: “The big influence on me, the voice and the style.” Carmen McRae: “A little bit of Sarah Vaughan.” Judy Garland: “She was very emotional, and I liked that. Whatever Judy Garland was singing about, she just had to know what she was talking about, because she sang it with so much conviction.”

But the main thrust of Natalie’s singing comes from none of these. Her repertoire is given breadth by jazz-tinged ballads like Inseparable and Joey on the first album, “Inseparable”; Good Morning Heartache on the second, “Natalie”; and occasional scatting, in a song from “Natalie,” Mr. Melody. But always the core, both in quantity and quality, is a joyous pop-soul singing: The sound of early Motown soul, Marvin Gaye, the Supremes, and above all, the early Aretha Franklin. Sometimes slow, like Touch Me, which she turns into a tour de force in concert; but mostly in uptempo numbers like the Grammy-winning This Will Be, in which her lead, extraordinarily like a lighter-voiced mid-‘60s Franklin, tosses like spray over the jagged gospel-backup harmonies as the bluesy piano struts beneath.

Nor is Natalie about to argue with success. Her new album is “basically similar to my last two—probably more like ‘Inseparable’ than the second one,” she says. “It’s a little more r&b. I’m taking advantage of my youth right now. I like the commercial music, most of it—I’ve always been a Stevie Wonder and Marvin Gaye fan, and I was very much into r&b just recently. I don’t want to wear that out, and that’s why even on a so-called r&b album of mine you’ll hear several ballads and maybe something like Mr. Melody, with some scatting in it. But you have to think of the market, and my market now is young people and r&b.

“I do plan on doing a jazz album, probably in about two years. The one after this is going to be a live album, and I’d like to do an album of my father’s songs. But right now, having established myself doing what I’m doing, I think it would be a mistake for me to try to go back to any standards.”
crucial in her move from potential to success. In her own understatement, "I would say that we have formed as close a producer-artist relationship as anybody could have in a very short time." They not only produced but wrote virtually everything on her first two albums, though the new one has two of her own songs on it: Peaceful Living and Your Eyes.

But to see her as a puppet dancing on their strings would be an oversimplification. First, she was well launched before they came along. Second, whereas producer-dominated artists normally come off feebly in concert, Natalie is better on stage than on record—quite as tight, and more varied and spontaneous. Moreover, Jackson and Yancy simply aren't Gene Page. Unlike too many "creative" producers who are the bad news of the mid-'70s, they avoid both the re-tread lushness and the Funkzak discoplast in which the times are awash.

While they obviously understand "the market," they also do what producers are supposed to do: bring out the quality of the artist they are producing. Few of their songs have much distinction, and most are vaguely reminiscent of something else, but they suit Natalie's range admirably. As producers, they use the current commercial "sound"—the disco-soul beat of Sophisticated Lady, the syrupy strings of the ballads—but they also have the taste to keep things simple, framing her best young-Aretha moments with a fine backup duo, bluesy piano, and jazz-based rhythm all in vintage gospel-soul vein. In all, it's a partnership that obviously can't be faulted commercially; but it also works well musically, never dominating her or giving the impression that she is being jammed art-first into some unsuitable sack marked, "What's happening."

That's important. Part of Natalie's strength, artistically as well as commercially, is that in a period of decadence, fatigue, and gimmicks she returns to the central issues of voice, tune, and spirit. To reinterpret the ethos of the young Aretha, to keep it all clean and tight and youthful, to back herself with classically joyous, shouting gospel-soul chorus and jumping musicians, is to return to what classic r&b was all about.

Yes, for all the help her father and producers have given. Natalie's talent is her own. So are its limitations—most obviously its derivativeness, which goes beyond general similarities. Her scatting isn't simply pop-bop scatting, it specifically sounds like Ella Fitzgerald's personal style: her soul singing isn't just vintage soul, but a lighter alter ego of Aretha Franklin. Nor is she really up to her models. Her scatting is engaging but has little of Ella's breathtaking rhythmic legerdemain. Though she has something of the marvelous warm/cool jazz-ballad tone, she comes off as singing notes rather than sharing experience—perhaps because she is young and relatively sheltered. Though it is what she does best, she isn't a particularly heavy rhythm-and-blues singer, compared with (to stick to newcomers) the eccentric but marvelous Chaka Khan. She swings and bounces, but she lacks that church-bred ability to shake the foundations.

In reality Natalie Cole is, I believe, an interpretive show or club singer with an almost perfect command of the current hip-pop middle ground. She doesn't excel at any one of the styles in her repertoire, but she does well by them all. Compared even with rather similar contemporaries like Melba Moore, her voice isn't outstanding, but she uses it with flair. Her emotions aren't deep, but her timing is beautiful. Like all the best show singers, in fact, the whole is more than the sum of its parts.

It becomes obvious when you see her on stage, in a muted long cocktail dress and necklace, moving comfortably and not much, her only prop a little silver
With specifically black references: hip but slightly middle of the road sung by black singers, but m.o.r.
with specifically black references: hip but slightly deodorized rhythm and blues, gospel-soul, the jazz-
ballad tradition, and a nostalgia for the great period of soul when its audience was kids.

If anything, Jackson and Yancy's lyrics cater more obviously to this new audience than their music. Whereas Ellington's Sophisticated Lady exuded a big city world-weariness, theirs is more like an upwardly mobile black executive's dream wife: "She's a different lady with a different style/She stands tall and steady like the Eiffel Tower/She is hip to politics but loves her jazz/She's got lots of rhythm, she's got lots of class." But her man needn't feel threatened, because "She talks quiet and gentle, she acts very cool/She stays close to her lover, she obeys God's rule."

This hip conservatism, which is, I believe, a very 1970s suburban ethos, becomes quite remarkably sexist in their ballad, No Plans for the Future:

"Let the dishes wait, no need of dusting/No reason to clean the dirty floors/Cause I'm sure it doesn't matter now that he's gone away/I've got no plans for the future, 'cause he's not here today."

Later the question, "Why should I comb my hair when I know I'm not going anywhere?" * And nowhere the answer that the young Aretha gave a decade ago, in her classic Respect.

In the long run, of course, the key question is whether she can keep this audience. And the question on which that ultimately depends is, behind the skill and the charm and the influences, who is the Real Natalie Cole? It's a question that her phenomenally rapid success may make hard to answer, even though age is on her side, because it's difficult to develop a personal style in the limelight, and the years of dues paying that she has missed are usually also years of growth and focus. If she pulls it off, those Grammies will have been justified, even though 1975 was an off year.

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Fleetwood Mac’s epic, ten-year saga of crisis and renewal is not only a fascinating tale, but makes the band’s heady success in the past year most provocative in terms of what it suggests about music and the music business. The name “Fleetwood Mac” tells us more now than it has sometimes in the past, since Mick Fleetwood, the six-foot-six-inch drummer, and John McVie, the bass player, are the only two surviving original members. The band dates back to 1967, when guitarist Peter Green split off from John Mayall’s Bluesbreakers. Mayall’s group was at the forefront of the fevered mid-Sixties British blues revival, and Green had come in to replace Eric Clapton. Green’s new group consisted of Fleetwood, another guitarist named Jeremy Spencer, and bassist Bob Brunning. McVie was Mayall’s bass player, and Green had wanted him all along for Fleetwood Mac.

It was shortly after the new band began that McVie decided Mayall was moving too far into a jazz-improvisatory idiom for his purist blues tastes, and joined Green, Spencer, and Fleetwood. They were then joined by Danny Kirwan in 1968, making for a three-guitar group.

The Fleetwood Mac that emerged was centered on Green and soon became the most popular band in Britain of the strictly purist type. The music of that era is available today on a two-record Sire set called “Vintage Years,” and it shows a straightforward electric blues outfit. So does another set, “Fleetwood Mac in Chicago,” recorded with such blues greats as Otis Spann, Willie Dixon, Shakey Horton, and Honeyboy Edwards in 1969. It’s always a problem balancing individuality with fidelity in such ensembles, and to my ears at least the early Fleetwood Mac sounds too derivative of its roots. But the group was an enormous success at home, and it clearly took a good deal of courage for it to break from a blind obeisance to the blues and adopt a broader-based mix of rock, blues, and even classical influences—as heard on the 1969 “Then Play On” album.

But then in 1970 came the first of Fleetwood Mac’s many crises. Green suddenly quit. Just why is a little confusing: He found religion, but whether his discovery was prompted by some involuntary acid trips launched by a shady band of German mystics he’d fallen in with, or whether it was accompanied by a simple, old-fashioned nervous breakdown, remains unclear. What is clear is that he wasn’t with Fleetwood Mac any more, and he wound up working in hospitals and graveyards—after giving all his earnings to charity.

The rest of the band fell into confused apathy, punctuated by the recording of the more hard-rocking “Kilm House” album. It was about this time that Christine Perfect McVie joined the band—almost, it seems, as an afterthought. She had been lead singer of another blues band called Chicken Shack when she married McVie and went off the road, later to resurface briefly with an interesting but uneven solo album that has recently been reissued here on Sire under the title “The Legendary Christine Perfect Album.” Christine designed the “Kilm House” cover but was uninvolved musically. Only when the group decided it needed a fuller sound on the road did she become a member. What with her singing, keyboard, and song-writing skills, it all seems painfully obvious now that she should have done so earlier. But then again, hindsight is easy.

During their 1970 summer U.S. tour, the band had its second run-in with religion. One day in Los Angeles Spencer simply disappeared. He was discovered days later in a vegetative state, surrounded by hundreds of intensely protective members of the Children of God who wouldn’t let him go. Spencer has since left the Children of God and formed a new band, Albatross, but he’s no longer part of the Fleetwood Mac story.

After a brief comeback by Green, who flew over to help his former mates finish the tour, the guitarist gap was plugged by a Californian named Bob Welch, who quickly became one of the band’s principal songwriters and its onstage spokesman. This lineup produced two mellower, more American-laid-back records, “Future Games” and “Bare Trees.” Then, after singer/guitarist Kirwan was fired and singer Dave Walker and guitarist Bob Weston had joined, Fleetwood Mac came forth with “Penguin,” generally regarded as one of the weaker items in the group’s discography. Then Walker was fired, and “Mystery to Me” was made by the remaining members.

The album may have constituted a step up from “Penguin” but it still seemed—a little less than four

by John Rockwell

Fleetwood Mac: 10 Years of Crisis & Comeback

“despite all the machinery... of the record biz, nobody can foresee the rock & roll future.”

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years ago—that the band was in a rut. It had lost much of its early English following because of its constant personnel shifts, its move away from blues, and continuous American touring. The U.S. audiences, in turn, were loyal but static—the classic cultist phenomenon. Fleetwood Mac performances in that period were always enjoyable and musically. But they lacked excitement and individuality, and that compelling sense of purpose and identity that distinguishes the best of rock.

The most bizarre episode of all came about in early '73. Fleetwood needed a rest: After all those years on the road in the netherworld of rock he was showing tangible signs of strain. Yet the group's manager, Clifford Davies, arguing that he had rights to the name “Fleetwood Mac,” went ahead with American tour plans using five completely unknown musicians. Audiences were outraged, the real Fleetwood Mac won an injunction preventing the use of their name, and the fake Fleetwood Mac tour collapsed in a welter of lawsuits and refunds.

After a year off to survive that trauma, the band returned in 1974 minus Weston. Managed by Fleetwood and McVie, the lineup then consisted of Fleetwood, the two McVies, and Welch. They produced “Heroes Are Hard to Find,” after which Welch decided to form his own band. Given the position of leadership he had assumed, his departure would have meant the end of a less tenacious group. It so happened, however, that Fleetwood had heard some tapes by a folk-rocking duo called Buckingham-Nicks and had been much impressed. So suddenly it made sense to invite the duo into the band. After only a little persuading, Lindsay Buckingham and his longtime girlfriend, Stevie Nicks, were convinced. They had had one album out on Polydor in 1973 (still in print and worth getting), but their career didn't seem to be going anywhere.

The new five-member group hastily recorded “Fleetwood Mac” and then sat back to watch. The album rose respectively to the Top 20 on the strength of the old band's reputation and then began what seemed an inevitable descent. But something about the new lineup caught the tastes of FM disc jockeys, listeners, and record-buyers. The disc hung there, rising steadily until a year after its release—July of 1976—it reached No. 1 and stayed there, off and on, until Peter Frampton took over the charts. In addition, three singles from it went to the Top 10—Over My Head and Say You Love Me, both by Christine McVie, and above all Rhiannon, by Nicks. In the meantime Fleetwood Mac caught on as a performing band as it never had before, playing huge stadiums all summer long. This was partly due to the success of the album, but also because in the exotically costumed, beautiful Stevie Nicks Fleetwood Mac at last had found a visual centerpiece worthy of its musical talents.

Normally a band records a quick followup after its first No. 1 album. But “Fleetwood Mac” refused to die, and the group was so busy touring that studio time was hard to find. In addition, both the McVies and the Buckingham-Nicks romantic pairing broke up, without apparent danger to the stability of the band (even though a hot rumor, forthrightly denied, circulated for awhile that the Americans were quitting and Peter Green was coming back). In addition, Fleetwood was divorcing Jenny, his wife of twelve years, although they are reportedly now living together again.

Unlike the hastily assembled “Fleetwood Mac,” the new album, “Rumors,” has been a long time in coming and is a closer collaboration, particularly between Buckingham and Christine McVie in the songwriting. The lyrics deal with recent developments in the lives of the band and its members, and the music continues the smoothly rocking format of the last album, energetic but poppy-melodic.
“The band’s progress over the past decade encapsulates the progress of blues-rock-pop itself.”

What are we to make of this saga, which in itself is certainly far more adventuresome than your run-of-the-mill rock-band bio? First, that despite all the machinery and tip sheets of the record biz, nobody can foresee the rock & roll future. What makes the business side of the recording industry fun is the sheer unpredictability of it. Frampton’s live album and the Jefferson Starship’s “Red Octopus” share the same surprise ending: All are sets by respected, established professionals and were expected to do fairly well. But each recording experienced a period of resting on its haunches, then sniffed the air, and suddenly leapt up to the top of the charts and sat there, staring down the competition.

Secondly, it’s nice to see tenacity rewarded. Rock is often dismissed by its enemies as a flash-in-the-pan world in which one untalented amateur is rewarded with millions while equally untalented peers are ignored purely on the basis of luck. But Fleetwood Mac’s story suggests that talent and perseverance may pay off—as long as there’s a magic spark.

The spark in this case would appear to be Stevie Nicks. She seems so talented as a songwriter, singer, and live performer that it’s difficult not to think that one day she’ll go off as a solo artist. In the meantime there’s her lovely, husky soprano with its sexy, quick quiver to enjoy, and her whirling, dancing stage act.

Another lesson from all of this is that Fleetwood Mac managed, completely without forethought, to balance the contradictory demands of continuity and change over a decade-long span. Successful rock bands like the Who or the Rolling Stones, with their fixed or relatively stable personnel, have a real problem renewing themselves. Their fans expect a certain quotient of favorite past hits at every concert and resist any radical shift in stylistic direction. For songwriter Peter Townshend or Mick Jagger and Keith Richard, the frustrations of finding new things to say within old formulas must grow extreme; Townshend has been particularly explicit—sometimes within his songs—at voicing such frustrations.

Fleetwood Mac never had to worry about such matters because at regular intervals the songwriting and performing constellation would shift. And yet Fleetwood and the McVies were always on hand to maintain the band’s image and some grip on its past, and to keep forged the links to the old fans. Still, the stylistic distance the band has traveled can be easily and quickly sampled by back-to-back listings to “Vintage Years” and “Fleetwood Mac.”

That distance is both chronological and geographical. Just as London was a cosmopolitan center ten years ago when the band originated, so now is Los Angeles—its current base—no longer just a provincial source of surf music and psychedelic harmonies. Fleetwood Mac retains its British core, but the mood and style (back to the days of Bob Welch) are irrevocably Californian.

Above all, the band’s progress over the past decade encapsulates the progress of blues-rock-pop itself. Most electric music of the past twenty years has some sort of blues base. But as styles have diffused and grown more sophisticated in recent years, the obvious debts to the blues have been subsumed by other influences, by technical innovations, and by a whole new set of stylistic signatures that have grown out of rock itself. Fleetwood Mac’s records trace that progression exactly, from the rawness of its first blues recordings to rock, soft-rock, and finally the diverse, all-purpose blend of idioms it incorporates today. One hopes the current quintet stays together for awhile, since it seems to work so well. But even if Fleetwood Mac continues its restless, protean growth, its story will remain the stuff of history.
George Benson & Tommy LiPuma
The “In Flight” Sessions

The room has the kind of history that dreams are made of. It's a big, barnlike area that seems all wrong for the tightly mixed, electronic acoustics favored by today's pop musicians. But it once was the favorite sound stage for Frank Sinatra, Peggy Lee, and Nat Cole—names that even today make the air vibrate with a kind of musical urgency. Capitol Records refers to it, rather mundanely, as Studio A. Last fall it was the place where guitarist/singer George Benson put down the tracks that would keep his burgeoning career rolling at full momentum.

"Obviously you can't pin down the source of your success to one room or one producer or one tune or one anything," Benson told me between takes at the Los Angeles studio. "But this room feels right to me, and Tommy's really happy working here."

"I love it," said producer Tommy LiPuma. "The size of the room has turned people off in the past, but it has such great natural acoustics. Just listen to it." And he's right. The room seems almost alive with resonance.

LiPuma laughed. "I guess it fell out of style because it doesn't have all the saunas and jacuzzis that seem to be a necessary part of recording studios these days. God knows why. The fact that somebody would record in a place just because it has a jacuzzi is really weird to me."

LiPuma is a music business veteran who has done everything from playing saxophone in Ralph Marterie's Fifties orchestra to plugging songs for music publishers. His track record with Benson makes him a man whose comments deserve careful consideration. The initial collaboration between the two was "Breezin'," the first album to occupy the number one slot in the pop, rhythm & blues, and jazz charts simultaneously. (Aided, no doubt, by the enormous success of the album's single, Benson's extraordinarily soulful interpretation of Leon Russell's This Masquerade.)

Producers have achieved a lamentable reputation lately for acting like auteurs of sound, controlling and overcontrolling the elements of recordings to such an extent that it's often hard to tell where the music ends and the electronics begin. One of the most attractive qualities about the success of "Breezin'" was that it had such a refreshingly live sound. Benson fans knew, quite clearly, that this was pure Benson, unburdened by the dense electronic trappings that too often had marred his earlier recordings. Much of the credit for that new sound goes to LiPuma, and to the especially felicitous relationship that developed between the two men.

LiPuma used a fascinating and—to this observer—unique studio setup on these sessions. The drummer was placed dead center, surrounded by baffles. Circling him was a low tier, built against the baffles. This was where the other members of the rhythm section sat with amplifiers behind them. "They get a complete feeling of playing together," said LiPuma. "With all the live interaction you usually can't get in a studio. Sure, we have to deal with some consequences afterwards. But it's no big deal to isolate the problem, find the source and go in and fix it. The important thing is that we have the energy of everybody working together, feeding the music back and forth."

Benson agreed: "It keeps us loose. And that's where the real creativity comes from. When it gets too tight—when the musicians get the feeling that they're just putting down tracks that don't seem to have anything to do with what the other guys are doing—it doesn't work. Then you get plastic music, and there's too much of that around already."

This second recording for Warners posed the usual problem of how to follow a hit. The pressure obviously was on, and it was most apparent in the way the recording sessions had to be priced out of Benson's busy performing schedule. Although he clearly would have liked the leisure to record in laid-back, let's-take-our-time fashion, it turned out to be a few days here and a few days there. Even so, both Benson and LiPuma struggled to maintain the loose studio ambience that worked so well for "Breezin'." Sometimes it was there, sometimes it wasn't.

After one of the sessions I sat with the ebulliently enthusiastic LiPuma and listened to rough mixes of the tracks. There was a lot to choose from. Among the most interesting was the Bensonized interpretation of
Nat Cole’s one-time hit, Nature Boy. Benson had decided to do it after working with Cole’s daughter Natalie shortly before the session. “The funny thing about this choice,” said LiPuma, “is that Nat Cole really provides the best comparison point for George—he’s a lot like Nat in that he’s a musician who sings rather than a singer who pecks at an instrument.”

Another hot choice was of course War’s The World Is A Ghetto. Donny Hathaway’s Valdez in the Country; Everything Must Change, and the originals by Benson and pianist Ronnie Foster all sounded good in the rough to my ears. [Apparently, the powers that be agreed with Don—check out the contents of “In Flight.”—Ed.]

“I guess I’m spoiled,” said LiPuma as we listened to Benson work through Nature Boy and Ghetto. “He’s just so fine. The last time out we cut an album in two days and nobody was looking. Now everybody’s looking over our shoulders and let me tell you, man, that’s tough, but it still feels good. George is just fantastic.

“The nice thing about the way we work is that it lets the things he does best come through. The room is big enough to let the music breathe and we don’t have to add a lot of electronic garbage—echo, tape delay, stuff like that—to make him sound good.”

I asked LiPuma about the bright sound of the drums, which obviously had been extensively miked. “Right,” he answered. “A lot of drummers don’t like overhead mikes, because they think they’re unnecessary. But listen to the way those cymbals cut through. That’s because they’ve got two Sōny S on them. I split the drums into seven tracks, and when I do my mix-downs I pan it so it sounds just like a drummer would sound live if he was sitting there. I don’t like the crap of splitting everything left, right, center, bouncing echo—tricks like that; who cares if you’ve got a snare bouncing from left to right. The drums are the foundation of the music—make them sound that way.”

He went on, describing the detailed follow-through that would take place now that the basic tracks were finished. “I’ve got to fix a couple of spots here and there—maybe do a little punching in on the vocals, but just a little, because George hates to overdub. Then we’ll sweeten the tracks—add strings, orchestration, and stuff like that.”

A smile snuck through his moustache. “Claus Ogerman will do all the arrangements. I sweeten everything and then just use what I want, so Claus said to me, ‘I’ll be like your waiter at the Ritz. I’ll serve you everything. Then, what you don’t want, you don’t take.’ How can I argue with that? It sure worked well enough with the last Benson album.”

All of the emphasis upon natural room acoustics and spontaneous music-making wouldn’t, in fact, amount to a hill of beans if the results on “Breezin” hadn’t been so spectacular: It is well past the million mark in sales and still moving. Some hill of beans. But neither LiPuma nor Benson started out with the idea of making a specifically commercial recording. Benson had demonstrated an ability to reach a fairly small but dedicated audience, yet few would have suspected he could come up with a monster hit like Masquerade. “I didn’t really believe it when it happened,” he recalled. “I started getting calls from disc jockeys in the middle of the night. They’d say, ‘Hey man, get on your promotion guys, because you got a smash on your hands.’ When I called the promo guys they said, ‘Okay, George, we’re on the case.’ And to their credit, they were. It took a while, but once it started moving, it never stopped.”

“Actually,” said LiPuma, “we almost didn’t release Masquerade as the single. There were more than a few people around the company who thought it just wasn’t the thing to do with a guy who was basically...
known as a guitarist. But the East Coast promotion guys were so strong for the tune that we finally went ahead and released it, and that wasn’t until six weeks after the album came out. The point, obviously, is that it was a hit record, and how can you argue with that? When you have an authentic hit it’s almost impossible to do anything wrong. The only real problem was editing the original track, which was eight minutes long, down to three minutes for the single.

Interestingly, even the seminal idea that makes *Masquerade* work so well—Benson’s soaring mixture of his voice with his guitar—happened spontaneously. “We had already rehearsed the tune with a sort of standard four-bar intro,” said LiPuma. “But just before we did the take George said, ‘Hey, hold on a minute. I just got an idea.’

“IT was something I’d been wanting to do for a long time,” added Benson. “And I never could seem to persuade producers to let me do it. But Tommy let me have my head. So I told Jorge, one of my pianists. ‘Just play some legato chords in front and let me ad lib on top of them. Then on the last chord, stretch it out until the rhythm comes in.’ And I told Harvey Brooks, the drummer, to count out the tempo at the end of the introduction so we would come in together. If you listen closely you can hear him tapping the sticks—bamm, bamm. . . . It worked so beautifully that I think it set the mood for the whole tune.”

And, of course, it did. So much so in fact that only one take was required. “Oh we did another one, just for insurance,” said LiPuma, “but we all knew that we had it, that the magic was there. That was it. Believe me, there were no tricks. Even the vocal mike, if you can believe it, was an Electrovoice 666—like a $60 microphone.”

Benson: musical legitimacy

I caught up with Benson in the middle of a rare break from his traveling schedule last November. We talked in the living room of his New Jersey home, a warm and comfortable refuge from the rigors of the road.

At the age of thirty-three, Benson is a mellow, articulate professional. He has few illusions about the permanence of the success he is having right now. but neither does he carry the scars of cynicism that mar so many successful pop performers. And his reference point—always—is the music.

“I think,” he said, “that we’re finally capturing the essence of what I’ve been trying to do on records for years. It always seemed logical to me that my records should have a broad-based appeal, since I’m—and don’t take this the wrong way—a man of the world. I’ve seen a lot and I’ve done a lot. I try to take in whatever I feel is good, no matter where it comes from. and then I mix it all up and use it in my own particular recipe. Well, the last time out that resulted in a pretty good cake. This time? We’ll see. The point is that it’s no good to have the ingredients in your head if you can’t get them on the record.”

Benson left the thought unspoken, but he clearly was referring to some of the recordings he’d made in the past (for Columbia, A&M, and CTI) in which his guitar, and sometimes his voice, was usually buried in waves of turgid rhythmic sound.

“That’s not to say I’m not proud of some of those early things, especially the Columbia recordings,” he added. “Sure, they were raw—very raw—because I was raw and new. But they had the main ingredient, and that was swing. And that’s something I’ve tried to hold on to ever since.

“It took me a long time to realize how important the recording process is to a musician, and how I could best work with it. At CTI, the only guy who got involved in the mixing of his own recordings was Deodato. Well, he always seemed to get a better sound than the rest of us bigger ‘name’ jazz performers. So I figured I’d better start finding out about mixing. And I did. Now I work with Tommy on the mixdowns.

“‘We don’t have to add a lot of electronic garbage . . . just to make him sound good.’”

“On the other hand, I found out that I have a hard time with overdubbing. I don’t like to do it and I never will. And maybe that’s one of the reasons I didn’t have more success in the past. Some guys don’t have any difficulty playing or singing with a track that’s already recorded, but I just find it hard to get into. It’s not the same as it is when the musicians are there and I’m feeling those cats around me playin’ and cookin’ away.

“What that means is that I have to have the kind of producer and the kind of musicians who can work well ‘live’ and let the music happen. The band I’ve got now can do that, and Tommy does it for me too. He lets me loose in the studio and then goes in and cleans up all the little flaws afterwards. But even he sometimes forgets how I feel about recording. One time he said to me, ‘You did something great on the last take. Do you think you could . . .’ And I said, ‘Tommy, even if I wanted to, my mind and my heart wouldn’t let me play it again the same way.’”

It’s that very quality of creative stubbornness—of musical legitimacy—that makes Benson’s success so special and well deserved. And he’s been around long enough to understand both the rarity of hitting such a long shot jackpot as he did with “Breezin.” But he also is energetic enough to believe that it doesn’t have to be a one-time event, that it can happen again.

“If we proved anything,” he said, “it was that a record doesn’t have to automatically sit on a shelf just because it’s labeled ‘jazz.’” All of us—all the guys labeled jazz musicians—have a lot to say, and we should be heard. There’s no reason why we can’t play music that uses the same ingredients that young people want to hear, and yet make it something that is an artistic experience as well. And that’s what I want to do.

“The only musical rule I would ever make for myself is that I want to stay within the context of believability for a musician of my years and my experience. In the long run, that’s the thing that matters the most.” It was a thought that would have made the lingering musical ghosts of Studio A very happy—very happy, indeed.
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Patents issued and pending. Cabinets are walnut veneer.
do our best to keep you up to date on the lingo. Our intention in “Input Output” is to provide a basis for understanding the new equipment, thereby helping you make informed decisions. Coverage will include instruments and accessories that relate to the new technology, the new music, and the new possibilities in sound. Stay tuned!

**Helpinstill Piano Pickup.** Amplifying a piano has always been a problem. Close miking works fairly well when there are no other instruments, but results depend very much on the number of microphones used and their placement. Two are better than one, and four are better than three, but the potential feedback problem is beyond belief. Contact microphones can alleviate some of this but are fixed to the soundboard and ignore sound radiated by the strings. Some relief from these difficulties is to be found in the Helpinstill Piano Pickup. Model 175 (for grand pianos) has a large aluminum frame from which hang six electromagnetic pickups, each with its own volume control on a terminal box and each designed to cover every string under its domain for equal sound reproduction.

While Helpinstill has fairly well alleviated many of the problems associated with amplifying a piano, the pickups are by no means a breakthrough in fidelity. We field-tested the Model 175 in a rock recording session; it was installed by a rental company representative, insuring that the pickups were properly balanced and that the output of the unit was verified. The Helpinstill does eliminate leakage from other instruments and achieves a somewhat truer sound than is available from some contact pickups. But the close proximity of the sensors to the strings results in a loss of impact, and the contribution of the soundboard is all but lost. I found it necessary to mike the instrument after all. Bear in mind, however, that this was a recording session, which requires a more exacting performance standard than a straightforward PA setup.

Basically, the Helpinstill eliminates leakage, picks up all the strings uniformly, and solves the feedback problem. It might be just what you're looking for.

A recent derivative of the Model 175 is Model 110, for use in both grands and uprights. Primary differences include portability, mixing control, and signal strength. While the Model 175 has six rigid aluminum sensors, the Model 110 has three flexible ones, which rest in place instead of clamping onto the piano. Installation time is thirty minutes for the Model 175 as opposed to fifteen minutes for the Model 110.

Both have high and low impedance outputs. The mixer (supplied) on the Model 175 has six volume controls and three on the Model 110. Both have master volume controls. No batteries or AC powering are required. List price for the Model 175 is $775, $850 with fiber case. List price for the Model 110 is $375.

**Polymoog.** This is Moog's new entry into the polyphonic synthesizer market. It is now amazingly simple to create up to five separate channels of
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- Two completely independent tape monitors. Allow two tape recorders to be used simul-taneously for direct tape-to-tape copying without passing through the receiver's electronics.
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Instantaneous electronic protection circuit in the output stage. Employs voltage/current sensing to prevent output transistor failure and speaker damage.

AM section designed around a tuned RF amplifier using J-FET. Improves signal-to-noise ratio.

And the Scott R336 is backed by a three-year, parts and labor limited warranty. Another very important plus.

For specifications on our complete line of audio components, write or call H.H. Scott, Inc. Corporate Headquarters: 20 Commerce Way, Woburn, MA 01801, (617) 933-8800. In Canada: Paco Electronics, Ltd., 45 Stinson Street, Montreal, H4N2E1, Canada. In Europe: Syma International S.A., 419 avenue Louise, Brussels, Belgium.
The split keyboard enables you to produce two completely independent signals. Other features include a ribbon controller, mounted at the center of the control panel, for bending the pitch of a given note, and a foot pedal (optional) for volume and filter control. An interesting addition is the Fine Tune Beat control, which allows you to "detune" to a less than perfect intonation. This effect simulates classically out-of-tune instruments such as the honky-tonk barroom piano. A flashing light tells you just how far out you really are.

The Polymoog seems to be a sensible step forward to polyphony. Although Moog has added some common presets to satisfy a growing demand, a number of functions are still left to the operator. With the Polymoog you can still shape the contours of the sound manually as well as control the filters, resonators, and portamento (glide). An electronic readout next to the preset section lets you know which one you are using and status lights indicate what's on and what's off.

Suggested list price is $4,495. Optional Polypedal unit is $295. The five outputs are 600 ohms and can be fed to microphone lines or directly to an instrument amplifier. Polymoog operates at 100-130 volts AC; the shipping weight is 82 lbs.

**Arp Omni**

Here's another new polyphonic synthesizer that offers presets. Unlike the Polymoog, the Omni preset voices are for violin, viola, cello, bass, solo brass, and brass chorus. It can also be interfaced with the Arp Pro Soloist for additional voices and signal processing. On the strength of our experience with the Arp String Ensemble, a constant visitor to recording studios these days, it's safe to say that the voices on the Omni can be made to sound quite realistic. Status lights indicate which sections of the instrument are on, and the pedal unit—supplied with each instrument—may be used for sustain and filter control. Front panel controls include a low-frequency oscillator for vibrato and a single envelope generator for shaping the sounds.

Arp Omni's approach to polyphony differs from the competition's in that it has stereo outputs at the rear with a mix control on the front panel, so that two channels of information can be fed from the unit. Also, by creating a sharp attack on one voice (e.g. piano) and a slow attack on another (violin) the operator can predetermine the number of voices available to an individual key by the length of time the key is depressed. The fullness of the sound is partly the work of three phase-shift circuits. The attractive front panel would indicate that the Omni is fairly easy to operate.

**Parapedal**

Most wah-wah pedals derive their sound by sweeping a filter back and forth over the higher overtones of the notes you play; Parapedal, from Tychobrahe Sound Co., uses a parametric equalizer instead. According to the manufacturer, this provides a center frequency so sharp that you can hear each note of a chord become increasingly pronounced as the pedal is moved slowly. You can continuously vary the frequencies at which a parametric equalizer operates, whereas with the conventional type of equalizer, you are limited to the frequencies chosen by the manufacturer. In this case, the parametric equalizer is designed with an extremely wide frequency response enabling the Parapedal to produce a bass wah-wah in the lower 25% of the pedal travel—this is an effect that you're not likely to get from most pedals. The unit has a chassis of 16-gauge steel, standard ¼-inch phone jacks, uses a 9-volt battery, and comes in a redwood storage case. Suggested list price is $89.95.

**Pedalflanger**

This pedal, also from Tychobrahe, uses the recently developed analogue-delay integrated circuit. Flanging is a sound effect that is produced by introducing a cyclically varying time delay into the signal path. Phasing, a similar effect, depends upon introducing a cyclically varying phase shift. Studios have begun to use professional flangers in preference to older model phasers. While some producers and engineers feel it is a duplication of equipment to have both, others have come to view the flanger as a different and more versatile studio tool. Next time you're in a music store, try one out. You may find its capabilities sufficiently different to make it worthwhile addition to your pedal group. Additional feet are optional. The Pedalflanger is also made of 16-gauge steel, has ¼-inch phone jacks, is powered by a 9-volt battery, and comes in a redwood storage case. Suggested list price is $189.95.
Stevie Wonder Says It All

Though deeply flawed, "Songs in the Key of Life" is an overwhelming pop album and a remarkable document by one of the most influential figures in contemporary popular music. Consisting of four regular LP sides, an additional seven-inch, 33-rpm disc, and a twenty-four-page book of lyrics and credits, the album took more than two years to make at a cost of more than $300,000 and contains twenty-one original songs.

Wonder's attempt to Say It All results in the aural equivalent of a gigantic mural whose interlocking themes—God, the brotherhood of man, the black experience, love, and sex—encapsulate one man's total vision of human experience. The musical territory covered is almost as broad. Wonder reprises the sound of his earliest Motown records, when he was the harmonica-brandishing street singer Little Stevie Wonder. He also tries to enhance his present image as a Renaissance man of pop music who breaks down stylistic barriers and influences everyone from Paul Simon and Paul McCartney to George Benson and Quincy Jones. Not surprisingly, it is the first Stevie Wonder, the grownup street singer and populist hero, who provides most of the album's magic.

"Songs in the Key of Life" means to contain, distill, and exalt the very spirit of black America. If it doesn't do exactly that, it at least stamps Wonder's musical identity onto the mid-'70s as surely as "Abbey Road" stamped the Beatles' identity onto the late '60s. Like the Beatles and like Duke Ellington before them, Wonder is more a force of nature than a creator of perfect artifacts that can be held up as ideals of form. His lyrics are awkwardly phrased and riddled with clichés. His philosophical hymns frequently lack any sort of focus or specific images. Part of this is the natural result of Wonder's having been blind from birth; part is the result of a cosmically infatuated, nonanalytical turn of mind. His tunes also tend to be simple, gawky affairs with predictable chord structures. Often they consist of a mere couple of phrases repeated over and over again. He seems to lack any intellectual screening process for his own ideas, and as a result much of the material on "Songs in the Key of Life" would not be missed had it been left off the album.

Such defects would sink the career of a lesser artist. But given the intensity of Wonder's passion and the unbelievable breadth and integrity of his musical personality, they scarcely matter. For his best tunes have an elemental force that transcends any lack of sophistication. The depth of his spirituality renders irrelevant the feebleness of his attempts to verbalize it. And while Wonder often phrases syllables deliberately when he sings, his singing is so passionately urgent that one is carried along by the emotion of his delivery, if by nothing else.

The only technical pop music skills at which Wonder is a master craftsman are as a multi-instrumentalist, specializing in synthesizer, and as a record producer. He has single-handedly brought the synthesizer into the mainstream of pop music. At the same time, he is the only person who has been able to use it consistently without letting it sound like a gimmick or a cheap substitute for another instrument. There is simply no more brilliant texturalist of pop sound than Wonder.

This is the key to Wonder's "Key," whose synthesized textures flow and bubble along like the stream of life itself.

One doesn’t listen so much to the sound of particular instruments as to the overall fabric, which blends multiple keyboards, bass, drums, percussion, and backup vocals into a richly textured sound that is the Stevie Wonder musical signature. The album’s finest moments combine this buoyancy with the romantic spirit that has characterized Wonder’s best ballads from My Cherie Amour through Heaven Is a Zillion Light Years Away.

Love’s in Need of Love Today is a sustained, pleading prayer-hymn, reminiscent of Heaven. It is essentially a simple choral fragment, the phrases of which are repeated continuously, each time with increasing freedom and emotional intensity. Knocks Me off My Feet is a pure romantic love ballad in the style of My Cherie Amour. The equally fine Summer Soft begins as a delicate reminiscence, then builds to an impassioned choral climax. The cut’s chromaticism and repeats several times. It is a devastating expression of sorrow and longing. Texturally, the album’s highlight is a disco extravaganza called Another Star. This tour de force love song boasts a lavish Latin-style production highlighted by exotic la-la-la’s from a female chorus and pounding Brazilian drums. The best song lyrically, I Wish, shows that Wonder, when he puts his mind to the task, can come up with a touching, credible statement about his own life that is not drenched with spiritual solemnities: “Looking back on when I/Was a little nappy headed boy/Then my only worry/Was for Christmas what would be my toy.”

The album’s absolute peak is the song about the birth of his daughter, Isn’t She Lovely. Here he shouts a very brash, simple tune above a hard strutting rhythm. The song is punctuated by live nursery sound effects that add an appropriate cinema verité quality and by a harmonica solo that is as arresting as Star’s. Wonder’s great declarative singing, Isn’t She Lovely distills the essence of Stevie’s art more perfectly than anything he has ever done. It sounds as if it was written and recorded with only one thing in mind: to seize the happiness of a moment and turn it into a song. There is simply no “higher” music.

The more complex material proves to be much less satisfying. Pastime Paradise and Village Ghetto Land, which imitate classical sonatas and structures, are interesting, but do not compel so readily. The latter uses heavy-handed irony to make an obvious point: While the music echoes a stately English air, the lyric enumerates the horrors of ghetto life. Have a Talk with God is as simplistically sermonlike as its title suggests. Contusion is a passable instrumental in the jazz-rock idiom pioneered by John McLaughlin.

Sir Duke, a vague tribute to Ellington, cautiously injects swing elements into an r&b setting. The 8½-minute Black Man provides an upbeat history lesson in ethnic integration. If its message is simplistic, its percolating music makes it eminently suitable for dancing. All of this, since it helps fill out Wonder’s grand scheme, legitimately belongs on the album. However, none of it is likely to be remembered out of context for long.

What will last are his prismatic secular statements of love and birth. The rhythms will filter down and revitalize American white pop music, which is continually threatening to fall back into plodding 4/4 time. Stevie Wonder’s sheer force as a musician brings home the obvious: Since 1950, the best American popular music has remained either black or almost entirely indebted to black music. In fact, the very life and vitality of “Songs in the NewKey Life” make every other pop album of the past two years sound a little bit drowsy.

STEPHEN HOLDEN


“Gulf Winds” represents a major departure for Joan Baez. Known primarily as an interpreter, in this instance she has written and arranged all of the songs. It clearly means a great deal to her—as a showcase for her own material and as a form of catharsis. Baez strips herself naked, delving into close-to-the-heart matters such as her parents’ separation in the title cut, I Wish Brother!, and various relationships both gay and straight—Stephanie’s Room and Sweeter for Me, respectively.

While Baez’s honesty is courageous, it’s also embarrassing. One winces not in shared recognition of her experiences, but at the naïveté of her expression. Dylan was unfortunately right when he described Baez as a “lousy” poet. The lyric sheet reads like the high school diary of a budding adolescent who has made the understandable but erroneous assumption that soul-searching is synonymous with art. Baez’s songs abound with self-conscious poetics (“Perhaps he’s just a vehicle to bear us to the hilly of truth”) and clumsy phrasing (“I’ve never written while I was drunk this could be terrific”). The arrangements cannot withstand the weight of such verbiage. Only when Baez returns to the less convoluted folk style of Still Waters at Night does she take flight. Unlike most of her efforts in the last few years, “Gulf Winds” is obviously an expression of emotional need rather than just the fulfillment of her recording contract. But the horrible irony of it is that despite all good intentions, the album is no more artistically successful than its predecessors.

K.R.


Conga-player Ray Barretto, one of New York’s leading Real Thing Latin band-leaders and a studio musician on numerous jazz and rock dates, left the salsa club scene last New Year’s Eve to build a new band that would express his lifelong involvement with all three styles. Since “Tomorrow: Barretto Live” is a recording of his group’s first concert in May 1976 and Barretto has been experimenting constantly since, “Beginnings” might have been a better title. The material bridges old and new Barretto. Half the cuts are fresh arrangements of Latin hits like Guareare and Que Viva La Musica, with a shout-for-joy quality that is one of salsa’s glories. The others are new fusion-minded numbers: The rock-tinged Villa, whose brass riffs are neither Latin nor r&b nor jazz but all of them at once; a two-part suite that consists of a cool/jazz mood piece, Night Flowers; and a loping Latin-jazz number, Slo Flo, distinguished by a marvelous Archie Shepp-ish tenor solo by Dick Mesa but marred by a silly piece of phony Afro chanting over percussion.

Successful concerts commonly make poor albums, since their high energy is apt to sound crude on repeated hearings. Though the “Tomorrow” arrangements are varied on paper, the over-all effect is too steadily brassy big-band, and Barretto’s one featured conga solo comes across as unfocused without the listening aid of live effects. But flag-waving never totally wins out: The classic salsa arrangements are leavened with marvelous half-Cuban, half-jazz flute from Artie Webb, and the interweaving frontline riffs and burning trumpet battles between El Negro Vivar and Roberto Rodriguez, which in concert are apt to cause a lift-off, retain a good deal of their punch.

One hopes that Barretto’s second Atlantic release, a studio album, will prove more tomorrow-like than the first. But this is the first salsa recording to appear on a national label in years, and, although it doesn’t represent the State of the Art, it does demonstrate why jazz and r&b have been so steadfastly Latinized and why people who run across the source are liable to end up hooked. J.S.R.

The Smithsonian’s policy of devoting jazz reissues to an artist’s work from a particular year has already proved successful with King Oliver’s Jazz Band in 1923 and Louis Armstrong and Earl Hines in 1928. It is equally rewarding in this view of Ellington’s orchestra in 1938.

The significance of 1938 in the Duke’s career, as pointed out in Schuller’s extremely perceptive notes, is his emergence from the discouraging two-year period when his band had been buried by the popular discovery of swing. It was at this time that he laid the groundwork for the brilliant peak the band was to reach in 1940 and ’41. Several notable selections from 1938 might have amply displayed these developments, but hearing the full body of the period’s recorded work (only seven sides are omitted, most of them with vocals by Ivie Anderson—which is certainly no excuse) puts the Duke’s new energy in perspective. It’s one thing to know that he created such classics as *Lost in Meditation*, *Bruggin’ in Brass*, *I Let a Song Go Out of My Heart*, *Prelude to a Kiss*, *A Gypsy Without a Song*, and *Blue Light* in 1938. It’s another to realize he was coping with such essentially routine affairs as *Skronch*, *You Gave Me the Gate*, and *Lambeth Walk* and still placing the Ellingtonian stamp on them in one way or another.

Except for Ben Webster and Jimmy Blanton, all of the major instrumentalists in the early ’40s band were present in 1938. With them, Ellington’s creativity began to well up, particularly in the use of color. *A Gypsy Without a Song* and *Blue Light* are good examples of this, as is the sheer splendor of Lawrence Brown’s trombone—especially on *Prelude to a Kiss*—and the distant haunting sound of Juan Tizol’s valve trombone.

Beyond its significance in the Duke’s development this set is a fascinating listening experience. Unlike the swing bands of the period, Ellington’s work has not become the least bit dated. Even though in later years he continued to update his older pieces (when he consented to play them at all), with the exception of a few selections that were deliberately of the period, time has stood still for these 1938 Ellington recordings.

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*ABC-Impulse* ASD 9322, $6.98. Tape:  
@@ 3027 9322, $8.95; @ 8027 9322, $8.95.

God bless Keith Jarrett. He keeps hanging in there, reminding us that the acoustic piano still exists, that jazz improvisation is still worthwhile, that creative density and electronic density aren’t necessarily the same thing, and that technical fluency can be artistically redeeming. And now he offers us an aptly titled album that celebrates all shades of jazz, from the sheer joy of the mainstream modern tradition to the complex contradictions of the avant-garde.

This is Jarrett’s current touring group, and it’s a good one. Dewey Redman on tenor saxophone and Charlie Haden on bass have had enough experience with Ornette Coleman to understand the intricacies of the avant-garde, and drummer Paul Motian has ranged comfortably between players like Bill Evans and Paul Bley. Fast company for most players, but just right for Jarrett, who clearly likes the stimuli provided by musicians in hot pursuit of their own muses.

I don’t know whether Jarrett intended for these pieces to represent a stylistic progression, one to the next, but that’s the way they work out. *Shades of Jazz* and *Southern Smiles* make up Side 1, connected by an almost abrupt, but altogether appropriate segue. *Shades* is flat-out modern jazz, brilliantly played, especially by Jarrett, who has an extraordinary capacity for finding a melody line, polishing it, adding wings and sending it soaring off into flight that feels as though it will never end. Then, suddenly, *Southern Smiles* romps through, underslung with the “Latin tinge” that venerable old Jelly Roll Morton told us was vital to all “real jazz.”

*Rose Petals* and *Diatribe* comprise Side 2. The first is lyrical Jarrett and—short of Bill Evans at his best—few pianists can approach his sensuality and sheer passion when he begins to move around in a slow tempo. On *Diatribe* Redman reaches into his avant-garde bag and makes some sense out of the saxophone tricks—honks, overtone squawks, simultaneous shouts-with-melodic-runs, etc.—that can easily lapse into cliché. Jarrett’s sense of humor is quick-witted enough to insert a lick and a dab of Rachmaninoff in the middle of all the chaos, just to make sure we understand that he’s serious about the piece’s title.

The funny thing is that all the recent pop chart successes of jazz (in its many guises) haven’t resulted in more albums like this one. Perhaps Jarrett’s acknowledged role as one of the contemporary conti...
The Allman Brothers Band: Wipe the Windows, Check the Oil, Dollar Gas.
Capricorn 2CX 0177, $7.98 (2 discs). Tape: ● L5 0177, $9.97; ● L8 0177, $9.97.
This two-record live album documents the twilight of the now-defunct southern boogie band when it functioned more like a competent engine than a high-powered diesel locomotive. It’s livelier than the Allman’s last two studio albums and indispensable to fans of the genre.

Cate Bros.: In One Eye and Out the Other. Steve Cropper, producer.
Asylum 7E 1080, $6.98. Tape: ● TC5 1080, $7.97; ● ET8 1080, $7.97.
The Cates excel at throbbing blue-eyed soul with a Memphis southern-fried crust. Though their material is not outstanding, all of it is craftsmanslike. The full impact of the duo, however, can only be appreciated live.

Burton Cummings. Richard Perry, producer.
Portrait PR 34261, $6.98. Tape: ● PRT 34261, $7.98; ● PRA 34261, $7.98.
The debut of a third CBS label, Portrait, is something of an embarrassment. For Cummings, onetime lead singer of the Guess Who, is a trifling pop/rock talent whose songs are as slick as they are vapid. Producer Richard Perry adds a patina of class to an album whose best song, Stand Tall, is Born Free recycled.

Electric Light Orchestra: A New World Record. Jeff Lynne, producer.
ELO is to the 1967 Beatles what Mannerist painting was to Renaissance art—a distorted elaboration of style. "A New World Record" compacts variations of I Am the Walrus with fragments of classical and electronic music in eight kaleidoscopic aural fantasies, and there’s an excellent remake of The Move’s classic single Do Ya. It is ELO’s best.

Kinky Friedman: Lasso from El Paso.
Kinky Friedman & Huey P. Meaux, producers; Steve Popovich, executive producer.
KINKY FRIEDMAN
LASSO FROM EL PASO
including:
“Waitret, oh waitret, come sit on my face” whines this Texas cowboy, so admired for his hip sense of humor. But his Epic debut unveils only stale sick jokes and “straight” country rock that is mediocre in quality.

Epic PE 34288, $6.98. Tape: ● PEA 34288, $7.98.
Rupert Holmes keeps threatening to become the new Harry Nilsson with Barry Manilow overtones. On his third album, he provides ten original songs conceived as pop singles, and both production and material are too self-consciously scaled down for the concept to work. There is one potential classic, however: The Last of the Romantics.

The Jacksons, Gamble & Huff, producers.
Epic PE 34229, $6.98. Tape: ● PET 34229, $7.98; ● PEA 34229, $7.98.
The Jacksons’ first non-Motown album is a considerable disappointment. Their funky exuberance doesn’t blend easily into the slick Gamble and Huff production and the great Michael Jackson has been reduced to just another voice.

Arista 4095, $6.98. Tape: ● 5301 4095, $7.98; ● 8301 4095, $7.98.
Manchester, who two years ago seemed about to become a major star, now needs all the help she can get. Here her band sounds tired, none of her new songs sparkle like Midnight Blue, and the outside material is not right for her. She looks like another New York artist who has been done in by Hollywood.

Melanie: Photograph. Peter Schekeryk, producer.
Atlantic SD 18190, $6.98. Tape: ● CS 18190, $7.98; ● TP 18190, $7.98.
On her Atlantic debut, this superannuated flower child branches out with a passable rendition of The Letter, in addition to presenting several of her most listenable tunes in years. The flat, choked-up voice that won hordes of furry, candle-bearing admirers in the late ’60s continues to charm.

Tom Pacheco: The Outsider. Shadow Morton, producer.
RCA APL 1-1887, $6.98. Tape: ● APK 1-1887, $7.98; ● APS 1-1887, $7.98.
Pacheco sings his own science-fiction country/pop in the gravelly speech-song of a rustic raconteur. Though his tunes are simplistic clichés, the stories they tell have the ring of classic Americana.
Country

Archie Campbell, Jim Malloy, producer.
Elektra 7E 1075, $6.98. Tape: • TC5 1075, $7.97; • ET8 1075, $7.97.

How interesting that Elektra, voice and essence of the great hilly mellowings of 1968, has come to release the work of Hee Haw regular Archie Campbell. This was recorded at the Tupelo Country Club, and it is different from—and dirtier than—the usual Hee Haw stuff. The only good country comedy record I've heard is "Lester Roadhog Moran Live" at the Johnnie Mack Brown High School" by the Statler Brothers. If this were 1941 and I had rocks in my head, I'd say I'd like this one too.

Columbia-Lone Star KC 34284, $5.98. Tape: • CA 34284, $6.98.

Johnny Gimble, one of the most successful and well-respected fiddlers in Nashville, celebrates his Texas swing roots in "Texas Dance Party," his second solo album. (The first was released on Capitol in 1974.) This is not nostalgia, but some of the toughest, most exciting music produced this season. It's great, amid all the sludge of Texas diletantes, to hear the real thing.

Ronnie Milsap: Ronnie Milsap/Live. Tom Collins and Ronnie Milsap, producers.
RCA APL 2043, $6.98. Tape: • APK1 2043, $7.95; • APS1 2043, $7.95.

For the uninitiated, this is a fine example of why Milsap was the Country Music Association's Best Male Vocalist in '74 and '76; for those already in the artist's corner, it provides a colorful live montage of both performer and Grand Ole Opry House ambience at their best. Although most of the album was culled from two separate shows, there are some new songs here—Busy Makin' Plans, I Can Almost See Houston from Here, and Let My Love Be Your Pillow among them—along with some previously recorded material. The mixture fares well, as do three medleys comprising seven numbers. Opry regulars like Charlie McCoy shine throughout, serving to enhance the album's "live" aspect.

Mary Kay Place: Tonight! At The Capri Lounge Starring Loretta Haggers. Brian Ahern, producer.
Columbia PC 34333, $6.98. Tape: • CA 34333, $7.98.

While a pleasant enough recording debut for Mary Kay Place—known to millions of television viewers as country singer/songwriter Loretta Haggers on Mary Hartman, Mary Hartman—this album is not without its flaws. The most apparent one is a tendency to phrase lyrics in an automatic "paint-by-numbers" fashion. But support vocals by Dolly Parton, Anne Murray, and Emmylou Harris go a long way to lighten the load, and material is generally varied and good. Place's two contributions, Vitamin L. and Baby Boy, are credits to her writing skills, and the latter enjoyed some chart success. Over-all, the talent is there, and it may just be a matter of time before it is fully realized artistically.

Ray Price: Hank 'n' Me. Jim Fogleseong, producer.
ABC-DoT DOSD 2062, $5.98. Tape: • DO 2062C, $7.95; • DO 2062T, $7.95.

I like this album in a perverse way. In recent years Hank Williams has been the subject of a new wave of idolatry—incidental to the outlaw dandies' rise in popularity—and he is esteemed as the avatar of pure, hard-core country music. The truth is, however, that Hank loved the pop cover versions of his songs and would have had no objections to recording with strings and chorus.

And so the sweet, fully orchestrated performances of his songs by former disciple Ray Price are, in their way, a better, more perceptive interpretation of Hank Williams than such stuff as Waylon Jennings' Are You Sure Hank Done It This Way.

Wynn Stewart: After the Storm. Eddie Kilroy, producer.
Playboy PB 416, $6.98. Tape: • PC 416, $7.98; • PB 416, $7.98.

Wynn Stewart has made solid country music since the late 1950s, but many of his records have been poorly produced, gaudily padded things of slight substance. "After the Storm," Stewart's first album with Playboy (he was with Capitol from 1964 to 1972, then with RCA briefly), is the finest work of his career. There are things here that can only be called awesome, such as a version of the obscure Don't Monkey With My Widder, first cut by Karl & Harty in the '30s, and I'm Gonna Kill You. The only country single of recent years to be effectively banned. "After the Storm" hews to no style or trend; it is simply a great record.

Floyd Tillman: The Best of Floyd Tillman. Don Law, producer.
Columbia KC 34334, $5.98. Tape: • CA 34334, $6.98.

Floyd Tillman was one of the most important songwriters of the 1930s and '40s. His It Makes No Difference Now and Slipping Around are classics and legends. Tillman was also one of the most curiously effective singers of that era, and his recordings for Decca and Columbia are among the most precious variations of Texas honky-tonk ever cut. "The Best of Floyd Tillman" is a much-needed reissue of some of his best Columbia work. It includes the well-known favorites as well as such scarce sides as This Cold War With You. And Columbia should be thanked for leaving the recordings in the original mono.

N.T.
Andrew Gold
Gets Into the Picture

Ronstadt's musical director tries the solo route

Andrew Gold is getting a little cocky, and that's a healthy development. He has proven himself a consummate pop craftsman through his brisk, vivid arranging and performing for Linda Ronstadt, and his late '75 solo recording debut served to establish his own buoyant, melodic rock style. Both projects mirrored Gold's reverent allegiance to prime mid-60s pop sources—the British Invasion and selective stateside reactions like the Byrds—with his own album and original songs explicating the sturdy pop ideas he had brought to Ronstadt's settings. "What's Wrong With This Picture?" spices that classic pop approach with a little welcome irreverence. Here, Gold is less painstaking in his re-creations of earlier epochs, drawing more freely from disparate styles. Yet in its jaunty self-assurance, the album brings the artist closer to the underlying spirit of rock's brave new world during the '60s.

In his mid-twenties, Gold is a classic victim of the airwave invasion: A Hollywood baby swept away by the brush, guitar-based pop of the Beatles, the Hollies, Manfred Mann, and their countrymen. As the son of film composer Ernest Gold and soprano Marni Nixon (who provided the bracing, sweet coloratura for a generation of nonsinging actresses cast in big-budget celluloid musicals like The King and I and West Side Story), young Andrew displayed little enthusiasm for music studies prior to the advent of English rock. His abrupt about-face was typical of the era: Make-believe guitars led to real ones, and Gold soon formed the first of many bands recruited from school friends. By his late teens, he had learned the drums and taught himself piano, the instrument he had earlier shied away from when his parents offered him lessons.

A two-year stint with Bryndle, a band formed with other young Los Angeles writers and performers, led to his first extensive studio experience. Signed to A&M, Bryndle eventually collapsed before a debut album could be completed, but Gold's hours in the studio proved to be an important investment. He took an apprenticeship as a recording engineer, began lining up session work as a guitarist and keyboard player, and joined another highly regarded but ill-fated band, the Rangers.

By the time he joined Linda Ronstadt's band, Gold had marshaled the arranging and performing skills to provide Ronstadt's distinctive singing with a compatible instrumental framework. She was already regarded as a charter member of L.A.'s country rock community, but Gold's contribution to her style offset those country elements with broad pop strokes, cushioning the ballads in a lusher, more orchestrated style, while bringing new punch to rockers. You're No Good, the pivotal single from "Heart Like a Wheel" that signaled Ronstadt's emergence as a front-rank pop figure, remains a useful sampler of Gold's pop instincts: One of the singer's most passionate performances is carried by a classic arrangement that is paced with an ominous bass line and stalking kick drum, shaded with moody electric piano lines, and highlighted by a searing chordal guitar bridge that mysteriously escaped from Abbey Road. Save for Kenny Edwards' bass, all were Andrew Gold's work, laid down through overdubs.

Like the Ronstadt albums, "Andrew Gold" boasted immaculate production and pointed instrumental work; like You're No Good, what began as an ensemble project ended up more of a self-contained effort. Gold's faithful re-creations of '60s pop elements inevitably won points with the critics: Like Emitt Rhodes, Todd Rundgren, and Roy Wood, he transcended the gratuitous excess that too often characterizes one-man studio extravaganzas; like Brinsley Schwarz and Duck's Deluxe, his pub-rock English counterparts, he had clearly retained the flavor of the mid-'60s.

"What's Wrong With This Picture" doesn't break with that flavor, yet there are some adventurous new wrinkles to Gold's solo style. He undertakes some sly musical transpositions: The opening original, Hope You Feel Good, echoes Manfred Mann's The Mighty Quinn in its skirling flutes near the fade, and Stay—a hit for the Hollies and the Four Seasons, among others—is given a spare, sexy reading modeled on Mickey and Sylvia's Love Is Strange. The album's most "nostalgic" moments arrive during Gold's own songs: Go Back Home Again echoes his English mentors in its
ebullent choruses and pumping rhythm guitars, while Stay provides balance in that it seems firmly rooted in the '70s, thanks to its crisp production and syncopated percussion.

In his first solo collaboration with Peter Asher, also Ronstadt's producer, Gold has substantially broadened his musical scale. David Campbell's string and horn charts are more prominent than those on "Andrew Gold," and Gold and the studio band flesh out their basic ensemble style with more atmospheric keyboard and percussion. The artist himself may remain skeptical of any debts to his family's cinematic heritage, but here the greater scope of the arrangements permits some vivid, widescreen effects.

The album's best song, Gold's own Lonely Boy, fuses this expansiveness with a rock-hard rhythm section that takes its cues from the sturdy opening three-chord piano riff. The lyric breaks from its usual trials-of-the-perennial-romantic-naif meter to deal with childhood trauma in explicitly primal terms. Hardly the stuff of Top Forty hits, it would seem. Yet Gold's stunning chorus, the insistent push-and-pull interplay between the piano and rhythm section, and the percussive effects derived from the Spector legacy all make the track irresistible.

The commercial climate for his new music is promising. 1976 was the year that soft rock boomed back hard, as exemplified by the success of Fleetwood Mac and Peter Frampton, and Gold's polished, melodic rock compares favorably with those platinum achievers. Beyond the craft itself, though, his own lighthearted persona is finally breaking through, allowing an emotional center for his records: his singing is frankly plain, and his lyrics are often slight, yet the overall melodic ripeness of his writing more than compensates. Just when Gold's vignettes of heartbeat seem ready to lapse into insufferable cuteness, his musical instincts intervene, as in the breathtaking slide guitar solo in Firefly.

Whether Andrew Gold becomes a major pop force as a solo artist remains contingent on his current activities as leader and arranger of the Ronstadt band. His music is clearly ready, but he appears to be taking his time. After all, as his resolutely screwball liner note maintains, one of the keys here is "Whoopla, my boy, whoopla!" I don't think Andrew Gold wants to sacrifice fun for "credibility," "validity" or any other vague polysyllables. And I'd be the last to encourage him.

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Andrew Gold: What's Wrong with This Picture? Peter Asher. producer.
Asylum 7E 1086, 6198. Tape □ TCS 1086, $7.98; □ ET 8 1086, $7.98.
masters gives him a bit more freedom in which to experiment. Whatever the case, this time out he has produced, by any measure, and in any part of space and time, a superb album of music. D.H.

Jerry Lee Lewis: Country Class
Jerry Kennedy, producer.
Mercury SRM 1-1109, $6.98. Tape: MCR4 1-1109, $7.95; MCR8 1-1109, $7.95.

This is the best album Jerry Lee has cut in Nashville since his early Sixties Smash recordings. The lethargy, softness, and carelessness of his recent records have been left behind; instead, here is Jerry Lee, keeper of the rockabilly flame and the toughest, best song stylist alive.

The choice of material on “Country Class” is, for the most part, sublime: Claude Boone’s 1947 standard of unrequired everything, Wedding Bells, and the classic You Belong to Me are executed with an awesome and beautiful disrespect for tradition, and several songs written for Jerry Lee are among the best he’s chosen in a long while, especially Mack Vicker’s I Sure Miss Those Good Old Times. Jerry Kennedy’s production is still misknowing and bland; Lewis’ piano work is underrecorded, and the string and choral arrangements, where present, are obtrusive and useless. If its production were less sappy, “Country Class” would be one of the year’s eminent albums. Still, it is one of the year’s—and the Killer’s—best. N.T.

Lou Reed: Rock and Roll Heart
Lou Reed, producer.
Arista 4100, $6.98. Tape: 5301 410011, $7.98; 8301 410011, $7.98.

Patti Smith: Radio Ethiopia
Jack Douglas, producer.
Arista 4097, $6.98. Tape: 5301 409711, $7.98; 8301 409711, $7.98.

If Lou Reed’s and Patti Smith’s newest albums are accurate indications, then New York’s underground rock scene is

Patti Smith—an excuse not to think
in serious trouble. Reed has earned his reputation by exploring the netherworld of New York’s idle hip—in past efforts, he has etched the despair, and the concomitant cynicism of drugs, bisexuality, and ennui. Though presenting himself as spokesman for this world, he always remained detached from it. One was never sure whether he condemned himself, his surroundings, or both. It is that very ambiguity and double vision—the most haunting and powerful aspect of Reed’s work—which is missing from “Rock and Roll Heart.”

The album is almost as disdainful of Reed’s audience as “Metal Machine Music.” It is a work of posturing rather than conviction, which relies on code words—“I’m banging on my drum,” “You wear it well”—rather than detailed expression. The artist has stripped his stance to the bare minimum, and what is left is contempt and cynicism. Worse, he turns his back on the methedrine, staccato-charged rock & roll which has been his forte, and instead offers stale, pedestrian jazz arrangements. Even the most self-deprecating songs (the title tune and Sheltered Life) fall flat. Reed is not mocking himself but his fans.

The major problem with Patti Smith’s “Radio Ethiopia” is that she fails to provide the musical equivalent of her stream-of-consciousness lyrics. In granting her four-piece band greater rein than on “Horses,” she simply exposes their inferiority. They are no better or worse than any number of heavy metal bands, who simply pound out the same overused riffs. Without the help of a strong backup, Smith’s lyrics come off as self-indulgent and muddled: She can rightfully make a claim to passion, but displays little intelligence as she wanders through a field of race, religion, and Armageddon. Her avant-garde primitivism becomes an excuse not to think. Though “Radio Ethiopia” is not a complete failure—Ask the Angels is the best cut here—it is extended narcissism rather than introspection. Pass it by. K.R.

Jerry Lee “Killer” Lewis

The anonymous Warner Bros. editorial staff has captured the high-energy appeal of Aerosmith’s “Rocks” album in this slick package of musically valid, accurate piano-vocal transcriptions. Excellent color photos of the group are a plus factor here. The sales potential of this folio is limited, however, by the inanity of the material.

Due to the group’s characteristic reliance upon rhythmic variation, some of the piano arrangements may be too demanding for the “home” musician. An unerring sense of syncopation is required from the purchaser who hopes to duplicate the group’s sound.


America’s bittersweet, Beatle-ish music is here transcribed with great care and fidelity by another unidentified genius. The album gives us English super-production at its glitziest, and the folio matches it stave for stave. The crystalline rock rhythms are comfortable for the fingers, and the folio is a winner for self-taught as well as schooled musicians.


The first of this two-volume collection highlights the major trends in the rock movement, from early ‘50s Presley-boogie through the folk-protest writers and into the first years of the Beatles. The piano parts are quite simple. No new ground is broken here, and most of the music will already be familiar to you.

Exactly half of the selections—eleven Gordon Lightfoots, seven Joni Michells, nineteen Bob Dylans, and no fewer than twenty-two Lennon-McCartneys—have been published in previous composer collections, so check your library against the table of contents before purchase. For those just gathering a folio collection, “The Book of Rock, Vol. I” will certainly get you off to a healthy start.

John Denver: Spirit. Cherry Lane Music. 12 songs. $5.95.

Before canonizing John Denver, let us pause to consider the contribution of Dan Fox, who transcribes these beatitudes for us. Every nuance of the record has been notated, in smart, country brown-on-buff stock. So precise is Fox’s work that comparing Denver’s version of Bill Danoff’s song Baby, You Look Good To Me with the original as sung by the writer himself (in the Starland Vocal Band folio, also transcribed by Fox and reviewed here), we discover that he not only has given us the exact Denver musical phrasing, but has altered several of the lyrics to conform with the enthusiastic Denver performance.

The songs are easy to sing, and the music is easy to play. If you are a dyed-in-the-denim Denver fan, what more could you want?

Lee Oskar: Lee Oskar. Chappell Music. 8 songs. $4.95.

This folio features hard-driving but melodic instrumentals by War’s lead harmonica player. You might not think that an uncomplicated two-line piano part could compress all of Oskar’s noodlings, plus synthesizer, sax, voices, and a busy lead guitar—but this one works. It swings easily, it is a joy to play, and the price is right. My compliments to the chefs.

Starland Vocal Band: Starland Vocal Band. Cherry Lane Music. 10 songs. $5.95.

The Starland Vocal Band is a latter-day Mamas and Papas, without the saving grace of a dynamic lead singer. The recording is poorly balanced, and so, oddly enough, is the folio: passages of fanatically literal notation are combined here with unwarranted errors in pitch, harmonic structure, and musical layout. For example: If we are specifically advised that an eight-bar instrumental has been deleted from the transcription of one song (War Surplus Baby), we should expect to be notified of similar deletions elsewhere in the folio. This is not followed through, however, and the result is slightly confusing.

The group does not sing too accurately, so we can forgive editor Dan Fox for some of the discrepancies between what we hear and what we see on the printed page. However, the collection is not one of Cherry Lane’s better offerings and will disappoint anyone who wants to learn the vocal parts as recorded.

Barbra Streisand: Classical Barbra. Glamarous Music. 10 songs. $4.95.

Claus Ogerman, the album’s orchestral arranger, has re-edited and reconstructed these ten art songs (by such giants as Handel, Fauré, Hugo Wolf, etc.) and transposed them into the lady’s keys. Only one, Braziliana, remains in the original key. I assume because it is reprinted by permission of the French publisher and not copyrighted in the name of Glamarous Music.

There are beautiful old G. Ricordi editions of these songs available individually, and at modest prices, in second-hand music stores. But this collection is well done. Ogerman’s transcriptions were obviously arranged with play- and sing-along value in mind. In fact, the Fauré Pavane includes chord symbols. An adventurous guitarist might want to try a hand at strumming over the impressionist harmonies. Don’t be deceived, however; the folio is not recommended for untrained musicians.


The Marshall Tucker Band’s “Long Hard Ride” is neither long nor hard: the three-line piano-vocal arrangements are quite serviceable for learning the songs as they were originally conceived by the writers. However, in listening to the group’s album, we find an added dimension that is missing in the folio: we can actually visualize the band as High Noon-ish, heavy-striding cowpokes on the Ponderosa. The tameness of the printed material prompts me to suggest that the folio could have been expanded to include several of the strong instrumental bridges.

Wild Cherry: Wild Cherry. Chappell Music. 8 songs. $5.95.

What can you say about junk-funk? A piano-vocal folio can be only as good as the material it contains, and some record albums offer us very little redeeming musical value, so why bother?

The folio offends me on two other counts: First, the “autobiographies” of the group’s members do not adhere to even minimal standards of literacy. Apparently in the interest of authenticity, the publishers have allowed this self-styled prose to go by unedited. Bass player Wentz discusses his mother’s interest in the “accordion” and his own in the “saxophone,” to name but a few slipups. Second, two of the album’s songs, 49’ and I Feel Sanctified, are omitted from the folio and replaced by Love Plays Our Song. No explanation is given. Do not buy this folio unless you are an out-and-out groupie.

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It has been said that there can never be a definitive book on studio techniques because every studio is different. While my own experience as a recording engineer tells me this is true, it doesn't quench my fantasy of having an instant answer to every audio question, a mike setup for every session, a book to tell me how to get a great drum sound or capture the definitive "fat" piano. There are times when even your standard setup, which normally works just fine, comes at you from the monitor speakers like a crazed water buffalo. That's when it's time to expand your horizons to include some new possibilities.

In the absence of the universal problem-solver, The Recording Studio Handbook is a useful tool for students, apprentices, and engineers alike. It is a clear, practical, and occasionally witty approach to understanding what makes a recording studio work. John Woram has filled a gaping hole in the audio literature regarding standards, procedures, commonplace setups, and the million other things a recording engineer must know. I have watched students of audio engineering come away frustrated by the time-honored learn-by-watching/doing method in the absence of such a definitive resource book.

The Handbook is divided into eight sections, with several chapters in each, making it a wholly approachable entity. There is something to learn for everyone. In covering almost all aspects, Woram has an excellent basics section as well as more in-depth explanations of common situations and problems encountered by the professional engineer. Section I, "The Basics," includes chapters entitled "The Decibel" and "Sound." In the latter, Woram begins at the beginning: Acoustical energy is created by a musical instrument, which moves air molecules against a transducer, such as a microphone, which converts the acoustical energy to electrical energy. This then travels through a mike cable, is amplified to a high level, equalized, mixed, and ultimately reproduced through another acoustical transducer known as a loudspeaker. The chapter contains logical, sensible explanations of frequency response, dynamic range, and wavelengths, as well as more sophisticated discussions of weighting networks and phase relationships. Of neces-
city, the decibel chapter moves right along to dealing with logarithms, microbars, newtons, and equations, all of which give me that cold, sweaty feeling I had in senior math. Happily, you needn’t be an expert to understand it all—a little patience is all that’s required, you know.

A larger chapter on microphones considers design, polar patterns, operating principles, wind screens, and other aspects of the subject. It is illustrated with three-dimensional drawings of polar patterns and photographs of some well-known studio microphones—and some rather rare and expensive ones like the Neumann SM-2. Placement techniques are discussed at length, with some good suggestions for applications. Worman stops short of recommending specific mikes for specific jobs, but does illustrate why one type of microphone will yield better results than another in a given situation.

There are chapters on loudspeakers, equalizers, and filters, and signal-processing devices get particularly thorough coverage. This includes almost all of the new studio toys in which the “semitpro” will also be interested, such as electronic delay lines, expanders, phasers, and flangers. Two excellent sections deal with the theory and practice of magnetic recording tape, while another tells you what makes your tape recorder go ‘round. All of the common noise-reduction systems are discussed as far as they need be for most readers, and the chapter on studio consoles, while necessarily limited by the wide variety available, provides a good road map to the whys and wherefores of consoles. This section will be particularly useful to students of the trade.

The final chapters deal with recording and mixdown sessions in a multitrack studio. Standard practices and rationale behind them are discussed—for instance, counting off before a take, slating, and tuning up.

The surprise ending is a well-thought-out group of appendices, including a table of logarithms, another of conversion factors, a glossary, and a reprint of the NAB (National Association of Broadcasters) Standard, which is like the Bible—much read but seldom adhered to. This is a very fine book—for the novice, for the engineer. I recommend it very highly, in spite of its stiff $35 price tag.

FRED MILLER


Few book publishers consider country music fans to be readers. Until recently only a handful of books were available on the subject, most of them dealing with folklore, such as Billy Malone’s classic Country Music U.S.A., or directed at fans, as with Lorett Lynn’s Coal Miner’s Daughter. Partially spurred by Robert Altman’s movie, a larger number of volumes devoted to the demigods of Nashville has begun to surface. Musical hillbillies have somehow gained the literary market’s respect. But quantity outranks quality: Most books on the subject rarely transcend the lightweight coffee-table variety or Horatio Alger-ish biographies of the ole country boy making good.

Just Country, written and photographed by Robert Cornfield and Marshall Fallwell, is an attempt to go beyond such previous efforts. Using some 170 photographs, the authors present a generalized history and report on the state of the art: the rise of the Grand Ole Opry, the cowboy singer fad, honky-tonk music, and the mandatory nod to bluegrass pickers. But most of their discussion is pretty much standard fare, with the usual biographies of Hall of Famers like Jimmie Rodgers, the Carter Family, Hank Williams, and a host of lesser lights. There seems to be an unwritten code that no book on country music can exclude lengthy discussions of these musical titans. At least in this case they are portrayed without the characteristic awe. Unfortunately, many of the life histories—given the quantity—must be brief to the point of superficiality. For people just discovering Music City this is perhaps sufficient, but knowledgeable devotees will find much of the material redundant.

To their credit, the authors do attempt to deal with Nashville’s relationship to the over-all music industry. They mention some—not all—of the problems in maintaining the traditional rural nature of the music. They acknowledge the “crossover” syndrome of pop singers such as Olivia Newton-John and John Denver invading the 1974 Country Music Association awards. They also deal in a semi-frank manner with the impact of rock and roll on country music during the ‘50s and ‘60s: Country artists and publishers have loudly bemoaned the invasion of their territory and yet there isn’t one of them who doesn’t crave a pop hit. Waylon Jennings, for one, decreed: “I can’t go pop with a mouthful of firecrackers.” And then consciously courted the readers of Rolling Stone. Chet Atkins for years has lauded “country purity,” all the while producing uptown, mainstream music.

Just Country is perhaps the best general audience book on country music, and it is more than just photographs with text tossed in. But somehow one still gets the impression that the publishers think of c&w fans as nonreaders who must be deluged with pretty pictures.

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Wow & flutter: .04%. Signal/noise ratio: 62 dB.

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4. All-new tape formulation with thicker oxide coating and thicker polyester for highest quality sound.

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