



BUT PIONEER COULDN'T LE WELLENOUGHALONE WE'VE REPLACED THE WORLD'S BEST SELLING CASSETTE DECK WI

For the last two years, the CT-F2121 has satisfied more people than any other cassette deck in the world. Because the major difference between it and much more expensive front-loading cassette decks was price. Not performance.

But there remained one highly critical group of people who were never satisfied. Pioneer's engineers. Who were constantly looking for ways to make it even better.

THE DIFFERENCES YOU CAN SEE.

The most obvious improvement over the old 2121 is the new front end of the CT-F4242.

What isn't quite as obvious is the thinking behind it. The new push-button oil-damped door, for instance, doesn't tilt in like the CT-F2121's, or out like others. Instead, it slides neatly up over the lighted tape transport. So it's easier to get your cassette in and out of the deck.

This same kind of thinking went into repositioning the hard Permalloy Solid tape heads. Vertically. Right at your fingertips where you want them. So it's no hassle to keep them free of dust and in good working order.

Pioneer's engineers also put a great deal of thought into features our competitors seem to have given very little thought to. Features like a three-position bias and equalization switch, instead of the more typical two. And a six fin tape drive shaft, instead of the common three, to hold your cassettes more securely.

The point is, you'll see a lot on the new CT-F4242 that you won't see on other modestly priced cassette decks.

But there's more to this deck than meets the eve.

THE DIFFERENCES YOU CAN HEAR.

By far, the most impressive refinements in the new CT-F4242 are the ones you can't see.

Inside, for example, where many cassette decks use small flywheels that can cause wow - Without veneer wood cabinet optional at extra cost

and flutter, the flywheel in the new CT-F4242 is massive. (In fact, it's 30% bigger than the 2121's.) Our bigger flywheel reduces wow and flutter even further. So you get cleaner and crisper recordings.

Then there's our new Dolby system. Practically every decent cassette deck today has some sort of Dolby system that adds clarity to the music by reducing tape hiss. But the Dolby in the CT-F4242 cuts tape hiss enough to produce an incredible signal-to-noise ratio of 62 decibels. A figure comparable to far more expensive equipment.

And although you'll find a multiplex filter switch on many cassette decks, you won't find one on the CT-F4242. It's built-in. Which literally means that you can't make a bad FM recording.

If you're beginning to get the idea that there are vast differences between the CT-F4242 and other decks for anywhere near the same price, you're right.

So visit your Pioneer cealer and listen to the most sophisticated cassette deck ever made for the money. Pioneer's CT-F4242.

Once you hear it, you'll be glad Pioneer couldn't leave well enough alone.



©1977 U.S. Pioneer Electronics, 85 Oxford Drive, Moonathie, New Jersey 07074

	CT 12721	CT-F4242
HEADS:	"Permalloy Solid" recording/playback head xl. Ferrite ensing head xl.	"Hard Permalloy Solid" recording/playback hoad xl. Ferrite crasing head xl.
	No more than 0.12% (WRMS)	No more than 0.08% (WRMS) No more than 2.2% (DIN)
FREQUENCY RESPONSE	Standard EH tape: 30 to 13,000 Hz (40 to 11,000 Hz ± 3 dB; Chromium type tope: 30 to 16,000 Hz (40 to 12,000 Hz ± 3 dB)	Standard LH tape: 30 to 14,000 Hz (40 to 13,000 Hz ± 3 dB), Ferrichronium type tape: 30 to 16,000 Hz (40 to 15,000 Hz 3 dB) Chronium type tape: 30 to 16,000 Hz (40 to 15,000 Hz 3 dB)
SIGNAL TO NOISE RATIO:	Dolby OFE-48 d8 (Standard and L1 tapes) Dolby ON: 58 d8 (over 5 kHz, standard and Ut topes). When chremium type tape is used, signal-to-noise radio is further improved by 4.5 d8 over 5 kHz.	Dolby OFF: more than 52 dB Dolby ON: more than 62 dB (over 5 kHz standard and LH tape4. When chronium type tape Is used, signal-to noise ratio Is further improved by 4.5 dB over 5 kHz.

WHEN SOMETHING WORKS THIS SUCCESSFULLY MOST PEOPLE WOULDN'T MESS AROUND WITH IT.

THE PIONEER CT-F212I. THE WORLD'S BEST SELLING CASSETTE DECK.

C CASESTITE TARE DECK MODEL CT. FRIEND

O PO

ETE STO

ð:=

CD1

The source of perfection in stereo sound... Pickering's new XSV/3000

The reviewers applaud as never before!

"... we don't see how you can do better at any price." Hirsch-Houck Laboratories. Stereo Review. February 1977

PICKERING 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."

CBS Technology Center. High Fidelity. February 1977

"Congratulations to all concerned on a fine contender amongst the world's best stereo pick-ups."

John Borwick. Gramophone. United Kingdom 1977

Pickering's new XSV/3000 is a remarkable development. It possesses a totally new and different design that makes it the precursor of a whole new generation of sophisticated, advanced stereo cartridges.

This has been made possible by technological advances in two areas. **First**, it has an unusually tiny, samarium cobalt (rare earth) magnet of remarkably high power that permits extremely low mass, and also offers high output. **Second,** this cartridge features the new Stereohedron[™] stylus tip, a Pickering first! This extraordinary shape has a far larger bearing radius, which provides increased contact area in the record groove. This assures gentler treatment of the record groove, longer record life, and also, far longer stylus life.

This cartridge provides remarkably smooth and flat frequency response; its channel separation is exceptional, its transient response possesses superb definition.

Truly, Pickering's XSV/3000 represents a whole new concept of excellence in stereo cartridges... the true **Source** of perfection in stereo sound.

For further information write to Pickering & Co., Inc. Dept. HF 101 Sunnyside Blvd., Plainview, New York 11803



PICKERING & CO., INC., COPYRIGHT 1977

CIRCLE 30 ON READER-SERVICE CARD



FEBRUARY 1978

VOLUME 28, NUMBER 2

MUSIC AND MUSICIANS

- 4 Happy Anniversary, ABC Leonard Marcus
- **50 Gilbert & Sullivan Discography: Part II** Richard Dyer Mikado, Ruddigore, Yeomen of the Guard, and three more
- 61 The Devil in Paris Sol London Paganini's fiendish talent marked music and science
- 67 Karajan's Beethoven Nine Harris Goldsmith
- 70 Sessions' "Lilacs" Cantata Andrew Porter

AUDIO AND VIDEO

- **19 Too Hot to Handle**
- 22 News and Views AES: audio from the inside □ Panasonic's VHS software
- **27** Equipment in the News
- **33 Equipment Reports**

Altec Model 19 speaker Technics ST-9030 FM tuner Teac A-103 cassette deck Harman Kardon Citation 19 amplifier Ortofon Model M-20FL Super pickup Soundcraftsmen PE-2217 preamp-equalizer

42 Things to Keep Records Quiet Edward J. Foster Which ones do the job?

REVIEWS

- 67 Featured Recordings Beethoven's nine □ Sessions' Lilacs
- 73 Classical Records Simon Boccanegra International Piano Archives' gems
- 74 Critics' Choice
- 102 Theater and Film Viva Zapata
 Film Music by Alex North
- 104 The Tape Deck R. D. Darrell

BACKBEAT

- 107 Heart: The Hassles Paid Off Patrick MacDonald
- 110 Input Output
- 112 AES: Digital Is Here Fred Miller
- 115 \$7.98: Where Your Dollar Goes Sam Graham
- 118 Records Columbia's Contemporary Masters Series David Bowie
- 124 Breakaway; Levon Helm and Rick Danko
- 126 Folios

ET CETERA

- 6 Letters
- 96 Advertising Index
- 97 Reader-Service Cards



High Fidelity is published monthly by ABC Leisure Magazines. Inc. The Publishing House. Great Barrington. Mass. 01230. a subsidiary of American Broadcasting Companies. Inc. Copyright * 1978 by ABC Leisure Magazines. Inc. The design and contents are fully protected by copyright and must not be reproduced in any manner. Second-class postage paid at New York, New York, and at additional malting offices. Authorized as second-class mail by the Post Office Department. Ottawa. and for payment of postage in cash. Yearity subscription in U.S.A. and possessions. \$8.95. Canada. \$10.95. eisewhere \$11.95. Single copies \$1.25. Subscribers. Send subscriptions, inquires, and address changes to High Fidelity. I Sound Ave... Marion, Ohio 43302. Change of address. Give oid and new addresses, including 2IP code. Enclose address label from last Issue and allow five weeks for change to become effective. Postmaster: Send Form 3579 to High Fidelity, 1 Sound Ave., Marion, Ohio 43302. Postat Identification. Number 24382.

Happy Anniversary, ABC

During the past year, much has been written about ABC's rocketing from last to first place among TV networks. (Nobody seems to have connected the corporation's dramatic rise in fortunes with its acquisition shortly before of HIGH FIDELITY and our sister publication, MOD-ERN PHOTOGRAPHY.) But in all the printed stories I read, I came across no reference to what ABC had contributed to America's musical life. Since this month marks the twenty-fifth year since Leonard Goldenson merged his United Paramount Theaters with the old American Broadcasting Company to form American Broadcasting Companies, Inc., I thought I would investigate that subject and, if I found anything of interest, write about it as a sort of anniversary present to our parent company. What I did find surprised me.

Take the ABC Symphony, for example. Never heard of it? Yet for thirty Saturdays each spring and summer from 1943 through 1948, one could hear concerts by this orchestra under such conductors as Antal Dorati, Maurice Abravanel, Roy Harris, Bronislaw Gimpel. Earl Wild, and Nicolai Berezowsky. Gimpel and Wild also appeared as solo violinist and pianist, respectively, and other soloists included the likes of harpsichordist Sylvia Marlowe, pianist Gary Graffman, violinist Ruggiero Ricci, and violist Emanuel Vardi. That it didn't capture the musical public's imagination might have been due to its lack of a star conductor (NBC, after all, had Toscanini) or even a permanent conductor (CBS had Howard Barlow). But for six years, it was there.

Or how about the more recent ABC String Quartet? This, at least, I remembered, for during the mid-Sixties, when New York's WABC-FM was a major classical station. its top-notch quartet weekly contributed the only live stereo music of any sort broadcast to the Metropolitan area. The group not only played string quartets, but expanded for memorable performances of such works as Mendelssohn's Octet, Chausson's Concert for Violin, Piano, and String Quartet, and Glazunov's Concerto for Saxophone and Strings.

For years until 1963 the ABC radio network was of course the outlet for the Metropolitan Opera and, during the Koussevitzky era, for the Boston Symphony Orchestra as well. And ABC-TV made the first telecasts from the Met: the opening nights of 1948 (Otello), 1949 (Der Rosenkavalier), and 1950 (Don Carlos).

Perhaps most far-reaching, ABC was the first network to make that revolutionary decision to transcribe broadcasts: the Bing Crosby radio show—on discs in 1946-47 and on tape thereafter. (For the full story, see John T. Mullin's "Creating the Craft of Tape Recording," HF, April 1976.) This decision all but transformed American broadcasting, making editing possible and a greater variety of programs from a greater variety of sources more readily available. Ironically, it also led to today's automated and syndicated radio (see HF, September and October 1977) and to the decline of network radio programming that Gene Lees described in last month's issue.

Unfortunately, today all symphonic, chamber, and operatic music remains the domain of independent programmers and broadcasters. Good music "networks" generally air the shows that link them at differing times. Only the Met broadcasts remain to remind us of the time when Americans around the country were bound together as they listened to the same good music at the same time.

The next quarter-century may change all this for the better. If so, we ask our parent to remember the best of its past and, in its newly won success, take the lead in the future.

Leonard Marcus



Cover photo: Daniel McCoy Cover model: Kathleen Palma

LEONARD MARCUS Editor

ROBERT S. CLARK Editorial Director

KENNETH FURIE Music Editor

ROBERT LONG Audio-Video Editor

HAROLD A. RODGERS Associate Audio-Video Editor

SHIRLEY FLEMING Editor, Musical America

SUSAN ELLIOTT Popular Music Editor

WAYNE ARMENTROUT Director of Production

REBECCA ABBOTT Copy Editor

LYNDA CARLOTTA CYNTHIA PEASE Assistant Editors

GAIL KOOKOOLIS Editorial Assistant

ROY LINDSTROM Graphics Director

EDWARD J. FOSTER Consulting Editor

EDWARD GREENFIELD European Editor

DICK ROSMINI Studio Equipment Consultant

ROYAL S. BROWN JOHN CULSHAW R. D. DARRELL ALFRED FRANKENSTEIN HARRIS GOLDSMITH DAVID HAMILTON DALE HARRIS PAUL HENRY LANG GENE LEES IRVING LOWENS ROBERT C. MARSH FRED MILLER H. C. ROBBINS LANDON Contributing Editors

DAVID LEE Circulation Director

PETER MICHAELSON Circulation Manager

WARREN B. SYER Publisher

It's time for everybody else to start playing catch-up. Again.

From the very beginning, experts have acclaimed the performance and feature innovations of Yamaha receivers as nothing less than spectacular.

But now, we've outdone ourselves.

Yamaha is introducing a new line of receivers with such unprecedented performance, it's already changing the course of audio history.

Real Life Rated.[™] While traditional laboratory measurements provide a good relative indication of receiver performance, they simply don't tell you how a receiver will sound in your living room in actual operation. So Yamaha developed a new standard for evaluating overall receiver performance under real life conditions. It's called Noise-Distortion Clearance Range (NDCR). No other manufacturer specifies anything like it, because no other manufacturer can measure up to it.

We connect our test equipment to the phono input and speaker output terminals, so we can measure the performance of the entire receiver, not just individual component sections like others do. We set the volume control -20dB, a level you're more likely to listen to than full at volume. We measure noise and distortion together, the way you hear them.

On each of our new receivers, Yamaha's Noise-Distortion Clearance Range assures no more than a mere 0.1% combined noise and distortion from 20Hz to 20kHz at any power output from 1/10th watt to full-rated power. Four receivers, one standard. On each of our four new receivers, Yamaha reduces both THD and IM distortion to new lows-a mere 0.05% from 20Hz to 20kHz into 8 ohms. This is the kind of performance that's hard to come by in even the finest separate components. But it's

CR-620 0.05% THD 0.05% IM

CR-1020 0.05% THD 0.05% IM

a single standard of quality that you'll find in each and every new Yamaha receiver. From our CR-620 and CR-820 up to our CR-1020 and CR-2020.

What's more, we challenge you to compare the performance and features of our least expensive model, the CR-620, with anybody else's most



expensive receiver. You'll discover that nobody but Yamaha gives you our incredibly low 0.05% distortion and -92dB phono S/N ratio (from moving magnet phono input to speaker output).

You'll also discover that nobody else starts out with such a variety of unique features. Independent Input and Output Selectors that let you record one source while listening to another. A Signal Quality Meter that indicates both signal strength and multipath. The extra convenience of Twin Headphone Jacks. Or the accurate tonal balance provided at all listening levels by Yamaha's special Variable Loudness Control.

More flexibility. It's consistent with Yamaha's design philosophy that you'll find the same low distortion throughout our new receiver line. Of course, as you look at Yamaha's more expensive models, it's only logical that you'll find the additional flexibility of more power, more functions, and more exclusive Yamaha features.

For example, there's a sophisticated tuner, with unique negative feedback and pilot signal cancellation circuits (patents pending), that makes FM reception up to 18kHz possible for the first time on a receiver. Plus other refinements like a Built-In Moving Coil Head Amp, Fast-Rise/ Slow-Decay Power Meters, and Yamaha's own Optimum Tuning System.

Now's the time to give us a listen. Our new receiver line is another example of the technical innovation and product integrity that is uniquely Yamaha. And your Yamaha Audio Specialty Dealer is an example of uncommon dedication to faithful music reproduction and genuine customer service. It's time you heard them both.

CR-820 0.05% THD 0.05% IM

CR-2020 0.05% THD 0.05% IM

If your Yamaha Audio Specialty Dealer is not listed in the local Yellow Pages, just drop us a line

©1977 YAMAHA INTERNATIONAL CORP.

COMING NEXT MONTH

"Tape and the Shape of Things to Come" is the theme of our March issue, as we explore the long-range implications of the latest developments in magnetic-tape recording. Audio-Video Editor Robert Long examines the impact of video cassette recorders upon the home-entertainment field today and tomorrow in VCRs: A Wayof-Life Revolution in the Making? And Associate Audio-Video Editor Harold A. Rodgers takes us into the professional studio for a peek at Digital Recordinghow it differs from current technology and what its astonishing capabilities will mean to music reproduced in the home. Paul Henry Lang will help us celebrate Vivaldi's 300th Birthday with a critical discography of the baroque master. BACKBEAT talks to Todd Rundgren and goes to a Carly Simon recording session to watch Engineer Lew Hahn in action. There will also be John Culshaw, Gene Lees, R. D. Darrell, and our usual complement of news reports and reviews.

SOLUTION TO HIFI-CROSTIC NO. 32

[EDUARD] HANSLICK: Vienna's Golden Years of Music, 1850-1900

It is impossible to speak and think of oneself more modestly than [Johann] Strauss [Jr.] did. His elastic figure, unbent by the years, will be sadly missed in Vienna. He was a last symbol of cheerful, pleasant times casting a fading light upon our disrupted present.

ADVERTISING

Main Office: Leonard Levine, Director of Advertising Sales. The Publishing House, Great Barrington, Mass. 01230. Telephone: 413-528-1300.

New York: ABC Leisure Magazines, Inc., 130 E. 59th St., 15th floor, New York, N.Y. 10022. Seymour Resnick, National Advertising Manager, 212-826-8381, George Dickey, 212-826-8383. Michael Littleford, Classified Advertising Manager, 212-826-8394.

New England: ABC Lelsure Magazines, Inc., 137 Newbury New England: ABC Leisure Magazines, Inc., 137 Newbury St., Boston, Mass. 02116. Telephone: 617-261-3145. Myles Grossman, New England Advertising Manager. Midwest: ABC Leisure Magazines, Inc., 190 N. State St., Room 632, Chicago, III. 60601. Telephone: 312-782-1173. William P. Gordon, Midwest Advertising. Manager

Los Angeles: ABC Lelsure Magazines, Inc. ABC Entertainment Center, 2040 Avenue of the Stars, Sulte 270, Century City, Callf. 90067. Telephone: 213-553-2000. Andrew Spanberger, Western Advertising Man-ager; Janet Endrijonas, Associate Western Advertising Manager

Tokyo: Japan Advertising Communications, Inc., New Ginza Bldg., 7-3-13 Ginza, Chuo-ku, Tokyo 104, Japan. Telephone: (03) 571-8748, Shigeru Kobayashi, President.

High Fidelity and High Fidelity/Musical America are published monthly by ABC Lessure Magazines Inc. a subsidiary of American Broadcasting Companies Inc. Warren B Syer President Herbert Kep-pler Vice President Photographic Publishing Division Warren Tuohy Vice President Finance. Cathleen Alos: Assistant to Ine President Member Audit Bureau of Circulation. Indexe on Reader S Guide to Peri-odical Literature Current and back copies of High Fidelity and High Fi-delity Musical America are available through Beil & Howell Micro Photo Division. Olid Manstell Road. Wooster: O 44691 Editorala Correspondence should be addressed to The Editor High Fi-delity Grael Barrington Masso 1230 Editoriar contributions withe wel-comed and payment for articles accepted will be arranged prior to publi-cation. Unsolicited manuscripts should be accompanied by return postage

postage

Stoky's Rescoring

In his review of André Previn's new recording of the Rachmaninoff Third Symphony [October], Abram Chipman asserts that both the late Leopold Stokowski and Eugene Ormandy retouched the scoring in their versions of the work, one instance being that violas were added to the instrumentation of the opening bars. Here we have yet another example of a music critic writing arrant nonsense about Stokowski. presumably through having read somewhere that the conductor was known to make emendations to a composer's text. In fact, the score and parts Stokowski used for his recording were hired from a London publisher and were returned totally unmarked by any reorchestration. If Mr. Chipman cannot tell the difference between violas (in the aggregate) and a solo cello. then he has no business being a record critic.

He aligns himself with the many writers (especially American) who have asserted that Stokowski constantly tampered with scores when he in fact did no such thing. Mr. Chipman should examine another of the great musical myths perpetrated by American critics: On the one hand they tell us that Stokowski was a great reorchestrator, on the other that Toscanini practiced absolute fidelity to the printed text. Mr. Chipman should listen to Toscanini's recordings with a score in hand, starting with Tchaikovsky's Munfred. "Do as written," said the conductor-and then proceeded to rescore whole chunks of the work, to say nothing of making massive cuts in the finale (five minutes!). And his changes to Mendelssohn, Beethoven, Schumann, Debussy, and even Gershwin give the lie to the myth that surrounds his name. Perhaps one day the truth will prevail. though I don't expect to read it from the pen of Mr. Chipman and his American colleagues!

> Edward Johnson London, England

Mr. Chipman replies: Mr. Johnson prompted some rechecking of the opening bars in various Rachmaninoff Third recordings. While I still hear the doubling of the solo cello line in the Ormandy. I'm prepared to concede that Stokowski may in fact have left the scoring alone. My original impression of his retouching was probably a function of the acoustical vagaries I noted in that recording and my own expectant "set" that anything was possible from the late maestro. Yet I can't agree that critics exaggerate Stokowski's editorial willfulness in general. Surely Mr. Johnson wouldn't dismiss as insignificant the alterations in the closings of either Tchaikovsky's Romeo and Juliet or Ravel's Second Suite from Daphnis et Chloé, on the current London issues (21032 and 21059, respectively).

Mr. Johnson, I'm afraid, fails to distinguish my views from those of critics whose

special adulation of Toscanini is well known. American critics are not monolithic. If I am occasionally too alert to Stokowski's liberties, that doesn't automatically make me an unquestioning defender of everything Toscanini did (nor, for that matter, are all the American critics who value his art). More important, my questioning of Stokowski's revisions of scoring does not in the least diminish my recognition of his priceless contributions to music through his long and full career, among them his courageous championing of twentieth-century masterpieces, his establishment of glorious standards for orchestral sonority, his popularization of good music for children, his advancement of the careers of younger musicians, and his magical interpretations of the music closest to his own temperament. These will remain his monuments for years to come, long after the quibbling over textual violations has been forgotten.

Brahmin Milstein

Although the beauty of Nathan Milstein's tone can never be adequately captured on records, his ideas on music and composers are not only out of tune with the times-as the subhead of your article "Nathan Milstein: Brahmin with Violin" [November] suggests-but ridiculously idiosyncratic. His limited repertoire also reflects the narrow vision of his musical mind. I'm particularly offended by his dismissal of Stravinsky: "[He] wrote for violin, but he wrote nothing extraordinary." Music, fortunately, does not stand still.

> I. P. Adams Clifton, N.J.

Linear Amp Ban and the Hams

I was disappointed by your comments in 'News and Views'' [October] regarding the FCC's proposal to ban all sales of linear amplifiers operating above 25 mHz. Illegal use of such amplifiers by CBers is certainly a serious problem that must be dealt with, but the FCC's blanket ban on amplifiers deals with the situation at the expense of more than 300,000 American amateur radio operators (hams) who have a legitimate need for the equipment.

Radio amateurs, as opposed to CBers who get their licenses by mail, are required to pass extensive examinations administered by the FCC demonstrating the technical knowledge necessary to properly operate an amateur station and to prove competence in the International Morse Code. Most amateur transmitters do not develop more than 200 watts; linear amplifiers are necessary for outputs greater than this.

By 1979 there will be more than 500,000 licensed ham operators in the U.S. alone, and we do not consider our investment in industry "minimal and incidental," as the Electronic Industry Association apparently does. The American Radio Relay League, an organization of amateur operators, and several equipment manufacturers are discussing alternative proposals with the FCC that would require the presentation of an amateur license prior to purchasing gear

The new Bose[®] Model 501. It shapes the sound to fit your living room and your music.

The new Bose Model 501 Direct/Reflecting[®] speaker captures the realism of live music by using rocm-wall reflections to recreate the balance of reflected and direct sound you hear at a live performance.

At the same time, the ex-

clusive Bose Direct Energy Control lets you adjust the radiation pattern of the outward-firing tweeter for the size and shape of your room, and for your music. Broader, for the sweep of a symphony, or tighter, for the intimacy of a vocalist. Two extended-range, 3-inch tweeters deliver crisp, clean highs, while the high-performance 10-inch woofer produces very deep, powerful bass with practically no distorzion. And an innovative Dual Frequency Crossover™ network lets tweeters and woofer play simultaneously over more than an octave, for smooth, open midrange.

Hear the new Model 501, the speaker that shapes the sound to ft the way you listen to music at Bose dealers now.



The Direct Energy Control lets you adjust the radiation pattern of the outward- īring tweeter.



The Model 501 speaker is designed to create a life-like balance of reflected and direct sound.



For a detailed description of the Model 501 and the technology behind it, send \$1.00 to Bose Corporation, Dept. PVN, The Mountain, Framingham, Mass. 21721. You will receive a Yull-color Model 501 brochure, a 12-page owner's manual, and a copy of Dr. Amar Bose's article on "Sound Recording and Reproduct on," reprinted from Technology Review. Cabinets are walnut-grain vinyl veneer. Patents issued and pending.



A new Space Program by Sansui.

Designed to send every audiophile into orbit.

Sansui has conquered space – the space in your listening room. Our engineers have created a rack to hold all your high fidelity components in one place so they're easily accessible and easy to operate. And the Sansui GX-5 rack is so elegant you will be proud to display it in your home.

The Sansui GX-5 rack is about the only EIA 19" standard-width rack available with casters for moving your sound system easily from room to room. It is 37-1/2 inches tall and can hold every rack-mountable component. You can also adjust the height of each unit to meet your needs.

We have filled the rack with our choice of outstanding Sansui components. And there's still plenty of room for your records. Listen to them on the **Sansui SR-838 Quartz-Servo direct-drive turntable**, about the most elegant and stable precision turntable in the world. Even when set on top of so much power, the SR-838 will

perform free from all noise and feedback.

When your mood changes, listen to your favorite FM station on the **Sansui TU-717 tuner**. Reception, even of the weakest stations, is outstanding, with selectivity so high there is never a problem with adjacent channel programming.

And, of course, if you want to preserve these treasured sounds for years — as clean and pure as they

were the very first time you heard them — it's all possible with the **SC-3110 cassette deck**, our rack-mountable version of the SC-3100, already well-known for its superior performance and ultraconvenience including Sansui exclusive Direct-O- Matic loading.

To match these outstanding components, Sansui offers you the **AU-717** amplifier with the widest frequency response (from main-in) of any available **DC integrated amplifier** at any price. With astonishingly low distortion and noise, and wide overall frequency response, the signal is an ultra-faithful replica of the original. The AU-717 delivers the brilliance and all the nuance that makes music so important in your life. Listen through a pair of **SP-L800** (or SP-L900 or 700) dual-woofer speaker systems.* They have been designed to give you the full enjoyment of the clean and pure sound that our advanced technology components provide.

Of course, you can select other components to meet your own listening needs. You may want slightly less power; so we offer you the AU-517 DC integrated amplifier, created with the very same expertise as its bigger brother, the AU-717. If you wish to spend a little less on your cassette, you can choose the SC-1110.

And for you recordists and musicians we have something almost out of this world. The **AX-7 mixer**/ **reverb unit** is about the finest home recording console that you can find at such a reasonable price. Versatility is the key, with up to 6 inputs for microphones, line level, electrical instruments, discs, broadcasts or tapes. You get panpots and



20dB input level attenuators on the 4 main inputs. Reverb is included, as well as circuits for 4-channel, equalization and noise reduction. Record the sounds you create on up to 3 tape decks.

We're sure you'll want to visit your local franchised Sansui dealer for a complete demonstration of Sansui's new Space Program. Just think about it. It will send you into orbit.

*Walnut veneer finish

SANSUI ELECTRONICS CORP.

Woodsidė, New York 11377 · Gardena, California 90247 SANSUI ELECTRIC CO., LTD., Tokyo, Japan SANSUI AUDIO EUROPE S.A., Antwerp, Belgium In Canada: Electronic Distributors



CIRCLE 34 ON READER-SERVICE CARD



These should not be your first loudspeakers.

The longer you've lived with other kinds of sound, the more you'll appreciate Tannoy.

The difference in Tannoy loudspeakers involves a dual concentric design that is quite unlike any other in the world.

Simply put, this design means that the highfrequency driver is physically integrated with the low-frequency driver. The positioning is such that the sound emerges not just phase corrected, but also phase coherent.

And that coherence is maintained throughout your listening room.

We're not new at this, of course. In fact, we we been refining our design for over 30 years. We've refined it so expertly that Tannoy cual concentrics are now the most widely-used studio monitors in Britain.

And the speakers we sell to professionals are the same speakers we offer to you.

Tannoy loudspeakers are available in five models — from the shelf-sized Eaton to the imposing Arden To find out where to audition a pair, write Henry Roed Jr., Tannoy, Inc., 122 Dupont Street, Plainview, NY L1803.

But don't be hasty. Only experience will tell you how good they are.



that could conceivably be used illegally by CBers. This seems a more reasonable way to enforce the law without penalizing a group that has prided itself on more than sixty years of self-regulation and service to the public.

Philip J. Johnson Ithaca, N.Y.

Here at HF, our main concern is to get the interference caused by illegal transmitters out of audio systems and television sets. Assuming that licensed radio amateurs can be trusted not to make this equipment available to CBers, the American Radio Relay League's proposal, as outlined by Mr. Johnson, seems reasonable to us.

Spanish Harpsichord Works

R. D. Darrell speculated in his review of London's recording of battle music played by Jonathan Woods [November] that Francisco de la Torre and two other composers may be represented for the first time on disc. De la Torre's Danza "Alta" has been available from Musical Heritage Society for years—MHS 713, MHS 761, and OR 352/ 4 (a three-disc set)—and most recently on our December release of MHS 3693.

Margie Williams Musical Heritage Society New York, N.Y.

....and Federico Mompou

Although the five-record set of Federico Mompou playing his complete piano music, which received a special citation as part of the Tenth Annual High Fidelity/International Record Critics Award ["Best Records of the Year." December], was not issued by Ensayo in the U.S., these same performances may be obtained by mail order from the Musical Heritage Society [14 Park Rd., Tinton Falls, N.J. 07724]. The discs are individually slipcased but sold as a set as MHS 3462/6.

John W. Trammell Charleston, W.Va.

Happy Birthday, BACKBEAT

I have subscribed to HIGH FIDELITY for more than twenty years, mainly for the reviews of John S. Wilson. But now you've changed your format, and there is no longer a review section devoted to jazz. Instead, in any given issue there may or may not be a review by J.S.W. in a mishmash called BACKBEAT. I should like to have an answer: Is the ridiculous new format to be continued?

William T. Reinick Tempe, Ariz.

It goes without saying that this format is one to which we have made a firm editorial commitment. Readers who share Mr. Reinick's displeasure will find justification for our commitment in the editorial in the February 1977 issue—that of BACKBEAT's debut—and Editor Leonard Marcus' reply to reader comments in the May 1977 "Letters" column. As for jazz, in order to cut down on name-calling by those who refuse to recognize that it is an integral part of popular music, we have obliged by separating John S. Wilson's and Don Heckman's monthly jazz reviews from the pop and rock coverage.

I would like to thank you wholeheartedly for expanding your critical coverage of pop and rock albums. I had written a couple of times requesting that you do so but had almost given up. Now your magazine provides its readers with much more to experience.

Phil Musso San Francisco, Calif.

Late Strauss on Records

A year ago HIGH FIDELITY reported that EMI was producing a recording of Richard Strauss's Die schweigsame Frau with Marek Janowski conducting and a cast including Jeanette Scovotti, Hermann Prey, and Theo Adam. Since that time I have heard and seen nothing of this project. As I have a very great interest in the as yet unrecorded late operas of Strauss, I was looking forward to this recording with some enthusiasm. Can you tell me what is up?

Also, are any companies considering production of Intermezzo, Die ägyptische Helena, Friedenstag, Daphne. and Die Liebe der Danae? The lack of recordings of these operas seems to me a deplorable gap in the catalog.

Scott Eggert Chicago, Ill.

There is as yet no release date for Die schweigsame Frau. The recording was be-



A superior TUNER on its own separate chassis A superior PREAMP on its own separate chassis A superior POWER AMP on its own separate chassis

These add up to three individual & discrete components perfectly molded into one integrated receiver, the TR 2075 Mk II, maintaining the specifications & characteristics that are normally associated with such components, and challenging systems costing much, much more.

In addition, the TR 2075 Mk II offers features available on no other receiver at any price: Pushbutton diode mode selection for silent, positive program switching. A mini-recording studio function that allows tone & filter controls to be switched into the Tape 2 output, plus fade between Phono 1 & Phono 2. Seven different protection circuits. And much more.



For your nearest Tandberg dealer, call toll-free 800-431-1506, or write: Tandberg of America, Inc., Labriola Court Armonk, N.Y. 10504

If this is what you are looking for.

If you demand nothing less than true hi-fi performance, you'll understand the advantages and flexibility that resulted when Technics separated the basic amplifier/control/tuner functions into the five units we call the Flat Series: The automatically switchable dual IF band ST-9030 FM tuner. The SU-9070 DC preamplifier. The SH-9010 stereo parametric/graphic frequency equalizer. The SH-9020 peak/peak-hold/average metering system. And the SE-9060 stereo/mono DC power amplifier.

You'll also understand why the Flat Series challenges the performance of the most expensive professional equipment in the world. And very often surpasses it.

Look at the graphs. The reproduced waveform is virtually true to the original. All types of distortion—some measurable, some not—are negligible. And the linear frequency response is extremely wide.

We're confident that the truly discriminating critic will recognize the magnitude of our achievement. Especially when that achievement is offered at prices that are unprecedented for equipment of this caliber. And with the flexibility to incorporate one or more,

or all five units into your system. Depending on your needs or budget.

To see how Technics achieved the incredible performance shown in the graphs, you have to see and compare the incredible specifications that are typical of the Technics Flat Series on the facing page.



Input Waveform to ST-9030 FM Tuner.



Output Waveform from Technics Flat Series.



bow cut off (DC) bow cut off (DC) bow cut on bow cu

TECHNICS ST-9030. THD (stereo): Wide-0.08% (1 kHz). Narrow-0.3% (1 kHz). S/N (stereo): 73 dB. FREQ. RESPONSE: 20 Hz-18 kHz +0.1, -0.5 dB. SELECTIVITY: Wide-25 dB. Narrow-90 dB. CAPTURE RATIO: Wide -0.8 dB. Narrow-2.0 dB. IMAGE and IF REJECTION, SPURIOUS RESPONSE (98 MHz): 135 dB. AM SUPPRESSION (wide): 58 dB. STEREO SEPARATION (1 kHz): Wide-50 dB. Narrow-40 dB. (10 kHz): Wide-40dB. Narrow-30dB. CARRIER LEAK: Variable terminal-65 dB (19 kHz). Fixed-70 dB (19 kHz, 38 kHz).

<u>TECHNICS SE-9060.</u> POWER OUT-PUT: 70 watts per channel (stereo), 180 watts (mono) min. RMS into 8 ohms from 20 Hz to 20 kHz with no more than 0.02% THD. INTERMODULATION DISTORTION (60 Hz: 7 kHz, 4:1): 0.02%. FREQ. RESPONSE: DC \sim 100 kHz, +0dB, -1 dB. POWER BANDWIDTH: 5 Hz -50 kHz, -3 dB. S/N: 120 dB (IHF A). RESIDUAL HUM & NOISE: 100 μ V. INPUT SENSITIVITY & IMPEDANCE: 1V/47k Ω .

All the specifications of Technics Flat Series are too numerous and complex to list here. But their performance is too good to miss. So don't. Technics Flat Series is now available for demon-

> stration at selected audio dealers. For very selective ears. And for very selective eyes there's Technics SH-999. A movable 19" custom rack with rosewood veneer side panels.

Technics Flat Series. A rare combination of audio technology. A new standard of audio excellence.

Technics Professional Series

by Panasonic

This is what you should listen to.



At last ... a flawless midrange built to take full power ... 300D 3-Way System

THE CORINTHIAN COLUMN

RTR resolves point-source radiation

Originators of column loudspeakers in the United States, RTR has introduced the most meaningful statement of column design since 1970. The RTR 300D 3-Way Speaker System.

What makes the 300D immediately fresh, almost startling, is its "Resolved Point-Source Radiation Field" which projects a stable image regardless of frequency. Musical instruments are reproduced in a virtually stationary position — just as they were in live performance.

This positive move toward audio reality is the result of significant technological advancements in the design and positioning of each driver within the 3-way system. Primary is the new RTR soft dome midrange system — the first to successfully integrate smooth response and broad dispersion with outstanding dynamic range and transient response. In consort with the two 10" woofers and solid state supertweeter, this milestone midrange reproduces music with the highest degree of audial integrity.

Packaged superbly in an acoustically transparent, Corinthian column and affordably priced. Audition the 300D at your RTR dealer.



RTR Industries, For dealer list, write: RTR, Dept. HF, 8116 Deering Ave. Canoga Park, CA 91304

CIRCLE 32 ON READER-SERVICE CARD

gun in August 1976 and, assuming no complications, should turn up in the next year, although we can't say whether Angel plans a domestic release.

Of the other operas, Daphne has been recorded twice. The lovely DG set from the 1964 Vienna Festival (with Hilde Gueden, Karl Böhm conducting) is out of the U.S. catalog, but it has been reissued in Germany as DG Privilege 2721 125 and copies have been imported by German News Company and others. The 1948 recording from Buenos Aires' Teatro Colón (with Rose Bampton, Erich Kleiber conducting) has also been reissued, by Educational Media Associates (IGI 295).

As we go to press, word reaches us of a major Decca/London Strauss project, to include Die ägyptische Helena; watch "Behind the Scenes" for details.

Berlioz and Italy

It's a pity that one off-the-cuff generalization should carelessly slip into Paul Henry Lang's otherwise well-considered review of *II Matrimonio* segreto [November]. "Splenetic" as Hector Berlioz was on many subjects, he did contain his venom toward Italy long enough to set several works there (particularly those of the 1830s). to extract musical ideas from its countryside and people (particularly for Harold in Italy). and to admire the likes of Spontini's La Vestale throughout his career. While he may have despised Rossini and the opera buffa genre he represented, he did find cause to admire William Tell and to lament Rossini's retiring just when, Berlioz felt, he had attained artistic maturity.

Otherwise, thank you, Mr. Lang. And, of course, thank you, Berlioz.

Richard Kassel Tenafly, N.J.

Poor Linda

Pity Linda Ronstadt. She's cursed with a beautiful voice, and some people say she doesn't understand what she sings. Now Stephen Holden, who is obviously a Ronstadt fan, is saying that "Simple Dreams," her "depressing" new album, "shows a major talent close to exhaustion" [BACKBEAT, November]. I won't go that far. Sure. she made some bad choices in material and she tried to sing some songs she apparently doesn't understand, but there's enough that's good in the album to keep it from being a total loss. Let's just say she couldn't grasp what she was reaching for and hope she learned from the experience. Then, if the album sells a million, she can cry as she banks her royalty checks.

Ronald C. Dailey San Bernardino, Calif.

Where to Find Those Superdiscs

Several readers have inquired where they can purchase the recordings discussed in "Those Limited-Edition Superdiscs" by Associate Audio-Video Editor Harold A. Rodgers in our December issue. Below is a list of labels and distributors of specialty records—some discussed in the article, some not—from whom further information about availability may be requested.

Audio Lab A-Train Ltd. 8719 Wilshire Blvd

8719 Wilshire Blvd. Beverly Hills, Calif. 90211

Audiophile Records Decibel Records P.O. Box 631 Lexington, Mass. 02173

Celia See Audiophile Records

Crystal Clear Records, Inc. 225 Kearny St., Suite 200 San Francisco, Calif. 94108

Denon Discwasher, Inc. 1407 N. Providence Rd. Columbia. Mo. 65201

Direct-Disk Company 16 Music Circle South Nashville, Tenn. 37203

Direkt to Disk Sonic Arts Corp. 665 Harrison St. San Francisco, Calif. 94107 Gale 348 E. 84th St. New York, N.Y. 10028

Mark Levinson Mark Levinson Acoustic Recordings Ltd. 55 Circular Ave. Hamden, Conn. 06514

M&K Sound, Inc. 8719 Wilshire Blvd. Beverly Hills, Calif. 90211

Nautilus Recordings 761 Shell Beach Rd. Shell Beach, Calif. 93449

Reference Recordings Sumiko. Inc. P.O. Box 5046 Berkeley, Calif. 94705

Sheffield Records P.O. Box 5332 Santa Barbara, Calif. 93108

Sonic Arts Recordings See Umbrella

Telarc Records 4150 Mayfield Rd. Cleveland, Ohio 44121

Three Blind Mice See Audio Lab

Umbrella Audio-Technica 33 Shiawassee Ave. Fairlawn, Ohio 44313

THAT NEW BLACK MAGIC.



So it's got an expensive new look that separates it from every deck in its class. Nice. But is that reason enough to call it magic?

No.

But this is: generally speaking, over a quarter century of TEAC engineering is wrapped up in the A-103. Specifically speaking, the A-103 boasts an innovative design that replaces a maze of wires and circuit boards with a single circuit board. That's one reason.

When you press the Eject button, your cassette doesn't pop out at you like a deranged toaster. It's cushioned, and works slowly and smoothly for longer deck life. That's two reasons.

Buili-in Dolby* circuitry, High Density Permaflux head, frequencygenerated servocontrolled DC motor, separate level controls, wide dynamic range, and switchable bias/equalization. Reasons three through eight.

But haw do we offer all these things (and more) in a deck that costs as little as the A-1037

That's the real magiz!

*Dolby .s c registered trademark of Dolby Laboratories, Inc. SPECIFICATIONS (conservatively rated)

Signal-to-Noise Fatio: 50dB(without Doby) 55dB(with Dolby at 1kHz)

Frequency Response: 30-14,000Hz (CrC2/FeC-) 30-11,000Hz (Normal)

Wow & Flutter: CL10% (NA3 Weighted)

TEAC First, Because they last.

TEAC Corporation of America • 7733 Telegraph Road • Montebello, California 90640 • In Canada TEAC is distributed by White Electronic Development Corporation (1966) Ltd.

CTEAC .977

We build the others

Only JVC offers a built-in graphic equalizer for more flexible control of the entire audio spectrum.

JVC





JR-S100 II



JR-S200 II



JR-S300 II



JR-S400 II



One of the very special features you'll find in our three top-of-the-line JVC receivers is our exclusive SEA five-band graphic equalizer. It replaces conventional tone controls to give you more flexible control over every segment of the musical spectrum, from low lows to high highs. (And our JR-S100 II and JR-S200 II offer the same professional-style slider tone controls.)

Our JR-S300 II, JR-S400 II and JR-S600 II give you another exclusive feature: you can switch the SEA equalizer section into the tape recorder circuit, so you can "EQ" as you record, just like the pros do.

JVC's superb Mark II Professional Series receivers give you so many useful features. Like separate power, tuning and signal strength meters, a team of triple power protection circuits, and more power than ever before (our JR-S600 II offers 120 watts/channel, RMS.* And carries a price of \$650,** for example).

Once you've seen the things we build in, you'll wonder why others leave them out.

JVC America Company, Division of US JVC Corp., 58-75 Queens Midtown Expressway, Maspeth, New York 11378 (212) 476-8300. Canada: JVC Electronics of Canada, Ltd., Scarborough, Ont.

CIRCLE 18 ON READER-SERVICE CARD

JR-S600 11

* @ 8 ohms, both channels driven from 20Hz to 20kHz, with no more than 0.08% total harmonic distortion. **Approximate retail value



Nikko Audio Puts It All Together for Your Professional Component System

ÉÉÉ

Nikko builds more than outstanding professional components and separates. And for good reason.

Firstly, we don't think stereo gear of any sort should be spread willy-nilly over the studio.

Secondly, we've created these designer-crafted hand-rubbed walnut veneer equipment racks. And in keeping with our professional attitude, two of the hardwood cabinets are 19-inch standard width.

Thirdly, we've made it possible for you to assemble three fantastic custom packages to fit the cabinet of your choice.

End of commercial on cabinets.

We now invite you to read about a few of Nikko Audio's newest electronic products.

As with every Nikko Audio product features abound in the NT-850 (far top), an AM/ FM stereo tuner.

A switchable (normal/narrow) IF band and advanced circuitry are employed to insure low distortion, signal stability, maximum stereo separation and outstanding reception.

Below the tuner is the NA-850 integrated stereo amplifier. It delivers 60 watts, continuous power output, minimum RMS per channel, driven into 8 ohms from 20

to 20kHz, with no more than 0.05% THD.

Take a hard look at the cabinet below with the Gamma I stereo FM broadcast monitoring tuner. A simply remarkable product.

It has a switchable wide and narrow IF stage for low distortion, high sensitivity $(1.8\mu V)$ and the ability to pull in distant stations with clarity.

Nikko Audio's ultra-slim stereo preamp, the Beta II, has both an input equalizer and amp circuit powered by independently regulated voltage supply to help eliminate interference distortion. There is no end to its professional features.

Each dual power supply on the Alpha II power

and specs to satisfy the most discerning audiophile and professional.

Ask your Nikko Audio dealer for a definitive tour of the new Nikko product line.



For those who take their stereo seriously

Nikko Electric Corp. of America 16270 Raymer St., Van Nuys, Calif. 91406 (213) 988-0105 © Nikko Audio 1977 In Canada: Superior Electronics, Montreal, Quebec

amplifier has dual filters to eliminate channel crosstalk and improve stereo separation. Exterior heat sinks keep the amp running cool, necessary when it delivers 110 watts per channel, continuous power output, minimum RMS into 8 ohms, from 20Hz to 20kHz, with no more than 0.03% THD.

The heavyweight of the new Nikko Audio professional gear is the Alpha I basic stereo power amplifier, shown in the bottom cabinet.

However, there is nothing really basic internally about the Alpha I. It uses a 3-stage Darlington direct-coupled OCL, pure-complementary quadruple push-pull circuit, rarely found on anything less than exotic amp circuits.

The Alpha I delivers 220 watts per channel, continuous power output minimum RMS per channel into 8 ohms from 20Hz to 20kHz, both channels driven. THD is 0.08%.

The revolutionary Beta I preamp's circuitry consists entirely of high-voltage FET's. It's a mate to the Alpha I and is DC and non-coupling for better frequency response.

The Gamma I stereo FM tuner also appears in the lower cabinet below the Beta I stereo preamplifier. Now, that's enough product





Wake up, guys. In your November issue, you claim that the vertical tracking angle of the Stanton 881S is "distinctly higher than the nominal standard of 15 degrees." It is true that the cartridge is a little off, but by 5 degrees, not 10. The standard has been 20 degrees for some time now.—Michael D. Riggs, Cambridge, Mass.

The nominal standard is still 15 degrees. Though the DIN standard (essentially for Germany) has been changed to 20 degrees, no similar change has occurred in the U.S.

I would like to add extension speakers to be used in another room and to be able to control the volume independent of the main unit. I also want to avoid impedance problems. Is it possible to run a connection thirty feet from the tape output to a small integrated amp in the other room? Will there be any adverse effects; and are there any special considerations involved in this?—David Daniel, Monroe, La. Probably you can do so, but we can't answer the second question for certain. Even sound contractors have occasional difficulties. Why not try it? Sixty feet of shielded cable (with braided, not wrapped, shield) and a few plugs don't seem too great a risk to take.

I recently purchased a Dolby-equipped tuner, primarily to receive WFMT in Chicago and other stations that use Dolby encoding. I notice that much the same effect occurs with non-Dolby stations when I push the Dolby button. For instance, a heavily limited classical station in Milwaukee seems to benefit from increased dynamic range, and also some noise reduction, when the Dolby decoding is added. Is this a strange quirk of the combination of the station's limiting and the Dolby decoding, or is my tuner not really working as it should?—Brian Gerl, Milwaukee, Wis.

It may be a quirk. You should expect some noise reduction in playing a nonencoded station through the Dolby circuitry, but you should also expect unnatural sound, with the highs becoming progressively more exaggerated as instantaneous signal levels rise. If the station's limiting is clipping off the high frequencies under the same conditions, it may produce a sort of "compensation" for this effect, though we still would expect careful listening to reveal that response characteristics vary with signal level, making the "improvement" somewhat questionable.

I am a novice at high fidelity and am searching for information on how to build loudspeaker enclosures and match them to raw drivers. I recently bought two 12-inch and four 3-inch drivers from which to build a stereo pair of speakers. I will appreciate any help you can give.—R. W. Pembuton, Mount Vernon, III.

Unless you have test equipment (an oscillo-

scope, an audio generator, and an audio voltimeter at minimum) and a good bit of technical knowledge, there isn't much you can do. The old rules for matching a driver to an enclosure never really worked except by trial and error and have been superseded by modern engineering principles. To do the job properly, the behavior of the drivers must be accurately known and a good bit of complex theory applied. The Loudspeaker Design Cookbook, published by S.R.A., 3959 SE Hawthorne, Portland, Ore., 97214, contains some useful information, and (for a fee) S.R.A. will analyze a pair of woofers and return them to you with the data you need.

According to your report on the Dynavector 20-B cartridge [July 1977], you had to lower the impedance to 100 ohms to smooth out the highs in the output by 2 dB. Since my SAE-2800 parametric equalizer lends itself well to controlling the high frequencies, I decreased the level of this section by 2 dB and sometimes by 8 dB, depending on the recording. But even with recordings from Sheffield and Crystal Clear a setting of -2 or -4 dB is not doing the trick, since the voices still emit a "shh" sound when they hit an s or a t. Can I obtain the same results by maneuvering the 2800 as I would by changing the impedance of my preamplifier internally?-Gilbert Lopez, Glen Ridge, N.J.

No. You must load the cartridge down. But because of the low impedance, the 100-ohm resistors can be successfully placed outside the preamp. The Satin Damping Adaptor SR-60, imported by Osawa, does the job very well and is compatible with the Dynavector.

I have Superex PEP-79E electrostatic headphones ("4–16 ohms"), which are connected to the "B" speaker outlets of a Kenwood KR-4130 receiver, with a pair of Dynaco A-25 speakers ("8 ohms") on the "A" outlets. Occasionally I would like to run both at once ("A&B") but fear that the combination might present an unsafe load (lower than 4 ohms) to the receiver. Is the combination safe? If not, can it be made safe by adding resistance to either or both outputs?—James H. Swift, Seattle, Wash.

Unfortunately, we don't have sufficient data to judge the safety of the combination, but we suspect you have overlooked a point that may make your question moot. Since the phones and the speakers differ in efficiency and, worse yet, are in such dissimilar positions with respect to listeners, you are unlikely to find a single setting of the volume control that will do for both. Many headsets have been fried when they were left connected while speakers were playing at high levels. It is possible to equalize the levels with series resistors (as you suggest, this could prevent any impedance difficulty as well),

FOR EVERY SYSTEM WORTH MORE THAN \$500



Unfortunately, one of the most overlooked components in a fine sound system is the cartridge. And all too often, it can be the one place where you skimped on quality. (Out of sight, out of mind, as they say).

We sincerely believe that an investment in a Sonus cartridge will truly surprise you with the way it improves the quality of your record reproduction. The analytical quality of the Sonus brings out the inner voices of complex musical passages clearly and cleanly. Listening fatigue disappears. And a Sonus introduces no extraneous coloration of its own.

But what we're talking about is said even better by Sonus owners. "Excellent clarity," "more fulfilling sound," "open, airy 3-D sound," "superb depth and definition," "clean, accurate and transparent sound," are typical of thousands of enthusiastic comments we have received from owners of Sonus cartridges.

Make sure your cartridge matches up to the rest of your system. Write us for further information and the name of the Sonus dealer nearest you.

> Manufactured in the U.S.A. by: SONIC RESEARCH, INC.,

27 Sugar Hollow Rd., Danbury, Conn. 06810



FEBRUARY 1978





CIRCLE & ON READER-SERVICE CARD

but whichever device gets the resistors is likely to suffer in performance due to a lack of damping.

The Sansui BA-2000 power amplifier [HF "Equipment Reports," September 1977] seems to be an excellent amp at a good price. My question is about the amp's ability to play into a 4-ohm load. I plan to buy the Phase Linear Model III loudspeakers, and your test report [June 1977] pointed to "a broad [impedance] trough between about 200 and 700 Hz, where [it] falls below 4 ohms and could give some solid-state amps a problem." Since the Sansui amp is only 100 watts [20 dBW], I'm not sure the combination is a good one. If not, would two amps do the job?—Leo Mauno, Torrance, Calif.

Paired BA-2000s will not work, but a single BA-5000 (for only a little more money) should be an excellent choice. It is safe with loads down to 2 ohms, and the extra 5 dB it can supply (it's rated at 300 watts per side) should make a noticeable difference in sound with the Phase Linear IIIs, which are very inefficient.

I own two decks (cassette and open reel), an expander, and a frequency equalizer, along with a turntable, and I like to play disc jockey, making tapes with my components. Is there anything I can buy that will allow me to mix sound sources, like blending the end of a song from a record with the beginning of a song on a tape, while taping on my second recorder, and using a microphone for announcing? As I understand it, a conventional mixer won't work, but I'm confused.—David Teves, San Ramon, Calif.

Yes, you are: A conventional mixer will work. Some of the disco models may be particularly well suited to your purposes.

I have an ICP eight-track stereo receiver that I would like to improve. My system has a single tone control, which I would like to divide into separate controls for bass and treble. Could you send me instructions or direct me to a source of such information?—Steven Wainwright, Hillsdale, N.J.

What you plan to do is hardly worth the trouble. If you want the capabilities of true high fidelity components, you had better start out with them.

I would like to buy a pair of Infinity QLS-3 or QLS-4 speakers but hesitate because they are said to be very inefficient. The manufacturer recommends a minimum of 35 watts per channel rms for the 3s and 30 watts for the 4s, but no efficiency rating is given in the literature. I own a Yamaha CR-2020 receiver (100 watts per channel), and when I auditioned the speakers in a showroom the salesiman played them through a 100-watt amplifier, which seemed to do fine. Do I have enough amplifier power to drive them to reasonably loud levels without fear of clipping?— Tony Biancardi, Monroe, Ga.

For practical purposes, unless your listening room is significantly larger or more absorbent than the room in which the speakers were demonstrated, the power of your unit should be sufficient.

We regret that, due to the volume of reader mail we get, we cannot give individual answers to all questions.

WHY MOST CRITICS USE MAXELL TAPE TO EVALUATE TAPE RECORDERS.

Any critic who wants to do a completely fair and impartial test of a tape recorder is very fussy about the tape he uses.

Because a flawed tape can lead to some very misleading results.

A tape that can't cover the full audio spectrum can keep a recorder from ever reaching its full potential.

A tape that's noisy makes it hard to measure how quiet the recorder is.

A tape that doesn't have a wide enough bias latitude can make you question the bias settings. And a tape that doesn't sound consistently the same, from end to end, from tape to tape, can make you question the stability of the electronics.

If a cassette or 8-track jams, it can suggest some nasty, but erroneous comments about the drive mechanism.

And if a cassette or 8-track introduces wow and flutter, it's ap⁻ to produce some test results that anyone can argue with.

Fortunately, we test Maxell cassette, &-track and reel-to-reel tape to make sure it doesn't have the



problems that plague other tapes.

So it's not surprising that most critics end up with our tape in their tape recorders.

It's one way to guerantee the equipment will get a fair hearing.

MAXELL. THE TAPE THAT'S TOO GOOD FOR MOST EQUIPMENT. Maxell Corporation of America, 13C West Commercial Ave., Moonachie, N.J. 07074





A Foregathering of Engineers

In the excitement and anticipation with which most of us approach a new audio component we tend to forget that every item of hardware has a long history by the time it reaches market. That history begins, of course, with a glint in the eye of a design engineer and continues under the aegis of engineering and marketing specialists through all the various stages of development. Thus, the course of audio is plotted, at least initially, in the laboratory. It was with this in mind that we attended the November 1977 convention of the Audio Engineering Society at the Waldorf Astoria in New York. (Our BACKBEAT section this month carries additional coverage of AES's sights and sounds.)

The big news was in digital recording, a technique that promises hitherto unheard of freedom from noise, distortion, wow and flutter, and, in fact, just about all of the ills that have plagued music reproduction. This is a revolutionary development with such far-reaching ramifications that it exceeds the scope of this column. A fuller treatment will be found among our feature articles next month.

But there were other items of interest. A good deal of attention was paid to transjent distortion effects—TIM (transient intermodulation), DIM (dynamic intermodulation), SID (slewing-induced distortion), etc.—and to techniques for expressing them numerically. Significiantly, discussion of the latter emphasized the correlation between measurement and audibility; all agreed that, whatever methods eventually are chosen, a lower distortion number should mean a better-sounding amplifier. The fact that conventional THD and intermodulation measurements do not necessarily reflect sonic quality in this way was one of the things that prompted research into TIM in the first place.

Despite the apparently negative verdict delivered by the marketplace, a relatively large number of engineers still is interested in the problems of quadriphonics, as evidenced by the six papers (seven, if you count one on a three-channel system) dealing with the subject. In particular, sound localization in a 360-degree field ("surround sound," if you will) is still a focus of attention. Unfortunately, the partisanship that has hurt quad so badly in the past is still in evidence, both in the heat with which systems are defended and in the intemperance with which competitors are attacked. We hope that future advancements in audio will not be similarly undermined by this sort of technological chauvinism.

Another exciting topic is that of electronic music. Developments in this area are likely to have vast aesthetic consequences. The universe of sound that a composer or performer has at his disposal is staggering. And the methods by which man can manipulate machines are becoming ever more varied and flexible—making it possible, for example, to control a synthesizer by playing a guitar or singing. Robert Ceely of Beep Electronic Music took the composer's point of view more than the engineer's when he examined the ways in which conventional control devices tend to limit musical imagination rather than enhance it.

In areas perhaps closer to home, Daniel Raichel of Audiotron Laboratories Corporation showed that distortion in loudspeakers can never be totally banished because of certain nonlinear effects in the air itself. And James White and Arthur Gust of the CBS Technology Center took a hard look at phono cartridges, identifying and measuring some distortion-producing mechanisms that have, up to now, received little attention.

The question of the audibility of phase anomalies, particularly in loudspeakers, naturally came up. Peter Mitchell, whose article on the subject appeared in our October 1977 issue, presented an expanded version of his views; Robert Berkovitz and Eric Edvardsen of Teledyne Acoustic Research offered a more general approach. The consensus seems to be that phase matters little, if at all.

There was much more, of course, but that's a quick once over of what the technical people in audio are talking about these days.

Dr. Peter Goldmark (12/2/06-12/7/77)

At 7:30 on the morning of December 7, as the HIGH FI-DELITY staff was on its way to Stamford, Connecticut, for discussions on our test report program at the CBS Technology Center, Dr. Peter Carl Goldmark, until 1971 president of the Center (then CBS Laboratories), was killed while driving from Stamford to New York.

It was Goldmark, of course, who led the research team that developed the LP record. In addition, he had garnered more than 160 patents and was instrumental in the development of many areas in communications. He built a successful television receiver in the 1920s, invented the color TV system that was used for probably the world's first

color telecast in 1940, and was responsible for the development of Electronic Video Recording, a catalyst in the growth of the video cassette business. Always more interested in the human uses of technology than in the technology itself, he founded Goldmark Communications, with the purpose of adapting the most sophisticated communications techniques to educational needs, after his retirement from CBS. Only two weeks before the Budapestborn scientist's death, President Carter bestowed on him the National Medal of Science.

Goldmark's impact on American audio and video will long be felt.

The Clean Logic of Leadership

SCIENCE

The simplicity of the Discwasher system belies the extensive research and instrumentation that has produced the world's leading record cleaner. Pain staking development using gas-liquid chromotography, thermalsensing instruments, precision weighing equipment, friction-measuring instruments and electron microscrophy have all contributed to the evolution of the Discwasher Record Care System.

This rigorous application of science has produced an integrated, patented system of brush and fluid which lifts both fingerprints and micro-dust from the record grooves (without smudging them deeper); which allows all contamination and fluid to be removed from the record surface; which preserves the chemical integrity of the vinyl (unlike many liquids and dry cleaning systems) and which offers long-term protection against biological and physical contamination.

EXPERIENCE

Any gadget can be made to "perform" by using simplistic test criteria instead of long term use.

Experience, on the other hand, responds

to the valid questions of science and has proven that the best, inost convenient, and most effective record cleaning system is the patented Discwasher.

"Experience" involves consumer intelligence, proper use—and proper evaluation of results. That's why Experience has made the Discwasher system the Leader in record care. Beyond any doubt.

AESTHETICS AND VALUE

What is the proper price for milled, hand rubbed walnut that will last long after the "plastic wonders" are cracked and broken? What is the net evaluation of an incredibly complex cleaning fluid which is lower in dry weight residue and yet more "active" and "safe" in the removal of standard record contamination than any other cleaner? What is the value of your record collection as compared to the protection of approximately 200 cleanings from each small bottle of D3 fluid?

You can be ripped off by cheaper attempts, and fooled by more expensive "followers" of the Leader. But only Discwasher has the Clean Logic of Leadership.

discwasher, inc. Columbia, Missouri 65201

Introducing the Koss Theory of loudspeaker design and the three new Koss CM speaker systems that prove it.

When Koss invented the stereophone, music lovers and audio experts were amazed at the low distortion, broadband frequency response, and high efficiency achieved by the Koss drivers. Indeed, the resultant Sound of Koss created a revolution in the audio industry.

Today, the exciting new Koss Theory of loudspeaker design has created another revolution. By developing a complex series of audio engineering formulas and by utilizing the precise knowledge of modern computer science, Koss engineers have created a breakthrough in loudspeaker technology of such significance that it heralds the second major revolution in loudspeaker design technology. For the first time, it's now possible to scientifically derive and produce the optimum system parameters for any loudspeaker.

By computerizing the Koss Theory and by first selecting the number of bandpasses desired in the system, the system's desired efficiency, the f_3 , low bass cutoff, and the desired cabinet size; Koss engineers are able to derive specific design parameters for every component in the total system. In fact, the Koss Theory is so sophisticated that even the structural design of the cabinet and the precise positioning of the components in the cabinet for optimum dispersion and phase coherency are specified.

Of course, what's really important is not the Koss Theory itself but the sound of the three new Koss speakers that prove it. Indeed, with current technology, there are no speakers available at similar prices that car match the Koss CM 1010 two bandpass loudspeaker, the Koss CM 1020 three bandpass loudspeaker or the Koss CM 1030 four bandpass loudspeaker in low distortion, high efficiency, and broadband frequency response.

But then, the incredible sound of these three new speakers isn't surprising when you consider some of the revolutionary new features they offer:

Take for example, the CM 1010's unique mass aligned 10-inch passive radiator that enhances the lower 2 octaves of the bass and allows for the use of a specially designed 8-inch woofer to reproduce the critical midrange up to 2.5 kHz. With the alignment mass in place, the CM 1010 reproduces a maximally flat response from an f_3 of 35 Hz on outward. However, by



removing the alignment mass, those who prefer more acoustic energy in the 50 to 80 Hz range can create an f_3 of 40 Hz and a low bass ripple of 1³/₄ dB centering on 60 Hz.

Or take the CM 1020's dual port design that provides an optimal cross sectional port area for proper cabinet tuning. Or the unique parallel midrange design of the CM 1030. By utilizing two 4¹/₂-inch drivers operating in parallel, Koss engineers were able to decrease the excursion of each driver thus creating a dramatic decrease in potential driver distortion and an equally exciting increase in the overall brilliance and presence of the midrange response. Then again there's the Koss high bandpass 1-inch dome tweeter and unique acoustic transformer that creates an incredible 6 dB increase in headroom.

And, of course, there's also the patented quasi second-order crossover network that provides a smooth, acoustically invisible transition from bandpass to bandpass.

But those are just some of the revolutionary features offered by the new Koss CM loudspeakers. Why not prove the Koss Theory of loudspeaker design to yourself by asking your Audio Dealer to give you a full demonstration of the beautiful Sound of Koss. Or write to Fred Forbes, c/o the Koss Corporation, for our free, full color CM loudspeaker brochure. Once you've heard these revolutionary new loudspeakers, we think you'll agree: hearing is believing.



HOSS CM SPEAKER SYSTEMS hearing is believing

KOSS CORPORATION, 4129 N. Part Washington Ave., Milwaukee, Wisconsin 53212 Koss International/London, Dublin, Paris, Frankfurt • Amsterdam • Kass Limited/Ontario • Kass K.K. /Tokyo CIRCLE 28 ON READER-SERVICE CARD



COUNTER RESET

MEMORY METER

INPUT SELECTOR DOLBY NR (MPX)

LH BIAS FINE (%)

Minute Warning from AIWA

With the AD-6550's unique new Remaining Tape Time Meter you never have to worry about running out of tape in the middle of recording your favorite music. In the past you monitored your tape visually and hoped that the musical passage and tape would finish together. Now, this extremely easy to use indicator gives you plenty of warning. It shows you exactly how many minutes remain on the tape. So that when you record the "Minute Waltz" it won't end in 45 seconds.



Bias Fine Adjustment

But there's a lot more to the AD-6550. AIWA has included a Bias Fine Adjustment knob that permits the fine tuning of frequency response to give optimum performance of any brand of LH tape on the market.

Wow and Flutter: Below 0.05% (WRMS)

The AD-6550 cassette deck achieves an inaudible wow and flutter of below 0.05% (WRMS) thanks to a newly designed 38-pulse FG servo motor and AIWA's special Solid Stabilized Transport (SST) system. And because we use Dolby* we also improve the S/N ratio to 65dB (Fe-Cr). So you can listen to the music instead of tape hiss.

The AIWA AD-6550. Be forewarned. **AIWA**[®]



*Dolby is a Trademark of Dolby Laboratories, Inc.

Distributed in the U.S. by: MERITON ELECTRONICS, INC., 35 Oxford Drive, Moonachie, N.J. 07074 Distributed in Canada by: SHRIRO (CANADA) LTD.

Panasonic Set to Dub VHS Video Cassettes

Three authorized duplication centers for VHS software were set up by the Panasonic Video Systems division late last year: Magnetic Video Corporation, Farmington, Michigan; Bell & Howell, Evanston, Illinois; and Video Software Production, Yonkers, New York. By the time this is printed, a fourth center, located in the Los Angeles area, may well be operational. The centers are to be equipped with the Panasonic PD-600 VHS duplication system, demonstrated last November; it is capable of producing twenty copies from a single master deck. Early indications are that the output of these centers will, at least at first, be educational materials. But a Panasonic spokesman did not rule out software production for the consumer market as well.

Also . . .

Henry Kloss, founder of Advent Corporation and pioneer of projection television, has formed a new company: Kloss Video Corporation of Cambridge, Massachusetts. It will manufacture tubes for projection TV and also license its technology to other manufacturers.

Nautilus Recordings has released a DBX-encoded tape of Randy Sharp's "First in Line," hitherto available as a directly cut disc. This marks the first commercial issue of a DBX-encoded tape. Available from Nautilus (P.O. Box 23, Pismo Beach, California 93449) for \$75 each, the new tapes represent a limited-edition release of second-generation copies.



Nakamichi adds tuner to component line

To complement the Model 410 preamp and Model 420 power amp, Nakamichi has introduced the Model 430 FM tuner. Its front end is said to ensure spurious-response rejection of better than 100 dB. Intermediate-frequency bandwidth provides, via a front-panel switch, 60 to 90 dB of selectivity. The 430 utilizes a tuning lamp system, rather than meters, and a self-lock tuning circuit to prevent drift. Rated frequency response is +0.5, -1.5 dB, 30 Hz to 15 kHz; capture ratio is said to be $1\frac{1}{2}$ dB for normal IF bandwidth, 4 dB for the narrow mode. The price of the Model 430 tuner is \$400; Dolby FM can be added with the optional DB-100 plug-in card, \$40.

CIRCLE 137 ON READER-SERVICE CARD



The Obelisk: Shape of things to come

The Obelisk speaker, the result of Shahinian Acoustics' research into radiation characteristics, provides a prism-shaped environment for its drivers. Asymmetric mounting of the drivers, according to Shahinian, enhances the benefits of the enclosure shape by optimizing sound dispersion and diffusion. An 8-inch woofer is loaded by a transmission line terminating in a 10-inch passive radiator. Crossover, to three 1-inch Mylar dome tweeters, is near 2 kHz. Continuous power-handling rating is 150 watts (21¾ dBW); rated frequency response is 35 Hz to 20 kHz, + 1, -3 dB; nominal impedance is 6 ohms. In walnut or oak finish, the Obelisk costs \$325; teak or rosewood models are \$350.



Numark introduces Model EQ-2000 equalizer

Designed to be used either as a room equalizer or in live recording, Numark's two-channel graphic equalizer offers up to 12 dB of boost or cut in seven frequency bands (50, 130, and 350 Hz; 1, 3, 6, and 12 kHz). The EQ-2000 features MAIN and TAPE MONITOR connections. Power consumption is rated at 5 watts and harmonic distortion at 0.05% with a 2volt output. The 2000 retails for \$149.95; a walnut base is available as an option.

CIRCLE 139 ON READER-SERVICE CARD

Kenwood extends DC amp line

Kenwood Electronics has adapted the design of its high-end DC amplifiers to the new KA-8100 integrated amp. The response down to 0 Hz (direct current) is credited with minimal low-frequency distortion, excellent transient response, and improved sonic localization. The KA-8100 uses a separate power supply for each amplifier channel, plus a third supply for the preamp. Power rating is 75 watts (18¾ dBW) per channel into 8 ohms for 0.03% or less harmonic distortion. Controls for tone, filtering, loudness, and muting all are exceptionally flexible. The price of the KA-8100 is \$375.





An add-on subwoofer for compact models

Miller & Kreisel Sound Corp., which makes several subwoofers, has announced the Goliath II, with a built-in crossover that can be adjusted for 50, 75, 100, 125, or 150 Hz. Minimum recommended amplifier power is 35 watts (15½ dBW). The company suggests that the new model is particularly appropriate for use in conjunction with any of the tiny full-range "superspeakers" now on the market (one of which, incidentally, is called David) to rival the overall sound of systems costing considerably more. Goliath II, in a natural wood enclosure, sells for \$175.

CIRCLE 140 ON READER-SERVICE CARD

Edcor's back-to-basics mike mixer and extender

The Model M-41 from Edcor is a no-frills microphone mixer—no controls except loud and soft for the engineer who doesn't believe in processing signals. Up to four inputs mix through the master gain. The Model M-41X, an extender for the M-41, provides six additional inputs. Frequency response of the M-41 is rated at $\pm 1\frac{1}{2}$ dB from 20 Hz to 20 kHz, and the signal-to-noise ratio is specified at 85 dB. Outputs include an RCA jack for connection into at least 5,000 ohms and a $\frac{1}{4}$ -inch phone jack for connection to impedances down to 250 ohms. Inputs will accept impedances from 200 to 100,000 ohms. The M-41 costs \$97.50, the M-41X, \$59.50.



CIRCLE 141 ON READER-SERVICE CARD



Shure's monitor speaker

One essential factor in a satisfactory on-stage monitor speaker for live performance is wide-angle high-frequency dispersion. The piezoelectric tweeter array in Shure's Model 702 is said to allow performers to move freely around the stage. The speaker also features controllable bass rolloff and a boosted midrange to cut through any on-stage ambient noise. Designed for use with amplifiers that deliver 50 watts into a 16ohm load, it has a recessed volume control to prevent breakage and parallel phone jacks for interconnecting more than one system from a single amp cable. The Model 702 costs \$238.

CIRCLE 142 ON READER-SERVICE CARD

HHBKS.

These cassette deck manufacturers use SA as their reference for the High(CrO₂) bias/EQ setting:

AIWA • AKAI • CENTREX • JVC KENWOOD • MERITON • NAKAMICHI OPTONICA • PIONEER • ROYAL SOUND SANSUI • SHARP • TEAC • TOSHIBA UHER • YAMAHA

> And are joined by these in recommending SA for use in their decks:

BANG & OLUFSEN • DUAL • FISHER HARMAN/KARDON • LAFAYETTE SANKYO • TANDBERG AND MANY OTHERS.



There's been a quiet revolution going on in the cassette world. \Box Leading makers of quality cassette decks have adopted TDK SA as their reference standard tape for "High" (CrO₂) bias and equalization settings. Why TDK SA? Because TDK SA's advanced tape formulation and super precision cassette mechanism let them (and you) take full advantage of today's advanced cassette deck technology. \Box In addition, a growing number of other companies are recommending SA for use with their machines. \Box So for the ultimate in cassette sound and performance, load your deck with SA and switch to the "High" or "CrO₂" bias/EQ settings. You'll consistently get less noise, highest saturation and output levels, lowest distortion and the widest dynamic

range to let you get the best performance from any quality machine. \Box But you needn't believe all this just because we say so. All you have to do is check our references.



TDK Electronics Corp., 755 Eastgate Blvd., Garden City, N.Y. 11530. In Canada: Superior Electronics industries, Ltd.



Thorens Isotrack for custom arm mounting

Elpa Marketing Industries has added the TD-16011B turntable, without tone arm, to its Isotrack line from Thorens. The new model retains the 16-pole synchronous motor, belt drive, and independent drive/arm suspension of the TD-126 series but is delivered with a blank wooden arm mount. In addition, Elpa offers predrilled boards for popular arms from manufacturers such as SME, Infinity, Grace, and Stax. The TD-16011B costs \$195 including base and dust cover.

CIRCLE 143 ON READER-SERVICE CARD

Flanger from Wasatch Music Systems

The Model 900A is a rack-mountable flanger for studio or stage use. Controls include SIGNAL MIX for blending normal with flanged signals, INPUT LEVEL for gain balancing, and EXT/OSC for switching between an external modulation source and the internal oscillator. Two LEDs indicate overload and sweep position. Back-panel phone jacks are provided; balanced XLR jacks are available as an option. The dynamic range of the 900A is greater than 800 dB with no insertion loss, according to Wasatch Music Systems. Input impedance is rated at 20,000 ohms, output impedance at 600 ohms. The price of the flanger is \$350, with a foot pedal and a road case available at additional cost.

CIRCLE 144 ON READER-SERVICE CARD





American Acoustic Labs markets Studio line

Among the speakers in American Acoustics Labs' line is the Studio 2, a three-way system that can be used either as a bookshelf or floor-standing monitor. The air-suspension cabinet encloses a 10-inch woofer, 2-inch midrange, and 3-inch piezoelectric supertweeter. The recommended amplifier power range is 10 to 50 watts (10 to 17 dBW), rated frequency response 27 Hz to 25 kHz, and nominal impedance 8 ohms. Crossovers occur at 4 and 7 kHz. The Studio 2 is finished in walnut-grained vinyl veneer and sells for \$149.95.

CIRCLE 145 ON READER-SERVICE CARD

Universal headshell from Audio-Technica

Audio-Technica's "universal" headshell, which previously had been available only with a premounted pickup, now can be obtained separately. This marketing change was made, according to the manufacturer, to meet the demand from an increasing number of owners of replaceable-headshell arms who frequently use more than one cartridge. The AT-N shell, as it is called, retails at \$5.95.

CIRCLE 146 ON READER-SERVICE CARD





Olympus offers microentertainment

The Pearlcorder Microcassette recorder line from Olympus in the past has stressed functions and accessories appropriate for in-the-field recording, as opposed to pure entertainment. The new Model SR-501 incorporates an AM/FM tuner and such features as a sleep switch to put the miniaturized cassette system into another league. Bandwidth of the mono tape system, which will record up to 30 minutes per side, is said to be 300 to 7,000 Hz. The 501, with accessory earphone, wrist strap, one prerecorded Microcassette, and four alkaline penlight cells, sells for \$199.95.

CIRCLE 147 ON READER-SERVICE CARD

For more reports on equipment and accessories, see "Input Output."

Total Energy Response: The reason why Jensen Lifestyle speakers sound better than any comparable speaker.

Just what is Total Energy Response?

Total Energy Response is the uniform radiation of sound throughout the whole listening area—at all frequencies. And it makes an unquestionable difference in the stereo sounds you hear.

Most speakers are to one degree or another directional. That is, part of the room in front of the speaker gets the full sound. Bass, treble and midrange. While parts of the room to the sides of the speaker get just a fragment of the sound. (See Fig. A)

It's precisely this fault we set out to correct. Because others may tell only part of the story. Often with just one response curve measured from just one position—their optimum position.

However their results don't look so favorable when the test microphone is



ker Dispersion

moved "off-axis," that is, to the side instead of directly in front of these speakers.

Figure B illustrates this. It is a Total Energy Response curve, taken with test micro-

phones in all positions. When comparing the Jensen (blue line) with a comparably priced "flat" speaker (red line), you can see how deficient the other speaker is in total radiated energy in the mid and mid-high frequencies. This midrange deficiency is unfortunately very common amongst speakers, and gives many so-called "flat"



Figure B Total Energy Response Curve

response speakers a very "thin" sound. The Jensen Lifestyle speaker, on the other hand, demonstrates true Total Energy Response. Uniform radiated



power—at all frequencies—throughout the whole room.

These speakers were conceived, designed and tested for this. Tested from every spot in anechoic "dead" rooms, reverberation "live" rooms, and simulated living rooms.

Our finished products: remarkable dispersion for the hard-to-disperse high frequencies...160° or 170° wide, depending on the model. Also expanded dispersion of the critical midrange response. And full, rich bass that still perfectly matches the other frequencies for accurate sound reproduction. The way it's *supposed* to be heard.

You can see how the sound from a Jensen is distributed much more evenly throughout a room. And when you're in your own listening room



What does all this mean to you? 1. It means that with Jensen Lifestyle speakers, you'll be able to hear all of the frequencies, all of the time, in almost any



part of the room. Not just the bass if you're to the side of the speakers. And not just the treble if you're in front of them.

2. Excellent stereo imaging. You hear everything that *both* speakers are putting out. Almost anywhere in the room. Unlike listeners of other speakers, who can fall victim to gaps in the response characteristics, or "hole-in-the-middle" stereo.

3. Excellent balance. Many other speakers are hot on treble, or bass, or both. But all that really means is that the midrange is often neglected. Jensen sends the all-important midrange throughout a room every bit as much as the highs and lows.

4. Total Energy Response is achieved in Jensen speakers without any loss of efficiency. Which means a moderate output amp or receiver is still all you need for great performance. Not a big super-amp.

What gives Jensen Total Energy Response?

A number of features. First, the extremely wide dispersion of the Lifestyle Tuned Isolation Chamber™ midranges.

Especially important are Jensen's two tweeters: a 160° dispersion cone direct radiator, and the 170° dispersion Mylar[®] Sonodome[®] tweeter. The sound input to each of these drivers is precisely

monitored by Jensen's exclusive Comtrac[®] crossover network, which insures uniform energy transfer between the woofer, midrange, and tweeter.

For final command of the Jensen Lifestyle's sound, behindthe-grille controls are featured. These controls let you adjust the treble, and in some cases, the midrange, to the characteristics of your individual room.

And with Total Energy Response... there's more music to control.

Hear the difference yourself...

Stop by your local Jensen dealer and hear for yourself the difference Total Energy Response makes. It's the reason why Jensen Lifestyle speakers sound better than any comparable speaker.





Here's a tip to make your records last longer.

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

ENPIE

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 tc 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".

> Cartridges Empire Scientific Corp. Garden City, N.Y. 11530


Preparation supervised by Robert Long, Harold A. Rodgers, and Edward J. Foster Laboratory data (unless otherwise noted) supplied by CBS Technology Center

A CONSUMER'S GUIDE

Model 19, a Standout Performer from Altec

The Equipment: Altec Model 19, a floor-standing loudspeaker in wood enclosure. Dimensions: 39 by 30 inches (front, including height of base), 21 inches deep. Price: \$749. Warranty: "full," five years parts and labor. Manufacturer: Altec Sound Products Division, Altec Corp., 1515 S. Manchester Ave., Anaheim, Calif. 92803.

Comment: Loudspeakers traditionally are full of paradoxes, and the Altec Model 19, among its interesting properties, makes a startling contribution in that department. The system is positively huge, to the point where even a relatively modest adjustment in its position is a job for two reasonably strong people, yet we have encountered few speakers that fade into the background so convincingly when they start to play music. A listener is really hardpressed to remember that what he is hearing is coming from those big boxes.

The Model 19 is a two-way system consisting of a ported 15-inch woofer that crosses over (at about 1,200 Hz) to a large sectoral horn fed by a driver that incorporates Aldec's new radial phase plug. Although the system contains but two drivers, the crossover network incorporates separate balance controls for both the midrange and high frequencies. According to data taken at the CBS Technology Center, maximum use of the midrange control varies the output level from about 1.6 to 8 kHz by 8 to 10 dB and from there to 15 kHz by 3 to 4 dB. The high-frequency control has a maximum effect of about 5 dB from 10 kHz up. Some overlap between the two controls is thus apparent.

Altec rates the system for an impedance of 8 ohms. While this is a reasonable approximation of the average across the band, the curve fluctuates rather widely and dips to 4 ohms at the point where strict interpretation of "nominal impedance" would place that rating. Since this dip occurs at 130 Hz or so, which is a rather energetic part of the musical spectrum, we would advise against running two sets from the same amplifier.

As befits a ported design with a large woofer, the Model 19 is efficient indeed. Fed with a pink-noise input of 0 dBW (1 watt), 250 Hz to 6 kHz, it responds with an average sound pressure level that exceeds 88 dB at 1 meter. A 20dBW (100-watt) sine wave at 300 Hz, which the speaker accepts with no signs of distress, elicits a 114-dB SPL at 1 meter on axis. In the pulse test, the Altec was able to soak up the full 29½-dBW (900-watt) peak output of the test



HIGH RANGE ADJUST

MIDRANGE ADJUST.

amplifier without clipping the peaks of the waveform, producing at the same time a whopping 123½ dB peak SPL. This is unusually abundant headroom for music signals.

Distortion below 500 Hz is particularly low; the second harmonic content remains below 1% almost to 30 Hz at levels of both 0 dBW and 20 dBW. The third harmonic is almost as well controlled, but it starts to rise at a higher frequency, reaching 1% just above 40 Hz on both large and small signals. The picture above 500 Hz is less exemplary but still very good. Both the second and third harmonics average right around 1%—somewhat lower at 0 dBW, higher at 20 dBW. Some of the distortion in the lower midrange takes the form of "spikes" that occupy narrow frequency regions and may well be related to fundamental cancellations that occur near crossover. In any event, these distortion products are far less audible than they would be if they were not so confined in frequency.

Ignoring minor irregularities (on the order of $\pm 2^{1/2}$ dB), the average anechoic omnidirectional frequency response (taken in the CBS chamber) is essentially a straight line that slopes off at roughly 2 dB per octave from 63 Hz to 12.5 kHz and 15 dB per octave above that point. Dispersion, as indicated by the front-hemisphere and on-axis curves, is very good—so good, in fact, that the two curves are virtually identical over most of the range and just a bit less regular than the omnidirectional curve.

REPORT POLICY Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Technology Center, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc. one of the nation's leading research organizations. The choice of equipment to be tested rests with thre editors of Hold Flocury Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested; neither Hisk Flocurty nor CBS Technology Center assumes responsibility for product performance or quality. Pulse response shows an initial lag followed by a very sharp rise. This characteristic, which is shared by both drivers, results in a very crisp response to musical transients information.

The sound of the Altec is essentially what one would expect on the basis of the excellent and well-balanced lab data. The bass is somewhat on the robust side, although nicely defined and free of boominess. Since the distortion varies little with level until the input power is exceedingly high, it becomes a part of the basic color of the speaker. Thus loud music (including explosive transients) essentially is reproduced with no sense of strain. Since the power-handling capability is vast and the slopes of the omnidirectional frequency-response curves are gentle, it is very easy to tailor the musical balance to taste via tone controls or equalizers, provided that the amplifier is able to supply whatever extra drive is required. With the balance controls set to OPTIMUM, the middles have just a touch of forwardness and the highs are clear and transparent, with a slight mellowness that might be attributed to the rolloff above about 12 kHz.

But probably the most striking characteristic of the Model 19 is its stereo image, which seems three-dimensional to the point of being detached from the speakers. The center of the image seems to extend forward between the two speakers and toward the listener rather than rearward beyond the plane of the speakers as is usually the case. Only at the extreme left and right is there any sense of flattening, and that is slight. About the only grief the Altec 19 gave us in the listening room was in initial setup. and that because its spring-loaded connectors are located on the bottom of the cabinet. (This does, of course, offer long-term cosmetic advantages.)

Considered in toto, the Model 19 is an outstanding loudspeaker. The differences between it and others in the same price class amount more to points of personal preference than of quality. A particular listener may find the minor faults of one preferable to those of another: The only way to tell is to listen—something we can heartily recommend in the case of the Altec 19. Another point not to be overlooked, especially with respect to such a large unit, is its pleasant appearance and impeccable finish.







A Tough-Looking Tuner from Technics

The Equipment: Technics ST-9030, an FM tuner in metal case suitable for rack mounting. Dimensions: 19 by 3½ inches (front panel), 12¾ inches deep plus clearance for controls, connections, and handles. Price: \$399.95. Warranty: "limited," two years parts and labor. Manufacturer: Matsushita, Japan; U.S. distributor: Technics by Panasonic, One Panasonic Way, Secaucus, N.J. 07094.

Comment: Although the first impression made by the ST-9030 tuner is one of no-nonsense styling and rackmountable macho, in its heart of hearts the unit is not that way at all. Its personality is in fact that of an obsequious servant who anticipates your needs and, unbidden, quietly turns its electronic wiles to delivering the best-sounding FM it can. Choice of station is about all this model will require of you. The design strategy seems to be based on equipping the unit so that it processes FM signals for the best possible sound, which makes it highly vulnerable to any marginal signal conditions, and including automatic devices that let it "defend" itself when necessary. For example, with the normal (AUTO) setting of the intermediate-frequency bandwidth control, the Technics is adjusted for a wide bandpass, giving low distortion and best capture ratio. Should an interfering signal intrude or the signal level drop too low, the tuner automatically switches to narrow band for better selectivity.

Similarly, the ST-9030 is normally set to maintain the widest stereo separation it can produce; when the input signal falls below a preset threshold, the high frequencies are blended so as to cancel noise components that are of equal amplitude and opposite phase in the two channels.

Both of these switching functions have a well-calculated overlap between the "on" and "off" thresholds, which makes them reasonably immune to "hunting" (rapid flipping back and forth) in the presence of fluctuating or borderline input signals. The muting function, controlled by the same switch that activates the servo tuning, is not as neat in this respect—audio breakthrough during rapid tuning can be obtrusive.

The SERVO TUNING itself is a joy to use. When a station is close to the optimum tuning point, a relay pulls in with a satisfying little clink and locks tuning to the exact center of the channel. Like other functions, the servo's normal (and defeatable) setting is its automatic mode.

The lab data confirm that this Technics tuner is optimized for good listening. Distortion is about average with the narrow IF bandpass and much better in the wide mode. Capture ratio is likewise adequate with the IF wide and excellent with it narrow, and IM distortion also is very good. The sensitivity curves, which at low signal levels are about average for a fine tuner, seem calculated to make listening enjoyable, rather than to permit the "collecting" of extremely distant stations. With very strong signals (65 dBf and up), the ST-9030 is the quietest tuner we have tested. Both noise and distortion, far from being increased by front-end overload in the presence of very strong input signals, actually improve a bit under these conditions; the already superlative noise curve is driven right off the bottom of our graph above 85 dBF.

To help in orienting an antenna for minimum multipath, the usual oscilloscope outputs are provided. In addition, the instruction manual explains how the vertical output (apparently a rectified version of the IF signal) can be routed to an unused preamp input and evaluated by ear to determine when the antenna is getting the best signal. Amplitude modulation of the IF signal, a usual symptom of multipath distortion, can thus be heard and minimized by rotating the antenna.

The ST-9030 is, in sonic terms, one of the more endearing tuners we have encountered. Frequency balance is good even though the response curve falls off a bit in the extreme low bass. The cancellation (rather than filtration) of the 19-kHz stereo pilot confines high-frequency droop to the high side of 15 kHz. (The lab did not confirm the passband to 18 kHz, but in normal broadcasting there is no signal there anyway.) Channel separation (with fullstrength signals, of course) is astonishing. Some of the 9030's sonic advantages are achieved by processing sig-



nals automatically in ways that other tuners offer as manual options or not at all, which scotches direct comparison. (In particular, the lab had to introduce an interfering signal to keep the tuner in its narrow mode for the appropriate measurements.) Be that as it may, the sound is fine and can be obtained with a minimum of fuss.

Can the Technics ST-9030 justly be called a budget supertuner? The fact that the exemplary performance by which this category used to distinguish itself is becoming more commonplace among "normal" tuners makes it difficult to say. In our view the Technics sits on the fast-fading boundary between the two categories, much as it does on that between a "technician's" tuner and a "convenience" model. More important, its performance is the result of an elegant balance between conflicting parameters. Certainly it offers very good value for its price and a uniquely conceived approach to the interface between human being and machine.

CIRCLE 135 ON READER-SERVICE CARD





Capture ratio narrow mode		³ / ₄ (1 ³ / ₄	dB		
Alternate-channel s narrow mode	electivity	25 87			
S/N ratio (mono; 6	5 dBf)	75	dB		
1 kHz 10 kHz THD, narrow mode 80 Hz 1 kHz	Mono 0.060% 0.065% 0.16% Mono 0.17% 0.17% 0.24%		L ch 0.060% 0.078% 1.5% L ch 1.2% 0.86% 2.3%		55% 75% % :h % 4%
19-kHz pilot		-73	2 dB		
38-kHz subcarrier		-6	9 dB		
38-kHz subcarrier All data measured less otherwise spe		-		I) mode	un



Teac's Good-Value A-103

The Equipment: Teac A-103, a stereo cassette deck in metal case. Dimensions: 16¼ by 6¼ inches (front panel), 10½ inches deep plus clearance for controls and connections. Price: \$250. Warranty: "limited," two years parts and labor. Manufacturer: Teac Corp., Japan; U.S. distributor: Teac Corp. of America, 7733 Telegraph Rd., Montebello, Calif. 90640.

Comment: Despite the yen's steady strengthening in currency markets, good values continue to flow from Japan the Teac A-103, for example. At a "nationally advertised value of less than \$250," it offers a level of performance that is surprisingly advanced for a cassette deck at this price. It also has more than the expected share of features.

The A-103 is a front-loading model with a removable door for better access to the heads, capstan, and pinch roller—cleaning those critical components therefore is a relatively straightforward procedure. The lever array provides the usual mechanical controls along with the separate EJECT that we prefer to the combination STOP/EJECT found on some decks. Also, you can switch directly between modes without going via STOP—except, of course, that you cannot go directly into the recording mode. Mike/ line mixing, headphone and output level controls, and memory rewind are absent, but we're impressed with what is there.

Lab tests reveal equally impressive characteristics. The signal-to-noise ratios—frequently the prime limiting factors in a cassette deck—are on a par with the best, and a check of the Dolby action shows that it provides the full 10-dB noise reduction at the upper frequencies. The erasure and crosstalk figures also are excellent, and the sensitivity is adequate for normal operation. The figures for distortion, especially intermodulation, are better than average.

The playback of the standard test tape shows the rising low-frequency response characteristic of almost all modern decks that employ the newer 50-Hz equalization point rather than the "standard" (higher-frequency) turnover to which test tapes still adhere. On the high end, there is a modest falloff at 10 kHz, more apparent on the bench than during our listening tests with commercially recorded tapes. The record / play response curves show the opposite characteristic, with a 3-dB rise between about 5 and 9 kHz that is nearly the same with either TDK AD (NORMAL bias and equalization settings) or TDK SA (in the CRO₂ positions). Fortunately, Dolby does little to accentuate these anomalies, and the overall response is within reasonable limits with or without it.

Mechanically, the A-103 performs well both in the lab and in the listening room. The peak-weighted flutter is much better than specified. Fast-winding times are about average, speed consistency with varied voltage excellent, and absolute speed acceptable at about one-sixth of a semitone sharp for tapes recorded at exactly 1% ips. (Tapes both recorded and played on this deck are, of course, exact in pitch.)

In the listening room, the Teac certainly reproduced all we have come to expect from commercially recorded cassettes. More to the point, we were pleasantly surprised at

Teac A-103 Additional Data

Speed accuracy	1.1% fast at 105 VA 1.1% fast at 120 VA 0.9% fast at 127 VA	c
Wow and flutter	playback: 0.05% record/play: 0.08%	
Rewind time (C-6	0 cas <mark>sette</mark>)	79 sec.
Fast-forward time	(same cassette)	82 sec.
playback	L Dolby off; CBS weig L ch: 58 dB L ch: 56 dB	R ch: 58 dB
Erasure (333 Hz at	normal level)	71 dB
Crosstalk (at 333 Hz) record left, play right record right, play left		48 dB 49 dB
Sensitivity (re DIN line input mike input	L ch: 115 mV	
Meter action (re D		R ch: 6½ dB high
Maximum output (R ch: 0.7 V



the recording quality that we were able to achieve. The meters are the conventional averaging type calibrated from + 3 to -20 VU. Though they seem a bit underdamped, it is relatively easy to attain good recording levels with them. This, we suspect, results from the generous safety margin in their calibration (the zero indication corresponds to a recording level 6 dB below DIN 0) and from the exceptionally low noise floor of the A-103. As long as we didn't let the meters bounce far into the red, we were able to get quiet, low-distortion copies of discs that we selected specifically for the demands they make on a cassette deck. And the tonal balance of the recordings proves very good. It is a trifle bright on the high end, but the brightness is quite welcome compared with the dull, overloaded copies we often have made from these discs.



On the evidence of the A-103, Teac's new construction technique, which eliminates a good deal of hand wiring, has promoted economy of production without sacrifice of performance. It may also contribute to better reliability and reduced servicing costs. We think that Teac has a winner here.

CIRCLE 136 ON READER-SERVICE CARD



Citation 19 Gives a "Big 100 Watts"

The Equipment: Citation 19, a stereo power amplifier, in metal case. Dimensions: 16 by 4¾ inches (front panel); 5½ inches high overall; 13¾ inches deep plus clearance for controls. Price: \$495. Warranty: "limited," two years parts and labor, shipping paid one way. Manufacturer: Harman Kardon, 55 Ames Court, Plainview, N.Y. 11803.

Comment: Because designers know more now (and are learning all the time) about how to make amplifiers perform well when reproducing music waveforms, the state of the art is definitely rising. Unfortunately, the art of writing specs that define the musical capabilities of amplifiers has

stagnated in a way that makes it possible for two units with similar ratings to sound quite different. We are happy to say that the Citation 19's performance exceeds considerably what might be expected on the basis of its specs.

According to the CBS Technology Center, the Citation meets its total harmonic distortion ratings handily at its full 20-dBW (100-watt) output as well as at 10 dBW (10 watts) and 0 dBW (1 watt). As is often the case, the low-level distortion is slightly higher than that of the midrange, but the spurious components are within 2 or 3 dB of the amplifier's noise floor. In the intermodulation test, the amplifier proves itself capable of exceeding rated power into



4-, 8-, and 16-ohm loads without running afoul of the specified 0.08% distortion level. Frequency response is within ±1 dB from below 10 Hz to beyond 100 kHz, and the excellent square-wave reproduction confirms this. Damping factor, at 113 for an 8-ohm load, surpasses any normal requirement. Signal-to-noise ratio is an excellent 100 dB with respect to rated output.

So much for steady-state tests, for here the Citation 19 performs much as would any good-quality model of similar ratings. With music-that is to say, under dynamic conditions-the amp really begins to strut its stuff. Clipping is evident on an oscilloscope only when it is delivering peak power on the order of 300 watts. This represents head room of close to 5 dB above rated output and seems an exceptionally generous margin. Clipping is always unpleasant to hear, of course, but the amplifier does not compound the problem with gratuitous misbehavior in addition to the overload. On the contrary, its recovery is very graceful. And the sound does not degrade noticeably as the peaks in the program material approach the limit.

All of this enables the Citation 19 to deliver music that sounds clean at levels beyond what one would expect of a "100-watt" amplifier. Noise is well out of the way; even with very efficient speakers, the listening ear must almost touch the tweeter before any hiss becomes audible. The front-panel display, which the instructions tell you how to adjust for speakers of different impedances, is accurate and quick. When the 0-dB light is set for full power and stays on for more than a fraction of a second, the amp is probably being pushed too hard-though it tolerates this with little complaint.

The Citation offers two minor annoyances along with its extraordinary capabilities: It pops slightly when turned on and off, and the output binding posts (suitable for bared or tinned wires, spade lugs, banana plugs or dual banana plugs) are recessed between the heat sinks on the back panel, making them a little hard to reach. On the plus side, however, the unit is equipped with a back-panel switch for strapping the two channels together to double the output power into 8 or 16 ohms.

All things considered, the Model 19 fits squarely into the Citation tradition of wide bandwidth, low distortion, and good damping. Most important, the amp delivers its best where it really counts-on music.

CIRCLE 132 ON READER-SERVICE CARD







Harman Kardon Citation 19 Additional Data

Power output at clipping (channels driven simultaneously) L.ch 21 dBW (124 watts) R.ch 21¼ dBW (132 watts)
Frequency response ±0 dB, 20 Hz to 40 kHz + ¼, -1 dB, 10 Hz to beyond 100 kHz
Input characteristics (for rated output at full gain) Sensitivity Noise S/N ratio 1.32 V -80 dBW 100 dB
Damping factor at 1 kHz 113

Ortofon's M-20FL Super: A Sound that Appeals



The Equipment: Ortofon Model M-20FL Super, a stereo phono pickup with a Fine-Line stylus. Price: \$100. Warranty: "limited," one year parts and labor. Manufacturer: Ortofon, Denmark; U.S. distributor: Tannoy-Ortofon, Inc., 122 Dupont St., Plainview, N.Y. 11803.

Comment: The introduction of a new cartridge by a major manufacturer is itself enough to pique our curiosity. When that cartridge represents the top of the line, reviewing it promises to be a pleasurable experience—and so it is with the Ortofon M-20FL Super.

This model and its newly introduced brother, the M-20E, represent the pinnacle of the Ortofon VMS line. (The VMS—for Variable Magnetic Shunt—distinguishes Ortofon's "magnetic" cartridge line from its moving-coil pickups.) The two cartridges are similar, the major difference being in stylus geometry and compliance. The M-20FL sports a Fine-Line stylus—yet another Shibata variant while the M-20E uses elliptical geometry. The M-20FL has a *lower* compliance and tracks at a *higher* force than its slightly less expensive brother.

Actually, it remains a very compliant pickup, although without test data we'll not quibble that the M-20E is even more so. In the SME-3009 arm that CBS Technology Center uses for its testing, the system resonance with the M-20FL occurs at 5.5 Hz, suggesting that a less massive arm would be a better choice. (The pickup itself is, at 5.25 grams, relatively light.) Still, we had no difficulty auditioning the cartridge with another tone arm of at least equal mass.

Although the recommended vertical tracking force is 15 millinewtons (1.5 grams)—a force that we and CBS used for all tests and auditions—the Ortofon cartridge is able to negotiate the standard torture course at a VTF of only half that. The recommended shunt capacitance is on the high side (400 picofarads); the recommended load resistance is the standard 47,000 ohms. Too late for lab or listening tests, Ortofon informed us that the M-20FL Super, M-20E, and VMS-20E will be supplied with a cartridge capacitor of 210 picofarads (CAP-210) bridged across the output pirs of each channel to make proper loading easier. The device is removable should it prove unnecessary in a particular installation and apparently can be retrofitted to any of these pickups or to the Mk. II models of the F and FF series.

Each M-20FL Super is accompanied by its own calibration data. CBS tests indicate that, with the exception of channel separation—a test in which measurements are hard to duplicate precisely—our sample exceeded its calibration data. The sensitivity is exceptionally high for a topof-the-line cartridge (1.63 millivolts per centimeter per second), and the channel balance at 1 kHz is superb (within 1/5 dB).

The frequency response is beautifully flat (within $\pm \frac{1}{2}$ dB) from 20 Hz to 10 kHz, with a separation that is almost

consistently better than 25 dB over the same span and better than 30 dB over much of it. Above 10 kHz, the response rises (more on the left channel than on the right) and the separation diminishes, as is to be expected. Yet, there is still more than 18 dB of separation at 15 kHz. The square-wave test excites a single cycle of overshoot, followed by ringing that is quickly damped out.

The second harmonic distortion is very low (1% or less at 1 kHz), as is the IM distortion-0.6% in the lateral mode and 1.8% in the vertical. The latter figure is especially good for a phono pickup. The vertical tracking angle is 20 degrees, the customary (and specified), if not "standard," value. The Fine-Line stylus displays excellent polish and alignment under the CBS microscope. We would not expect the 15-millinewton tracking force to increase record wear significantly, if at all, considering the larger area of contact that the stylus geometry offers. At the recommended force, it passes the CBS tracking test excellently. (See "Additional Data.") On music records, the only evidence of mistracking (and it was rare) occurred on the innermost grooves of heavily recorded discs and on a directto-disc recording (the Nexus "Ragtime Concert," Umbrella UMB DD2).

The sound of the M-20FL is appealing. The bass is sonorous but tight, a characteristic that is very evident in the lower octaves of the bass viol and on drums. The sound has warmth but at the same time provides a sense of presence often lacking in "warm" pickups. The stereo imaging is both wide and deep—which, we suspect, adds to the



warmth of the sound without detracting from its up-close presence. We found a slight instability in the exact center image—noticeable, for example, on a solo violin recording—in which the upper partials seemed to favor the left channel. Brass reproduction is very brilliant (perhaps a trifle too much so for some tastes), no doubt because of the raised response at the higher frequencies. The same characteristic adds an appealing brilliance to the cymbals and a less appealing edge to sopranos. The distinction between instruments is very well drawn, the sound having a clarity that cartridges with higher distortion usually lack.

Like many audio components, the Ortofon M-20FL offers a series of tradeoffs in performance. Its low-frequency tracking capability is excellent; high-frequency tracking is nearly as good. Most important, to our way of thinking, is the fact that the general sound and stereo imaging of this pickup are right there among the best—and at what is fast becoming a modest price for a premium pickup. On the vast majority of discs, this Ortofon will unveil the music in a truly righteous fashion.

CIRCLE 131 ON READER-SERVICE CARD

Ortofon M-20FL Super Pickup Additional Data

Maximum trackir	ng levels
	VTF; re RIAA 0 VU)
300 Hz	> + 18 dB
1 kHz	+ 9 dB
10-20 kHz	>-5 dB



Soundcraftsmen Integrates Preamp and Equalizer

The Equipment: Soundcraftsmen PE-2217, a preamp/ equalizer in vinyl-clad wood cabinet or optional rack mount. Accessory AC outlets: 4 switched, 2 unswitched (1,000 watts total). Dimensions: 19 by 6¹/₄ inches (front panel), 11 inches deep plus clearance for controls and connections. Price: \$529.50; optional walnut-veneer cabinet, \$49. Warranty: "limited," two years parts and labor. Manufacturer: Soundcraftsmen, 1721 Newport Circle, Santa Ana, Calif. 92705.

Comment: Here is a product that raises the question: Are the usual preamp response-altering controls really redundant when combined with an equalizer? Tone controls, filters, and even loudness contours can be closely approximated by manipulating the sliders of an equalizer. In the PE-2217, Soundcraftsmen offers a combination preamp/ equalizer in which *all* frequency-sensitive adjustments are made on its ten octave-band controls.

The PE-2217 includes all the normal preamp switching and connections—even dual headphone outputs—and will carry the signal straight through from a phono cartridge to the input of a power amp. Dubbing between tape transports can be in either direction and can take place while you are listening to another program source. Note that the second deck may be connected either to the usual pin jacks on the back panel or via stereo phone jacks on the front panel.

There are, in fact, a number of additional features that will be welcomed by recordists. In particular, the equal-

ization can be switched in either ahead of the decks (to correct shortcomings in the original signal and allow recording of the result) or in the line output (to equalize playback of any source—and for use as a speaker equalizer). The mode switching includes separate right- and left-channel mono buttons (press both for L + R mono) so that individual tracks can be played even if the (stereo) deck itself does not provide switching for the purpose. This last feature is not uncommon among the better preamps, but pre/post equalization switching is all too rare.

In addition to the typical balance control (which, be it noted, lacks a center detent), there are a pair of ZERO-GAIN sliders and four indicators to facilitate adjustment. As Soundcraftsmen points out in the owner's manual, an equalizer is not meant to be an amplifier: Input and output signal levels should be approximately the same at least when averaged over the audio band. Obviously, the frequency balance will be affected by the control setting, but equalization should leave total energy relatively unchanged by the process. This, incidentally, will allow you to determine the effect of the equalizer with an A/B comparison. Furthermore, the dynamic range of the equalizer should be optimized if it is not asked to be a broadband amplifier as well. To obtain an average unity gain condition, you adjust the ZERO-GAIN controls so as to match the brightness of the two indicator lights for each channel. Program material-preferably wideband pink noise-must be present for this setup. A supplied test record contains not only appropriate wideband pink noise, but ten octave

bands of noise recorded separately on each channel as well. The record thus provides a convenient means of setting up the unit as a room or speaker equalizer. While the left channel cycles through the ten octave bands, the right channel contains a reference noise band centered on 1 kHz. Each octave-band slider is adjusted by ear until the loudness of the noise band matches the reference. (The reference level shifts for each octave in accordance with the Fletcher-Munson curve so that such "ear matching" works reasonably well in establishing the correct balance.) If you have a sound-level meter, the record can be used as a signal source and each slider adjusted for uniform measured sound level at the listening position-and the reference signal ignored. The equalization procedure should be repeated several times, since the sliders interact somewhat. Once your "basic room equalization" settings have been determined, a template can be made (with materials supplied by Soundcraftsmen) to aid in returning to them quickly. Then the sliders can be manipulated about these "normal" settings to achieve whatever tonal alterations are desired for a particular program.

At the lab, the PE-2217 acquitted itself well. The maximum output level is more than adequate for any power amp, and the THD—even with intentionally "difficult" setting of the equalization sliders—is low enough not to cause any concern. IM is a bit higher but reasonably low for such a complex device. The frequency response is exceptionally flat for an equalizer and results in excellent square wave response at both test frequencies. Each octave band slider provides close to the ±12 dB spread claimed for the unit. Furthermore, the shape of the curve for each octave is pretty much the same, and the various center frequencies are quite accurately spaced.

The phono equalization is excellent. The phono sensitivity is, if anything, on the high side; the overload point is a bit low but should handle most high-quality cartridges. The sensitivity of the high-level inputs is typical of a preamp, and the signal-to-noise ratio of all inputs is very good; that of the phono section is equivalent to 83 dB referenced to a 10-millivolt input at 1 kHz.

With the help of the test record, and with our ears as a meter, we found it relatively simple to adjust the equalizer to flatten out our listening room's response. Once we had done so, there was a definite improvement in tonal balance. As usual, the improvement is greatest in the lower registers where speakers (and rooms) exhibit their greatest eccentricities. The smoothed bass response of our system was clearly apparent even with casual listening to bass viols, organ, and such.

If we have any reservation about the PE-2217, it is that with our pickups the sound of the phono section-while certainly good-does not have quite the extra midrange clarity and definition that we have commented on in reviewing some of the separate preamps now on the market. This is a subject that we approach with diffidence since some preamps interact with some pickups in unpredictable ways, and we obviously can't try all conceivable combinations. Therefore, we urge careful audition and A/B testing (listen, in particular, to the sound of the upper strings) by the prospective purchaser. The preamp is, in any event, quiet and clean by most standards. Our sample of the test record seemed unduly infested with ticks and pops, and the power cord seemed a bit lightweight for the 1,000-watt (total) rating of the accessory outlets. Presumably, however, Soundcraftsmen's rating means what it says, and of course the test record is not meant for listening, so neither of these points should deter the potential buyer.

For more reports on equipment, see BACKBEAT.

And the PE-2217 should attract many. Incorporating the graphic equalizer within the preamp reduces the amount of cabling and circuitry through which the signal must flow. It also places the entire switching logic in the lap of the designer—a desideratum whose import is easily underestimated. It allows optimum control of noise and distortion and the greatest possible functional utility of the switching itself. Soundcraftsmen has done an excellent job of achieving such utility while avoiding the often confusing and needlessly redundant switching of separates. In short, the PE-2217 is a well-thought-out and capable unit.

CIRCLE 134 ON READER-SERVICE CARD



Square-wave response



Soundcraftsmen PE-2217 Additional Data

Output at clipping (ch. L ch R ch	annels driven si 7.1 V 6.9 V	multaneously)
Frequency response		to 20 kHz elow 10 Hz to 70 kHz
RIAA equalization	± ½ dB, 35 Hz ±1 dB, 25 Hz	
Input characteristics (phono 1 phono 2 tuner aux tape 1, 2	(for 2 volts out Sensitivity 1.4 mV 1.4 mV 163 mV 163 mV 163 mV	
Phono overload (clipp	ping point)	85 mV at 1 kHz
IM distortion (2 volts o	output)	0.157%





Photos by Daniel McCoy

by Edward J. Foster

AMONG THE FAUNA, so to speak, of high fidelity, record-care accessories might be compared to the insects: They're relatively small, they're exceedingly numerous, and telling the "good bugs" from the ones that will sting sometimes requires the services of an expert. And the "good bugs" serve as ecological agents whose importance to record survival is difficult to overestimate, while the look-alikes may be no better than pests. We are only beginning to understand the workings of this microcosm, but-nothing daunted-we plan, in this article, to let you in on our observations of it. Be warned that it is one in which mutants occur with a rapidity unknown in nature. forestalling definitive classification of specie and genus; we will simply be describing the specimens in our collection and sketching in the broader lines of classification as they appear at the moment.

Successful products are quickly imitated. For this reason, the many gizmos in our collection fall into relatively few categories. By far the most populous group is the hand-held velvet pad to be used either with or without some special fluid. Such solutions often are acclaimed for their ability to deep-clean a record, deposit an antistatic coating, and leave no residue. (How the latter two attributes can exist simultaneously stymies our logical instincts.) Some of the products are specifically designed to leave a lubricating film.

Besides the manual velvet-pad devices, several similar items swap the velvet for a fine-bristle brush—or may supplement the velvet for a double whammy. And the newer types collect the dust and lint onto an adhesive roller.

To loosen the grip that a statically charged record exerts on dust and lint, there are several ionization guns on the market. They use a piezoelectric high-voltage generator, charging a sharply pointed needle. The electrostatic field at the tip of the needle "ionizes" (unbalances the electric charge of) the air molecules. which then conduct away the record's static charge.

For really dirty records, there are several soak-'em-and-scrub-'em approaches and at least one foaming cleanser. And of course, the vacuumcleaner concept has not been totally ignored.

All of these devices clean the record before it is played. For automatic cleaning during play, a variety of auxiliary devices resembling tone arms (intended to "preplay" the disc and wipe it clean) have appeared. Some of these also are equipped to drain off any static charge that builds up during the listening session. Antistatic mats serve the same purpose. If your stylus should develop a case of the cruds, there are all sorts of cleaning fluids and brushes to strip the dirt from the diamond.

With Net and Magnifier

It would require virtually unlimited time and resources to perform a series of tests sufficient to judge conclusively the practical effectiveness of the many available products. So we attacked the problem in a roundabout way, deducing-rather than measuring-the effectiveness in most respects.

We checked the residue left by each cleaning fluid by dropping some of it onto a clean glass microscope slide. After it had dried, we inspected it visually, noting the amount of residue and its nature: dry, sticky, or oily. (If a residue is left, it would seem best that it have no tendency to hold dust deposits on the disc surface.) We judge any claims that the fluids we checked had permanent antistatic effects to be hyperbole.

Velvet pads and brushes were examined under a 25X microscope to determine the relative size and uniformity of the bristles or pile, and whether they were separate or intertwined. We also determined, both by microscopic observation and by feel, whether the pile had a preferred orientation. Velvet pile generally feels smoother in one direction, that in which it tends to lie. It is logical to assume that passing the pad along the record grooves in the "rough" direction would direct the fibers into the groove and aid in dislodging embedded dirt.

Antistatic guns were evaluated comparatively by determining how brightly they would cause a neon bulb to flash, how much ozone was generated in the nozzle, and how well they discharged a record. The latter is what really counts and fortunately is relatively easy to determine. We charged a disc by rubbing it briskly with a rabbit fur, checked its level of charge with an electroscope, zapped it with the gun, and rechecked the charge level. All guns passed with flying colors.

Our Collection

Our sampling is, once again, far from complete. Some species are hard to trace to their breeding grounds: many record-care products are marketed by companies other than their manufacturers and hence may show up from more than one source and at more than one price. (Dealer practice also varies; the same device may appear as both a come-on bargain and as a premium accessory.) Distribution is sometimes irregular, and not all distributors would send us samples for evaluation; nor, surely, did we manage to reach all of them. As the company-by-company listing that follows makes plain, our collection already was so large as to be barely wieldy. But here is what we found with the samples at our disposal.

• Audio-Technica. The AT-6008 Rotary Disc Cleaner (\$9.95) is a 3¹/₂-inch-diameter plush velvet pad mounted in a holder with a center handle knob. Since the pad rotates with respect to the knob, the velvet pile remains aligned with the groove as it sweeps around the disc, thus reducing the possibility of redepositing the dirt. The pile is short, is relatively matted, and has no apparent wale or preferred direction.

The AT-608 Record Cleaning Solution packed with the cleaner is applied with a delicate eyedropper (also included) through a hole in the handle. It permeates the pad in a reasonably uniform manner, leaving the pad barely damp. Its ability to discharge a record is deemed good. The solution left a slightly oily residue. (The kit also contains a holder for the cleaner and a stiff-bristle brush with which to clean the velvet.)

The PDQ System (\$18.95) consists of the AT-6002 Grounded-Brush Autocleanica (\$9.95), the AT-6010 Manual Disc Cleaner (\$5.95)-both of which also use AT-608 fluid-and the AT-607 Stylus Cleaner (\$2.95).

The AT-6002 Autocleanica, a tone-arm-type automatic disc cleaner, has a velvet plush roller and a soft, electrically conductive brush. The well-finished metal arm adjusts to the desired height and has an integral armrest. The base attaches to the turntable top plate via a double-sided adhesive ring, and the arm is grounded to a metallic part of the frame to drain off the static charge.

The cleaning fluid is injected into an internal storage reservoir with the supplied eyedropper and, from there, metered to a roller made of essentially the same material as that in the AT-6008. The brush has soft, reasonably separate bristles.

The AT-6010 record cleaner is a rectangular velvet pad (1 by 3½ inches) with a hollow handle into which the cleaning liquid is applied. Fluid spreads over the surface of the pad unevenly, with wet spots apparent. The manufacturer provides a holder for the pad (and double-side tape to mount it) along with a stiff foam pad to clean the velvet.

The AT-607 Stylus Cleaner mixture includes isopropyl alcohol and leaves virtually no residue. It comes in a nail-polish-style bottle with a brush in the cap.

• Audiotex Laboratories. The Total Concept (\$12.95) kit comprises a foaming record cleanser (Record Basic) and a less aggressive cleanser (Record Plus) that also contains a silicone lubricant. Each is packaged in a 7-ounce aerosol can. Also included are a half-dozen lintless wiping towels (12 by 17 inches), a velvet plush pad (3½ by 1½ inches), and a bristle brush for cleaning the velvet. The pad has a short, waleless pile with no preferred orientation. The heavy-duty Record Basic left a substantial but

nonoily residue on our microscope slide, while Record Plus left a slight but very oily residue. Audiotex recommends that Record Plus always be used after Record Basic.

• **Ball Corporation.** Sound Guard Record Cleaner Kit (\$7.99) consists of a 2-ounce bottle of recordcleaning solution with a pump spray top, a velvet pad (1% by 4% inches), a sponge, and a grooming pad. You apply the liquid to the velvet pad and wipe lightly soiled records. Badly soiled discs require direct application, followed by a rinse with the wet sponge and a buffing with the pad. In our tests, the fluid left practically no residue. The velvet pile is very short and random in orientation. When we followed the "light cleaning" directions, the system did a good job of discharging static.

The Sound Guard Record Preservation Kit (\$7.99) supplies a bottle of dry lubricant, intended to reduce wear (we attempted no substantiation of this claim), in a liquid carrier. The solution is sprayed onto the surface of the record, which is then buffed with a velvet pad. Ball claims that the 2 ounces of solution provided should be enough to treat both sides of thirty to thirty-five LPs and that the lubricating properties will last through approximately twenty-five plays. The slight residue will cause no degradation in frequency response, judging from tests I made earlier at Diversified Science Laboratories. Applied according to directions, the solution reduces static charge reasonably effectively; after fifteen minutes, the charge is reduced even further.

The velvet pad supplied with this kit looks similar to that with the Sound Guard cleaner, but the pile actually differs greatly. There is a relatively tight wale with reasonably separate fibers that have a preferred orientation along the rib, which is determined by touch.

• *Bib.* The Bib Anti-Static Record Care Kit (\$24.95) contains a Groov-Stat ionization gun, an electro-



scope, and a Bib Record Dust Off. The electroscope detects static: When brought near a charged record, the two metal foils in the cylinder will separate; near a neutral disc, they remain together. It can also be used to check the ionization gun. As far as we know, the electroscope is unique to the Bib kit; in any event, it is very handy. The gun itself operates easily and effectively. The needle is reasonably well protected in the barrel of the gun, although a small finger could still reach inside and get pricked.

The Dust Off is a velvet pad (1¼ by 5¼ inches) that has a relatively deep pile with a preferred direction along the ribs of the wale. Although the instructions don't say so, the Bib Dust Off appears to be more effective when used in one direction than when used in the other. The velvet pad rests in a plastic housing with a foam pad on the base. The velvet can be made barely damp by bringing it in contact with the moistened foam. No fluid is included.

• Decca. The Decca Record Brush (\$14.95) consists of two 4-inch rows of extremely fine conductive bristles—a million of them all told, according to the literature. (We didn't count.) No fluids are to be used with the brush. A single light pass of the brush totally discharged our record and wiped it clean of surface lint and dust. It is not designed to do much with fingerprints or other greasy residues.

The "tone arm" version of the record brush is the Decca Record Cleaner. It is mounted to the baseboard by an adhesive pad and grounded to the turntable frame. The height of the arm is roughly adjustable via an assortment of spacer blocks. A magnet holds the arm in its rest position.

• Discwasher. This line of record-care products includes the D-3 Discwasher System, the Zerostat ionization gun, the D'Stat-II antistatic mat, and the SC-1 Stylus Cleaner.

The D-3 System (\$15) consists of a wide-wale fabric mounted on a handsome burled walnut handle. The hollow handle stores a 1-ounce bottle of fluid, which left a barely apparent residue. The pile of the fabric is quite stiff, quite long, and definitely oriented in one direction. (The direction in which the pile is to be used is indicated by an arrow on the handle.) Microscopic examination reveals that the individual fibers are uniform and well separated, so they are likely to reach well into the groove to pry out dirt. The wide wale of the fabric leaves plenty of room to collect the dust so it isn't just rearranged on the record.

The fluid is applied in a bead along the leading edge of the fabric pad, which presses against the rotating disc for 5 to 10 seconds. Then the brush is rocked so that the trailing edge contacts the record to dry it and collect the debris. This procedure also relaxes the static charge. The D'Stat-II antistatic mat (\$7.95) is a thin conductive-fiber turntable pad meant to neutralize the static charge of a disc resting on it in playing position. In use, we found it reasonably effective in diminishing the charge on the upper surface of the record.

The Discwasher Zerostat (\$20) was the first of the ionization guns to come onto the market. It is the only one tested with a mechanical means of protecting the piezoelectric generator from overstress. In practice, the Zerostat completely eliminates surface charge. The pointed needle that ionizes the air is reasonably well protected from little fingers.

The SC-1 Stylus Cleaner (\$6.00) is composed of an extremely dense mass of fine bristles that have been sheared to a smooth surface. A few drops of D-3 fluid are applied to the brush, which is then wiped against the stylus—moving from the rear of the cartridge to the front. A magnifying mirror on the reverse side of the brush aids in cartridge alignment.

• Empire Scientific. Among the items in the Audio Groome line are the Static Eliminator (\$39.95), an ionization gun with two barrels, and the Dust Eliminator (\$19.95)—a cleaning brush with conductive carbon-fiber bristles, similar in construction to the Decca brush. (The claimed bristle count is more modest—just "thousands.") A light pass of the Dust Eliminator removes surface dust from a disc and markedly reduces static as well.

The Static Eliminator has its sharp points reasonably well protected from finger contact, although it is just possible to touch the lower one (and receive a shock). Like its competitors, it is very effective in neutralizing static. (With normally charged discs, the extra barrel somewhat suggests overkill, but that's better than underkill.)

• Fidelitone. Fidelitone's Record Conditioner with Purifier Fluid (\$10.95) resembles the Discwasher system in appearance and operation. It, too, sports a hollow wooden handle (in this case, cherry) that holds a ^{1/2}-ounce bottle of fluid. When not in use, the Conditioner rests in a wooden holder. On our microscope slide test, the Fidelitone mixture left a very slight but oily residue. The pile, which has a relatively wide wale and a preferred orientation (indicated by an arrow on the handle), is somewhat random in length and the fibers are not well separated. Our sample's pile does not run parallel to the handle and so is hard to orient well with respect to the grooves. The brush also tends to apply excess fluid. The system discharges static effectively.

The Fidelicare Spin & Clean (\$19.95) is meant to wash very dirty records. The record is suspended vertically on adjustable rollers so that the grooves are immersed in a tank of cleaning solution formulated from tap water and the Fidelicare Record Wash. As the record rotates in the tank, brushes force the solution into the grooves to lift out embedded dirt. Our tests indicate that, although the fluid leaves a noticeable (nonoily) residue, it does a better than average job.

• Le-Bo. The Stat-Brush (\$24.95) is an ionization gun but with a difference. The ionized air is generated within a large cavity surrounded by a velvet pad. Dust released by the discharge is swept up by the brush and collected by the pile. The brush bristles appear relatively coarse under the microscope, and the pile is random in character. The Stat-Brush does an excellent job of neutralizing a charged record, but the ionization needle is unprotected in the large cavity—a definite safety hazard in our opinion.

• Memorex. The tape company has two products in the disc field: the Record Cleaner (\$2.59) and the Record Care Kit (\$5.49). The major ingredient of each is a velvet plush preening rod 4 inches long and 34 inch in diameter. The pile is uniform in length and random in orientation. It is not as convenient as using the pad-with-handle types. The simple Record Cleaner may be used dry or moistened slightly with water. The Record Care Kit provides a bottle of fluid and a brush with which to clean the preener. The fluid has an isopropyl alcohol base and leaves very little residue.

Memorex advises weekly use of the cleaning solution to dampen the foam pad on which the cleaner rests and keeping the lid closed between uses to maintain humidity. Since isopropyl alcohol evaporates very quickly and the case is hardly air-tight, the device generally turns out to be dry.

• Radio Shack. The Realistic label offers something in just about every category of record-care product from clip-on record brushes (42-1073, 39¢, without arm lift; 42-1072, 79¢, with one) to the Discotron ionization gun (42-109, \$19.95). There are also replacement inner record sleeves both for 45s and LPs (42-104, \$1.49 for ten; 42-132, \$1.99 for ten, respectively) as well as a turntable-mounted brush (42-746, \$1.19) to capture the dust from a stylus as it passes by.

Of the record-cleaning aids, the least expensive is a sponge cleaning pad (42-121, 88¢). Dampened with water, it does wipe the record clean of surface litter and discharge the static. It also leaves it wet-which is not desirable.

Stepping up the line, there is a Record Cleaning Kit (42-1085, \$1.98), consisting of a bottle of antistatic fluid, a furry "powder-puff" pad, a clip-on tonearm brush, and a stiff brush (presumably to clean the pad). The fluid, which left only a slight residue, is effective in neutralizing (but not in preventing) static buildup. It also left the disc wet and sprinkled with fur.

For a penny more, you can get a round rod-type



disc cleaner (42-135), evidently meant for dry use. The wale is relatively wide but not oriented to capture debris, nor is there a preferred direction to the pile.

The 78/45/LP Record Cleaner (42-130, \$2.99) offers a better approach. This rollerlike device has a convenient hollow handle into which a few drops of water are added to humidify the pile; a tight plastic cover helps retain the moisture. The damp pile does a good job of discharging the disc and picking up and holding lint and dust. (Because of the relatively wide, coarse wale and the fiber orientation—or lack of it—it will not do the job very well when dry.) The record may emerge from this treatment slightly damp but certainly not wet.

Radio Shack's Hydro Stor Cylinder (42-101, \$5.95) and Hydro Stor Professional (42-102, \$9.95) use the same record-cleaning fluid—one that we find leaves a relatively substantial oily residue. Each Hydro Stor device has a hollow core filled with glass beads that "trap" the fluid. (The method is less than successful; each of our samples leaks as soon as it is loaded.) The Cylinder model has a round, roller-shaped plush pad stored in a plastic cylinder. The Professional system has a woodenhandled rectangular pad. Each wets the record excessively but effectively neutralizes static. The plush pile has a relatively tight wale with no preferred orientation.

The Discotron ionization gun proves much more successful. Its two ionization needles are well shielded from intruding fingers, and it does an excellent job of neutralizing static.

Radio Shack offers two tone-arm-style cleaners, the Discoclean (42-107, \$9.95) and the Discostat (42-106, \$19.95). Each has a coarse, long-haired roller to collect debris. The fibers are relatively soft and appear unlikely to pick up any but surface lint and dust. The Discoclean has a bristle brush in addition to the roller, while the Discostat features a group of fine copper wires to discharge the surface of the record. The charge is carried down the length of the arm and grounded to the turntable frame. We harbor some reservations about tracing a groove with a mass of copper wires. Each arm mounts on the base via a double-sided adhesive pad, and the Discostat design includes an integral arm rest absent from the Discoclean.

The cleaning fluid used with the Realistic Phono Cartridge Maintenance Kit (42-108, \$5.99) has an isopropyl alcohol base, and left little residue. An applicator brush, tweezers, a jeweler's screwdriver, and a stylus microscope complete the kit. The microscope—though somewhat beyond the scope of this survey—does not have good enough optical quality to be very useful.

An alternate Stylus Cleaning Fluid and Brush (42-1074, \$1.39) also is available. The isopropyl alcohol liquid again left virtually no residue.

• *Recoton.* The company offers us two recordcleaning products: Clean Sound (\$15), a half-cylinder velvet pad, and Magic Twins (\$7.49), a foursided rectangular velvet pad. Each uses an entirely different cleaning solution. That with Clean Sound left a relatively large, oily residue; the Magic Twins solution, largely isopropyl alcohol, left the least residue of any liquid we tested.

The fibers of the Clean Sound pad are reasonably well separated and have a definite orientation, determined by feel. The pile on our sample does not run parallel with the sides of the holder. The Magic Twins pad has a soft, short pile with no particular grain orientation. Each is effective in neutralizing static.

• **Robins.** Included in its extensive accessory line is the Stylee phono-stylus and cartridge maintenance kit (41-039, \$10), essentially the same as the Radio Shack Phono Cartridge Maintenance Kit. The stylus microscope sells separately at \$3.75.

• *Rotel.* There are four record-care accessories in the line, none of which relies on special cleaning fluids. The RK-66 (\$3.50) is a rectangular velvet pad, used dry to preen the record. The RK-77W (\$7.00), a similar, somewhat larger, unit designed for barely damp operation, is kept humid by moistening a foam pad in the bottom of the holder. A brush, integral with the holder, cleans the RK-77W pad; a separate piece of hard foam serves the same purpose for the RK-66. The RK-77W is effective in discharging a disc, while the RK-66, being dry, is not.

The RK-88A (\$15) is a tone-arm-style automatic cleaner having a soft-bristle brush and velvet roller. You can easily adjust the arm height, and (since only the roller head pivots vertically) no arm rest is required. The velvet pad of all three devices exhibits a tight, random shear and appears matted under the microscope.

The RK-100 Rolling Cleaner (\$16) employs an elastomeric sticky roller to pick off surface dust. We saw no traces of residue when the roller was applied to a microscope slide. The roller effectively removes surface lint but does nothing to remove static. Accordingly, the record tends to attract new debris as soon as it has been cleaned unless an ion gun is used as well.

• Sonic Research. The Pixoff (\$17.50) also is an adhesive roller, with a sticky tape similar in appearance to that of double-sided masking tape. When its surface becomes contaminated, the tape is stripped off to reveal a fresh surface. A roll contains five feet of tape, and replacements are available. The Pixoff is effective at removing surface litter. It does not reduce static charge, however, so the litter soon reaccumulates; again, an ion gun will help. No traces of adhesive remain behind. After each use, a vinyl strip must be wrapped around the roller to prevent contamination during storage—perhaps a minor nuisance.

• Sound Guard. See Ball Corporation.

• Vac-O-Rec. To use the Model 100 (\$44.95), the disc is placed vertically in a slot and spun by a motor. Brushes at the mouth of the slot sweep the surface free of dust, which is sucked up by a vacuum cleaner. The unit appears to be designed for 12inch LPs.

Vac-O-Rec is adequate for removing surface litter. Its drawback, like that of several other devices we tried, is that it doesn't lower static; and in fact in a dry atmosphere, it charges a previously neutral disc. A new model (1100) was not available in time for the tests.

Similarly, the Duotone Groovac (\$89.95), a "preplaying" arm that vacuums a disc as it plays, did not come to our attention in time to be included.

• *Watts.* This line of record-care products is one of the widest and oldest in the industry. Watts take a systems approach to record care by offering a variety of related products.

For a very dirty record, there is the Record Wash Brush (\$5.50)—3¾ inches long with an array of fine nylon bristles in a wooden holder. The bristles are sufficiently stiff, small, and separate to reach deep into the groove. The brush is meant to be used with a solution of liquid detergent and water.

For less contaminated discs (and for drying a disc after washing), the Parastat (\$14.95) employs a record-washing brush sandwiched between two velvet pads. The bristles extend slightly above the surface of the pads to penetrate the groove and dislodge dirt. The velvet is relatively smooth and random in orientation but we deem it adequate to collect and hold the dirt.

For automatic cleaning of the record during play, Watts offers the venerable Dust Bug (\$7.95), the progenitor of the tone-arm type. A simple plastic arm, pivoted from an adjustable stand, supports a long, stiff-fibered pile roller. A nylonbristle brush rides ahead of the roller to loosen the dirt. Two bases are provided—one with a suctioncup mount, the other with an adhesive mount.

To clean the preening pads and the Dust Bug rollers, there is the Humid Mop (\$4.50) with Anti-Static Fluid (\$3.00). The former consists of an assortment of foam sponges forced into a perforated plastic tube, through which the sponge bulges to form a rough surface. A few drops of Anti-Static Fluid humidify and condition the foam. As the Humid Mop works against the surface of the preening pads or Dust Bug roller, it collects the debris and distributes a microscopic layer of the liquid. You clean the Humid Mop itself by forcing it into a bottle stuffed with foam sponge, which can be washed as necessary. Although the Watts Anti-Static Fluid left a considerable residue, the amount that would actually reach a record in this long transfer chain should be negligible. The Parastat/Humid-Mop system proves reasonably effective in cleaning surface litter from a disc, but it does little to relieve a static charge.

Mounting the Specimens

What conclusions can be drawn from these experiments? Is there one universal record-care product? In our opinion, no. Too much depends upon that state of the record prior to cleaning. Just how dirty is it? What causes the dirt to adhere to the record? Is it deep within the grooves or merely on the surface?

A record that is basically in good shape but has static-held surface litter is set to rights simply. Any of the ionization guns will neutralize the charge so that the dust can easily be swept off—and effectively kept off, during play, by any of the tone-armtype devices. But (with the exception of the Le-Bo), the guns won't do the sweeping. The Decca Record Brush drains off the charge and will sweep away surface litter as well, but its soft bristles are of questionable value for removing dirt captured by chemical (rather than electrical) attraction.

Any of the humid velvet pads also will discharge static and do the sweeping—at least of surface litter. Dampened with a solvent, they should also remove dirt that adheres chemically. How well they do that depends largely on the ability of the solution to break the chemical bond and the ability of the pile to get the solvent into the groove and then pull out the dirt. But the solutions (including plain water) can also attack chemical bonds within the record's surface. Alcohols are particularly dangerous in this respect, but it seems that any fluid in quantity is a threat. From the best information we have been able to get on the subject of vinyl breakdown, we would have to recommend those systems that only dampen the disc for short periods over those that really wet it for any length of time. (The finer points—such as the threat imposed by excessively high alkalinity in the solution—also seem to have been established, though since we are not chemical engineers we must defer to the opinions of those with expertise in this field.)

There are, as well, large differences in the amount of residue left by the fluids. The least was left by Magic Twins (Recoton), D-3 (Discwasher). Sound Guard Record Cleaner (Ball). Memorex, and Purifier Fluid (Fidelitone), in that relative order. The Magic Twins and Memorex fluids have a high alcohol content, an excess of which may, as we have said, remove stabilizers from the vinyl compound and make the record surface more brittle and subject to disintegration under the poundings of the stylus. The Fidelitone product's slight but oily residue would seem less desirable than a dry deposit.

Wet-playing systems (a prime example is Lencoclean) appear to contribute to destruction of the record surface in yet another way. New evidence collected with a scanning electron microscope suggests that a liquid film causes the stylus to skid, instead of keeping close contact with the groove walls. In applying the large forces necessary to recapture the errant stylus, the vinyl can be irreparably damaged. This warning pertains in some degree to any device that applies liquid to a disc while it is being played.

The type of velvet pad used on the cleaners varies widely in fiber type and orientation. Those with a matted surface whose fibers look tangled under the microscope may pick up surface litter but will do little to penetrate the grooves for more deeply embedded dirt. Other velvets have a stiffer, more individual fiber structure and a preferred lie, which should make them more effective deep cleaners. Of these, Discwasher's stands out from the crowd. The Watts Parastat is comparable in loosening embedded dirt, which can then be picked up on the velvet. Similar-looking devices vary in the quality of the pile, as noted in the tests. The unaided eye is not a good guide.

If a record is really grimy, it probably will have to be wet-cleaned-for better or worse. Both the Watts Record Brush and the Fidelicare Spin & Clean seem well designed for this chore, which we'd consider a "last hope" for the disc.

Although there is no single record-care product for all seasons, keep in mind the adage about an ounce of prevention. Dust that becomes ground into the vinyl—or the "goo" that you have failed to remove—can be as deleterious to long-term surface quality as solvents that rob vinyl of plasticizers. So the maintenance of a fine recorded library requires care: in the selection of disc-maintenance products and in their use, as well as in their design or formulation.

THE INSIDE STORY ON AKAI'S GREAT PERFORMANCE.

AKAI GXC-730D

Wow and Flutter: less than 0.08% WRMS

Frequency Response: 30 to 17,000 Hz (±3 dB using FeCr tape)

Distortion: less than 1.5% (1,000 Hz, "O" VU)

Signal-to-Noise Ratio: better than 60 dB using LN tape with Dolby on (measured via tape with peak recording level of +3 VU)

Bias Frequency: 100 kHz

Heads:

(3) one GX recording/ playback head for forward and reverse direction; two erase heads.

Motor:

4-pole hysteresis synchronous motor

Dimensions:

17.3"W x 6.9"H x 11.9"D

Weight: 27 lbs.

GREAT PERFORMANCE **FEATURES**:

Automatic stop or stop and play mode from fast forward or rewind with "memory wind." Soft touch solenoid AKAI's Automatic Distortion Reduction System, limiter circuit to cut distortion microphone or line input selector, peak level indicator and reverse selector.



ON'T INTERRUPT LIFE'S GREAT PERFORMANCES.

With the new AKAI GXC-730D, great moments in music aren't shattered by those not-so-great moments in cassette rewinding and flipping.

Instead, a bi-directional GX record/playback head allows you to play both sides continuously. Automatically. And you can play or record both sides without ever having to stop and physically turn the cassette over.

The fact that the 730D is the most versatile front-loading cassette deck on the market is just the beginning. It's also loaded with some pretty fantastic features.

Automatic Distortion Reduction System (ADRS). Memory rewind. Pause control. Separate right and left channel record level controls. Soft touch, direct function operating controls. Peak level indicator. Illuminated VU meters. A great-looking walnut-grained vinyl cover. And all the specs you'd expect an AKAI top performer to deliver.

Hear it at your dealer's.

The AKAI GXC-730D. Dedicated to the proposition that some of your performances are just too good to interrupt.

Dolby Labs, Ltd.



For an 18" x 24" reproduction of this Charles Bragg etching suitable for framing, send \$2 to AKAI, Dept. HF, P.O. Box 6010, Compton, CA 90224, ATTN: Lovers

Illustrations courtesy of the Plerpont Morgan Library



by Richard Dyer



Part II

Currier and lves captured *The Mikado*'s "three little maids from school" as they appeared in the first American production of the opera (1885) to be given with the authors' sanction.

The Mikado (1885)

YUM-YUM: Yes, I am indeed beautiful! Sometimes I sit and wonder, in my artless Japanese way, why it is that I am so much more attractive than anybody else in the whole world. Can this be vanity? No! Nature is lovely and rejoices in her loveliness. I am a child of Nature, and take after my mother.

Early in 1890, Arthur Sullivan presented Ethel Smyth with a copy of the full score of his oratorio The Golden Legend, remarking, "I think this is the best thing I've done, don't you?" Recalling the incident in her memoirs, Impressions that Remained, Dame Ethel records that candor compelled her to say that she thought The Mikado Sullivan's masterpiece. "He cried out: 'O you wretch!' But though he laughed, I could see he was disappointed."

Connoisseurs may argue about what Sullivan's masterpiece is (though no one has suggested The Golden Legend lately), but the public has always agreed with Dame Ethel. The Mikado enjoyed the longest initial run of any of the operas, and it continues to be by far the most popular. In his twenty seasons with the D'Oyly Carte, Kenneth Sandford has performed the part of Pooh-Bah more than 2,000 times.

Yum-Yum's consciously naive speech tells us something about why The Mikado is so well loved. The opera

Mr. Dyer, music critic for The Boston Globe, here concludes his consideration of the thirteen G&S operas on recordings, the initial portion of which appeared in our May 1977 issue. All the complete recordings he mentions herein are on two discs unless otherwise specified. is beautiful in the directness and simplicity of its ironies, the cleverness of its irritability, the breadth and charm of its characterizations, the range of its wit-and, yes, its human feeling. William S. Gilbert's text has been criticized in his day and in ours for its bloodthirstiness; capital punishment is not the most agreeable of subjects. But this is offset by the vigor of Gilbert's humor and, surprisingly, by the delicacy of his feeling-which is exposed not only in the obvious places (like the chorus "Comes a train of little ladies" or the madrigal "Brightly dawns our wedding day"), but also in the rounded characterization of the elderly and ugly Katisha. Sullivan had demanded a "probable plot." He didn't get one, but he did get probable and sympathetic characters.

Yum-Yum is the most irresistible of the heroines, and the town of Titipu produced exaggerations of what any English village could plentifully supply. The tailor Ko-Ko is a common man for all of his uncommon resourcefulness; and in Pooh-Bah, Gilbert found a name for a personality that had always existed and that will continue to exist as long as committees meet.

Sullivan, too, worked with vigor and delicacy in his score. The concerted numbers are among the most ingenious he ever wrote, for he does not simply pit tunes and rhythms against each other, but also injects personality: He found music for Gilbert's people. The Mikado is artifice so skilled and intricate that it seems artless; for all its absurd removals from reality, it does in fact take after Mother Nature.

The Mikado has been recorded ten times, and eight of these versions are still available. The earliest of them is

the electrical recording of 1926, conducted by George Bynge (Pearl GEM 137/8). The second electrical version was that, from 1936, by Isidore Godfrey conducting the D'Oyly Carte; it has several times been transferred to LP but has not been available for many years. Then in 1950, Godfrey returned to the studios with Martyn Green and Darrell Fancourt to re-create what they had done fourteen years before (Richmond RS 62004).

In 1956, Green, who had left the D'Oyly Carte, went to Hamburg to record Mikado again; that version, originally on Royale, recently reappeared on Everest (3412), the first-and one hopes the last-Mikado to be forced onto a single disc. (It plays more than forty minutes to the dim-sounding side.) Richard Korn's conducting commands respect, though he does not seem to be using the standard orchestration; the chorus and some of the principals are German ("If you want to know who we are, we are chentlemen of Chapan").

A year later Sir Malcolm Sargent made the first stereo recording (Angel SBL 3573) with his usual cast of opera singers, and, in 1958, Godfrey made his third D'Oyly Carte recording (London OSA 1201, hereafter London I). Then in 1962, the Sadler's Wells company—now the English National Opera—recorded its highly acclaimed production that Alexander Faris conducted (now on Rod McKuen's Stanyan label, 2SR 9009). Finally, in 1975, Royston Nash made the best-recorded version of all (London OSA 12103, hereafter London II); there is a terrific sharpening of the ax in the first-act finale.

Nash's set completes a circle, for his tempos are the liveliest (and the closest to the metronome markings in the score) since Bynge's nearly fifty years before. Faris gets some particularly lovely woodwind playing but curiously substitutes a clumsily assembled overture for the one that Hamilton Clarke prepared under Sullivan's direction. Sargent's version has slow tempos and exquisite detail; Godfrey's 1958 account has even more emphatic weight. Some curious set of chances has determined that none of these includes the spoken dialogue.

Pearl's avid annotator speaks of the artistic superiority of Henry Lytton's Ko-Ko, but I do not hear it on the records. The great veteran seems to be making such an effort to "sing" that he neglects to characterize fully; he also jumbles the words more than once. Still, there's something very touching about his ongoing, vigorous "Tit-willow"—there is poignancy in the gargled octave echo that arises from the suicide's grave.

Peter Pratt (London I) seems to me the best of all Ko-Kos. He sings with the greatest liveliness of rhythm, musical accuracy, and apt vocal coloration. Can one resist the besotted way he sings of how he adores himself with "passion tenderer still"? Geraint Evans' Ko-Ko is the best of his performances in the Sargent/EMI series, but the pointedness of his delivery of the list song is offset by an excessively lachrymose "Tit-willow"; his timbre is also close enough to those of Pooh-Bah and Pish-Tush to cause some occasional confusion of identity.

John Reed (London II) has a tendency to rush the beat, and he often resorts to the kind of cockney mannerism that Sullivan deplored in the work of some of the early Savoyards. His echo from the suicide's grave is a gimmicky electrical one, and he spoils an otherwise pleasing version of the song by bursting into sobs at the end.

The actor Clive Revill (Stanyan) takes out after most of the words with real zest; he makes a droll exception in "The criminal cried" when he seems almost afraid to utter the dread word "snickersnee." The recording makes very odd stereo shifts in the middle of the tra-lalas in "The flowers that bloom in the spring," bouncing them from speaker to speaker—perhaps in this emulating one of Green's funniest vocal effects, for he makes this passage sound as if emerging from different throats.

Green's three recordings of Ko-Ko document a progressive deterioration of voice and abandonment of artistic conscience. The 1936 version is his finest recording of any of his roles. The voice is youthful and very beautiful (one tends to forget that Green had been before the public for thirty years and a D'Oyly Carte regular for sixteen years before he made the Richmond recordings for which he is best known) and "Tit-willow" has surpassing simplicity and eloquence; the patter he manages with aplomb and accuracy. For some reason, Green didn't like Ko-Ko's listing of that "singular anomaly, the lady novelist": In 1936 he went after "the prohibitionist," and in both of the later recordings he chose to place upon the list "the girl that's never kissed."

There is not much characterizing to do in the music of Nanki-Poo, but the sections of his "Wandering Minstrel" song do want differentiation. Derek Oldham (Pearl), Leonard Osborn (Richmond), and John Wakefield (Stanyan) do this most completely, and of the three Wakefield is the most accomplished vocalist. Richard Lewis is at his most pallid on the Sargent set; Colin Wright (London II) has slovenly musical manners and a baa-ing kind of voice that refuses to blend with anyone else's. Thomas Round (London I) is characteristically direct and pleasing. One "Karl Brock" is identified as the Nanki-Poo of the Royale set (Everest provides no identification at all); the tenor sounds very like Round, who in 1956 had temporarily left the D'Oyly Carte.

Yum-Yum has a lot of skittery music that almost anyone can sing, but her song is one of Sullivan's most difficult. The soprano must sing over the most minimally supportive—but magical—of accompaniments and somehow turn an even series of notes into a supple line by letting the words decree the rhythm; she must differentiate between the verses, and the tone must vie with the sun and the moon.

Elsie Griffin (Pearl) is properly mischievous, and she has all the right ideas, though hardly the technique to implement them; Elsie Morison (Angel) is ideal. Margaret Mitchell (Richmond) and Barbara Troxell (Everest) have healthy voices and project personality. Jean Hindmarsh (London I) sings metronomically and uninterestingly; Marion Studholme (Stanyan) is brittle and unappealing, while Valerie Masterson's tone color (London II) is unvaryingly bright.

Bertha Lewis (Pearl) is predictably the best of Katishas, delivering her invective with terrific bite and energy, yet singing the rest more meltingly than any Orfeo. Ann Drummond-Grant (London I) and Monica Sinclair (Angel) have vivid personalities, though they do better as termagant than as woman wronged. Ursula Boese (Everest), for years a Bayreuth regular, swoops imposingly through the music, but her English is imperfect. Ella Halman (Richmond) is dull, and the others are just awful.

Fancourt's Mikado, unlike Green's Ko-Ko, develops in resourcefulness and broadly sketched subtlety over the years (he is heard in the 1926, 1936, and 1950 D'Oyly Caricature of Arthur Sullivan (1880) by Sir George Henschel, German-British singer and conductor who became the first conductor of the Boston Symphony Orchestra.



Carte sets), though there is obvious deterioration in actual vocal quality. Donald Adams (London I) is Fancourt-plus, though all of the recorded Mikados have been adequate. Owen Brannigan (Angel) gets many lively effects by purely musical means—he briefly sounds like the kind of amateur tenor one would desire to shirk—and he has the most elaborate Mikado laugh, spanning two octaves. James Pease (Everest), a famous American Hans Sachs, sings the music most handsomely, but he sounds just like Pooh-Bah.

That's because he sings Pooh-Bah's music as well. (It's not quite clear what happens in the glee, when the Mikado and Pooh-Bah must occasionally sing at the same time!) It is Kenneth Sandford, with a magnificent voice (London I and, somewhat attenuated, London II), and Leo Sheffield (Pearl), with almost no voice at all, who make the most of the Lord High Everything Else. Sheffield has a very funny bit when he runs out of breath in his big cadenza in the first-act finale.

There are brisk, vigorous Pish-Tushes from George Baker (Pearl) and Michael Rayner (London II), but John Cameron (Angel), working within Sargent's almost stately Handelian tempo, tells the story with the most detail. Patricia Kern (Stanyan) is the only Pitti-Sing to suggest that this was once a star part for Jessie Bond, though the anonymous young lady who sings for Everest knows what she's about, and Beryl Dixon (London I) does a Baby Snooks number that may bring a few smiles.

Each of the three Mikado selections in "The Art of the Savoyard," Pearl's three-disc collection (GEM 118/20)

of recordings by singers with ties to the earliest years of the D'Oyly Carte Company, tells us something interesting. Richard Temple, the original Mikado, makes a very pompous and lugubrious effect (it should be remembered that he was long past his prime by the time of his few recordings), but it is significant that there is no Mikado laugh. Walter Passmore's "I've got a little list" is mostly spoken, not sung (that got started early), and for the "lady novelist" he substitutes "lady motorist"-already, in 1907!

C. H. Workman's "Tit-willow" is the most absurd disc in the entire survey. He sings most of the song very beautifully, but then-perhaps fearing that we won't have noticed the comic aspects of Ko-Ko's situation-he sallies into a cadenza as elaborate as one of dotty Lucia di Lammermoor's.

The Mikado has been much-adapted. In 1939 there were simultaneous productions of The Swing Mikado and The Hot Mikado on Broadway. Apparently no original-cast recordings were made, though Mildred Bailey did a "Tit-willow" that year that I would dearly love to hear. In 1962, Michael Winner made a movie called The Cool Mikado, and, in 1975, London had a stage hit in the reggae version of the opera called The Black Mikado. A recording is available on Transatlantic TRA 300. The rhythmic insistence of the Titipu Town Band, which played on-stage, gets to you after a while, but some of the singers do skillful and entertaining things: Val Pringle's Mikado laugh leaves everyone else in the genteel-titter class.

Cleo Laine did her own baroquely ornamented version of Yum-Yum's song about this time (British RCA LPL 1-5026), but by far the most bizarre of all Mikado recordings is the soundtrack of the television version Green produced in the late '50s. The Columbia LP has long since vanished, but a few tracks from the performance survive on a British Harmony record (30060) called "Gilbert and Sullivan's Greatest Hits." If you can get through Nelson Eddy singing "I am the monarch of the sea," you will shortly come to a unique version of "As some day it may happen" in which the one and only Groucho Marx delivers all manner of original inflections (such an "irritating laugh") with the most endearing indifference to all notions of pitch, rhythm, tone, and style.

Ruddigore (1887)

MAD MARGARET: Mad. 1? Yes, very! But why? Mystery!... But see, they come—Sir Despard and his evil crew! Hide, hide—they are all mad—quite mad! ROSE: What makes you think that? MARGARET: Hush! They sing choruses in public.

"Take it away—give us back The Mikado!" shouted the gallery on Ruddigore's first night; one of the subsequent headlines called the new opera Gilbert and Sullivan's "FIRST FLAT FAILURE." Ultimately, though, the opera ran 288 nights, and Gilbert said he could use more failures like that.

But both of the collaborators knew that something had gone wrong with *Ruddigore*; the second-night audience saw a much changed show with a sharply reduced second act, and the next opera represented a major departure. Still, Gilbert had had a bright idea when he decided to satirize the conventions of melodrama, opera, and the Shakespearean stage. But when he tried to cross these conventions with those of Savoy opera, he cornered himself into situations he couldn't write himself out of.

There are senses in which Gilbert was in fact giving

audiences back The Mikado: Here are madrigals and ballads and failures in etiquette. Dick Dauntless' boat is called the Tom-tit, and Dame Hannah's song about the little flower and the great oak tree uses the same method (nature allegory) and serves the same function (reconciliation of characters) as "Tit-willow." To reassuring familiarities like these, Gilbert adds the shameless exaggerations of melodrama, a mad figure from Hamlet, and a simpleminded sailor who descends from all those seafaring, openhearted cousins in Restoration comedy (and collaterally from Tristram Shandy's Uncle Toby). The plot has everyone falling in and out of love with everyone else with a ready will, and it takes a stroke of madness to bring about an ending. Basingstoke.

Sullivan's accomplishment was likewise uneven. He was tired of doing all the usual things, and when they turned up in the text his music lacked energy and invention and melodic distinction. (One excepts Dame Hannah's lovely ballad and that most dizzying of all the patter numbers—331 straight eighth notes—the trio "My eyes are fully open.") On the other hand, the scene in which the family portraits come to life awakened Sullivan's imagination, and he wrote a full-scale operatic scene that is at once legitimately effective and cleverly parodistic. (The portraits start to sing in the melody of Schubert's "Wanderer," and soon we've moved to Weber's Wolf-Glen.) Gilbert thought this was too much but today this section of the score is the one audiences are likely to respond to most warmly.

After that initial run of 288 performances, Ruddigore disappeared from the D'Oyly Carte repertory until the company revived it in Glasgow in December of 1920; for



Miss Jessie Bond as Mad Margaret and Rutland Barrington as Sir Despard in the first production of *Ruddigore* (1887).

that revival the conductor Geoffrey Toye had produced a still further revised edition. Gilbert and Sullivan had already shortened the second-act finale until all that remained was a reprise of the first-act finale; Toye also took out a section of the duet, No. 17, "Happily coupled are we," Robin's patter song, "Away, remorse!," the melodrama, and a few other short passages. Since some of this music appears in the original overture, he supplied a new one of his own, which is now the one usually played. It is a skillfully put-together parade of hits and makes a brilliant effect, but it gives away too much too early and misses the best joke of the original, the direct parody of the opening of Il Trovatore-timpani roll, string octaves, horn call. (The original overture is played as an entr'acte in Godfrey's 1962 London set, OSA 1248.)

The 1924 recording now on Pearl (GEM 133/4) is virtually an original-cast recording of the Toye version. Ruddigore has always appealed to performers, because the characters get to change from good to evil and back again, and change is challenge; even the static characters like Dick Dauntless are rather more colorful than their counterparts in the other operas. It is the Pearl cast that is most successful in these kinds of characterizations—and in singing.

Darrell Fancourt and Bertha Lewis make a thing of extraordinary beauty of their ballad, and Fancourt puts on a fabulous display of melodramatic evil in Sir Roderic's song. Leo Sheffield is an idiosyncratic Sir Despard, and Elsie Griffin brings a delightful little tea-rose voice to the music of the heroine. She cleverly differentiates the speakers in her song and communicates the sense that she is somehow thinking all this up and figuring it out as she goes along.

George Baker and Derek Oldham deliver their music with typical panache, and Eileen Sharp brings a good glassy giggle to the part of Mad Margaret; the bridesmaids do a delightful bit of babysing. There is one scrap of dialogue, something unique in the acoustic series, but it gives you nothing to generalize upon since it is delivered by Baker, who did not perform his roles on-stage.

Godfrey's 1952 version (Richmond RS 62014) makes even more cuts than Toye, but it is something to have because of the matchless Dick Dauntless of Leonard Osborn (this, apparently, was his favorite role)—he alone sings the song about the encounter with the "parleyvoo" in the kind of accent that is implicit in the text. Martyn Green is also excellent as Robin, singing gracefully, accurately, even bashfully in the duet and with great spirit later on.

Ann Drummond-Grant is the most vivid of Mad Margarets, but she sounds far older than the sympathetic Dame Hannah of Ella Halman; Margaret Mitchell brings considerable personality to Rose. Fancourt, although now in leathery voice, sings Roderic's song with unrivaled energy. This performance, even more than any of his three recorded Mikados, lets you hear what the Illustrated London News was talking about when it spoke of his "priceless gift of attack," something like "watching high tide flooding across the beach: It is an irresistible swell-and-surge."

Sargent's 1962 set (EMI SXDW 3029, imported by Capitol) restores most of the music the Richmond Godfrey set omits, and it boasts superior recorded sound (something more important here than in any of the other operas but Iolanthe). There is some exceptionally good work here by Monica Sinclair and Owen Brannigan. Sinclair sings Dame Hannah's first song as if it were "Condotta ell'era in ceppi" (which it almost is) but also manages the ballad beautifully; Brannigan is superbly hammy as Sir Despard.

Pamela Bowden's Mad Margaret blends beautifully with the instrumental textures, but the singing hasn't much character. Richard Lewis and Elsie Morison are pallid as Dick and Rose, and this may be Baker's least fortunate characterization. He was nearly seventy-eight when he recorded Robin, and the performance is all diction and no singing tone-after a while one thinks unkindly of those windup sets of false teeth.

Sargent's reading takes the fast music faster than anyone else, which makes for something marvelous in the madrigal, but he also tends to linger excessively over the rest. The portrait scene is full of weight and color.

Godfrey's second set is also a good one, with John

Reed and Kenneth Sandford at their best as the Murgatroyd brothers—Reed has a spectacular success with his smarmy delivery of "As pure and blameless peasant" in the first-act finale. Donald Adams makes a fearful roar as Sir Roderic, and Jean Hindmarsh makes a neatly embroidered Rose.

Jean Allister is bland and innocent as Mad Margaret, which is the way Jessie Bond, the creator of the role, thought it ought to be played. Both Thomas Round (elegant and buoyant) and Gillian Knight (comfortably embosoming the music) are in excellent form as Dick and Dame Hannah, and Godfrey gets superb playing out of the Covent Garden orchestra.

The D'Oyly Carte has reportedly been experimenting with restoring more of the original score: it is to be hoped that Nash and company will give us, for the first time, the *Ruddigore* that Gilbert and Sullivan wrote. That we do not yet have such a thing is madness. Basingstoke.

The Yeomen of the Guard (1888)

JACK POINT:	For, look you, there is humour in all things, and
	the truest philosophy is that which teaches us to
	find it and to make the most of it
2ND CITIZEN:	A kiss for that, pretty maid
POINT:	Back, sirs, back! This is going too far.
2ND CITIZEN:	Thou dost not see the humour of it, eh? Yet there is humour in all things—even in this.

Gilbert was waiting for a train in Uxbridge Station when he saw a poster advertising the Tower Furnishing Company—and, in it, the subject for his next libretto. The beefeater pictured in the station in two flat dimensions set him to thinking about what turned out to be his most three-dimensional text, The Yeomen of the Guard. At last Gilbert gave Sullivan what the composer had kept saying he wanted: "No topsy-turvydom," Sullivan wrote approvingly of this text, "very human, and funny also."

"Very human" is usually taken to refer to the fact that Yeomen is the only Gilbert and Sullivan opera that does not have a happy ending. Phoebe—attractive, sighing Phoebe—loses her Fairfax and has to marry the odious, dull-witted Shadbolt; Dame Carruthers snares Sergeant Meryll on blackmailer's terms.

And, of course, jesting and gibing Jack Point loses his Elsie and "falls senseless" at her departing feet. George Grossmith, the original Point, used to kick his leg up in the air during those last measures of music and wiggle his foot to let everyone know there was life in the private buffoon yet; it was with the next generation— Henry Lytton in London and George Thorne simultaneously in the provinces—that the now-prevalent tradition of a dead Point was established.

But the rich humanity of Yeomen arises from something more than these destinations of its plot. There is little comic distancing in this opera; these characters do not prettily pose in their feelings while Gilbert satirizes them. Instead they express legitimate emotions of frustration and loss, act out of understandable human motive, experience the pain of loving the wrong person or of loving the right person at the wrong time.

The dialogue uses its ingenuities not as abstractions. easily assigned to other characters, but as indicators of personality and situation. The commonplace exchanges of conversation—"Why, how you've grown! I did not recognize you"—are not simply the amusing rattle they make in the other operas; here they are charged with urgency and drama.

The verses aspire to, and attain, the condition of poetry. Gilbert had been rereading Shakespeare for Elizabethan atmosphere—not, he complained, a "rollicking" experience—and there is something of Shakespeare's songs in Phoebe's and in Fairfax' songs, in Elsie's and Point's ballad, in the quartet "When a wooer goes a-wooing." Even the contrast ensembles emphasize hopelessness and pain rather than comic conflict of aim—compare that quartet with something like "The flowers that bloom in the spring" in *The Mikado*. Ruling over everything is the recurrent image of that grim old fortalice, the Tower itself, keeping watch and ward, a sentinel unliving and undying, in whose shadow pass the courses of human lives.

Yeomen was Gilbert's own favorite among the operas. But up to the very day of the premiere he worried about it because the text and music were so much a departure from the usual G&S manner. The earlier operas, he well knew, had made their work "as much a national institution as Westminster Abbey." The morning of the first performance he wrote an urgent letter to Sullivan about the order of events at the beginning—there were five dark numbers in a row.

Sullivan, too, had his difficulties with the score. It took him several tries to get a tune for "Is life a boon?" that seemed right; he had a terrible time finding the melody for the unusual, "archaic" meter of the Elsie-Point duet. His music draws on darker orchestral colors than before; there is a majestic Tower leitmotiv, even a Dies irae. Everywhere there are predominantly slower tempos to give the words, emotions, melodies, voices space in which to unfurl themselves.

The danger in performing Yeomen is that the conductor will obscure the work's lighter qualities and try to strain its honest sentiment into tragedy. That is why I prefer Godfrey's reading on the 1951 Richmond set (RS 62012) to either of the available ones of Sargent (the deleted Angel set SBL 3596, due for reissue on Seraphim, and hereinafter referred to as Sargent II, or the still later version with D'Oyly Carte forces on London OSA 1258. Sargent III).

Godfrey chooses generally brisker tempos than Sargent, and he refuses to dawdle anywhere. (He also makes an inexplicable cut in the first-act finale, as well as the more traditional decision to omit the "Rapture, rapture!" duet for Dame Carruthers and Sergeant Meryll.) Sargent's dawdling permits him to do some very beautiful things—he brings a most lovely flexibility to the quartet—but it also tends to degrade sentiment into sentimentality and to alter the majestic into the marmoreal.

The key role, of course, is that of the jester Jack Point. The musical characterization emphasizes his hurt and bitterness; much of his music is somehow lopsided. It is a pity, therefore, that none of these sets includes the dialogue so that one could experience his quick-wittedness as well.

Martyn Green's Point was one of his most celebrated portrayals, and the Richmond recording is a fine memento of it—the weariness and inelasticity that had invaded his voice by 1951 can seem a legitimate part of this particular characterization. Green can throw a veil of tears over the sound of his voice, and in a song like "Oh! a private buffoon" he can use his voice to demonstrate the way Point uses wit both as weapon and defense.

John Reed (Sargent III), too, finds in Point one of his finest roles. He sings that first duet in a nice conversational manner, not underlining the ironic story that parallels his own until the reverses of the end; his voice here is only a thread, but he manages some musically very beautiful decrescendos on the sustained notes. Reed is economical with his special effects in the two patter songs, and he sings the close of the opera very movingly indeed, though I could have done without the Canio-sized sob at the very end.

Geraint Evans (Sargent II) has certain advantages in the crucial concerted numbers—he can join a truly musical sound to the others in the ensemble. But the qualities intrinsic to his voice make Point sound too lugubrious too early on; Evans' lack of vocal mobility means that the allegros have to be very "comodo" indeed—the duet with Shadbolt (Owen Brannigan) sounds like a grotesque lumbering parody of those head-over-heels Gianetta-Tessa duets to come.

Elsie Morison (Sargent II) and Elizabeth Harwood (Sargent III) are simply ideal as Elsie-blooming, pensive, sensitive, spirited-while Muriel Harding (Richmond) sounds stuck-up. Ella Halman's Dame Carruthers, on the same set, is one of her best-sung characterizations; Gillian Knight on Sargent III is similarly gentle and attractive, and Monica Sinclair (Sargent II) comes on like a one-woman brass band, which seems a little beside the point, as does her slavering delivery of the refrain about the twisting screw and the turning rack.

Ann Drummond-Grant (Richmond) sounds hoarse and old as Phoebe (she also mispronounces "heigh-ho"); both Ann Hood (Sargent III) and Marjorie Thomas (Sargent II) are splendid, Hood singing with charming dynamic sensitivity. Thomas with a gentler kind of tone and with a delightfully peripatetic, conditional sort of portamento in "Were I thy bride."

Richard Lewis (Sargent II), "bravely coy," sings "Is life a boon?" as if he were asking the question rather than assuming the answer: Philip Potter (Sargent III) sings with an analogous callow timidity but without comparably blandishing tone. Leonard Osborn, shoving his voice up to the notes, at least sounds as resolute as Fairfax is supposed to be. Kate has almost nothing to do but come on and sing the crucial soprano line in the quintet; none of the three ladies sounds attractive enough.

Several older recordings demonstrate that earlier generations of performers left the sentimentalizing in this opera to the audience: their approach is far more direct. Robert Evett, a tenor especially admired by Sullivan, sings Fairfax' two songs with great clarity and firmness in the "Art of the Savoyard" set, and Walter Passmore, also admired by Sullivan, sings some of Point's music laconically and interestingly. (His duet with Elsie, incidentally, goes without the big accelerando at the end that occurs in all the modern performances.) C. H. Workman, on his Pearl recital record (GEM 124), sings some of the same music with almost licentious liveliness.

Two bits of George Baker's straightforward and touching characterization of Point for the more vigorous Sargent of the 1928 set are on his deleted HMV recital record. The Derek Oldham recital on Pearl (GEM 125) has most of the role of Fairfax. taken from the 1920 acoustic recording under Bynge; his colleagues include Baker, again notably effective, Violet Essex, and the Erda-voiced Nellie Walker.

Finally, a real curiosity: A Pearl miscellany (SHE 509) has Thomas Round and Donald Adams singing the three "lost" arias from Yeomen (really not "lost" at all, like so many others, since it has been known for many years that the New York Public Library had them all along) one for Meryll, one for Shadbolt, and an earlier version of "Is life a boon?" The singing is terrible, and the orchestrations do not sound authentic.

Nevertheless it is fascinating to hear this music, once. Meryll's song is martial, conventional, and expendable, an expression of parental pride. Shadbolt's song intrigues more because of its slightly off-color text (it's about how Phoebe will allow a cat but not an Assistant Tormentor to lie in her lap) than because of its music. The alternative "Is life a boon?" is written in 6/8 time. Occasionally the melodic contours are the familiar ones ("Yet one would pray to live another moon"), but mostly they are not; the lilting rhythm makes both music and text sound more ornamental than they do in the version we know.

The Gondoliers (1889)

DON ALHAMBRA:	I have arranged that you will reign jointly,
	so that no question can arise hereafter as to
	the validity of any of your acts.
MARCO:	As one individual.
DON ALHAMBRA:	As one individual.
GIUSEPPE	(linking himself with Marco): Like this?
DON ALHAMBRA:	Something like that.

"Something like that," indeed, for Gilbert and Sullivan truly wrote as one individual in The Gondoliers, perhaps the merriest of the operas. Each collaborator set out to please the other and, in doing so, satisfied himself—and the public. After The Yeomen of the Guard, Sullivan thought he wanted more of the same; he made it clear that he did not want to return to "the former type" of collaboration. "The types used over and over again (unavoidable in a company such as ours), the Grossmith part, the middle-aged woman with fading charms, cannot be clothed in music by me. Nor can I again write to any wildly impossible plot in which there is not some human interest."

Gilbert made some apparent concessions—the middle-aged woman with fading charms makes no appearance here—but in fact came up with something of the "former type." (The resolution of the plot depends on the same switched-baby trick he used in *Pinafore*.) But he worked with such ingenuity that the wild impossibilities become "bright, interesting, funny, and very pretty" (words from Sullivan's diary, written after he had read the libretto). Gilbert touches no deep emotions here, but he does work with the universally appealing theme of people wondering how the other half lives. "We're called gondolieri," Marco and Giuseppe sing, "but that's a vagary." Like all Gilbert and Sullivan characters, they are colorfully costumed Englishmen, calling from the throne room for their afternoon tea.

Everything in Gilbert's book is neatly plotted: Whether he knows it or not, each of the characters is suitably married by the end of the first act, and each domestic relationship (the romantic liaison of Casilda and Luiz, the naive newlywed suburban bliss of the two gondoliers and their girlfriends, the worldly wise, combative relationship of the Duke of Plaza-Toro and his Duchess) comments on the others to make a full and complex statement of Gilbert's views on love and marriage. And these relationships also have thematic affinities with the different ideals of political order the characters espouse.

Best of all, this plotting is full of musical suggestion. Irked with the star antics of his company, Gilbert was anxious to write a libretto in which no character "would stand out more prominently than another." So this text provided Sullivan with the opportunity to write the largest and greatest variety of ensembles in all the operas—in fact, in The Gondoliers there are only two real solo numbers. The gondoliers and their girlfriends alternately sing in unison and tumble all over themselves to complete each others' thoughts; in that wonderful second-act quartet, "In a contemplative fashion," the unisons are interrupted by private thoughts that break down into an ingenious crossrhythmic squabble before returning, chastened, into unisons.

Sullivan had asked for words that would "suggest" music, not "govern" it. Gilbert obligingly worked with great metrical variety, so the score of The Gondoliers teems with dance-forms: There is a waltz, a barcarolle, a gavotte, a tarantella, a saltarello, a cachucha. There is, in fact, more music in The Gondoliers than in any of the other operas. The second-act finale, for once, requires musical elaboration rather than a simple reprise of the most appealing tune, and all of Gilbert's tumbling rhymes requires fast music; Sullivan himself explained to an interviewer that there was "more work" in The Gondoliers than in The Yeomen for this very reason.

"We leave you with feelings of pleasure," the cast sings at the end, and audiences have always reciprocated; it is wonderful to think about the "little, squat figure in black," Queen Victoria, beating time with her hand during her command performance while the cast sang about the advantages of being "a regular Royal Queen." For all of us, The Gondoliers brings a renewed sense that life is indeed a "pleasant institution."

No recording of The Gondoliers has surpassed the first electrical version of 1927, one never issued on LP. (Pearl should cast a possessive eye.) That performance was strongly cast all up and down the line, with particularly lively realizations of the Plaza-Toros by Henry Lytton and Bertha Lewis; and Derek Oldham sings the most mellifluous of versions of "Take a pair of sparkling eyes." Each of the subsequent recordings only partially satisfies, though each makes a useful supplement to one of the others.

The 1950 D'Oyly Carte version (Richmond RS 62010) boasts a demure and fetching Casilda in Margaret Mitchell, a vital, bossy Duchess in Ella Halman, and quite the most energetic Marco in Leonard Osborn. He makes heavy weather of his song, but he actually sounds as if he could oar a gondola instead of just going along for the ride. Yvonne Dean is the merriest of soubrettes as Tessa; her little song benefits from her cute yodel over the register break. Muriel Harding sings Gianetta with ladylike, "eccented" vowels that amuse, but most of the other performers are unattractive. Alan Styler sounds a very poker-faced Giuseppe, and one with a tendency to rush the music besides; Richard Watson seems very pained to be singing Don Alhambra; and Henry Goodier makes one dull potato of a Luiz.

Martyn Green had extensive experience in this opera—in addition to the Duke, he also appeared at various times as Antonio, Giuseppe, and Luiz—but too much of that experience shows. His voice is tired and tight, and he seems to have grown impatient with what Sullivan set down; he keeps lifting words out of music and into Sprechstimme. Some of the inflections are amusing and show a real gift for mimickry—"Doubtful propriety!," he echoes Halman—but Lytton had those too, and he sang more accurately.

Godfrey sometimes has trouble maintaining order with this motley crew, but his 1961 remake is one of his liveliest readings (London OSA 1323, three records to accommodate the dialogue and a performance of the Sullivan and Burnand "triumviretta" Cox and Box). There are several attractive performances here: Styler, though singing even more like an aged curate, has the advantage of the dialogue in creating a livelier character, and Kenneth Sandford, dripping condescension, speaks the dialogue as exceptionally as he sings the music of the Grand Inquisitor.

The two sopranos do rather whine, but Joyce Wright has a nice, simpleminded way with Tessa's adorably simpleminded song. Gillian Knight delivers the dialogue imposingly, but she has trouble with the Duchess' singing tirades because her tone is round and the music needs edges. John Reed, her consort, pulls the rhythms about, but his voice is in fine needling fettle; if, as usual, he sounds excessively amused by himself, at least that can be heard here as part of the characterization.

The latest D'Oyly Carte version is scheduled for domestic release this spring as London OSA 12110; the performance has the dialogue, slightly cut, and the discs include a bonus, Sullivan's fustian but lovable Marmion Overture, after Sir Walter Scott). Nash conducts the first-class Royal Philharmonic with great élan and with respect for the score; he plays Sullivan's overture, ending with the gavotte, rather than interpolating the cachucha as Godfrey does in both of his versions. (Apparently that innovation was Godfrey's, for it does not appear on Henry Norris' 1927 version.)

A couple of the parts are well cast: Michael Rayner brings a yare heartiness to Giuseppe, and Julia Goss, the Casilda, sings with plump and pleasing tone and real rhythmic liveliness. But Sandford and Reed, even better than before in the dialogue, must huff and puff to get through the music, and Lyndsie Holland's contralto production is so gummy you can't make out her words. Geoffrey Shovelton (Luiz) is a suaver vocalist than Meston Reid (Marco); both deliver dialogue like tenors.

But the great curiosity in the dialogue is Goss's reading of Casilda, who comes out sounding like a cross between Tweety-Bird and My Friend Irma. Goss isn't consistent about substituting w for r when she sings (the serious music she sings straight—there is no cry of "O wapture!"—but she remembers to do it in the comic music); wherever it occurs, it is irritating. This turns out to have a D'Oyly Carte precedent: Green records that his first Casilda, Miss Mabel Sykes (universally known as "Bill" Sykes), delivered all her lines with "surpwise and indrigation!"

Sargent's 1957 version, newly reissued as Seraphim SIB 6103, is a comparative and uncommon disappointment. His work with the Pro Arte Orchestra is predictably lovely when the tempo can relax a bit and the conductor can play with nuances—the gavotte, for example, is full of exquisite detail; but too much of the faster music is sluggish and lacks sparkle.

There is especially strong casting in the smaller roles—Helen Watts, for example, makes something slithery and arresting of Inez' crucial revelation at the end, and Alexander Young is the prince among kings of Barataria. Some of the principal roles are also well taken: Elsie Morison's glamorous Gianetta, Monica Sinclair's incisive Duchess, John Cameron's characteristically firm and supple Giuseppe.

But there is too much disappointment in crucial places. Owen Brannigan is quite uncharacteristically characterless as Don Alhambra; Edna Graham, a littleknown soprano, chips away at Casilda with the voice of an ice pick; Richard Lewis sounds inappropriately reticent as Marco, particularly when singing alongside the vigorous Cameron, and Geraint Evans brings to the music of the Duke a voice that is a padded boxing glove when the situation requires a rapier.

There are not many individual recordings from The Gondoliers, because there are so few extractable numbers. C. H. Workman sings bits from two different roles in his series of solo recordings, but the results here are without great interest; rather too interesting is Danny Kaye's grotesque "go" at "In enterprise of martial kind." EMI has recently put together a recital by the tenor Webster Booth (HLM 7109), who was a British version of our own James Melton; the record has on it a particularly clear-toned, nimble, and charming account of "Take a pair of sparkling eyes."

Utopia, Limited (1893)/ The Grand Duke (1896)

PHANTIS: Yes-bizarre, is it not? KING: Most quaint. But then it's a quaint world. PHANTIS: Teems with quiet fun.

Utopia, Limited

The saddest of Gilbert's Bab Ballads is the last of them. We are supposed to laugh at the dilemma of the "played-out humorist" of the title who vainly seeks for jokes that aren't fifty centuries old. "I've come to the conclusion that my mine of jocularity," the humorist writes, "in present Anno Domini is worked completely out." But it isn't easy to smile at Gilbert's assessment of his own situation—and his recognition of the verdict of the public on his last works.

The Gondoliers is usually referred to as the last triumph for Gilbert and Sullivan; for audiences since the nineteenth century, the last two collaborations.



Utopia, Limited: Nancy McIntosh as Zara and Charles Kenningham as Capt. Fitzbattleaxe in the first production (1893).

Utopia, Limited and The Grand Duke, have been the great Gilbert and Sullivan "failures" because that is what tradition calls them (though Utopia enjoyed a run only one performance shorter than that of Princess Ida), the great Gilbert and Sullivan mysteries because they remained unheard.

The books mention these pieces but never discuss them, content to repeat what the last study said; pages go to analysis of the quarrel about carpets, paragraphs to the last pair of works the great collaborators actually produced. And those paragraphs usually talk about how much Utopia cost to put on, and what Melba, "gorgeous in dark green," wore to the premiere.

This unsatisfactory situation began changing in the Sixties. The BBC broadcast performances of both operas, with Peter Pratt as King Paramount and the Grand Duke; tapes of those performances gained wide circulation among collectors. The D'Oyly Carte Company, reluctant custodian of these works, filled out its 1963 Trial by Jury (OSA 1155, one disc) with five excerpts from Utopia, neatly conducted by Godfrey, with Thomas Round giving an exceptionally amusing account of "A tenor all singers above," that wonderful song about how tenderness of emotion can crack a high C. (Some writers, incidentally, have seen stratagem in the way Gilbert assigned the name Arthur to this character who "can't do himself justice" in music!)

About the same time, the semiprofessional Lyric Theater Company of Washington, D.C., issued a complete recording (with dialogue) of its production of Utopia, followed in 1965 by The Grand Duke. More recently Pearl Records added both operas to its catalog: that same Lyric Theater performance of Utopia (SHE 505/7, three discs), and a British amateur performance of Grand Duke (SHE 516/7, without dialogue). Finally the 1975 centenary celebrations prompted the D'Oyly Carte to stage Utopia for the first time since 1893 and to present a concert version of Grand Duke-performances that led to the recent London recordings.

Since then, the British G&S enthusiast John Wolfson has produced a book, The Final Curtain (Chappell/ Andre Deutsch), that analyzes these pieces in detail. Paradoxically, it is through Wolfson's study of operas few people properly know that we can find out the most about how Gilbert and Sullivan actually worked together and put something on the stage—a nerve-racking process for both of them. "Another week's rehearsal with W.S.G.," wrote Sullivan after the premiere of The Grand Duke, "and I should have gone raving mad. I had already ordered some straw for my hair."

All of this activity has established Utopia as a surprisingly solid repertory success; unfortunately, it has also confirmed what has always been said about The Grand Duke: that it is the one out-and-out Gilbert and Sullivan failure.

Utopia, in fact, is a wonderful piece. Gilbert got around his flagging imagination when it came to plots simply by virtually eliminating that element altogether. The central situation, a neat reversal of the satiric one in Montesquieu's Lettres persones and Goldsmith's Citizen of the World, creates its own self-perpetuating comic energy: The residents of Utopia have set about making themselves perfect, just the way people and institutions are in England.

In some ways this is Gilbert's richest and most amusing work, because its central situation permits him an



"In lazy languour": two ladies of the Utopia, Limited chorus.

almost unlimited (utopian?) range for satiric attack—the work ranges farther than any of the earlier operas, subsuming their themes. Not that "themes" are all that important ("the stage." Gilbert once said, "is not a proper pulpit"); it's the topsy-turvy way he addresses those themes.

Some of the language of address is familiar. The Duke of Plaza-Toro. we recall. is "limited," too; we get "serried ranks" from *Mikado*, a "helmet hot" from *Ida*, a world of *dolce far niente*. The King of Utopia is in touch with the Mikado of Japan, and Captain Sir Edward Corcorán, K.C.B., makes an appearance; the first love duet turns on the same conditional joke as the one in *Mikado*.

The first audiences delighted in all of this: it was only critics who complained that Gilbert had mined himself out, that he was "repeating himself." Of course he was, and on purpose, because he always had. That, in fact, is one of the great delights of knowing more than one of the operas: Each work is amusing in and of itself, but it becomes the more so by reference to how these same counters were played in other games. Here Gilbert's reminiscences are particularly welcome, because Utopia is such a summary work.

Sullivan's score, too, is one of the most varied and amusing of the series. It quotes from Pinafore, glances at "God Save the Queen" (one recalls that Gilbert once said that he knew only two tunes: "One is 'God Save the Queen'-the other isn't"), and even parodies Sullivan's own Lost Chord cadences when the young princesses sing, "And when I wish to hum a tune/It needn't be a hymn one." It isn't necessary, perhaps, to join Shaw in considering the mock-banjo and real-tambourine accompaniment to the minstrel ensemble (the wonder of the opera) the equal of Mozart's orchestration in the farewell trio in Così fan tutte to admire it. And of all the love duets, the nocturnal "Words of love too loudly spoken" is perhaps the most beautiful, it too with its echo (of "None shall part us from each other" in lolanthe) but with something new as well, that lovely backwardclimbing melody of the beginning.

The blame for The Grand Duke's failure lies principally with Gilbert, since his words and situations always generated Sullivan's music. (The finale of Utopia provides the one celebrated exception: Sullivan got stuck, so Gilbert wrote new words to fit the music Sullivan was finally able to write.) The Grand Duke is Gilbert's worst book. "Dialogue too redundant," Sullivan confided to his diary; Gilbert, not a man given to self-criticism, wrote of his latest "child": "I am not at all a proud Mother, and I never want to see the ugly misshapen little brat again."

Misshapen it certainly is: The plot is excessively complicated, and everything in it seems to happen more than once. The subtitle of the opera is "The Statutory Duel," but there are two statutory duels in the first act; and by the end there are who-knows-how-many claimants for the position of Grand Duchess.

The pity of it is that the central situation is so promising and the central metaphor is, of all that Gilbert tried, the one he knew the best: the theater. (What, after all, did he know, or care, about lozenges?) Ernest Dummkopf's theatrical company lives the roles its members assume, and the operation of the company parallels the operation of the government of the Grand Duchy of Pfennig Halbpfennig. There is an amusing bitchiness in the rivalry between the actresses Lisa and Julia; Ernest's song, "Were I a king in very truth," epitomizes Gilbert's method:

> "F claims all hoydens as her rights (She's played them thirty seasons) And G must show herself in tights For two convincing reasons— Two very well-shaped reasons."

But the trouble is that Gilbert can't keep his central metaphor at the center. He wants to ride off in all directions but forgets that you have to saddle a horse first.

Sullivan comes up with at least one capital tune—in the Herald's whimsical proclamation—but mostly he supplies tired music, compounding all the old formulas, which this time fail to fizz. But then, who could make music of rhymes like "chooses" and "shoeses"? (It doesn't help that Gilbert calls attention to how far he's had to reach to come up with this.) Listening to it, one begins to feel as queasy as the Grand Duke does singing his Nightmare-Song ripoff, "When you find you're a broken-down critter," over the creepie-crawlies in the orchestra.

Because The Grand Duke is set in the Ruritanian world of the Viennese operettas, commentators keep saying that the influence of Johann Strauss Jr. is predominant here—and then they point to the waltz chorus at the beginning, forgetting that there is a better one in The Gondoliers. But the chief influence at work is that of naughty French operetta in the style of Offenbach. That line about the "two well-shaped reasons" has an uncharacteristic leer and wink in it, and there's lots more of that sort of stuff; there is even a direct reference to the popularity of La Grande-Duchesse de Gérolstein. The Prince of Monte Carlo's "roulette song" is only the most obvious attempt of Sullivan to work in Offenbach's gamier manner.

The earlier recordings of both operas are frankly poor, but they have the advantage of reproducing performances that have been properly rehearsed; tempos are established before a piece begins rather than along its course. Throughout, the flesh may fail (the singers are almost uniformly terrible, and the orchestras have an awful struggle getting out all the notes and keeping them in tune), but the spirit is usually right.

The London sets can easily supersede these older

ones, but frankly it will not take much enterprise for someone else to supersede them. The Royal Philharmonic under the not-always-steady beat of Nash sounds as if it were sight-reading—it takes a while for the orchestra to get the hang of too many things; many errors of enunciation and textual detail are permitted to pass-Michael Rayner even mispronounces the subtitle of The Grand Duke.

The casts have the D'Oyly Carte regulars in more or less predictable roles: John Reed as Scaphio in Utopia and the Grand Duke, John Ayldon as Phantis and the Prince of Monte Carlo, Kenneth Sandford as King Paramount and Ludwig, Rayner as Mr. Goldbury and Dr. Tannhäuser, Meston Reid as Captain Fitzbattleaxe and Ernest Dummkopf, Lyndsie Holland as Lady Sophy and the Baroness of Krakenfeldt. The principal-soprano and mezzo parts are split: Pamela Field sings Princess Zara in Utopia, while Julia Goss-Zara's sister Nekäya in Utopia-is Julia Jellicoe in Grand Duke; Judi Merri is Zara's youngest sister, Kalyba, while Jane Metcalfe is Julia's rival, Lisa.

Most of the cast members of Grand Duke (OSA 12106) are in representative current form. This is a good thing in the case of the solid-voiced Ayldon (though his French is pretty awful for a prince from Monte Carlo) and Rayner, not a good thing in the case of Holland, Sandford, and most of the others.

Goss is the most musical and wittiest of the cast, but she misses the main comic point of the role: The "Englishwoman" Julia, as a foreigner among the Pfennig Halbpfennigers, should have an accent (the role was written for Ilka von Palmay, a Hungarian countess who had sung Nanki-Poo in Berlin—her accent, and her bewitching laugh, can be heard in a song called "Butterfly" in Pearl's "Art of the Savoyard"); Goss saves her accent for The Gondoliers. Reed's Grand Duke completes his cycle of all the patter songs and commemorates his twenty-five seasons as principal comedian; unfortunately, this role brings out the italics in him.

The Utopia recording (OSA 12105) is a more attractive proposition, with everyone but Sandford (who sang Phantis to Reed's Scaphio in the 1963 excerpts) in notably better form—that grand veteran makes heavy weather of Paramount, a part that might once have been among his best. One must turn to the Godfrey disc to know what this music can be made to sound like. Both recordings are slightly but not damagingly cut. The Utopia set includes a bit of spoken dialogue at the end. presumably in order to make sense of the finale; since the opera is without an overture, Nash plays the "Imperial March," a piece that is unintentionally amusing in its stodginess. Shaw once said that the music was destined to enjoy a great vogue in the suburbs as a pianoforte duet.

There are not many historical records of music from Utopia, but Scott Russell's "A tenor all singers above" (in Pearl's anthology) is of unusual interest because the artist sang small roles in the original productions of these last two operas. His singing, compared to Round's, or even to Reid's in the complete set, is square, hammering, sturdy in rhythm, marked by fulsome enunciation; it sounds just like one of those Edwardian tenors bursting into "Then shall the righteous shine forth" from Elijah. It is utterly charmless and, for that reason, utterly charming. Gilbert-and-Sullivan is indestructible, you see.

Not many tonearms can pass this simple but very revealing test.

Pivot bearing friction is one of the most important elements of tonearm design. It is the major source of resistance encountered by the stylus as it traces the record groove. And it directly affects the way your records sound and how long they last.

While most tests of tonearm performance require sophisticated laboratory equipment, a remarkably precise test of bearing friction can be made with only a 5%" square of paper, such as the corner of a dollar bill.

That piece of paper, placed on the head of a carefully balanced free-floating tonearm, will cause the tonearm to lower—or it won't. It depends on whether the bearing friction of the tonearm pivot is significantly lower than the 25-milligram weight of the paper.

A good place to make this test is at your high fidelity dealer. You can try it on any turntable you may be considering. We believe you'll be surprised how few—even very high-priced ones—can pass this simple test.

We encourage this test with confidence, since even our lowest-priced model, the 1237, has vertical bearing friction well below the test condition.

While making this test, you might examine tonearms in other ways. For example, are they straight (good) or curved (not so good)? Curving the tonearm adds more mass and makes the arm prone to lateral imbalance. Also, note how smoothly you can balance the arm the sense of precision you get as you set tracking force and anti-skating and the overall sense of quality in the materials and finish.

Then you'll know why Dual wants you to know more about tonearms. And why others may not.

For the life of your records United Audio, 120 So. Columbus Ave., Mt. Vernon, NY 10553

Dual

by Sol London

Paganini in 1831–a rare pre-Daguerreotype

photographic

representation

Bettmann Archive

- CIRCLE 17 ON READER-SERVICE CARD

Paganini's demonic genius left its imprint in the annals of both music and science

NICCOLO PAGANINI a revolutionary? The greatest showman of his time, the most irresistible lover, the most incandescent in temperament, yes. But a revolutionary, and a French revolutionary at that? The Devil you say!

Well, the Devil is exactly who is said to have instigated the revolution. Paganini's Paris debut in 1831 came in the aftermath of another revolution, a piece of political mayhem known as the July Revolution: In 1830 the good citizens of Paris decanted the gaunt and haughty Bourbon, Charles X, and bottled in his place his cousin Louis Philippe, the fat and friendly Citizen King. But Paganini's preceded two others: a revolution in music led by the young Hector Berlioz against the dead hand of eighteenth-century classicism, to which Paganini might have been expected to contribute but didn't (except for a thousand or so francs every now and again), and a revolution in the sciences led by an angry band of avant-garde experimentalists seeking to uproot the old-guard empiricists who preferred to ponder nature rather than tinker with it. Paganini did, in a strangely convoluted way, contribute handsomely to the latter. For just as things were going quite nicely for this new breed of French scientists, along came Paganini with old Lucifer in tow and threatened to undo all their hard labor by reviving a kind of medieval Devil worship in every faubourg and salon of Paris.

Paganini-tall, cadaverous, long-nosed, spiderfingered, dressed perpetually in black-did, of course look like the very Devil, especially so when he began to play: weaving and flailing, spindly fingers cavorting over the strings, contorted shoul-



Granger Collection

ders giving him the appearance of a giant flapping bat. The effect was intensified by the sounds of lightning runs and trills, fearsome double and triple stops, simultaneous pizzicatos and staccatos, whole sonatas played on just one string, unearthly women's voices screaming from his violin's sound box. Every motion, every sound seemed to fulfill the nearly 300-year-old reputation of the violin as the Devil's consort and of the violinist as the Devil himself.

This is to say nothing of the notoriety the rumor mills of Europe had distilled for Paganini out of a not unlurid past. Two items that were accepted as fact want special notice. One was that, when Niccolo was only six, his mother made a pact with the Devil wherein she traded the boy's soul for his career as the world's greatest violinist. The second was that no sooner had Niccolo attained puberty than he automatically became the greatest womanizer of all time, in which exalted state he killed a woman, imprisoned her soul in his violin, and was using her intestines as an eternal source of gut for his strings.

Thus, by the time Paganini left Italy in 1828 to conquer Europe, the soil had been tilled extremely well for him-most notably so that of Central Europe, which he had decided to use as a staging area for his ultimate goal, Paris. Here the rivers and forests were still inhabited by kobolds and nixies and the natives had never quite forgotten Dr. Johann Faust, a real doctor of theology turned magician, necromancer, and all-around charlatan whom they had conjured into a Devil's contractee for his wickedness. The Satanic Familiar always ran before Paganini's mortal entourage, preparing the febrile imaginations of potential audiences for the violinist's corporeal apparition as well as his dazzling music. This supernatural double usually appeared in somber black as a member of the audience, recognizable from the long black locks, the burning black eyes, and the sardonic smile. But occasionally he broke the pattern.

In Vienna he happened to have been more brash than usual, taking to the stage at Paganini's side dressed in a red cloak and pantaloons, complete with horns, hooves, and tail, to guide the violinist's bow arm through a blazing performance of Le Streghe (The Witches' Dance). In Magdeburg, Germany, he merely raised a violent thunderstorm during a concert and, without appearing himself, conducted lightning to the free end of the bow. But in Frankfurt he actually took possession of Paganini's body, according to the testimony of an otherwise stolid Frankfurter, who looked for a cloven hoof beneath the artist's trouser leg and, though he saw only a boot, swore he could discern the outline of a hoof within. And so it went throughout Mitteleuropa—in Prague, Warsaw, Dresden, Leipzig, Hamburg, Berlin, Munich—and points west until Paganini, leaving Strasbourg, finally set his path toward Paris.

With all of these harbingers speeding westward for more than two years, Paris was properly agog when his big black brougham clattered up to the Hôtel des Princes on the Rue de Richelieu in the early morning of February 24, 1831. By nightfall he had received a request from the Citizen King for a command performance on March 5 and was being besieged by impresarios brandishing contracts. A recurrence of his pernicious cough and an old throat pain had caught him just as he was entering the city, however, and he was feeling too poorly for such exertions. Instead, he spent the next day at the clinic of Dr. Francesco Bennati, medical adviser to the Théâtre des Italiens and an old friend from his Vienna tour who had treated him for the same ailments in 1828. Together with Dr. Marcel Miquel, a specialist on the stethoscope (which had been invented less than twenty years previously by the great Laënnec, Miquel's teacher), Bennati explored Paganini's every inch. When they had finished their poking and probing, they agreed that the patient was sound and showed no evidence of tuberculosis, the disease that had been suspected.

Paganini was sufficiently cheered by this medical verdict to begin canvassing Paris for a likely impresario. He hit upon Dr. Louis Véron, the newly appointed director of the Royal Academy of Music-more affectionately known as the Paris Opéra-and editor and publisher of the Revue de Paris, who possessed the added virtues of being a canny manipulator and a physician. The contract they finally agreed upon called for a series of nine concerts at the Opéra and an escalating scale of admission prices for each, with Paganini receiving a proportion of the box-office receipts.

If the opening concert on March 9 struck Paris with the force of a storm, the second concert, on March 13, was even more phenomenal. For this Paganini had reserved his famous rondo La Clochette (actually the last movement of his first violin concerto) and his new Concerto in D minor, which he had made bold to dedicate to the "brave people of France." And when he was done Paris was figuratively in flames. The Devil immediately began his operations, concentrating on the fashionable salons along the Faubourgs St. Germain and St. Honoré and achieving an undisputed triumph when the Comtesse de Lamothe-Langon, the peerless leader of the salon set, confessed that Paganini had so excited her drawing room by his presence that "I glanced involuntarily at his foot to see if it was cloven."

More unusual, however, was the reaction of the literary clique, ordinarily the coolest social enclave in the city. Honoré Balzac wrote of "supernatural talents born of a spark struck from another world." François Castil-Blaze, the otherwise dispassionate critic for the Journal des débats, had to apologize to his readers for being forced "to have recourse to the Devil himself to give you some idea of what Paganini is like." None other than the dean of musicologists and critics, François Joseph Fétis, likewise abandoned his academic composure and confessed in the scholarly Revue musicale: "There is the awesome prestige, the thrill of the supernatural in these works of fantastic genius."

It was at this point that the scientists of Paris began to stir. They—especially the physicians—were the most avid of the drawing-room crowd and as such were privy to all the gossip that went twittering through the faubourgs. At first they were amused by it all, but matters changed when the humanists, their natural allies in the crusade for a new world built on scientific reason, showed evidence of losing their cool over Paganini and his Devil. This defection made the threat of a diablerie imported from Germany and Eastern Europe where a mystic theology of sin and salvation still whistled through medical philosophy—ominous indeed.

In mounting the barricades of medical protest, none stepped higher or shouted louder than Dr. Bennati. "We consider this foreign invasion as much an affront to the honor of France as to the honor of science," he cried. There was, he insisted, only one thing to do: organize a special plenary session of the Academy of Sciences, the official body that presided over the scientific affairs of France, at which he would present a paper on those intimate medical secrets of Paganini's that only he knew and that would convince the world no Devil stood at the violinist's elbow. Not being advanced enough in research or teaching to have merited election to the Academy, Bennati was forced to act through those who had been touched by this honor: the surgeon Guillaume Dupuytren, the toxicologist Mathieu Orfila, the internist Jean Baptiste Bouillaud, and the great physiologist François Magendie. Ah yes, they all said, but no thank you; this would be descending into contemporary mudslinging, too demeaning an exercise for the venerable Academy. There must be another way.

"And so there is," wheezed fat and scrofulous little Dr. Véron, who, sunk deep in his enormous collars, had replaced the Devil at Paganini's side. Publication of Bennati's article in Véron's Revue de Paris would reach a far greater audience, lay



A newspaper illustration purporting to show the satanically spellbinding effect of Paganini's fiddling on the opposite sex.

and scientific, than any Academy seance could hope for. "Write the article quickly and give it to me," Véron told him in mid-March of 1831. "I will have it in print by May 1."

Bennati wrote not only quickly, but effectively, almost as if he were pouring all his Italianate bent for histrionics through his pen. "I have," he proclaimed in his prologue, "no intention of analyzing the magical effects of Paganini's playing or describing the enthusiasm of his admirers. I have a far more difficult task, that of appraising his physical organism and studying its effect on the development of his genius. In this task, furthermore, I shall not seek the explanation of his marvelous performances in ridiculous legends; indeed, it is my firm intention to destroy them for all time. I shall instead look for it in the development of his sensibility and his musical organs."

With that, Bennati launched first into a catalog of Paganini's past illnesses and habits, a procedure used in all good medical-case reportage since time immemorial as a means of setting the mise-enscène, and then into his major thesis. There were in Paganini, he said, four major anatomico-physiological characteristics underpinning the clinical aspects of his genius. First there was the "extreme sensibility of his nervous system" as manifested by his rapid but easy breathing, his finely textured skin with its copious perspiration, and his volatile temperament. This was linked directly to the second, the anatomical hallmarks of his musical genius as manifested by "the bump of music, which in Paganini's case is highly developed on the outer angle of his forehead, as well as in the unusual size of his cerebellum and the broad, deep conch of his ear, indicating an unimaginable delicacy of hearing."

The third and most revealing of this scientific tetrad was Paganini's unusual musculo-skeletal system and the manner in which it was supervised by his nervous system: "the hand, which although of normal size has its reach doubled by the elasticity of the capsular ligaments of the shoulders; the pliancy of the ligaments joining the hand to the forearm, the wrist to the metacarpus, and the phalanges to each other. Thus he imparts to the first joints of the fingers of his left hand, which touch the strings, an extraordinary flexibility which, without the hand changing its position, enables them to move sideways without abnormal tension, and this they do with facility, precision, and speed."

Fourth, there was Paganini's leanness: "According to my diagnosis, which is confirmed by Dr. Miquel, his leanness is constitutional and not a symptom of tuberculosis. Were Paganini stout, he could never twist himself into those acrobatic poses while he is playing, as when he almost crosses both elbows and turns himself into a kind of triangle."

Then, having reached the finale of his presentation, Bennati declaimed with the fervor of a Rienzi, "There, messieurs, is the science of genius. Ecco Paganini!"

This issue shattered all of the Revue's sales records, foreign as well as domestic. Huzzahs sounded from all the great medical schools of France and from the Academy of Sciences, including Dupuytren and Magendie-not only because the article represented a new thrust in medicine, but also because it had the splendor of timeliness, Bennati having based his thesis on the new physiological data Magendie had recently uncovered in his experimental research on the nervous system. The only facet of the article its scientific readers could have quarreled with was the business of the cranial bumps, already being discarded as the pseudoscience of phrenology. But Bennati's paper had provided them with a triumph of principle; he had preserved the revolutionary primacy of French science, they proclaimed, and nowhere in the world could Paris be faulted for allowing the antiscience of medieval diabolism to flourish cheek by jowl with the science of the future.

The most prestigious huzzah of all came from far-off Weimar, where the aging lion Goethe wrote of "this extraordinary article that once again demonstrates how well France is suited to reign supreme in the sciences." As for Paganini, "the talent of this extraordinary man is no longer based on a pillar of cloud and flame, but on the incontrovertible fact of his physical organism."

It was inevitable that this "extraordinary man" should share in the benefits of the Bennati-Véron enterprise. The Devil stopped making his rounds of the salons and no longer gained recognition in the learned publications. Instead, the Journal des débats and Revue musicale devoted themselves solely to arguments over Paganini's violin techniques with an occasional skirmish over the aesthetics of his compositions. And when he left Paris in late April (richer by more than a million dollars at today's rate of exchange), he found that the Devil had pulled in his horns elsewhere as well. In the north of France audiences were content to endow him with the euphemism of "the Enchanter," while in England he was dubbed merely Samiel (son of Satan) in attacks of spleen over his box-office avarice. The Irish were considerably more romantic even if they were equally envious. In order for Paganini to cross the Irish Sea to Dublin, they had him book passage aboard the Flying Dutchman. Even Mitteleuropa was forced to reconsider its previous notions, and in Prague and Vienna, Paganini was shortly converted into a nineteenthcentury analogue of the Wandering Jew.

So diametrically had the worm turned, in fact, that when he returned to Paris in the spring of 1832 his image had shifted to the opposite extreme. The great cholera epidemic struck the city during this second concert tour, and rather than take to his heels like so many of its other visitors Paganini stood his ground to help calm the panic with his music. As a reward, he was called the Dark Angel.

But this status was to last for only eight years. Despite Bennati's and Miquel's assurances after examining him in 1831, Paganini did indeed have tuberculosis, and he died of it in Nice in 1840-by coincidence on the tercentenary of Doktor Faustus' death. Through an unfortunate quirk of circumstance, he died without benefit of the Church's last sacrament, and the archbishop used this misfortune to deny him burial in consecrated ground. Paganini lay in a friend's villa while his son Achillino sought to have him transported to Genoa, and the good citoyens of Nice began to witness nightly witches' sabbaths on the premises to the accompaniment of weird snatches of violin music. These ghostly fantasies came to a halt only in 1844, when the two Paganinis, the quick and the dead, left for Italy. The dead man was compelled to wait once more for a religious burial-this time on the grounds of his own Villa Gajona in Parmawhile Achillino negotiated with yet another corps of ecclesiastics.

For thirty-one years the householders of Parma, who had never heard of Paganini's sterling contribution to the French revolution in science, were terrorized by the same diabolical virtuoso violin celebrating nightly sabbaths. It was only when Pope Pius IX consented in 1875 to grant Niccolo Paganini title to his share of consecrated real estate that the Devil left him for good. To those who insist that there is a teleology of fate, this could be considered a just reward—because there is good historical evidence that the Bennati article in the Revue de Paris helped the pontiff arrive at his decision.

Introducing the new TDK testing machines.

ALIGNMEN

ALIGNMENT TAPE

TEST TAPE

EST TAP

TE-record

EST TAP

ST TA

Pre-recorded

AFNT

TDK

TDK

TOK

STDK

NOT

ATOK

TDK

a ai

AP

A ... 342

AD-1 7

DOLBY LEVEL

AD 324

AZINUTH

AC-323

ATIMUTH

AC-316

LEVEL

AC-315

LEVEL

AC-337

AC-336

AC-335

OVE & FLUTTER

When TDK created a series of cassette test tapes, we approached them as integral components, with both tape and housing engineered as precisely as sophisticated test instruments.

You'd expect that from the makers of TDK SA, the High bias reference standard for most manufacturers of quality cassette decks.

TDK test tapes are loaded into the same Super Precision Cassette Mechanism as our well-known and respected SA and AD cassettes. That means they don't jam, and they're dropout-free. They're built to last under unceasing use. The audio lab critics, dealer service managers. cassette deck manufacturer quality control engineers, and discerning audiophiles who use them, demand that kind of precision and reliability.

To make absolutely sure they get it, each TDK test cassette is recorded one-to-one, in real time. We then test our test cassettes, one by one, to guarantee against slip-ups. There's a TDE test cassette for any test or setup task: bias/EQ alignment; playback level calibration; Dclby calibration; head azimuth alignment; wow and flutter and tape speed and 11-, five- and three-point frequency characteristics tests.

You see, TDK is more than just another tape

company. Our trendsetting cassette tapes are the esult of over 40 years history in the design, manufacturing and engineering of advanced electronic products, from the critical ferrite parts which make up your cassette deca, to audio tapes to test tapes to video tapes. Check out the complete ine of TDK test tapes. Ar 1, if you haven't done sc a ready, pick up our SA and AD cassettes next time you visit your an. lio dealer. You'll discover for yourself that the same TDK quality and reliability that goes int. TD- test tapes applies all the way down the line.



TDK Electronics Corp., 755 Eastgate Boulevard, Garden City, New York 11530. (800 695-3338 CIRCLE 44 OIL READER-SERVICE CARD



Karajan's Triumphant Nine

Herbert von Karajan and the Berlin Philharmonic achieve awe-inspiring results in their new DG Beethoven cycle.

by Harris Goldsmith



Lauterwasser/DG

HERBERT VON KARAJAN'S Beethoven-symphony discography now spans some three decades—from his pre-LP recordings of Nos. 5, 7, 8, and 9 to the 1975-76 cycle newly released by Deutsche Grammophon.

His first integral cycle was made in London in the early Fifties with the Philharmonia Orchestra (now available in an imported reissue, EMI SLS 5053, November 1976). Since then, with the exception of a Vienna Philharmonic No. 7, all his Beethoven symphony recording has been done with the Berlin Philharmonic. Since becoming its permanent director in 1955, he has by his own reckoning performed these symphonies literally hundreds of times. His first recorded Berlin cycle was made between December 1961 (No. 1) and October 1962 (No. 3), and between the two DG cycles a video series was recorded.

Unlike some of the great conductors of the past, Karajan is obviously interested in leaving accurate recorded documentation of his work. To accomplish this he has been working in close and regular collaboration with his recording team—insisting, for example, that they all use the same home playback equipment to guarantee that they are all hearing the same things.

The new Beethoven cycle was the result of the most thoroughgoing preparation. First came preliminary sessions in which all nine symphonies were taped. The results were put aside for several months, at which time Karajan took these "sketches" one by one. listening and advising his coworkers of the changes he planned. Only then did recording begin in earnest. (Karajan tells us that the Funeral March of the Eroica was completely remade at the final sessions because he ultimately decided that he wanted a slightly different tempo.) The editing too was meticulously supervised by the conductor, and we can thus assume that what we hear on these discs, like it or not, represents his current views on the music.

There is an obvious hazard in the pursuit of "per-

fection": The process can result in a sculless projection of notes and patterns. I am coming around more and more to the view that many of the commercially issued late Toscanini/NBC Beethoven symphony performances (preserved in Victrola VIC 8000) are cut-and-dried affairs of this sort, capturing little of the wonderful humanity of his earlier, less carefully drilled renditions.

No conductor has been as vulnerable as Karajan to the charge of glossy superficiality. Indeed, the late Bruno Maderna made chiding reference to his "chocolate Beethoven." The complaint had some validity in some of his earlier work, but I am happy to say that he triumphantly avoids most of the pitfalls here. Although the Berlin Philharmonic's playing is even more refined than before, the increased responsiveness in dynamics, articulation, and nuance is used to project content and energy to their fullest.

For all the meticulous planning that went into the making of these records, seemingly spontaneous details abound: an undulating violin line in the trio of No. 7 the first time around but not the second, the viola/cello line definition at the end of the trio of No. 9, and so forth. These touches impart a constant delight and sense of adventure to these stupendously played performances. This is precisely the sort of variety that survives repeated listening, the sort of subtle elaboration that characterized the best of Toscanini's work but somehow was expunged from so many of his later studio performances.

The most conspicuous differences between Karajan's Berlin cycles (hereafter Berlin I and II) are Berlin II's greater clarity of texture and frequently faster tempos. The former undoubtedly owes much to improved recording techniques, but some of the added clarity is attributable to the acoustics of the orchestra's present home, the Philharmonie. Judging from the aural evidence, the hall provides as much air space as the Jesus Christus Kirche, the Berlin church where the orchestra used to record, but there is less jumbling of textures from reverberation. The sound is uniformly bright and tightly focused; in general it seems slightly lacking in solid bass, but there are exceptions, most notably in Nos. 4 and 7.

Another factor in the textural cleansing process is surely the orchestra's increased sensitization to Karajan's direction. Berlin I, considered on its own merits, boasts better than average execution and reproduction, but it is astonishing to compare with this the miracles of refinement and virtuosity of Berlin II. Pianissimos are more delicately graded than before, but without losing incisiveness as they sometimes did in Berlin I. Fortes and fortissimos now have a cutting edge to them in place of the impactive but rather blunted weight previously heard. Most importantly, articulation of fast passages and general intonation are much improved.

Naturally changes of this nature vary from symphony to symphony, and while some of the earlier performances are virtually as well played as the new ones, such instances in Berlin I as the slightly harried wind/string teamwork in No. 1's last movement and the fractionally out-of-tune timpani strokes at the end of No. 4's second movement demonstrate how the Berlin Philharmonic has been transformed from a solid, old-fashioned German orchestra into a gossamer virtuoso ensemble. In 1962, after only seven years under Karajan, the process was well under way; now, clearly, it is accomplished.

If the refinements in engineering and orchestral execution might have been predicted, who would have expected fifteen years ago that the conductor so associated with effortless gloss, even "superficiality," would one day champion steady rhythm and Beethoven's controversial fast metronome marks? In a disc interview that accompanies the deluxe edition of the new set (which I have not seen-a transcript of the interview was included in the press kit). Karajan sheds light on the subject, voicing his increasing distaste for tempo fluctuation, and this antipathy is revealed throughout the performances. One or two of the old gearshifts survive in highly modified form, but for the most part Berlin II makes good the conductor's promised intention of delineating structure by means of color, texture, and accent rather than crude tempo modifications, and nearly everywhere the improvement in shape and structure is remarkable. In only two symphonies, the Eroica and the Ninth, do I prefer Berlin I.

Particularly revealing is Karajan's discussion of No. 7: "Of course, when we were young, the generation before us conducted it much slower. And I knew it was wrong, but I couldn't get out of this because of the inner content of the music. It did nothow shall I say-lend itself to a faster tempo; and with time, you seem to be able to-as I would say it very, very grossly-to pack it in a faster tempo. Then both things were joined: the right tempo and the content of it."

Since there are five Karajan recordings of No. 7, dating from the early Forties to the present, we can readily trace the evolution of his interpretation. The Berlin State Orchestra and Philharmonia versions (the latter from 1953) are both relatively sober and staid. Already in the 1958 Vienna Philharmonic ver-

sion (London Treasury STS 15107) one can sense Karajan's desire to increase animation and luminosity: The tempos are still basically steady, but the textures have greater shimmer, the angles are less severe and forbidding. With Berlin I the plunge to faster tempos is made, but the music sounds hysterical and disappointingly shapeless. In Berlin II everything works triumphantly: The tempos are, if anything, even brisker than before, but there is iron in the rhythm, and structural paragraphs are delineated with an incontestably firmer, more knowing handan idea has become actuality. Even the Allegretto, which suffers in all four earlier versions from Karajan's fancy shifting of gears in the maggiore sections, sounds pretty much an organic whole. This is one of the finest performances of the symphony I have heard.

I sense that Karajan's Eroica has been undergoing a similar, but not yet completed, metamorphosis. He warns in the interview that many will be shocked by his new fast tempo for the first movement. I like the tempo but for other reasons find the interpretation unsatisfying. The counterpoint sounds constricted and trivialized, and much of the expansiveness that gives this militant music its forward-looking, revolutionary character is missing. (Note the feebleness of the timpani outburst at bar 266, in the development, and the matter-of-factness of the cellos' and basses' climbing figuration beginning at bar 603.) Moreover, a lack of variety in the articulation takes a considerable toll: Why the buttery legato at the start of the coda (where the tonality drops a whole tone from E flat to D flat)? And why are the sixteenth notes at bars 561-62 so weak? While Karajan tells us he is unequivocally opposed to metronomic playing, I had the unpleasant sensation that in this movement his players are indeed chasing the metronome.

The other movements are better: The fugal portion of the Funeral March builds to a shattering climax and Karajan's impetuosity pays greater dividends in the finale. This is far from a poor Eroica, but I prefer the more expansively conceived Berlin I and Toscanini's great 1953 account, which weds the kind of nervous intensity for which Karajan is now striving with appropriate breadth.

No. 1 combines the forthright grandeur of Karajan's Philharmonia recording with the felicitous grace of Berlin I. The opening movement, with a measured introduction and an Allegro slower than in either of the earlier performances, is followed by an Andante just as swift as before but with more fluidity of motion and a better sense of transition. The molding of woodwinds in the development is as impressive as in the Philharmonia recording, and the last two movements, rollicking in their animated gusto, are intense and tautly focused. I particularly admire the way Karajan this time keeps his violins in tempo-and perhaps even accelerates a shade-in the thirty-second notes in bar five of the last-movement introduction.

No. 2 recaptures the blazing solidity of rhythm of the Philharmonia version. (Berlin I, though tonally refined, lacked rhythmic backbone.) In this symphony particularly Karajan has come remarkably close to the late Toscanini manner. The weighty "monumentality" heard in the Philharmonia version's introduction has given way to a terser, more
stinging accent, and, though some may find him a bit rigid in the Alberti-bass passages of the briskly paced Larghetto, the sophisticated undulation of string and wind tone, the thoughtful shaping, and the sheer technical control outshines the perfunctory jog-trot rhythm of Toscanini's similarly paced 1949-51 account. This brilliantly light-textured Second surpasses even the admired versions of Kempe, Szell, and Jochum.

In No. 4, I wondered which direction Karajan would take: Berlin I was a fleet, subtle account in the Toscanini manner, while his earlier Philharmonia version was exaggerated and morbidly introspective. I'm pleased that Berlin II, although slightly slower than Berlin I, is interpretively much like it. The increased definition and sharpness of the new recording perhaps makes the opening of the Allegro seem a bit brutal and blatant (this quality was somewhat veiled by the more opaque acoustics of Berlin I), but the new engineering also reveals a wealth of rich coloration from the violas and cellos. Karajan, like Furtwängler before him and now Haitink in his Philips recording, retains the long appoggiatura at the beginning of the first-movement development-a detail I rather like. There is a wealth of communicative phrase-shaping in the Adagio, and the last two movements romp with unfussy refinement. This is a marvelous Fourth, and I even forgive the indulgence of the large ritards in the last measures of the finale.

Karajan has always done No. 5 impressively, and the new account is perhaps springier in rhythm and more organic in line than the earlier ones. The scherzo seems a mite tighter and more forwardly impelled than before, and, if the double basses in the trio are less vehement and a shade overrefined, the finale now blazes more persuasively, with less artificial pomp and more breathing space around the notes. Even the controversial habit of slowing down for the bassoon and horn phrases at bars 317 et seq. now seems more natural.

It is symptomatic that Karajan, who used to make slight (and not bothersome) ritards on the bassoon phrases in the Pastoral's first-movement development, has gradually eliminated even that modest liberty. Berlin II improves over both excellent predecessors by including the scherzo repeat and tempering the cool momentum of Berlin I with some of the Philharmonia version's richer luminosity. The storm movement makes one want to run for shelter, and the other movements flow with marvelously unaffected momentum.

The opening measures of No. 8, hammered with almost indescribable brilliance and thrust, immediately make one sit up and take notice. Some may feel that Karajan has become a shade too stringent in the second theme, but I like the way impetus is thus carried through. The Allegretto ticks away with sardonic humor, and in the last two movements the new tempos are a blessed improvement. The Tempo di menuetto now moves spryly, with judicious expansion and wondrously clear cellos in the trio, while the finale (already brilliantly performed in both earlier recordings) bounds out of sight at an amazing clip. Like Scherchen, Karajan comes close to Beethoven's seemingly impossible metronome marking, and the Berlin Philharmonic brings it off triumphantly; this performance has incredible thrust and fire.



The quartet in the Ninth Symphony: José van Dam, Agnes Baltsa, Anna Tomova-Sintov, and Peter Schreier

No. 9 resembles the Philharmonia performance more closely than Berlin I. The first-movement tempo is about the same as in Berlin I, but the clarity of the string triplets at the beginning and the greater wind detail slightly later impart a more rhythmic (and, some may say, more academic) regularity to the interpretation; I have a slight preference for the mysterious opening of Berlin I, which makes the first outburst seem more awesome and dynamic. But the scherzo of Berlin II has better-controlled rhythm (as did the Philharmonia account), and the poetic but not overblown Adagio has far more genuine exaltation, less of Berlin I's voluptuous gloss and-in the brass fanfares at the end-less bombast. Some of the Berlin II solo singing may be less sweet-toned (the quartet-soprano Anna Tomova-Sintov, mezzo Agnes Baltsa, tenor Peter Schreier, and bass-baritone José van Dam-is put at a disadvantage by overly close miking), but on the whole this one is a masterly, exciting finale, even if Karajan's sense of transition is less supple than it was in Berlin I and the balances in Berlin II are less consummately gauged. (Cymbals, bass drum, and triangle are more pugnacious; lower strings lack the needed solidity.)

Karajan remains unpredictable in the matter of repeats. As indicated, he has restored the one in the third movement of No. 6, but he has now eschewed those in the first movement of No. 1 and the first section of the scherzo of No. 9. He has retained from DG I-unwisely, I think-that spurious da capo repeat in the third movement of No. 1. Elsewhere Berlin II follows the practice of Berlin I: First-movement repeats are taken only in Nos. 5 and 8; the last-movement repeat of No. 1 is observed, as are the necessary scherzo repeats of Nos. 1, 2, 3, 4, and 8. (There are no trio repeats in No. 7-not even the first time around.) The conductor's sense of transition is so sound, and his readings so organic, that he makes nearly all his decisions acceptable.

The package is decidedly lavish, including an elegant brochure with copious annotations covering both the music and the performers plus extensive color photography—not only Karajan (many times over), but the vocal quartet and (would you believe?) section-by-section portraits of the orchestral personnel! Karajan may not have said all that can be said on the subject of Beethoven's symphonies, but what he has said here will be listened to with awe-and envy-for many years to come.

BEETHOVEN: Symphonies (9). Anna Tomova-Sintov, soprano°; Agnes Baltsa, mezzo°; Peter Schreier, tenor°; José van Dam, bass-baritone°; Vienna Singverein°, Berlin Philharmonic Orchestra, Herbert von Karajan, cond. [Michel Glotz, Hans Weber, and Cord Garben, prod.] DEUTSCHE GRAMMO-PHON 2740 172, \$63.84 (eight discs, manual sequence). Tape: 3378 070, \$53.88 (six cassettes). Also available in a leather-bound limited edition, signed and numbered, with interview disc: 2721 200, \$125.

Symphonles: No. 1, In C, Op. 21; No. 2, in D, Op. 36; No. 3, in E flat, Op. 55 (Eroica); No. 4, in B flat, Op. 60; No. 5, in C minor, Op. 67; No. 6, In F, Op. 68 (Pastoral); No. 7, in A, Op. 92; No. 8, in F, Op. 93; No. 9, in D mInor, Op. 125*. Comparisons:

Karajan/Philharmonia Karajan/Berlin Phil. (1961-62)

EMI SLS 5053 DG 2721 001



Sessions' Passionate and Profound Lilacs

Seiji Ozawa and the Boston Symphony give eloquent voice to Roger Sessions' setting of Whitman's noble Lincoln elegy.

by Andrew Porter

ROGER SESSIONS' CANTATA When Lilacs Last in the Dooryard Bloom'd was commissioned by the University of California, Berkeley, in commemoration of the 100th anniversary of its founding, and was first performed there in 1971. A friend in Berkeley wrote to tell me that it was "the American composition"great music that was also quintessentially American music. And so it is.

Whitman's noble, romantic vision of this country is not unknown to British choristers, who learn it through Delius' Sea Drift and Vaughan Williams' Sea Symphony. Sessions' cantata has the rapture, the tenderness, and the poignancy of the former, and the energy, the grandeur, and the mystical, contemplative calm of the latter; but in it the words are uttered with an American accent, the melodies take shape from the rise and fall of American speech, and the local visions as well as the universal emotions are passionately and vividly present.

Hindemith set the same text—Whitman's elegy for Lincoln—in 1946, as an elegy for Franklin D. Roosevelt and for those who had fallen in the war: he called it A Requiem "For those we love," making plural the "for him I love" refrain of Whitman's first, tenth, and eleventh strophes. (The composer's recording of the piece, with the New York Philharmonic and Schola Cantorum, was reissued last year on Odyssey Y 33821.) Hindemith's Requiem is a grave, impressive. dignified, formal piece in eleven numbers, which lasts an hour. Sessions' Requiem, which is dedicated "to the memory of Martin Luther King Jr. and Robert F. Kennedy." lasts forty-two minutes, and could be described as a long connected song and as a vision, expressed in words and in sounds, which moves from the particular to the transcendental.

Forty years ago, Sessions wrote of art's striving to create "a spiritual world in which 'the unattainable' in Goethe's words 'becomes event' and the fragments achieve a unity impossible in the real world." The last scene of Goethe's Faust, Mahler's Eighth Symphony (the second part of which is a setting of that scene), the finale of his Das Lied von der Erde, the last movement of Britten's War Requiem, and (without words) the finale of Beethoven's last piano sonata provide glimpses of that world. When Lilacs Last in the Dooryard Bloom'd is not "merely" a cantata but a profoundly moving, inspired, and visionary composition.

Whitman once declared that in Leaves of Grass his "method of construction . . . is strictly the method of the Italian Opera," and in late life he was reported as saying:

My younger life was so saturated with the emotions, raptures, uplifts ... of musical experiences that it would be surprising indeed if all my future work had not been colored by them. A real musician running through Leaves of Grass—a philosopher/musician could put his finger on this and that anywhere in the text in no doubt as indicating the activity of the influences.

In Whitman's Lilacs one can discern the analogues of recitative, aria, and chorus. It is hardly a coincidence that Hindemith and Sessions distribute the lines be-

tween soloists (Hindemith uses two, Sessions three) and chorus in almost exactly the same way. The main difference is that the Death Carol, "Come. lovely and soothing Death," is in Sessions a long contralto solo, the heart of the work, and in Hindemith a chorus—rather unsuitably for the song of "A shy and hidden bird ... Solitary ... The hermit."

When Lincoln was killed, the lilacs were in bloom; Whitman later wrote that "I find myself always reminded of the great tragedy of that day by the sight and odor of these blossoms." In his threnody, three "themes" are stated and developed in an almost musical way: the Lilacs, representing spring and perpetual renewal; the great Star falling in the west, Lincoln; and the Bird, the reconciler, singing of death with a beauty that makes death "lovely and soothing." In Sessions' cantata, the introductory strophe is begun by the soprano soloist to a lovely melody over a rocking accompaniment, and continued by the baritone. Then the three themes are separately stated: The chorus breaks in with "O powerful, western, fallen star"; the baritone sings "In the dooryard ... Stands the lilac bush"; the soprano sings of the "shy and hidden bird." That "exposition" forms the first movement.

In the second movement–Whitman's fifth to thirteenth strophes–composer and poet follow Lincoln's coffin as it moves westward through the mourning land, through the bright burgeoning of lilacs and the spring, and through dirges and knell. The music is part funeral cortege, part hymn to Lincoln, part vision of broad-spreading America, at peace after the long war: "Lo! body and soul! this land! Mighty Manhattan... Ohio's shores, and flashing Missouri, And ever the far-spreading prairies, cover'd with grass and corn." The Bird still sings, but the poet's attention is on the national funeral.

The remaining strophes form Sessions' third and longest movement. With "the knowledge of death" and "the thought of death" beside him like two companions, the poet listens to the Bird's Death Carol, "with pure, deliberate notes, spreading, filling the night." And during the long, lovely song, the night becomes transfigured: "Lilac and star and bird, twined with the chant of my soul. There in the fragrant pines, and the cedars dusk and dim."

After the Berkeley premiere, Lilacs was next performed at Harvard, in 1975. The following year, Solti did it in Chicago. In April last year, it was done by the Boston Symphony, under Seiji Ozawa; I heard two of the four performances and some of the recording sessions; the disc under review was made at the time. Like most of Sessions' later music, Lilacs does not yield all its secrets at once. Its "song"-or so I found-is not evident at the start; it takes time to sort out background from foreground, to learn the themes, to discover the network of melodic and harmonic associations. But then, when the work suddenly falls into place, one is amazed that one did not respond at once to its vigorous, lucid progress and its full-throated, passionate lyricism. I have been listening to the record with increasing delight in the colors of the music (the vividness of the orchestral writing seems to grow with each hearing) and increasing emotion, and trust that all who buy it will do so.

For the three solo roles, singers with the timbres and expressive resources of Gundula Janowitz, Janet Baker, and Dietrich Fischer-Dieskau would be ideal. But those particular three would not be good casting unless they carefully studied American speech patterns, inflections, and pronunciation. Sessions asks not for meticulous metrical observance of his carefully notated meters but a free delivery "respecting the subtleties of rhythm and stress which are inherent in the words themselves. In this manner the singers will best realize the composer's intentions." The three singers of the Boston performance are not ideal, but as one listens again and again one begins to like them, for they have the heart of the matter right. The sustained high notes of the soprano, Esther Hinds, are not firm, clear, shining, and pure; there is a beat in them. But there is a kind of rapt tenderness in her phrasing and in her utterance a directness that prove very eloquent. Dominic Cossa, the baritone, sings his lyrical narratives clearly and firmly and his reflective passages with feeling. One wants a nobler tone, and at times one wants more accurate pitch ("And thought of him I love" is closer to B flat than a repeated A); nevertheless one warms to him. Also to Florence Quivar, the contralto. Her voice is unconventional, not equalized; the timbre is furry. But she knows how to interpret the Death Carol.

The Tanglewood Festival Chorus is not a virtuoso body, no Philharmonia Chorus or Vienna Singverein, but it sings with confidence. In the recording, it is rather hard to tell exactly where it is. Having been at the performances in Symphony Hall, I know it was in the usual place, behind the orchestra; on the disc, it sounds as if it were recorded rather closely and then added to the sounds of the orchestra in a way that gets the dynamic balance between them right but produces a disturbing aural perspective. In the second movement, it does not distinguish sufficiently between what should be very soft and very loud singing. And the soprano tone tends to lack solidity.

The glory of the performance is the playing of the Boston Symphony. Sessions has said that he writes ever with its sound, as first he heard it in student days, in mind. Boston performances under Ozawa can sometimes be rather coarse and obvious nowadays, but this one is played with finesse, eloquence, beauty, and vividness of tone and phrasing. The orchestra is well recorded.

It is tempting to imagine a Karajan performance of *Lilacs*. It is a work that should be in the international repertory. Each great conductor, with soloists of international stature, would be able to find new kinds of richness in the work. But the current recording is enough—and far, far more than merely enough—to bring the work to life. In New World Records' "Recorded Anthology of American Music" it is the most important item. For here, as Andrew Imbrie wrote of another Sessions piece, is "a forceful musical personality at work, who has full command over his resources. Here is unconventional music in the great tradition; here is pattern made to sing; here is movement in sound, expressing what is noble."

Sessions: When Lilacs Last in the Dooryard Bloom'd. Esther Hinds, soprano; Florence Quivar, mezzo; Dominic Cossa, baritone; Tanglewood Festival Chorus, Boston Symphony Orchestra, Seiji Ozawa, cond. [Andrew Raeburn, prod.] NEW WORLD NW 296, \$8.98 (distributed by Peters International).

Music you never knew was there.

There are p obably beautiful musical passages on many of you accords that you've never heard. And you never will, unless your cart idge is sensitive er ough to clearly reveal all the subtle har

mor_ics within the aucio spectrum. Today's soph sticated "ditect to cisc 'technology has to sed the quality of disc recording to a new state of the art. You need a cartricge that does justice to these fine re-cordings: an ADC cartridge. With an ADC cartridge, you will find the state of the art has been brought almost to the state of perfection.

Long known by audiophiles for incredibly pure sound repro-duction. ADC carridges have also proven their amazingly low record wear. This year, they have even surpassed the inselves.

First, there's the remarkable new ZLM with the unique ALIPTIC "stylus. I: corbines the better stareo reproduction of the

eliptical stylus shape with the onger, lower wearing, vertical bearing radius 5: the Shibata shape. As a result, sound reprod. ction is completely transparent and clean. Individual instrument placement is more easily identifiable. And Fequency response is ruler flat ±1dB to 20kHz and =1½dB to 25 kHz. Ir tracks at 1/2 to 11/4 grams.

Then there's the new XIM MK III with the same recuced mass, tapered cantilever b. t with a true elliptical shaped nude d amond tip. It aas 50% k wer mass than our previously lowest n ass XI M MK II. It tracks at 3_-11/2 grams.

The OLM 36 MK III with the innovative Diasa elliptical nucle tip also has excellent frequency respense, wide separation, and an incredibly clean sound. It also tracks at 3/4-11 2 grams.

The QLM 34 MK III cffers ell ptical shape and tracks as low as 1 gram with flat response out to 20kHz=2dB.

The QLM 32 MK III is a 2-4 gram elliptical with great sound. It's one of the best budget ellipticals around.

And i lea for automatic changers the OLM 30 MK III is a 3-5 gram conical styles that's compatible with a wide range of stereo e qui oment.

See the complete line of ADC carmidges and tonearms at Las Vegas, ADC Booth 703.



Audio Dynam c. Corporation Pickett District Read New Milford, Conn. 00776

reviewed by ROYAL S. BROWN SCOTT CANTRELL ABRAM CHIPMAN R. D. DARRELL PETER G. DAVIS ROBERT FIEDEL SHIRLEY FLEMING ALFRED FRANKENSTEIN KENNETH FURIE HARRIS GOLDSMITH DAVID HAMILTON DALE S. HARRIS PHILIP HART PAUL HENRY LANG IRVING LOWENS ROBERT C. MARSH ROBERT P. MORGAN IEREMY NOBLE CONRAD L. OSBORNE ANDREW PORTER BADFORD-BENNETT WILLIAM C. ROBBINS LANDON PATRICK J. SMITH SUSAN THTEMANN SOMMER

> Phor Evans/

triguing features-Brendel is, after all, a decidedly scholarly, intellectual sort of artist-but rather that some of the erstwhile iconoclastic features have been abandoned for more conventional solutions.

Thus the new Emperor, while still rather chamber-music-like in its crisp, airy texture, is easier in its pacing, less sharply severe in its phrasing, and the new G major, which features a first movement that eschews the usual tempo fluctuations, hangs together far more successfully. Brendel's cooling of ardor can also be noted in his revised choice of cadenzas: Though he still favors the lesser-heard Beethoven alternative in the G major's first movement (an option also taken by Pollini, Gieseking, Gilels, and Moravec), the new recording of the C minor uses the standard Beethoven cadenza in lieu of the short, unidentified intrusion heard in the Vox edition. In the C major Concerto, Brendel formerly used a synthesis of his own devising, wherein the composer's incomplete first cadenza was brought to a workable conclusion with excerpts cribbed from the longer third cadenza; now that third cadenza is played in its entirety. Certain curious textual interpretations remain. Some, indeed, may well have been introduced. I don't have the earlier Choral Fantasia on hand, but in any event I vigorously disapprove of the added flourish in the fourth bar of the opening solo: since this passage is very much a cadenza, it strikes me as nit-picking and pedantic to ruin the asymmetry by transforming the "offending" measure of 3/4 into one that conforms to its 4/4 neighbors. (Katchen, by the way, did likewise in his recording with Gamba. London Treasury STS 15211.)

Brendel's performances will not be to all tastes, but there is a lot to be said for them. I found the C major especially congenial. The sharp impetuosity and snap he brings to the tripping upward runs near the end of his opening first-movement solo recalls Gieseking, as does the feathery, patrician passagework throughout. The broadly spacious Largo, more deeply meditative than Gieseking's, is more in the manner of Schnabel and Kempff, while the rondo really sparkles. (Brendel takes great care with his treatment of slurs in the opening solo there.) I found the first-movement tempos of the B flat and C minor Concertos rather too sedate. True, the manuscript of the latter gives the meter as 4/4 rather than the alla breve of some editions, but it is hard to interpret Haitink's tempo as Allegro con brio

Haitink and the London Philharmonic are of course far superior in suavity and en-

Explana	tion of symbols
Classical:	
B	Budget
	Historical
R	Reissue
Recorde	d tape:
	Open Reel
	8-Track Cartridge
	Cassette

Alfred Brendel-a splendid and smoothly reproduced cycle of Beethoven concertos

BEETHOVEN: Concertos for Piano and Orchestra (5); Choral Fantasia, Op. 80*. Alfred Brendel, piano; London Philharmonic Choir® and Orchestra, Bernard Haitink, cond. PHILIPS 6767 002, \$44.90 (five discs, manual sequence).

Concertos: No. 1, in C, Op. 15; No. 2, in B flat, Op. 19; No. 3, in C minor, Op. 37; No. 4, in G, Op. 58; No. 5, in E flat, Op. 73 (*Emperor*; available separately as 9500 243).

E	З	
F		

BEETHOVEN: Concerto for Piano and Orchestra, No. 5, in E flat, Op. 73 (Emperor). Edwin Fischer, piano; Philharmonia Orchestra, Wilhelm - 11 Furtwängler, cond. TURNABOUT THS 65072, \$3.98 (mono) [from HMV originals, 1951].

Ľ	3
1	1

BEETHOVEN: Concerto for Piano and Orchestra, No. 5, in E flat, Op. 73 (Emperor). Rudolf Serkin, piano; New York Philharmonic, Bruno Walter, cond. ODYSSEY Y 34607, \$3.98 (mono) [from COLUMBIA originals, 1942].

BEETHOVEN: Concertos for Piano and Orchestra (5). Glenn Gould, piano; various orchestras and cond. [Howard Scott (Nos. 1-4) and Andrew Kazdin (No. 5), prod.] ODYSSEY Y4 34640, \$15.92 (No. 2 mono, the rest stereo) [from various COLUMBIA originals, 1957-65]

BEETHOVEN: Leonore Overture No. 3, Op. 72b; Concerto for Piano and Orchestra, No. 4, in G, Op. 58*; Symphony No. 5, in C minor, Op. 67. Claudio Arrau, piano*; Bavarian Radio Symphony Orchestra, Leonard Bernstein, cond. [Hans Weber and Hans Hirsch, prod.] DEUTSCHE GRAMMOPHON 2721 153, \$17.96 (two discs, manual sequence) [recorded in concert, October 17, 1976, for benefit of Amnesty International]

BEETHOVEN: Concerto for Piano and Orchestra, No. 3, in C minor, Op. 37. LISZT: Concerto for Piano and Orchestra, No. 1, in E flat. Claudio Arrau, piano; Philadelphia Orchestra, Eugene Ormandy, cond. ODYSSEY Y 34601, \$3.98 (mono) [from COLUMBIA originals, 1948 and 1953]

Brendel's new performances of the Beethoven concertos are less innovative and probably more finely considered than his provocative earlier ones for Vox. This is not to say that the new recordings are without in-

semble weight to the undernourished pickup groups that supported Brendel in the Vox recordings. Unfortunately the wiry, unpleasantly thin piano tone, which I previously blamed on faulty reproduction. is present here too; Brendel is a superb musician in many respects, but I find his sonority and occasionally tight-lipped rigor offputting. Others may react less severely to these attributes, and objectively this is a splendid and smoothly reproduced cycle of the Beethoven concertos. The Choral Fantasia has spiritualism in this reading but for my taste seems rather precious. When will Columbia give us one of the incomparable Serkin/Casals/Marlboro performances?

It is interesting to hear Brendel's Emperor, a connoisseur's version, in conjunction with that of his illustrious teacher, Edwin Fischer. Fischer may have been slightly past his prime when he made his 1951 recording with Furtwängler, heard in a Turnabout reissue; his wartime version with Böhm and the Dresden State Orchestra, which I have never heard, is said to be more brilliantly virtuosic. Yet I for one am quite willing to overlook a slightly sedate approach to the first movement's bravura octaves and a bit of smeary passagework in the finale in light of Fischer's mastery and substance elsewhere in the performance. Furtwängler, working with the incisive Philharmonia-then in its most virtuosic estate-contributes an illuminating, ripely sonorous, and (for him) unusually straightforward framework. There are, to be sure, a

few rhetorical gestures and tempo shifts. but these are of a conservative rather than disruptive nature.

The Turnabout transfer is excellent with clean woodwinds, solid, warm tuttis, and an admirably discreet placement of the solo instrument rather unusual for concerto recordings of that vintage. The defects are a slight hardness in the violins and a touch of clouding from the reverberation prevalent in EMI's engineering of that period (e.g., it's a bit hard, though not impossible, to distinguish the timpani rhythm at the end). This is a welcome reissue of an interpretation that will always deserve an honored place in the catalog alongside the 1942 Schnabel/ Stock (Victrola VIC 1511) and 1933 Gieseking/Walter (Turnabout THS 65011).

Although I grew up with-and derived years of pleasure from-the Serkin/Walter Emperor, now available again on Odyssey, candor compels me to note that there is nothing particularly transcendent about that 1942 performance. Serkin plays cleanly, with orthodox phrasing and strong rhythm, but misses the pearly tonal allure of Gieseking's early work or the volcanic excitement and tension of Schnabel's contemporaneous pianism. (His entrance in the Adagio is much more prosaic than it was in bis concert performances last season with Ormandy and the Philadelphia Orchestra.) Walter and the New York Philharmonic provide lively, unfussy support, but more of that conductor's quintessential lyricism comes through in the earlier Vienna record-

The best classical records reviewed in recent months

BACH, J.C.: Sinfonias. Zinman. PHILIPS 6780 025 (2), Nov.

BACH: Brandenburg Concertos. Leonhardt Consort. ABC/SEON AB 67020/2 (2), Dec. BEACH: Piano Concerto. Boehm, Landau. TURNABOUT TV-S 34665, Dec.

BEETHOVEN: Piano Sonata No. 18. SCHUMANN: Fantasiestücke, Op. 12. Rubinstein. RCA RED SEAL ARL 1-2397, Jan.

BRAHMS: Songs. Ludwig, Bernstein. COLUMBIA M 34535, Jan.

BRAHMS: Symphony No. 3. Levine. RCA RED SEAL ARL 1-2097, Jan.

BRIDGE: Phantasm. MOERAN: Rhapsody No. 3. Braithwaite. HNH 4042, Dec.

BRUCKNER: Symphony No 7. WAGNER: Siegfried Idyll. Karajan. DG 2707 102 (2), Jan. CIMAROSA: Il Matrimonio segreto. Varady et al., Barenboim. DG 2709 069 (3), Nov.

COUPERIN, L.: Harpsichord Suites. Curtis. Archiv 2533 325. Music of the Couperin Fam-ILY. Pearlman. TITANIC TI 9. Dec.

DAVIES: Dark Angels. WERNICK: Songs of Remembrance. DeGaetani, Ghiglia, West. NONE-SUCH H 71342, Dec.

Dvořák: Piano Concerto, Richter, Kleiber, ANGEL S 37239, Dec.

ELGAR: Cello Concerto; Enigma Variations. Du Pré, Barenboim. COLUMBIA M 34530, Nov. HANDEL: Messiah. Handel and Haydn Society (Boston), Dunn. SINE QUA NON SA 2015/3 (3), ADVENT (cassette) EE 1061, Jan.

HANDEL: Oboe Sonatas. Roseman et al. NONESUCH H 71339, Nov.

HAYDN: Orlando paladino. Shirley, Auger, Luxon, Dorati. PHILIPS 6707 029 (4), Dec

Mozart: Oboe Quartet; Clarinet Quintet. Koch, De Peyer, Amadeus Qt. DG 2530 720, Nov.

POWELL: Sonata Teutonica. R. H. Johnson. COMPOSERS RECORDINGS SD 368, Dec.

PUCCINI: Gianni Schicchi. Gobbi, Cotrubas, Domingo, Maazel. Columbia M 34534, Dec. Rameau: Harpsichord Works. Gilbert. ARCHIV 2710 020 (3), Jan.

SCHUMANN: Papillons; Symphonic Etudes. Perahia. Columbia M 34539, Jan.

SHOSTAKOVICH: The Nose. Akimov, Moscow Chamber Opera, Rozhdestvensky. EuroDisc 89 502 XFR (2), Dec.

SIBELIUS: Symphonies Nos. 3, 6. C. Davis. PHILIPS 9500 142, Jan. NELLIE MELBA: The London Recordings. EMI/CAPITOL RLS 719 (5), Jan. MUSIC OF THE FRENCH BAROQUE. Oberlin Baroque Ensemble. Vox SVBX 5142 (3), Dec ing with Gieseking. Heard alongside the memorable Furtwängler, the Walter/New York execution sounds relatively coarsegrained, perfunctory—and unrhythmic, despite Walter's brisker tempos and superficially more metronomic approach. With Serkin still active, I hope that Columbia will give him the opportunity to re-record the Beethoven concertos with engineering and orchestral support worthy of him: I would suggest Kurt Masur or Carlo Maria Giulini as a suitable collaborator.

Columbia, by the way, should be chided for not furnishing recording dates on historical reissues. If the merchandising department fears consumer resistance to identified antiques, it might consider the potential impact on all sales should these releases be innocently confused with the company's modern product! Complete discographic information would only increase the value of a program of carefully chosen reissues.

The reissue of Glenn Gould's set is a case unto itself. Listening to the concertos in their order of composition, which was also the order of recording (over a period of eight years), one can painfully perceive the shadow of the interpreter lengthening over the music. In the introduction to Don Quixote, Richard Strauss depicts the protagonist's progressive mental clouding through serpentine inner voices and an ever-increasing density and elaboration of texture: one experiences much the same thing herean unfortunate change from passionate involvement to neurotic self-involvement. from a refreshing new viewpoint to a grotesquely myopic lack of perspective.

The 1957 B flat Concerto may be slightly lightweight, but it remains an attractively lyrical, technically sparkling, and mostly straightforward performance. Leonard Bernstein's accompaniment is sturdy but thin-toned in reproduction. The slightly later C major Concerto is once again straightforward and invigoratingly buoyant, but already some of the former nuance has given way to a hard, machine-tooled veneer and there are some abrasive eccentricities in the form of the pianist's jarring, Regerian cadenzas. Vladimir Golschmann and the Columbia Symphony provide bracing support, but the tuttis again lack sonic body and the woodwinds are unpleasantly overmiked. Things grow more expansive in the C minor Concerto with Bernstein (from about 1959). and the lefthand anticipations and elaborate rubatos begin to hurt. Still, in its strange way this is a deeply affecting performance, and much of the nuance of the B flat Concerto has returned. Reproduction of the orchestra (the Columbia Symphony) is still thin and cramped.

With the 1961 G major Concerto, Gould passes beyond allowable liberty into the realm of the hizarre. Inner voices pop up randomly: phrasing is lamed by self-indulgent arpeggiations: deliberate tempos become impossibly static, even swooning. Bernstein and the New York Philharmonic make the best of a bad situation, however (the conductor is more in control of himself than in the benefit performance with Arrau-see below), and the reproduction, spread over two full sides, is by far the best of these reissued performances.









Any 3 Recordings of Your Choice—only \$1 Each

PLUS ALL THESE ADDED BENEFITS:

1. FREE CATALOG

of records and cassettes spanning our entire musical heritage: Medieval, Gothic, Renaissance, Baroque, Rococo, Classical, Romantic, Modern! 2. A SUBSCRIPTION FREE to Musical Heritage Review magazine, an 18 times a year periodical. It offers you 8 to 15 new recordings per issue. It's cover price is \$18.00 annually. 3. CHARGE ACCOUNT This permits you the convenience of charging your purchases—of paying for your recordings *after* you have received and tried them.

AND NO PURCHASE OBLIGATION—EVER!

You'll enjoy these and many other benefits if you accept Complimentary Membership in Musical Heritage Society.

World Renowned Composers, World's Greatest Artists on the Society's Recordings

You can enjoy the superb artistry of such musical luminaries as Maurice Andre, Jean-Pierre Rampal, Llly Laskine, Jean Martinon, Ralph Munch, Allcia De Larrocha, Franco Gulli, Helmuth Rilling, Marie-Claire Alain, Jorg Demus, Nicolas Harnoncourt and many others. All recording the works of the world's great composers.

And the Society offers you not only the more popular works of the best-known composers, but perhaps more important to many music-lovers (and to schools, colleges and libraries) it also offers a large selection of works *not* available elsewhere.

Some composers, notably Telemann, Pachelbel, Fasch, Gilles and many others have become noteworthy in today's music world due almost solely to the Society's efforts!

Special Membership Prices

As a member you'll enjoy substantial savings. Members' prices are \$3.75 per LP and \$4.95 per Cassette. This is more than 25% below regular retail prices of \$4.95 per LP and \$6.95 per Cassette.

How the Society Operates

The Society's recordings are not sold in stores. They are offered directly through the MUSICAL HERITAGE REVIEW magazine at three week intervals.

When the Society receives your request, it sets up an account in your name, sends you its latest catalog and includes a certificate entitling you to buy up to three records of your choice for \$1.00 each plus shipping. (Or you may buy up to three cassettes for \$2.00 each.)

The Society will begin sending you MUSICAL HERITAGE REVIEW magazine for your edification and delight. There is no purchase obligation and you may discontinue the complimentary subscription at any time. As a subscriber two outstanding selections will be scheduled for shipment to you from each issue.

If you wish to audition the scheduled selections, do not return the advice form always provided. Or you may order only the recordings you'd like to audition or

Musical Heritage Society Building

14 Park Road

you may advise us to ship no recordings at all.

ENJOY OUTSTANDING AWARD-WINNING PERFORMANCES

Would you like to enjoy Tchaikovsky's immortal ballet Swan Lake in a definitive performance? Or Gounod's Faust in a Grand Prix winning edition? Or Monteverdi's monumental opera Orfeo in the most acclaimed rendition of all time?

Of the Society's more than 2,300 LPs, nearly 200 have received top honors from around the world. Why not ask for a complimentary membership today?

MEMBERS ONLY

OFFER VALID IN U.S.A.

Complimentary Membershi	p Request Form
MUSICAL HERITAGE SOCIETY Dept. HF-2	OFFER OPEN TO NEW

Tinton Fails, New Jersey 07724	ONLY.
Ladies and Gentleman of the Society,	
Please enter my complimentary membership in the Society. I am interested in-	
[] 12" Stereo Records [] Dolbyized Stereo Cassettes [] Both Records and (assettes
Also, please set up an account in my name, send me your catalog and enter my MUSICAL HERITAGE REVIEW magazine. It is understood that I am under no pu may discontinue at any time. I understand that, as a subscriber, two outstanding each issue will be scheduled for shipment to me. I further understand that I may selections by not returning the response form; that I may order what I want or I m by returning the response form.	new selections from opt to audition these
ADDRESS	
CITY STATE	

CIRCLE 23 ON READER-SERVICE CARD

By 1965. Gould's musical "individuality" seems to have deteriorated into full-fledged looniness. Graffitilike embellishments are created to demonstrate the pianist's Schenker-graph harmonic analysis (he is always intelligent even at his most deranged), and tempos are dragged through the mire. Leopold Stokowski, on occasion noted for eccentricities of his own, here sounds merely soft-spined and inept, while close-up microphoning cruelly calls attention to the untidy, understaffed execution of the American Symphony. Hearing Gould's early work again makes his subsequent artistic decline all the more tragic and hard to fathom

The Arrau/Bernstein G major Concerto mentioned above is part of a gala benefit concert in Munich in October 1976 on behalf of Amnesty International, which seeks to help political prisoners and victims of political persecution all over the world. The artists declined any payment, and I am deeply moved by the gesture. Few composers, however, are worse served by sentimentality than Beethoven, and I found these coarse, lumbering performances all but unendurable.

Granted that Arrau displays a wealth of color and splendid robustness of tone, that Bernstein often commences a movement with admirable assertiveness, that the Bavarian Radio Symphony plays cleanly, that the sound and processing are first-rate. (All applause has been omitted, and the audience is attentive throughout.) Granted all of that, this universal music, which can withstand many diverse treatments, is sapped of its energy and communicative power by all sorts of miserable little underscorings and tempo adjustments. Phrases are manhandled and subjected to various precious, artsy diminuendos. Tempos are pulled about in an externalized, heart-onsleeve manner that would be out of place even in Tchaikovsky. Bernstein displays a limited concentration span. Arrau a decidedly limited sense of humor-both of these qualities being essential if Beethoven is to make his full impact. Given the worthiness of the cause, a direct contribution to Amnesty International would be a sensible alternative to buying these records.

As a happy foil to Arrau's depressing G major Concerto, we have a welcome Odyssey reissue of his 1948 C minor with Ormandy and the Philadelphia Orchestra, which also contrasts instructively with the New York performance with Kubelik televised live last season. This vintage C minor is rather direct, uncluttered, and externalized. For all his mastery, Arrau has always been prone to expansive point-making, and a brusque conductor like the Ormandy of 1948 is a perfect antidote: a stimulant-perhaps even an irritant-rather than a yes-man deferring to the pianist's every whim.

In the first movement. Ormandy clearly follows the manuscript's 4/4 marking but, unlike Haitink, does it at a true, bracing Allegro con brio: the resulting performance has more impetus and far more internal shape than the funereal one with Kubelik. The well-balanced sound serves both piano and orchestra reasonably well, although the limited frequency range of thirty years ago of course couldn't capture Arrau's so-



Maurizio Pollini Sinewy, chamberlike Brahms

nority in all its coloristic beauty. (He may have also been a more percussive, monochromatic player in those long bygone days.)

The Odyssey coupling is Liszt's E flat major Concerto, which Arrau rather surprisingly has never re-recorded commercially. I have been told that this 1953 recording with Ormandy was done in a single take, the under-the-wire product of a recording session immediately preceding a musicians' strike. Perhaps that explains the splendid panache and note-to-note impetus of this brilliantly incisive, stirring performance. Arrau gives the slow section unusual asymmetrical phrase-shaping without ever losing vitality. The combination of massive sobriety with straightforward élan and astonishing virtuosity makes this a performance to cherish. Ormandy accompanies superlatively, and the reproduction, while similar to that of the Beethoven in solidity and balance, has more sparkle and frequency range. HG

BEETHOVEN: Symphonies (9). For an essay review, see page 67.

BRAHMS: Concerto for Piano and Orchestra, No. 2, in B flat, Op. 83. Maurizio Pollini, piano; Vienna Philharmonic Orchestra, Claudio Abbado, cond. [Rainer Brock, prod.] DEUTSCHE GRAMMOPHON 2530 790, \$8.98. Tape: 3300 790, \$8.98.

Having heard from these same artists a remarkable broadcast performance of the Brahms D minor Concerto—a modern-day counterpart. in its passionate, grim austerity, to the old Columbia recording by Rudolf Serkin and Fritz Reiner—1 expected great things from their B flat. It does not quite work out that way, although this is still one of the better recordings of the work.

In its basic style. Pollini's account of the solo part is once again reminiscent of Serkin's: This is in general sinewy, chamberlike Brahms, full of light and shade and far removed from the burly weight associated with such older champions of the score as Wilhelm Backhaus. Like Serkin, Pollini opts for animated tempos and a kind of tensile momentum. But in contrast to Serkin's rigorous angularity, his work sounds a shade too rounded off and effortless.

A similar complaint can be made about Abbado's conducting: While the orchestral execution is always clean and tonally attractive, a certain shapelessness causes the musical argument to lose focus. Soft strings have a slight ooziness in the scherzo: too many phrases are rounded off with just a hint of ritard. Brahms does need flow, but here he coosts. The very beginning and end of the concerto will demonstrate my misgivings-the former slightly too lingering, the latter with an enormously protracted .slowdown.

The sound is stunning, with undamped clarity of detail and a wide, undistorted dynamic range. Most listeners, however, will stick with the Serkin/Szell package (Columbia MG 31421), offering outstanding performances of both Brahms concertos forthe price of this one. H.G.

BRIAN: Symphonies: No. 6 (*Sinfonia tragica*); No. 16. London Philharmonic Orchestra, Myer Fredman, cond. HNH RECORDS 4029, \$7.98.

Havergal Brian (1876-1972) may qualify as the most neglected musical genius of the twentieth century, and I can think of no good reason for this. Perhaps (and I'm just grasping at stravs) the scale of his orchestration has discouraged performances: Symphony No. 16. for example, calls for quadruple woodwinds, brasses including six horns and euphonium, and a percussion section requiring ten players!

The two works recorded here were created in a period of resurgence following the Second World War. Brian had stopped writing during the war; then, suddenly, his despair left him, and between the ages of seventy and ninety he experienced a burst of creativity that most younger artists would envy, for it was during this time that he wrote most of his symphonies (which number thirty-two in all) and his large-scale operas.

Sinfonia tragica was one of the first products of this activity, along with a comedy overture. The Tinker's Wedding. Both were inspired by the writings of Synge-indeed, the symphony was originally conceived as the overture to an opera based on his Deirdre of the Sorrows (thwarted by copyright problems). Symphony No. 16 stems from a remarkable period of fourteen months in 1958-59 when Brian wrote five complex one-movement symphonies for large orchestra.

If you are used to British music only as represented by Vaughan Williams, Elgar, Walton, or even Britten, be prepared for a shock in listening to Brian's works, for they do not resemble those of most of his countrymen. Pressed to give a new listener something to hang on to, I'd say they resemble works of certain Scandinavian composers: the use of woodwind and percussion in particular evokes Nielsen. If you know the music of E. J. Moeran, another writer from the British Isles somewhat un-

In the Black II

Performance, beauty, quality — three attributes that have always been the hallmarks of SAE products. SAE systems in the past have had them, this system's predecessor had them, and the new In The Black system has them and much more.

The 2900 Parametric Preamplifier offers our new flexible parametric tone control system, full dubbing and tape EQ. New phono and line circuitry results in unparalleled clarity and definition with distortion of less than 0.01% THD & IM. The 2200 Stereo Power Amplifier with fully complementary circuitry delivers 130 Watts RMS per channel from 20-20K into 8 ohms; at less than 0.05% Total Harmonic Distortion, from 250mW to full rated power.

The 8000 Digital FM Tuner has linear phase filters, phase-lock multiplex, and of course, our famous digital readout tuning indicator system.

Combine these products together and you have a system that ensures superior performance in all areas, excellent control flexibility, and the sonic quality that is typically SAE.



der the spell of Scandinavia, imagine Moeran with melody but minus the sometimes sing-songy lunes

The recording now offered by HNH was made by Lyrita, that entertaining English company that "takes care of its own." (Now that Lyrita has completed its cycle of Bax symphonies. I hope that this 1975 recording heralds a cycle of Brian's.) The playing of the London Philharmonic under Myer Fredman's sure hand is flawless, and the Lyrita engineers have done their usual fine job in producing an extremely wide-range recording with excellent definition and, to my ears. exactly the right amount of warmth and highlighting. Perhaps audio dealers could help the Brian revival: This record is surely of demonstration caliber.

It should be noted that this recording has already been released domestically by Musical Heritage Society (MHS 3426). As fine as that edition sounds. HNH's is even better. The highs are a little crisper yet not at all overbearing, and there seems to be just a little more focus in involved passages. The MHS is a fine production, however, particularly considering its lower price. Whichever edition your budgetary condition favors (the jacket notes, incidentally, are the same), this disc invites you to discover a great symphonist previously unknown to most. W.R.-R

CHOPIN: Preludes (24), Op. 28. Preludes: in C sharp minor, Op. 45; in A flat, Op. posth.



\$8.98. Tape: •• 3300 721, \$8.98. Comparisons: Arrau Perahia Pollini Rubinstein

Phi. 6500 622
Col. M 33507
DG 2530 550
RCA LM 1163

Argerich has always impressed me as an instinctive sort of player, whose natural musical perceptions and relaxed facility enable her to excel in Romantic music, of which no better example exists than the Chopin preludes. She apparently is not an intellectual" artist in the sense of Arrau, Perahia, or Pollini, but she is decidedly an interpreter of stature, whose artistic taste and innate intelligence more often than not guide her to a right-sounding, or at least thought-provoking, solution.

Martha Argerich, piano. [Rainer Brock,

prod.] DEUTSCHE GRAMMOPHON 2530 721,

Thus her new recording of Op. 28 has much in common with the four versions listed above, but particularly with the mono Rubinstein. Like Rubinstein, Argerich goes for overall thrust and line and is sometimes remarkably careless about detail: She rather loses the syncopation in the C major (No. 1): melody, harmonic counterline, and bass are something of a jumble in the F sharp minor (No. 8): the B flat minor (No. 16), played even more precipitously than Rubinstein's, has an alarming number of telescoped runs and wrong notes (including a highly exposed one in the bass near the beginning); and there is none of the care both Pollini and Perahia take with the problematical ending of the F minor (No. 18), where Chopin implies a crescendo that begins during a silence.

Having unburdened myself on those points. I will also confess that I love Argerich's performance. Some of her fast tempos are almost breathlessly so, but time and again she achieves a kind of grand exaltation and structural clarification reminiscent of some of Schnabel's Beethoven performances. It is no mean feat to successfully combine forward propulsion and expansive breadth. Argerich is also a master at managing a gearshift or illuminating a harmonic change with the subtlest coloristic device, and while sentiment abounds her playing is virtually never sentimental in the manner of more obvious Chopin "stylists." Let me at least cite the G major (No. 3), with its uncommonly shimmering left-hand passagework; the absolutely sizzling G sharp minor (No. 12): and the wonderfully arching D flat major (No. 15). Best of all. her cumulative sense of continuity makes unmistakably clear that Op. 28 is indeed a cycle. Some may ultimately prefer Arrau's bronzen tone and epic style or the more painstaking classicism of Perahia and Pollini, but Argerich obviously joins them in anyone's short list of recommendations for this music

Like Arrau and Perahia. but unlike Pollini and Rubinstein. Argerich's recording includes the two separate preludes. DG's sound is warmly resonant, but my copy was blemished by surface crackle. H.G.

DONIZETTI: Lucia di Lammermoor.

Lucia	Montserrat Caballé (s)
Alisa	Ann Murray (ms)
Edgardo	José Carreras (t)
Arturo	Claes H. Ahnsio (1)
Normanno	Vincenzo Bello (1)

CIRCLE 56 ON READER-SERVICE CARD

If you thought **ReVox made just** the world's finest tape recorders

guess again ... and again.

REVOX

We also make the world's finest tuners and amplifiers, including this incomparable matched pair of state-of-the-art components. The B760 Digital Frequency Synthesizer FM Stereo Tuner and B750 Integrated Control Amplifier are to separate components what the B77 is to tape recorders; they are simply the best there is. Willi Studer wouldn't have it any other way.

REVOX

We urge you to test our claim by visiting your ReVox dealer to compare our B760 and B750 against any other tuner and amplifier regardless of price. If you can find anything that sounds demonstrably superior to this incomparable pair, Herr Studer would like to hear from you. But first, you'll have to audition these exciting new ReVox components for yourself, so write to us for complete information and the pame of your nearest demonstration dealer.

complete information and the name of your nearest demonstrating dealer.



Enrico Raimondo

Vicente Sardinero (b) Samuel Ramey (bs-b)

Ambrosian Opera Chorus, New Philharmonia Orchestra, Jesús López-Cobos, cond. PHIL-IPS 6703 080, \$26.94 (three discs, manual sequence). Tape: ●♥ 7699 056, \$26.95.

This new Lucia, while not in my opinion a particularly compelling performance, nevertheless commands attention. According to Jesús López-Cobos (who in addition to being a conductor is a musicologist and is editing a new edition of the opera from the Donizetti autograph), the version of Lucia hitherto current is full of mistakes and distortions.

More than a hundred "differences of rhythm, text, tempo, actual notes, dynam-

ics, and scoring." to quote López-Cobos' introductory essay, have been put right in the performance under review. the most notable corrections being those of pitch, especially in the heroine's big scenes. From the autograph we learn that the vocal scores in circulation have Lucia's entrance aria. "Regnava nel silenzio." a semitone too low and both the Lucia/Enrico duet from Act II and the Mad Scene a whole tone too low. In the present recording these three scenes are transposed upward to their original keys. Moreover, the role of Lucia is stripped of what López-Cobos claims to be its spurious fioriture: the cadenzas (including the famous flute-accompanied showpiece in the Mad Scene), the variants and decorations, the famous (but, as we now learn, inauthen-

"SPECTACULAR" and other comments from audio critics about Ohm L loudspeakers:



Comments from Stereo Review:

"In summary, the Ohm L...is easily good enough to meet the sort of critical standards usually applied to much larger and considerably more expensive speaker systems.

The upper mid-range and high frequencies were virtually perfect. The balance between lows and highs was excellent...Blindfolded, one would never guess its compact dimensions." (Copyright 1977 by the Ziff-Davis Publishing Company. Reprinted from Stereo Review, June 1977, by permission. All rights reserved.)

Comments from The Complete Buyer's Guide to Stereo/Hifi Equipment:

"Ohm was among the first companies to take advantage of A.N.Thiele's research into vented loudspeakers, with some pretty spectacular results...In listening to the Ohm L, the immediate reaction is one of surprise at the openness of the sound. In addition, the frequency response of the speaker is exemplary. And the midrange, which is often a weak point in speakers of this size and price, is very good. There is no sense of strain, and voices sound utterly natural."



CIRCLE 52 ON READER-SERVICE CARD

tic) high notes-among them the E flat that so many Lucias in the past have aspired to if not always achieved.

Lucia, he asserts, is a role for a lirico spinto soprano and not a coloratura soprano (by which term he apparently means a soprono leggiero). The latter will hardly come as news to those of us who have heard the Lucias of Callas and Sutherland and thus know Donizetti's opera to be a serious and moving work. In any case, López-Cobos view of the past is suspect, since he seems to think that both Patti and Melba. whom he implicitly accuses of misrepresenting the title role, were soprani leggieri. The former, however, sang Aida as well as Lucia in the same Covent Garden season. and the latter sang Mimi as well as Lucia. On the evidence of records and contemporary reviews. I find it impossible to believe either singer to have been, as López-Cobos implies, inexpressive, a mere technician interested more in her high notes and cadenzas than the communication of musical emotion

On the contrary, it is Montserrat Caballé who, despite the size of her voice and the unadorned plainness of this edition, is inexpressive, a Lucia capable of pretty sounds (and unpleasant ones. too. whenever the music demands power above the staff) but hardly memorable or individual in characterization. The Mad Scene in particular lacks dramatic focus. a sense of inevitability and wholeness. Moreover, a good deal of her singing is ungainly. The authentic Lucia may be more austere than the one we have all grown used to, but the title role still requires runs, trills, and brilliant high notes, in all of which areas Caballé lacks proficiency

As a vocalist she is outclassed by her Edgardo. José Carreras, who is in particularly beautiful voice on this occasion. As an interpreter he is also more involved than Caballé, more ardent and vivid. That fact, however, is not enough to make him a truly satisfying Edgardo. Good as he is now. Carreras will be twice as good when he learns to moderate his volume-at present stuck nearly all the time at mf-and introduce into his performance a modicum of dynamic shading. Unreliable as the Schirmer score I have been following may be, it offers in its expressive markings a surer guide to musical depth than the scarcely unrelieved obstreperousness employed by Carreras.

Vicente Sardinero makes an unremarkable Enrico, bland in personality and grainy in timbre. The highly promising Samuel Ramey is a good deal better as Raimondo, though I found his vibrato slightly too predominant for pleasure. I regret to say that all four principals tend to fall back on aspirates whenever there are difficult passages to negotiate. Incidentally, both Caballé and Carreras occasionally give their words a Spanish rather than Italian pronunciation (e.g., the former's "funtossma" for "fontosma").

The Ambrosian chorus attacks its rather uninspiring assignment with energy. López-Cobos secures fine playing from the firstrate New Philharmonia and is often lively, sometimes stodgy, never inspiring. As a

Continued on page 84



We confess. We couldn't have done this without a 30 year head start.

BONN

Thirty years ago, other manufactures clicn't know where to begin making a tabe recorcer.

Scny not only knew where to begin, but was putting the finishing touches on its first tape recorder.

That's quite a jump to have on a very star-led competition.

Tcday, we're still keeping them jurr bing Proof positive: our 3 new fron-lcading cassette decks. The TC-K71, K4 and K3.

Three decades of sound engineering, in producing both tape and tape decks, have gone into these machines. Which is clearly evident from the sound that comes out of them.

Our transport mechanism. Designed so the music can transport you.

The tape transport mechanism is pernabs the most important engineering challenge of a tape deck. Sony deels with it through a DC servo-controlled motor. A frequency generator (found on the K7 and K4) emits a signal which is relayed to electronic c rcuitry, thereby controlling motor speed.

This insures accurate, stable tape movement.

Sony's intelligent design enccmpasses something as obvious as a servo-motor. And something as seemingly trivial as the best rubber compound for the pinch roller, or the Lest oil for the flywheel bearing.

for the flywheel bearing. Nothing escapes Sony's attention; we're a prisoner of our perfectionism.

Our head keeps us ahead.

Our heads are our own ferritaand-ferrite formula. Not bought from a different supplier, they're made by Sony. The hard, high polish surface assures you of optimum contact, minimum wear and maximum life. (The life expectancy of a ferrite head is 200 times longer than that of a conventional permalloy head. See what a heac start

can co when it comes to making heads?)

Other teatures of these cassette decks include a Dolby Noise Reduction System. Three-position to as and equilization switches for standard, ferrichrome and chromium clox de tapes. Rec-mute for instant muting while recording.

As complex as these electronics are, that's how simple we've designed the controls to be. They're refreshingly logical. With a solid, responsive fee

Thirtz years ago, Sony was out in front.

Today, catch one of these cassete decks at your Sony dealer, and you'l see that no one has caught up with us.



© 1378 Sony Corporation of America, 3 West 57th Street, New York, Nº CD19



Ervin Nyiregyházi

Gems and Curios from the International Piano Archives by Harris Goldsmith

Thanks to an arrangement made last spring. selected releases of historical material by the International Piano Archives, previously available only through IPA, are now distributed by Desmar Music through regular retail channels (listing at \$7.98 per disc). While many of the releases to date have already been available from IPA (and a number of them have been reviewed in these pages), some-a fascinating Liszt recital by the enigmatic Ervin Nyiregyhäzi and a collection entitled "The Catalan Piano Tradition"-are appearing for the first time.

All of the reissues have been carefully remastered by Ward Marston under the direction of IPA's Gregor Benko and Desmar's Marcos Klorman, both of whom take pains and obvious pride in their work. Almost needless to say, the quality of reproduction varies greatly from disc to disclimited by the quality of the original source--and the artistic interest varies from performer to performer (and with many of these performers from listener to listener, depending on the individual perspectives). At the very least, each of these records has intrinsic archival value.

Pride of place must go to the rather bizarre Nyiregyházi recital (IPA 111). This pianist, born in 1903 and still living in obscurity, began his blighted career as a spectacular child prodigy but from a combination of circumstances-personal naivete. financial duress. and an unhappy psychological relationship with his overambitious mother-was soon living in destitution (and sleeping on the Forty-second Street shuttle in New York's subway system!). An IPA representative happened to hear Nyiregyhází in one of his rare comeback recitals and, with understandable

thrill of discovery, enticed this strange artist into the recording studio for a single LP side's worth of playing. (The reverse comprises poor-sounding excerpts from an amateur tape of the California concert: Nyiregyházi felt that he had done justice to the two "St. Francis" Legends and refused to retape them.)

It is worth bearing in mind that this record presents the playing of a septuagenarian who had not regularly played in public for thirty years-and indeed has not even owned a piano on which to practice for nearly as long. In many ways this is the ruin of a great virtuoso, but, as with the Parthenon, what a ruin! Nyiregyházi's work is. I gainsay, like nothing you or I have ever heard. He doesn't so much play the music as paraphrase it, which is probably very much what Liszt himself did. There are all sorts of dynamic inversions, octaves in the bass. altered harmonies, and rampant tremolandos that will cause the purist (and even the less strict listener) to raise his eyebrows. But Nyiregyházi's pianism also raises the hair and elevates the senses.

From the outset he commands a haunting bell-like sonority with a spiritual haze, and the dynamic range (especially overwhelming on the "live" performances) is nothing short of torrential. Even on the basis of this flawed evidence. Nyiregyházi impresses inescapably as a towering figure in the annals of Romantic pianism, a precious and wonderful interpretive voice-a voice, in its way, as distinctive as Rachmaninoff's. This disc may, sadly, turn out to be our only legitimate document of Nyiregyházi's playing (he made a few early piano rolls, which in his view do him scant justice): I understand that after this brief comeback, and following the death of his ninth wife, he has retreated into his reclusive state.

IPA 112 brings us the recordings (the Brahms F minor Sonata. Op. 5. and a number of short works) that Harold Bauer made for the Schirmer label in 1939, previously issued briefly on the Veritas label. The new dubbing is much louder and clearer and, if still well below 1939 state of the art, a close replica of the original shellac discs. The short pieces perhaps betray the fact that by 1939 Bauer was playing less and devoting much of his time to teaching and editing. (His Schirmer editions reflect both noble musicianship and rather suspect attitudes vis-à-vis textual license: he even suggested cuts in Schubert's B flat Sonata.) His noble and ruggedly grand performance of the Brahms sonata, however, is my favorite recording of this flawed but inspired early work, the rather shallow and congested sound notwithstanding-a substantial claim with a discography that includes Grainger, Kempff, Curzon, Arrau, Solomon, Fischer, and Rubinstein (twice).

Considered purely as pianists. Josef Hofmann. Leopold Godowsky, and Mischa Levitzki undoubtedly enjoyed greater repute than Bauer, who was originally a violinist and in his later years a chamber music partner of Casals, Kreisler, Gabrilowitsch, et al. Legend has it that Godowsky (heard on 1PA 113) was a supreme perfectionist who

somehow froze when it came to public performances and recording sessions. With only the latter to go by, I find him rather problematical. In the short pieces on Side 2, I am occasionally moved by the limpid, silvery tone production and sometimes too by the tasteful reticence-Debussy's "Clair de lune." Rubinstein's Melody in F. and Tchaikovsky's Barcarolle in particular are phrased with a most attractive wistful shyness. The most important item in the Godowsky collection is the 1930 English Columbia recording of the Chopin B flat minor Sonata, and I find it instructive that, while both he and Rachmaninoff (who recorded the sonata around the same time) employ bass amplifications and arbitrary dynamics and rubatos. Rachmaninoff's rapt, artistic interpretation somehow transcends these period mannerisms in a way that Godowsky's large-scale, craftsmanlike but slightly choppy and pedestrian reading never does. Levitzki, who died young, seems to be of a piece with Godowsky: a fluent, tasteful artist-again with a silvery legato tone-but somewhat detached throughout this collection of acoustic and early electric discs (IPA 114).

Hofmann was a much stronger personality, and regular readers are by now probably familiar with my mixed feelings about his work. Newer readers, however, may be misled by the highly selective excerpts from my review of the 1938 Casimir Hall recital on the shrink wrap of the reissue (IPA 5007/8, two discs)-for the full story. see the original review (March 1976). Having chastised this astonishing virtuoso technician for his artistically irresponsible and cynical exploitation of Beethoven, Schumann, Chopin, and Schubert. I am happy to report that his combination of fluency. grace, and ruthless power is magnificently appropriate to his own Chromaticon and to the Fourth Concerto of his onetime teacher Anton Rubinstein: that these performances are superbly supported by Fritz Reiner and the all-star Curtis Orchestra: and that the reproduction of this 1937 "Golden lubilee Recital" (IPA 5001/2, two discs) is remarkably fine for its period. This set also includes a taut Reiner-led Brahms Academic Festival Overture (his only extant recording of the work). an ingratiatingly charming speech by Walter Damrosch, and astonishingly well-played but capricious performances of solo works by Chopin. Moszkowski, and others, which are at least well reproduced. (The solos were once issued on a dreadful-sounding Columbia disc.)

IPA 103 presents Hofmann at an earlier phase in his career: his Brunswick recordings of the early 1920s. It is hard to tell whether he was showing greater artistic responsibility then or he simply behaved himself more in the recording studio (his 1935 HMV recordings were similarly continent and tasteful in phrasing), but either way this disc is one of the more recommendable chunks of Hofmann's recorded legacy. The Scarlatti-Tausig Pastorale and Capriccio, the Lisz? Waldesrouschen' and Second Hungorian Rhapsody, and two Rachmaninoff preludes all show a mercurial temperament and supreme finish, while the Beethoven-Anton Rubinstein Turkish March is far more soberly controlled than in the "Golden Jubilee" performance. Chopin's Nocturne. Op. 15. No. 2. however. sounds more reposeful on the 1935 HMV recording. Finally. the aforementioned Casimir Hall recital should be approached with decided caution: I detected some sonic improvement in the new mastering, but my artistic objections have if anything grown more severe.

Probably the most frustrating item of all is the notorious Brahms cylinder in "Landmarks of Recorded Pianism, Vol. 1" (IPA 117). Recorded informally in 1889, this singularly hideous-sounding curio purportedly preserves the composer's performance of his own G minor Hungarian Dance. After six or so fruitless hearings. I began torturously to decipher some of what indeed appears to be that composition. Brahms's rather high-pitched spoken introduction, though, is distinguishable, and many will want to own this track as a conversation piece. The artists who are heard include Grieg, Saint-Saëns, Debussy, Friedheim, Grainger. Michalowski, De Pachmann, Godowsky, Paderewski, Lhevinne, and the inevitable (for IPA) Hofmann. I was particularly impressed with Ilona Eibenschütz' flowing, fast-paced performances of two Brahms waltzes, re-recorded from an unissued G&T disc recorded in 1903.

'The Catalan Piano Tradition'' (IPA 109) comprises primitive-sounding cylinders of Albéniz, Joaquin Malats, and Frank Marshall (the teacher of Alicia de Larrocha, who is heard in two 1932 Chopin performances recorded for Odeon at age nine). These represent a labor of love (hundreds of hours were spent declicking the tape made from one cylinder that had been broken in half) but, for all their archival value, are probably for piano specialists only; the all but unlistenable sound, not much better than that of the Brahms cylinder. sorely tested the ears of even this patient listener. Enrique Granados, however, comes across with somewhat greater verisimilitude.

IPA 106/7 (two discs) brings us Wanda Landowska's regal and decorously embellished performances of Mozart's K. 415 and 482 Concertos (with Artur Rodzinski) and the K. 332 Sonata, all magnificently played (on the piano) and well reproduced. Also. Poulenc's Concert champêtre (dedicated to Landowska) is performed on the harpsichord and conducted by Leopold Stokowski. The orchestra in all three of these broadcast transcriptions is the New York Philharmonic. The remaining IPA/Desmar items are Arthur Loesser's superbly enlivening Town Hall recital, "Sic Transit Gloria Mundi" (IPA 102), not to be missed on any account: Ferruccio Busoni's rather austere discs backed by performances by three of his pupils (IPA 104): and Rosita Renard's sometimes exciting but mostly merely facile 1949 Carnegie Hall recital (IPA 120/1, two discs).

Not all IPA releases will be distributed by Desmar, and indeed four new releases come directly from IPA (now located at Box 303, Ivor, Virginia 23866).

The first two, featuring William Kapell and Percy Grainger, are offered as special membership gifts with a contribution of \$15. The Kapell disc (IPA 507), containing the Rachmaninoff Third Concerto and two movements of Mozart's K. 414, is reviewed separately in this issue: the Grainger disc (IPA 508) is devoted to works of Grieg. Grainger was as celebrated for his performance of the Grieg concerto as Rachmaninoff was for playing his own C sharp minor Prelude. Yet somehow he never recorded the whole concerto commercially. He did make a disc of the first-movement cadenza in 1908, shortly after working on the piece with the composer, and there have been issues of his piano-roll solo interpretation and also of a late Scandinavian performance recorded in his declining years. Thus, IPA's issuance of a magnificent-and very well recorded-1945 performance led by Stokowski is decidedly an event, and the similarity of that version to the playing on the 1908 excerpt, also included, documents that we are indeed hearing the same interpretation lauded by Grieg himself. The second side of the disc, alas, is of far less value: A home-recorded performance of three Norwegian folksongs from Op. 17 is so wavery in sound that it can scarcely be listened to with pleasure, and a later, completely superfluous account of the concerto. with a miserable community orchestra, is no better than the cited Scandinavian reading. If only IPA had instead coupled the Grainger/Stokowski performance, one of the finest I have ever heard, with one of Grainger's outstanding shellac albums-the Brahms F minor Sonata, closely comparable to Bauer's, one of the Chopin sonatas, and Schumann's Symphonic Etudes immediately come to mind.

The other new releases are recordings by Sigismond Stojowski (IPA 115) and John Ranck (IPA 2002), both available in selected retail outlets or directly from IPA at \$7.00 each. Stojowski, friend of Paderewski and mentor of, among others. Loesser and Guiomar Novaes, sounds rather brusque here in works by Chopin, Paderewski, and himself. He plays with strength and character but more often than not displays hard tonal characteristics and many of the less admirable rhythmic exaggerations of the old school. I might have attributed the deficiencies of these late broadcast performances to advanced age were there not similar hard tone and blotchy fingerwork in the Chopin A flat Waltz recorded in his prime. The second side of the disc is rounded out with performances of Stojowski's music by his widow. Louisa Stojowski; her playing and the attractive modern stereo sound make a far more persuasive case for his music.

A much more appealing proposition is the Ranck disc. originally recorded by Zodiac in the early '50s. Ranck's name was unfamiliar to me, but he plays the music of Poulenc. Tcherepnin. Griffes, and Werle with dash. idiomatic identity, humor, and rhythm. qualities that are amply conveyed in the still very sonorous reproduction.

The annotations on all of these discs are detailed and admirably literate.



XDR Cassette



details ... A DIFFERENT KIND OF RECORD CLUB

You can now own every record or tape that you may ever want ... at tremendous savings and with no continuing purchase obligations. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

Look at these benefits:

TREMENDOUS SAVINGS

on every record and tape in printno "agree-to-purchase" obligations of any kind.

DISCOUNTS OF 43% TO 73% off mfg. suggested list ... special catalog features hundreds of titles and artists.

ALL LABELS AVAILABLE

including most imports through special custom ordering service. If we don't stock it we'll get it for you.

SCHWANN CATALOG

lists thousands of titles; classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country, etc.

DISCOUNT DIVIDEND CERTIFICATES

Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

NEWSLETTERS

happenings in the world of music; concerts, critiques, new releases ... special super-sale listings at discounts of up to 73%.

DISCOUNT ACCESSORY GUIDE

Diamond needles, cloths, tape cleaners, etc. Discount Music Club is your complete one stop music and accessory buying service.

QUICK SERVICE

same day shipping on many orders rarely later than the next several days. Partial shipments always made in the event of unforeseen delay ... all at no extra cost to you.

100% IRON-CLAD GUARANTEES

on all products and services. Everything is guaranteed factory fresh and free of defects or damages of any sort. Your total satisfaction is unconditionally guaranteed.

Discount Music Club is a no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want ... when you want ... or not at all if you choose.

These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon below for immediate information.

discount 650 Main	MUSIC CLUB, INC. DEPT. 8-0278 Street, New Rochelle, N.Y. 10801
NAME	
ADDRESS	
STATE	ZIP

CIRCLE 10 ON READER-SERVICE CARD

musicologist, it should be said, he is no less inconsistent than as a conductor. For though the role of Lucia has been cleansed of impurities, that of Edgardo has not, Carreras taking the familiar inauthentic cadenza (higb B flat and all) at the end of "Tombe degl'avi miei" and another at the end of "Fra poco a me ricovero."

The recording, a moment or two of preecho notwithstanding, is as superlative as the pressings. There is a libretto in Italian, English, French, and German. D.S.H.

DVOŘÁK: Overtures: In Nature's Realm, Op. 91; Carnival, Op. 92; Othello, Op. 93; Husitská, Op. 67. Bavarian Radio Symphony Orchestra, Rafael Kubelik, cond. [Hans Weber and Rudolf Werner, prod.] DEUTSCHE GRAMMOPHON 2530 785, \$8.98.

DVOŘÁK: Legends, Op. 59. English Chamber Orchestra, Rafael Kubelik, cond. [Hans Weber and Rudolf Werner, prod.] DEUTSCHE GRAMMOPHON 2530 786, \$8.98.

DVOŘÁK: Slavonic Dances (16), Opp. 46 and 72. Michel Béroff and Jean-Philippe Collard, piano. [Eric Macleod, prod.] CONNOIS-SEUR SOCIETY CSQ 2146, \$7.98 (SQ-encoded disc).

The Opp. 91-93 overtures were written as a cycle dealing with the notions of nature, life, and love: a unifying leitmotiv, representative of nature, is first heard at the opening of In Nature's Realm. Unlike Smetana's Má Vlast cycle of tone poems, Dvořák's triptych is rarely encountered as such, even on records, where it fits neatly on one and a half disc sides. With Ančerl's imperious Czech Philharmonic readings available only as a Supraphon import (SUAST 50432, with the My Home overture). and with Kertész' exciting but rather brassy and unsubtle London Symphony readings available domestically only as fillers for his symphony recordings (the overtures are gathered on a British Decca disc. SXL 6358, along with the Scherzo capriccioso). the new Kubelik edition has the palpable advantage of mere availability-and another plus in its substantial and wellmated filler, the patriotic Husitská overture.

To these virtues add the splendidly live and detailed DG sonics. good playing from the Bavarian Radio Symphony. and Kubelik's sense of the music's color, rhetorical power, and lilting Bohemian charm. Without lessening my admiration for the disappearing Rowicki/London Symphony performances (fillers for his Philips recordings of the Dvořák symphonies) and for such classics as Sejna's magisterial Husitská and Talich's tragically desolate Othello (to say nothing of countless Carnivals). I would recommend the Kubelik disc as the sensible way to acquire this music in totoand all Dvořák fans will want to acquire it.

In the ten orchestral Legends, the buyer has had to choose between a musically first-rate but technically second-rate edition (by Pinkas and the Brno Philharmonic on Supraphon 1 10 1393) and a technically polished but interpretively cool one (by Leppard and the London Philharmonic on Philips 6500 188). I am happy to report that Kubelik now offers the best of both worlds. The English Chamber Orchestra plays with affectionate style and wit, sumptuous tone, and alertness. Kuhelik feels the music warmly, paces it instinctively, and holds these exquisite miniatures together quite cohesively; his Nos. 5 and 6, for example, make more musical sense than Pinkas' or Leppard's. The sound is warmer and more immediate than that of most of the Munich and Berlin recordings in Kubelik's DG Dvořák series, and the antiphonal separation of first and second violins pays many dividends in this music. A delightful and welcome disc.

Unlike Kubelik. Michel Béroff and lean-Philippe Collard are "cultural outsiders" to the Czech idiom, and one is often aware of this in their performance of the four-handpiano originals of both books of Slavonic Dances. I am uncomfortable with the deliberation of Op. 46. No. 5. and the forward pressure of Op. 72. No. 2. The rubato in Op. 46. Nos. 2 and 3, and Op. 72. No. 3. seems a mite calculated rather than naturally flowing. All this tends somewhat to constrict the outdoor vitality and ruggedness, the passionately lamenting qualities of the music. which are more evident in the performances by Lejsek and Lejsková (Supraphon 1 11 1301/2. March 1976). Moreover. some will find the piano sound rather close for comfort-as if the microphones were right under the piano lid.

All this said. I must note that Béroff and Collard, even if lacking in Slavic "soul." certainly use their heads and their fingers impressively in these performances. Crisp. clean, and superbly coordinated, their playing lays bare the harmonic interplay of the music in a way their phonographic predecessors haven't-one repeatedly notices fresh textural details organically related to the forward progress of the writing. The engineering, for all its lack of concert-room ambience, is clean and wide in range, and Irving Kolodin's informative liner notes communicate infectious enthusiasm for the greatness of each of these sixteen masterpieces. A.C.

HINDEMITH: Theme and Four Variations (The Four Temperaments)*; Nobilissima Visione. Carol Rosenberger, piano*; Royal Philharmonic Orchestra, James De Preist, cond. [Brian Culverhouse, prod.] DELos DEL 25440, \$7.98.

Paul Hindemith has too long languished, due to the bum rap of "scholasticism," in the same kind of semi-obscurity from which Sibelius has lately been emerging. With this release conducted by the gifted young music director of the Quebec Symphony. Delos restores to the catalog two "closet masterpieces" (both written for the ballet) whose life-affirming spirit and precision workmanship get full due.

The Four Temperaments is a theme-andvariations set for piano and strings, whose sections describe in turn the melancholic, sanguine, phlegmatic, and choleric characters also portrayed by Nielsen in his Second Symphony. While Nielsen allowed himself to cast each movement in its own melodic, structural, and rhythmic frame, producing some very vivid "types," Hindemith worked within the narrower confines of one motivic source, a smaller and more limited instrumental texture, and a tripartite



Needle in the hi-fi haystack.

Even we were astounded at how difficult it is to find an <u>adequate</u> other-brand replacement stylus for a Shure cartridge. We recently purchased 241 random styli that were not manufactured by Shure, but were being sold as replacements for our cartridges. Only ONE of these 241 styli could pass the same basic production line performance tests that ALL genuine Shure styli must pass. But don't simply accept what we say here. Send for the documented test results we've compiled for you in data booklet #AL548. Insist on a genuine Shure stylus so that your cartridge will retain its original performance capability—and at the same time protect your records.

Shure Brothers Inc. 222 Hartrey Ave., Evanston, IL 60204 In Canada: A. C. Simmonds & Sons Limited

TECHNICORNER

The criteria for these tests involved the eight standard production line inspections used for all Shure styli: Visual and mechanical inspection, tip configuration, trackability, vertical drift, 1,000 Hz output level measurement, channel separation at 1,000 Hz, channel separation at 10,000 Hz, and frequency response. Only genuine Shure styli have the name SHURE on the stylus grip and the words "This Stereo Dynetic® stylus is precision manufactured by Shure Brothers Inc." on the box.

Manufacturers of high fidelity components, microphones, sound systems and related circuitry. CIRCLE 35 ON READER-SERVICE CARD

THE BEST \$500 SPEAKER FOR **UNDER \$265:**



AUS 7

An opinion from an expert: "... the end result is a speaker that has superb frequency response without sacrificing the equally important transient characteristics

Thus, the sound of this system is incredibly open and well defined and the effect is that of listening to music rather than to a loudspeaker."

Thank you, Martin Clifford!

What the renowned technical editor has so aptly described is known by audiophiles all over the world as:

The INVISIBLE SOUND of ADS

We manufacture a complete line of loudspeaker systems, active and passive, for home, mobile and studio applications, priced approximately between \$100 and \$700.

For more information please state your area of interest and send us the coupon below; we promise to have literature and a dealer list on its way to you by return mail

To: ADS, Analog & D Industrial Way, Wilm (617) 729-1140		
I'm interested in: ADS Miniature S ADS Miniature S or trucks	peakers for	the home
ADS Two-Way Sp ADS Three-Way ADS Programma	Speakers	Monitors
Name Street City	Zip	

structure for each section (evocative of that temperament's range of activity and passivity). Considering the stringent demands of that framework, his achievement could be said to be even more impressive.

Nobilissimu Visione is a suite describing episodes in the life of St. Francis of Assisi. It sounds like a lush exercise in multihued sonorities, but in fact the grand opening movement is economically scored for strings and clarinet, later strings and flate. The final Passacaglia-a grandly triumphant peroration-is thematically akin to its great C minor namesake by Bach.

In both works. De Preist's readings can stand comparison with the composer's own (mono) recordings. Not that there is any slavish imitation here. The bright-eyed approach that De Preist and pianist Carol Rosenberger take to The Four Temperaments benefits from orchestral playing tidier than that of the Berlin Philharmonic on Hindemith's DG recording. I do miss the way in which the DG pianist. Hans Otto, slithered through the allegretto section of the "Phlegmatic" movement in an uproariously lazy and jazzy style not heard from the generally brisker and more-well, choleric or even sanguine Rosenberger. A minor point, though, and this planist/conductor team is in every other way impressive.

De Preist's Nobilissima is also a bit more mercurial than Hindemith's (with the Philharmonia, for EMI), though sturdier, as befitting this ascetic score, than the somewhat hot-blooded Martinon/Chicago one recently deleted by RCA. The new version is closer to the score's metronome marking for the Passacaglia than Hindemith's incredibly broad-spanned performance, and I think it works both ways. In the March, I miss the raucous and weighty swagger of unison horns and trombones eight bars after No. 21 as heard in the composer's recording, but Delos picks up a point for clarity (one of many) in the finale, between Nos. 39 and 40, where the chattering clarinets can be heard equally with the flutes.

The Delos recording is cleanly focused and airy throughout these splendid performances. The pressings and the jacket annotations and designs are elegant. A.C.

IVES: Symphony No. 4; Central Park in the Dark. Boston Symphony Orchestra. Seiji Ozawa, cond. [Thomas W. Mowrey, prod.] DEUTSCHE GRAMMOPHON 2530 787. \$8.98. Comparisons—symphony: Stokowski/American Sym

Serebrier / London Phil. Comparison—Central Park:	RCA ARL 1-0589
Bernstein, Ozawa, Peress/N.Y. Phil.	Col. MS 6843

A new recording of the lves Fourth is always welcome. The symphony is a complex work that no single performance can possibly encompass, and different readings tend to place the piece in radically different perspectives. This is certainly true of the present release: Ozawa puts together a picture of the work very different from any I have previously encountered.

Although Ozawa's version is not without its rewards. I am afraid that for me it will be necessary to characterize it mainly through negatives. But let me at least begin on the positive side. The textural clarity is generally quite high, even in the more complex passages in the dense thickets of the second

movement. I hear details that I don't remember having heard before, and everything has obviously been worked out with great care.

Curiously, it is just this sense of great care that for me proves to be the undoing of Ozawa's reading. The whole thing has a rather mechanical quality-as if the problems were worked out to the point where all life and spontaneity had been drained from the performance. It is difficult to imagine this piece really falling flat (whether one likes it or not), but it comes remarkably close to doing so here.

In the opening movement, for example, the chorus sings the hymn "Watchman. Tell Us of the Night" in a sort of lusty campfire manner that is completely out of character with the air of mystery that lives has so impressively written into his setting. The questioning quality, already present in the text and underscored by the composer in numerous ways (e.g., by not allowing the tune to reach its expected cadence), is missed entirely. Rather than mystery (a quality that should then unfold with evergreater intensity throughout the work), we get an aggressive and rather pedestrian rendering of the vocal line.

The second movement suffers also. In general, everything sounds calculated, robbing the music of much of its liveliness. More specifically, the tempos are leveled out so that the movement, which should at least to some degree sound like a hodgepodge of violent contrasts, moves along on an even, and rather dull, keel from beginning to end. To cite one particularly egregious instance: The music at rehearsal No. 18. where the texture is dominated by the band music in the brass, is played much too slowly and tentatively, whereas at No. 22. which is marked "slower" and should serve as a kind of lyrical interruption of this previous section, the pace is actually accelerated a bit. Thus the essential relationship between the two segments (which is of course more than just a matter of tempo, as it encompasses the entire character) is thrown off balance.

The third movement's fugue comes off considerably better. (It is, in any event, less vulnerable to the whims of individual performances.) But the last movement, which is one of those transcendental lvesian visions that should appear to float in a kind of timeless vacuum, is played with too much rhythmic punch and drive, which ironically has the effect of grounding it.

Let me say that I admire Ozawa greatly and that over the past few years I have had occasion to hear him give two truly extraordinary performances of large-scale twentieth-century works (Schoenberg's Gurre-Lieder and Messiaen's Turangalila). both of which I count among my unforgettable musical experiences. But he seems to have little ear for the rhythms and gestures of lyes's (admittedly rather special) musical language. For me the most illuminating lyes Fourth remains Stokowski's classic Columbia reading. It catches the spirit of the work remarkably well, and despite certain problems (including, as with Ozawa, the temporelationships of the second movement). I would not want to trade it for any other. For clarity of execution of the second movement, always a very special problem. I would recommend Screbrier's RCA ver-



Everything but the effects of poor room acoustics, poor speakers or poor program quality with the MXR Stereo Graphic Equalizer.

You've got a room that's a lot like a sponge ... rugs, drapes, overstuffed chairs. And every time you turn on your system, most of the aural glory gets soaked up. Or. you've bought a sound system that has an impressive price but alas, a depressing sound. Your records, tapes and radio sources may sound good to some, but to you, the high fidelity just isn't high enough. And you'd lose if you made a trade.

Get into control with the MXR Stereo Graphic Equalizer. It lets you tailor frequency responses and adjust acoustics to your desires. Control 10 frequencies plus level on each of two channels. Play with the lows, boost the mid-ranges, and soar with the highs. Bring each speaker closer, or move it farther away at the touch of a slide control. The MXR Equalizer's frequency controls not only adjust for the interior of your room, but also for the interior of your system, making a small system sound big... a big system sound mammoth.

Built with the same ingenuity are our Compander which enhances sound for home recording, and our new Dynamic Processor, which brings recorded dynamics to life and removes impulse noise. Hear the entire MXR line at fine audio dealers. Or write MXR Innovations, Inc., 247 N. Goodman St., Rochester, N.Y. 14607. Or call 716-442-5320. Also distributed in Canada by White Electronic Development Corporation,

White Electronic Development Corporation, 6300 Northam Drive, Mississauga, Ontario.





sion. Although not as exciting as Stokowski's, it is a technical wonder and complements the latter particularly well.

Central Park in the Dark, which fills up the remainder of the DG disc. is of course a much easier work to perform than the Fourth Symphony, and it comes off quite well here. The performance, not surprisingly, is similar to the one Ozawa and Maurice Peress (the work can be performed with two conductors) recorded with the New York Philharmonic some years ago under Leonard Bernstein's supervision. when the two were serving as his assistants. The climax in this new version does not have as much bite as in that older one. but here (as there) the separation between the two independent instrumental groups is extremely clear. RPM

Liszr: Concerto for Piano and Orchestra, No. 1–See Beethoven: Concertos.

LISZT: Transcendental Etudes (12); Concert Etudes (3). Claudio Arrau, piano. PHIL-IPS 6747 412, \$17.96 (two discs, manual sequence).

Comparisons—Transcendental Etudes: Berman Col./Mel. M2 33928 Sherman Van. Ev. SRV 354/5 SD

Any doubts about Arrau's technical fitness, at seventy-five, for the strenuous Transcendental Etudes are put to rest by the opening "Preladio," which is not merely noteperfect—and far more beautiful in sound, in both playing and engineering, than Lazar Berman's Columbia/Melodiya version—but also marvelously robust and fully up to tempo.

Wilde Jagd" and "Mazeppa" are firm in outline and steady in rhythm: both abound in the kind of meticulous detail that Russell Sherman achieves at the expense of impetus and line in his Advent/Vanguard Everyman performances. Note, for instance, the clear outlining of the left-hand dotted figuration in the central section of "Wilde Jugd" or the lustrous separation of the basic melody from the clouds of dust in "Ma-"Paysage" moves with taut simzeona." plicity, the horizontal lines beautifully colored and wondrously clear: "Vision" progresses with arrowlike straightness, its textures cleansed by sparing use of the sustaining pedal, and the same may be said of the swirling F minor Etude, only a hairsbreadth more deliberate than Berman's precipitous reading, "Chosse-neige" is bleak yet varied, and "Harmonies du soir" rivals Richter's 1958 concert performance for arching subtlety.

My only reservations in this masterfully rendered cycle, and they are slight, concern "Feux follets" and "Ricordonzo." It is not the slowish tempo of Arrau's "Feux follets" that bothers me (the tempo marking, after all, is allegretto), but rather his somewhat ponderous emphases and insufficiently delicate pianissimos. His "grand manner" again obtrudes in "Ricordonzo." which lacks Sherman's exaltation and gracefully spun filigree.

The three Concert Etudes, less fearsome technically than the Transcendental Etudes, fare well too, Arrau's "La Leggierezza" and "Un Sospiro" rival the respective achievements of Godowsky and Bauer.

HIGH FIDELITY MAGAZINE

CIRCLE 31 ON READER-SERVICE CARD

The Laboratory Reference Series tuner.

A very remarkable component—by itself or as part of a complete LRS system.

Although the LUX Laboratory Reference Series was conceived—and introduced—as a completely new concept in systems, we believe you'll find the LRS tuner alone merits special consideration.

At a glance, the 5T50 is strikingly clean and elegant. The tuning display itself is digital, supplemented by what might be considered an advanced touch of nostalgia for the dial of old. One linear dial is calibrated in 1 MHz increments, and another provides for 200 kHz indication. However, instead of a pointer, LED's traverse the dials, giving linear readout of tuned stations

Electronic tuning and memory.

Tuning is accomplished electronically, by a touch on either of two buttons. Station selection can be switched to either manual or automatic scanning mode, and tuning speed can be adjusted from slow to rapid. A further tuning option is provided through the tuner's C-MOS IC memory system, which stores seven stations in digital code. A touch of the appropriate button provides instant reception, with the station exactly center-tuned.

Tuning accuracy within 0.003 per cent.

Tuning is always exact, no matter how you select the FM station. Using a quartz crystal frequency synthesizer instead of a tuning capacitor and coil assembly, the 5T50 gives a degree of accuracy (within 0.003 per cent) and stability that cannot be found in conventional tuners. The station is received center-tuned and it remains that way-just as accurate and as stable as the FM transmitter frequency itself-which, for reasons of precision, is also referenced to a crystal.

But the utmost in design and performance doesn't stop here. From front end to output terminals, the 5T50 utilizes the best circuitry. For example, dual-gate MOSFET's in the RF. amp and mixer. And a buffer circuit ---which helps achieve outstanding image, IF and spurious response rejectionfollows the crystal oscillator. In the IF section, a ceramic filter plus two pairs of 4-pole block filters provide for excellent

selectivity without sacrificing low distortion characteristics. A double-tuned guadrature detector also keeps distortion low, at the same time protecting against signal overload. And to assure excellent stereo separation (45 dB at 1kHz and at least 40 dB at high and low frequencies), the multiplex section employs a Phase-Locked-Loop circuit.

The Luxman 5T50

Special tuning refinements.

To help you take advantage of this advanced internal design-which includes a Dolby* decoding circuit for Dolbyized FM broadcasts—we've included a number of advanced external features. So tuner operation is just as precise as performance. For example, a multipath check button lets you detect multipath distortion audibly-no need for an oscilloscope. There's also an antenna attenuator for adjustment if signals are too strong in your reception area. For quick level adjustment when recording Dolbyized broadcasts, a 400-Hz test tone button is provided. The tuner output level is adjustable, along with interstation muting threshold. A digital display provides easy-to-read signal strength indication. And if incoming signals are weak, there's a high blend noise filter to assure low-noise stereo FM. Other LRS components.

Of course, only you know if you're considering a new tuner at this time, or an entirely new system. If the latter, we'll simply advise you that the LRS system has carried the separates concept to "an extreme." That is, the preamplifiers have no tone controls—these are provided by the LRS graphic equalizer or separate tone control unit. The power amplifiers are available with or without meterssupplemented by a separate LED peak indicator. And if low distortion is important to you, the total harmonic and IM distortion of the LRS power amplifiers at rated power is no more than 0.008 per cent. That's double-0 eight.

However, if a superb tuner is really all that interests you at this time, that's fine. Chances are you'll see and hear it as part of the complete LRS system-where it will look and sound the most impressive. Suggested price: \$1,495

Dolby is a trademark of Dolby Laboratories. Inc

LUX Audio of America, Ltd.

160 Dupont Street, Plainview, New York 11803 • In Canada: White Electronics Development Corp., Ontario



90

Add'I postage: \$3 per year outside U.S., its poss.

All of this music is heard in by far the best sound it has yet had on records—Philips captures the full velvety richness of Arrau's sonority without any of the tubbiness that sometimes intrudes. Since the pianist has returned the compliment with some of his most spontaneous-sounding playing on disc. I would say that his *Transcendental* Etudes, with due respect to the competition, are a clear recommendation. This set is a triumph in nearly every way. H.G.

MOZART: Concerto for Piano and Orchestra, No. 12—See Rachmaninoff: Concerto for Piano and Orchestra, No. 3.

OCKEGHEM: Vocal Works. Pomerium Musices, Alexander Blachly, dir. [Marc J. Aubort and Joanna Nickrenz, prod.] NONESUCH H 71336, \$3.96.

Ma maistresse; Missa Ma maistresse; Au travail suis; Missa Au travall suis; Ave Maria; Alma redemptoris.

This most attractive recording brushes away some of the mystique that so often surrounds the music of Johannes Ockeghem. The fifteenth-century composer, who has been surprisingly popular as writers of early music go, is amazingly well represented on recordings. Many of these are excellent, but they tend to pander to Ockeghem's more inscrutable side, emphasizing his amorphous forms and ambiguous rhythms with echoing cathedral acoustics.

Alexander Blachly's Pomerium Musices, on the other hand, brings a clear, crisp sound to the Missa Au travail suis, a comparatively straightforward parody Mass recorded here for the first time. The Mass is well suited to the talents of this young New York-based vocal ensemble, as is the short Missa Ma maistresse (Kyrie and Gloria only) based on the composer's justly famous chanson of the same name. The secular chonson models. "Au travail suis" and 'Mu muistresse." are elegantly sung by soprano Ann Monoyios accompanied by lute and vielle. Monovios is an exciting young American singer with an impeccable sense of style and a clear, sweet sound perfectly suited to the finely etched line of the fifteenth-century chanson. Two motets, set-

round out this delightful disc. The quality of the recording itself and of the accompanying liner notes reflects Nonesuch's customary care. S.T.S.

tings of Ave Maria and Alma redemptoris,

RACHMANINOFF: Concerto for Piano and Orchestra, No. 3, in D minor, Op. 30.* MOZART: Concerto for Piano and Orchestra, No. 12, in A, K. 414: second and third movements.* William Kapell, piano; Toronto Symphony Orchestra, Ernest Mac-Millan, cond.*; Los Angeles Philharmonic Orchestra, Pierre Monteux, cond.*. INTER-NATIONAL PIANO ARCHIVES IPA 507, \$15 membership fee (mono; price includes Percy Granger disc, IPA 508—see page 83) [recorded in concert, 1948° and 1950*] (International Piano Archives, Box 303, Ivor, Va. 23866).

RACHMANINOFF: Concerto for Piano and Orchestra, No. 3, in D minor, Op. 30. Lazar Berman, piano; London Symphony Orchestra, Claudio Abbado, cond. [Steven Epstein, prod.] COLUMBIA M 34540, \$7.98. Tape: • MT 34540, \$7.98. [Available for a limited time at special reduced price, with X prefix.]

RACHMANINOFF: Concerto for Piano and Orchestra, No. 3, in D minor, Op. 30. Tamás Vásáry, piano, London Symphony Orchestra, Yuri Aranovich, cond. [Cord Garben, prod.] DEUTSCHE GRAMMOPHON 2530 859, \$8.98. Tape: • 3300 859, \$8.98.

BACHMANINOFF: Concerto for Piano and Orchestra, No. 3, in D minor, Op. 30. Earl Wild, piano; Royal Philharmonic Orchestra, Jascha Horenstein, cond. [Charles Gerhardt, prod.] QUINTESSENCE PMC 7030, \$3.98 [recorded 1965, previously issued by Reader's Digest].

Comparisons:	
Ashkenazy, Fistoulari/London Sym.	Lon. CS 6359
Ashkenazy, Ormandy/Philadelphia	RCA ARL 1-1324
Horowitz, Coates/London Sym.	Sera. 60063
Horowitz, Reiner/RCA Sym.	in RCA CRM 4-0914
Mogilevsky, Kondrashln/Moscow Ph	iil. Ang. SR 40226

These recordings of Rachmaninoff's longest concerto offer so baffling a diversity of textual options that we would do well to begin by sorting them out once and for all.

First, the matter of cuts. My own view is that the Third Concerto is an inspired but flawed creation. Some of Rachmaninoff's most compelling music may be found heree.g., the piano's plummeting first entrance into the murk of the second movementbut, possibly because of its grand design, the work fails to make the overall satisfying impression that the less ambitious Second Concerto does. There are structural problems and many passages where Rachmaninoff apparently succumbs to his own ether fumes and goes nowhere. Contrast this with the Second Concerto, where he more closely follows the course of Tchaikovsky's First Concerto, with simpler, more firmly delineated themes and a logical line of development that never falters.

It seems to me that the composer himself must have considered the work uneven, for he did suggest some cuts-and his 1939 recording with Ormandy is slashed to ribbons. Let's pin those cuts down. First movement: from the tempo precedente three bars after rehearsal No. 10 to No. 11. Second movement: from the piu vivo six bars after No. 27 to eight bars after No. 28. Third movement: 1) from No. 45 to nine bars after No. 46; 2) from two bars after No. 52 to No. 54. These excisions range from valuable (the second cut in the third movement) to disastrous (the first cut in the third movement, which eliminates the first appearance of the important second theme where it is most needed-all well and good that the preceding bridge passage presents the theme in chordal form, but it doesn't make its emotional impact).

Some of the other recordings listed herethe Kapell/MacMillan, the Wild/Horenstein, and both Horowitz versions-are also cut, but none, interestingly enough, precisely duplicates Rachmaninoff's cuts. According to the annotator for Columbia's new, uncut Berman/Abhado recording. Horowitz claims that Rachmaninoff never made that infamous first third-movement cut in actual performance. But could the great pianist's memory be inverting the facts slightly? His first recording of the work, made nearly a decade before the Rachmaninoff/Ormandy during the period when he studied the work with the composer, observes all the sanctioned cuts ex-



The first tuner and amplifier that won't scare you into buying a receiver.

Most people buy a receiver instead of a separate tuner and amplifier because they think it's easier to handle, less complicated, not as frightening, even less expensive.

Nothing could be further from the truth. Which is amply proven by the Optonica ST-3636 tuner and the SM-4646 amplifier, a pair so easy to get along with, and so affordable.

Nobody gives you a combination of features like the smart-looking Optonica[™] ST-3636 tuner. It's got Opto-Lock tuning, which locks in the signal and locks out station drift and unwanted noise. The advanced FM front end is designed for excellent sensitivity, outstanding selectivity and a high signal-to-noise ratio.

The Optonica ST-3636 also comes

with air check circuitry so that a tape deck can be calibrated to record FM broadcasts at the optimum level.

Just wait until you get your hands on Optonica's SM-4646 amplifier. The beautifully engineered front panel gives you total control flexibility to meet every recording and listening need.

There are three independent power supply circuits to give you full range stability and power handling. This Delta power amplifier puts out smooth, effortless reproduction.

With the SM-4646 you've got the power to handle it all. There's a full 85 watts per channel minimum RMS at 8 ohms, from 20 Hz to 20 kHz with no more than 0.08% THD.

With that kind of power, you need

OPTONICA THE OPTIMUM.

write Optonica, Dept. HF, 10 Keystone Place, Paramus, New Jersey 07652.

protection. And you get it with an LED

Automatic Protection Circuit. This exclu-

sive Optonica feature isolates vital output

components if the outputs are accidentally

shorted. And to prevent speaker damage,

We invite you to test the Optimum

We'd also like to give you a free copy

the circuit will also activate if excessive

tuner and amplifier to find out just how

comfortable separates can be for you.

DC voltage occurs at the output.



cept the one in the first movement. The Wild/Horenstein account utilizes the same text as Horowitz/Coates-i.e., first movement complete but all three cuts in the second and third movements identical to those of Rachmaninoff/Ormandy. The Kapell/ MacMillan, a 1948 air check of a live concert performance, makes the standard cut in the first movement, offers the second movement complete, and makes a single original cut-from No. 51 to No. 54-in the third movement. This is certainly less harmful to the work than the composer's suggested mayhem, but everything considered-and this may sound like heresy-1 am coming more and more to feel that Horowitz' second recording (with Reiner) provides the ideal solution: the first movement complete; in the second movement a liny (and perhaps ineffectual) six-bar cut beginning, like the standard cut, six bars after No. 27 but running only to No. 28: in the third movement the second standard cut but not the first. If Horowitz' announced intention to make his forthcoming third recording complete is based on sensitivity to purist "policeman" critics rather than his own structural convictions, I urge him to reconsider. Without that second cut in the third movement, the work rambles badly.

The second textual question concerns the performer's choice of first-movement cadenza. Rachmaninoff wrote two versions of its first part. The first of them, favored by the composer in his recording, is thirty-nine bars long and rather mercurial in texture. with the recapitulation of the first theme given a scherzando restatement. This version of the cadenza was used by Horowitz in both his recordings, by Ashkenazy in the first of his three recordings (with Fistoulari), by Wild, and more recently by De Larrocha (on London CS 6977). Nowadays, this once overwhelmingly preferred edition has been supplanted by the alternative: fiftyfive measures of muscle-bound thundering and lumbering chords. Gieseking's eccentric 1939 broadcast performance (once offered on an IPA disc) opted for this, but it was Van Cliburn who made it stick. Regrettably, all of the more recent recordings except De Larrocha's adhere to this artistically inferior version.

The final textual variant is of slight import: the rarely encountered quadruplet-octave alternative at the end of the work. Interestingly, among the recordings under discussion this pyrotechnical option is taken only by Vásáry, whose performance seems somewhat deceptively the least showy and virtuosic of the lot. Indeed, the only other pianist I have heard play this variant is André Watts (whose rather unsatisfactory Columbia recording with Ozawa has little else worthy of attention).

All four of the new releases are reasonably successful, but ironically the most seriously handicapped performance, Kapell's, towers over the others. Quite apart from the cuts, it suffers from rather poor and ill-balanced orchestral playing and dated sound (which starts out as decent mono but falls off badly in the third movement). What a tragedy that Kapell never lived to record the work commercially. From the very first notes, stated simply and luminously, his pianism and musicianship are in Horowitz' class. He begins more

fact: one mistrack damages grooves more than 25...50...even 100 plays.



CBS STR 100 Played 75 Times With a V15 Type III Cartridge



Mistracking Damage A Commercial Recording After Just One Play With Top-of-the-Line Name Brand Cartridge at 1.0 Gram Tracking Force. Mistracking — Critical Damage.



The Same Commercial Recording After 50 Plays With Shure V15 Type III Cartridge at 1.0 Gram Tracking Force. Normal (Inaudible) Wear — Excellent TrackIng.

The Optimist's View:

The cartridge that tracked the grooves shown in the top photomicrograph caused no PERCEIVABLE wear after 75 plays. But because these grooves are cut at relatively low velocities and have a continuous 20 kHz signal (only on one channel), they don't present a very challenging test. As a matter of fact, any reasonably good cartridge should produce the same results. However, under greater magnification these same grooves would probably reveal some amount of record wear (although not enough to alter sound quality). That's because record wear is a gradual but constant phenomenon

... like tire wear every time you drive.

The Terrible Truth:

The middle photomicrograph shows a record of musical material cut at today's "hotter" velocities after only one play with a well-known competitive cartridge at its rated tracking force. This cartridge mistracked the record. Clearly, critical damage resulted. Notice the deep gouge marks on the groove walls.

A single mistrack can result in MORE damage than 25, 50 or even 100 plays of a record! Continuing our tire analogy, a mistrack is like a blowout. Once your cartridge mistracks a record passage, the damage has been done and that passage will never sound the same. TRACKABILITY is the single most meaningful yardstick by which to measure cartridge performance. That's because TRACKABILITY encompasses virtually every performance factor by which a cartridge is judged . . . including velocity of the recorded signal, frequency, compliance, and effective mass.



The bottom photo shows the same groove played 50 times with a V15 Type III at a recordand stylus-saving force of only one gram. Clearly, there is no cartridge you can buy — for any amount of money — that will protect your record collection more from the damage of mistracking than the Shure V15 Type III.



Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204, In Canada: A. C. Simmonds & Sons Limited Manufacturers of high fidelity components, microphones, sound systems and related circuitry.

FEBRUARY 1978

93

Dirty heads do to tape what a worn stylus does to records.



TEAC's Recorder Maintenance Kit has what you need to keep your tape recorder up and running.

Head Cleaner to prevent loss in frequency response and unnecessary wear.

Rubber Cleaner to prevent wow and flutter problems due to hardening, cracking and loss of roundness in rubber parts.

Stainless Polish keeps exposed metal work gleaming.

In spill-proof dispenser bottles. Suggested retail price: \$9. Suggested use: often.

TEAC. Studio-Proven Accessories

TEAC Corporation of America • 7733 Telegraph Road • Montebello, CA 90640 CIRCLE 46 ON READER-SERVICE CARD

Enjoy Music More

If the recorded music you purchase and listen to is important in the way you enjoy life you ought to know about this source of helpful information.

Schwann Record & Tape Guide

is a compilation of information about records and tapes of many classifications. This wonderfully useful catalog uncovers titles you didn't know were available, helps you select versions by conductors and artists whose work you prefer... shows you money-savings reprints on budget labels... and much, much more.

More than 65,000 records and 8-track and cassette tapes are listed in the monthly *Schwann-1* and its semi-annual companion, *Schwann-2*. All are available through your record dealer if you ask for them by Schwann title and number. Schwann opens up rich rewards in your record collecting hobby. See your record dealer for latest copies.

Schwann-1 Monthly. Hundreds of new listings in many categories. Also nearly 45,000 available recordings on 686 record labels, 230 tape labels. 84 quadraphonic labels, in classical, recent popular, rock, jazz, musical shows, country, opera, ballet, electronic, etc. \$1.00 at your dealer's. Schwann-2 The semi-annual companion catalog for specialized categories: popular, rock, etc. more than two years old, classic jazz, classical classics of the prestereo era, also the the great re-issue catalogs. International pop & folk on domestic labels, spoken, educational, religious, etc. 95c at your dealer's.

please try your dea	ore doesn't carry Schwann ller first. Prices include po	stage and handlin	ig.
Latest Schwann	-1 (monthly)		\$2.50 eac
Latest Schwann	-2 (semi-annual)		\$2.50 eac
	er: latest Schwann-1 (month		
	latest Schwann-2 (semi-	annual)	\$4.50
l enclose \$	for the items checked above.		SCHB8
Name			
Address			
City	State	Zip	

slowly and engages in far more tempo variation, but his tigerish control and sprinting tonal command are in fact very much like Horowitz'. In one or two places I think he even surpasses Horowitz in scrupulous musicianship and attention to detail-for example, he alone observes the piano at the outset of the third movement's first piu mosso, where the temptation to bang away violently is admittedly hard to resist. On the other hand, neither Kapell nor anyone else plays the veloce roulade in the fourth and fifth bars after No. 26 in the second movement with anything like Horowitz' jolting electricity. But Kapell's is unquestionably a performance to set beside those of Horowitz and Rachmaninoff. I can't make that claim for any of the others-not even those by Ashkenazy and Mogilevsky, admirable though they both are.

As filler for Kapell's Rachmaninoff, IPA offers a concert performance of the last two movements of Mozart's A major Concerto, K. 414. with beautiful support from Monteux and 1950 sound of good quality. Like Kapell's underrated recording of the Beethoven Second Concerto, his fine Mozart reminds us that, although he was a consummate showman, he was also a fine, unaffected player of classical music-a combination of excellence that would reappear in another American pianist whose career was tragically cut short, Leon Fleisher.

Having heard the broadcast of last year's much-publicized Berman/Bernstein/New York Philharmonic Rachmaninoff performance, I think that music lovers can count their blessings that they were spared having that grotesque travesty preserved on records. The account with Abbado, recorded in London a few months earlier, is incomparably superior. Not only is the orchestral framework luminous of tone, accurate in intonation, and without the New Yorkers' shocking crassness of execution, but Berman, who more and more impresses me as an amiable sort of pianist who follows where he is led, delivers a far more restrained and affecting reading of the solo part. The difference is striking immediately: The tender opening melody, which in New York was pulled about and unpleasantly gesturesome, is here shaped with repose. The Columbia recording is not perfect. The piano, pleasantly singing when it is soft, becomes jangly and metallic in fortissimo. And while the orchestral quality has plenty of range and impact I get the uncomfortable feeling that instruments are crowding in on each other without really being well balanced-a problem not so much of piano/orchestra ratio, which is fine, as of microphone placement for the orchestra itself. RCA's Ashkenazy/Ormandy version is an instructive corrective: No other recording clarifies the sometimes trivial, sometimes meaningful instrumental comments so well, but at the same time both piano and orchestra have air space in that plushly agreeable ambience. Berman's reading is a good one, but, even with Abbado eliciting the best from him. I find some of his phrasing slightly stolid and directionless, a trifle ordinary and predictable. Honorable and idiomatic though it is. I suspect that I would soon tire of this interpretation.

Vásáry gives a somewhat more patrician account, and his wide dynamic range

builds many an impressive climax. Yet his reading, too, is not one that I would care to live with. He is, to be sure, a romantic (with both upper- and lower-case r) player, but the flavor is more akin to Schumann or Chopin. Vásáry is as breathtakingly fleetfingered as anyone below the Horowitz/ Rachmaninoff/Kapell class, and, while it is admirable that he never exploits his equipment in a tasteless manner. in the end his performance seems disappointingly well bred and even-tempered. Much of the blame, I think, can be laid at the conductor's feet. Aranovich doesn't pull tempos about to the degree that he did in the First and Second Concertos (DG 2530 717, June 1977), but his rubato nevertheless sounds lame and unintuitive. Nor is the recording outstanding by DG standards: a rather underrecorded, reticent, unforthcoming pickup. Though the individual timbres are true enough, physical impact and individual definition merge into a generalized euphony. The leggiero piano work at the end of the second movement sounds rather dry and prickly.

In the Quintessence/Reader's Digest issue, the conductor is a strong temperamental asset and the impactive and impressive sound, though it dates back more than a decade, yields only to the much newer Ashkenazy/Ormandy in suavity and meaningful clarity. Wild is a powerhouse technician, and some of his playing is strikingly forward-impelled. It would sound more arresting still were it not so unvaryingly loud of touch. This pianist is rarely attentive to the markings dolce, p, and pp-surely as frequent in the score as ff. Hence the huge climaxes are robbed of much of their effectiveness by want of contrast. Still, Horenstein's sharpness of texture (which can almost be described as "barbed") and the feeling that everything is "in place" give this kinetic rendition an absorbing validity. Even with its cuts and lack of soft dynamics, this is an attractive (and of course inexpensive) edition. H.G.

SESSIONS: When Lilacs Last in the Dooryard Bloom'd. For an essay review, see page 70.

STRAVINSKY: Chamber Works. Tashi and guest artists. [Max Wilcox and Peter Serkin, prod.] RCA RED SEAL ARL 1-2449, \$7.98. L'Histoire du soldat: Suite for violin, clarinet, and piano (Ida Kavafian, violin; Richard Stoltzman, clarinet; Peter Serkin, piano). Septet (Stoltzman; Robert Routch, horn; Bill Douglas, bassoon; Kavafian; Danlel Phillips, viola; Fred Sherry, clello). Pastorale (Kavafian, Serkin). Three Pieces for Clarinet (Stoltzman). Suite italienne (Sherry, Serkin).

A curious collection, made cohesive and pleasurable by the players' strong feeling for Stravinsky's idiom. Three of the five pieces are transcriptions (made by Stravinsky himself), and of these I believe one is a first recording: the trio version of The Soldier's Tale, made as a favor to Werner Reinhart, a wealthy Swiss patron of the arts and a clarinetist (the Three Pieces were also written for him). Since Stravinsky so pointedly omitted the piano from the Tale's original instrumentarium, its use in the transcription is somewhat paradoxical, but



If you own a tape recorder, you should own TEAC's E-l Head Demagnetizer. Here's why: during normal use, residual magnetism accumulates on the heads and guides. That can cause noise, distortion, and partial erasure of your tapes.

Used often, TEAC's Head Demagnetizer removes residual magnetism and keeps your tape recorder recording and playing its best.

The suggested retail price of \$25 is a small price to pay for a big sound benefit.

TEAC. Studio-Proven Accessories

TEAC Corporation of America • 7733 Telegraph Road • Montebello, CA 90640 CIRCLE 47 ON READER-SERVICE CARD



CIRCLE 39 ON READER-SERVICE CARD

ADVERTISING INDEX

(ey No.		Page No.
1	ADC Phono Cartridges, A. Div. of BSR Consumer Products Group	70
	ADS, Analog & Digital Systems	
2	AIWA. Akai America, Ltd.	26
3	American Song Festival	
4	Angel Records Audio Technica U.S., Inc	83
J	Addio rechinica 0.5., inc	
6	Bang & Olufsen	
	Bose Corp. Buying Guide to Tape Systems	
8	Carston Studios	
9	Classified Ads Component Warehouse	
53	Dahlquist. Discount Music Club.	
	Discwasher, Inc.	
17	Dixie Hi Fi Dual	
11	Empire Scientific Corp.	
12	Genesis Physics Corp	127
	deneara i nyaies corp	
14	Illinois Audio	
15	International Hi Fi	
	Jensen Sound Laboratories	
16	J & R Music World JVC America, Inc.	
10	Jvo America, Inc.	10, 17
10	Kenwood	.Cover IV
28	Kli <mark>psch</mark> & Assoc Koss Corp	
	Lux Audio of America	
	Marantz Co., Inc.	Cover III
21 22	Maxell Corp. McIntosh Laboratory	21
	Micro-Acoustics Corn	106
	Musical Heritage Society Music Listener's Book Service	102
24	MXR Innovations	87
	Nikko Audio	10
		18
52 25	Ohim Acoustics Optonica Electronics	80
26	Orion Records	
27	Peters International	
30	Pickering & Co.	2
29	Ploneer High FidelityC	over II, 1
	Radio Shack	
31,.	Rotel	88
32	RT <mark>R I</mark> ndustries	14
33	SAE, Inc.	77
34	Sansui Electronics	8, 9
35	Schwann Publications Shure Brothers, Inc.	
36 55	Shure Brothers, Inc. Sonic Research, Inc.	
37	Sony Corp. of America	
	Soundcraftsmen Sound Guard.	
39	Sound Reproduction	
40	Speakerlab Stereo Corp. of America Stereo Discounters	99
E 4	Stereo Discounters Studer Revox America, Inc.	99
	Studer Revox America, Inc.	79
41]	andberg of America	11
42	Tannoy TDK Electronics	10
44	DK Electronics	65
46 1	Feac Corp. of America. Feac Corp. of America	94 95
481	Fechnics by Panasonic	12, 13
19 1	<mark>3M Company.</mark> Fop Discou <mark>nt Audio</mark>	
. /l	Jnited Audio Products	60
۰	anguard Records.	
V	/ideo Center, The	100
51 1	Visconsin Discount Stereo	122
	Tisconsin Discount Stereo	

the whole thing works here because of the wonderfully spirited and pointed playing. Only five movements of the original score are included in this version, and Stravinsky mavens will be fascinated to examine the transcription in detail, for it isn't simply a matter of clarinet and violin retaining their original lines and piano filling in the rest; on occasion, the clarinet and violin even interchange lines. And Stravinsky's piano reproduction of the Tango's percussion accompaniment is particularly delightful.

The cello version of the Suite italienne is another of those cases where one has wondered: "Is this transcription really necessary? Again, the performance, much leaner and cleaner than those by your standard virtuoso cellists and subservient accompanists. provides its own answer. The charming Pastorale, with its purling melody and staccato accompaniment, is an old favorite; the only other current violinand-piano recording I have traced, in Columbia's six-disc Szigeti box, isn't really of this transcription, but a straight rendition of the song, without the extensions that Stravinsky added for this and the parallel violin-and-winds version. The solo playing here isn't perfectly secure, but the piano part is delightfully set forth-in fact. Peter Serkin's command of Stravinsky articulation is one of the disc's continuing delights.

Another is Richard Stoltzman's clarinet playing, notably in the *Three Pieces*, which haven't been better done in my experience. Stoltzman's tone is more pliable than that of Guy Deplus (on the Boulez Stravinsky record. Everest 3184), and his phrasing more relaxed: further, he uses the right instruments (Deplus played the first two on a B flat clarinet instead of the instrument in A that Stravinsky preferred), and he avoids Deplus's rhythmic errors.

From two decades later than the other pieces comes the Septet. an incipiently serial work that manages to be both buoyant and knotty at the same time. These players succeed in releasing both these aspects, and this is definitely the recording of choice. Fine, clear recorded sound, and excellent program notes by Michael Steinberg. D.H.

VERDI: Simon Boccanegra.

	5
Amella	Mirella Freni (s)
Amelia's Servant	Maria Fausta Gallamini (s)
Gabriele Adorno	José Carreras (t)
Captain	Antonio Savastano (t)
Simon Boccanegra	Piero Cappuccilli (b)
Paolo Albiani	José van Dam (bs-b)
Jacopo Fiesco	NIcolai Ghiaurov (bs)
Pietro	Giovanni Foiani (bs)
La Scala Chorus	and Orchestra, Claudio Ab-
bado, cond, [Ra	iner Brock, prod.] DEUTSCHE
	09 071, \$26.94 (three discs,
manual sequer	nce). Tape: 🕶 3371 032.
\$26.94.	
Comparisons:	
Silveri, Stella, Bergo	Dati Date
Molinari-Pradelli/	
	es, Campora, Christoff,
Santini/Rome Ope	
	elli, Domingo, Raimondi,
Gavazzeni/RCA Iti	aliana RCA ARL 3-0564

Simon, despite its growing acceptance as fairly regular repertory, has had a poor time of it on discs, in both quantity and quality this is only its fourth recording, and just the second in stereo. The current SCHWANNS list two of the earlier versions (the Angel mono and the RCA stereo), and the other, the Cetra mono, remains widely available at low price in its Everest edition; given the narrowness of the field, I shall give all three some comparative attention here.

To briefly characterize our story to this point: 1) Cetra's effort, circa 1951, is vocally somewhat rough-and-ready, but at least vigorous. With a representative all-Italian cast of the period and with more mettlesome conducting from Francesco Molinari-Pradelli than we later grew accustomed to expecting from him, it hangs together as a performance, though hardly a memorable one. Unfortunately, its just presentable mono sound has been further devastated by a typical Everest rechanneling. 2) The Angel version (1958), with somewhat clearer though still hardly vivid sound, offers a strangely assorted cast (more comment below) and an intermittently dull, albeit sometimes lyrically pleasing, reading under Gabriele Santini. 3) The RCA stereo set is, regrettably, a generally poor performance with nothing really distinguished about it. und**er a co**nductor (Gianandrea Gavazzeni) from whom we could have expected better things. In addition, its engineering (dynamic range that cannot be comfortably adjusted on home stereo systems. a shallow, wide spread that turns its performing forces into a Thin Red Line) is of a sort that makes me prefer dated mono.

Which brings us to the new performance, a serious and thoughtful one that is far better recorded than any of the others, and so in a basic way more of a pleasure to listen to. Like the recent Macbeth (DG 2709 062, January 1977), it is based on the current La Scala production, directed by Giorgio Strehler.

Perhaps it will be most helpful if I discuss some casting specifics first. In an operawritten for dramatic voices, predominantly of lower range, there has been an increasing tendency of late to cast with lighter. brighter voices (except. oddly, for the role of Paolo, once generally taken by high baritones, lately often by bass-baritones). This recording follows the trend in almost every role. Mirella Freni, whose vocal structure is that of the straightforward Franco-Italian lyric soprano, is invading Rethberg/Tebaldi territory. José Carreras, well suited to Edgardo or the Massenet Des Grieux, is pretending to a true tenore di forza part, most effectively taken by such singers as Tamagno, Martinelli, Tucker. Piero Cappuccilli, who on a clear day is a solid Paolo in the older tradition, assumes Boccanegra for the second time on records.

Freni seems to me to be making the classic error open to full-voiced lyric sopranos in midcareer: A slight increase in weight and darkness in the upper-middle range lends a specious "dramatic" color to the timbre that seems to indicate a more dramatic capability, when what it really indicates is the necessity for extra attention to lightness and balance in the voice.

In this part, there are numerous phrases that turn on an arch through this moderately high territory, and at many of these points Freni sounds firm and legitimate enough. But the role is dependent on real, full-throated solidity in the lower octave. A high proportion of its special effects are built around the ability to plunge downward into a satisfying chest voice (e.g., the sudden double-forte at "sul talamo spu-





mante" in her first scene with Gabriele, sustained top A natural down to a turn firmly grounded on the middle D natural) or to lift an ascending line through a rich lowermiddle "mix" (as at "Mi baciò, mi benedisse" in the great interview scene with the Doge).

Further, long stretches of relatively quiet dialogue sit in the middle range, where they are supposed to sound not merely easy and pretty, but authoritatively "present" in a way commanded only by a more dramatic caliber of voice. In all these circumstances the best that Freni can summon is more or less well-calculated compromise. either attractive but lacking in the requisite force or unattractive but lacking in the requisite force (noticeably in her shredding of the pleas in the Council Chamber Scene, where a "baby chest" intrudes on G and A flat, too high to be healthy and too thinned to be effective). Interpretively, she offers perfectly solid, idiomatic phrasing that conveys nothing very individual.

For all this, she must be preferred to RCA's Katia Ricciarelli, who has a pretty lyric voice no better suited to the music, with less technique and experience to back it up. Angel's Victoria de los Angeles is also too light of voice and gentle of temperament, but is a much more polished vocalist who has some winning moments. This leaves us with Cetra's Antonietta Stella, who after a clumsy reading of the opening aria settles into some singing that is at least of appropriate caliber and expansivity.

Carreras is a recording substitute for Placido Domingo, who sang the role in the stage production, but also in the RCA edition, presumably rendering him unavailable for the new recording. His fine lyric tenor is simply too lean for the music, and his efforts to fill it out lead him to miss many of the more lyrical opportunities one would expect him to take advantage of: Driving an overly open tone above the break robs him of the control he might bring to, for instance, the beautiful dedicatory duet with Fiesco in the garden scene. No doubt his unfamiliarity with the part accounts for certain choices not clearly made-but what is he doing in the role in the first place? He shares with Angel's Giuseppe Campora this bantam weight for the part-either of the other two (Carlo Bergonzi, at the onset of his career, for Cetra; Domingo for RCA) is preferable.

Cappuccilli is here in much better vocal form than he brought to the RCA set. There is more core and bite to the voice, and the phrasing has a tauter underpinning. He also has more direction with the part, perhaps as a result of his work in the Scala production. He thus arrives at his true level, which is that of an adequate, distinctly audible utility haritone, the sort one is not displeased to encounter at the international level in certain roles, or as a replacement when necessary in the great ones. He has acquired a more thorough, serious approach to his roles (at least on these recent DG/Scala recordings) than, say, the Mario Sereni of fifteen years back. In other respects, though, the two are roughly comparable-indeed, Sereni actually had the nappier timbre and the more impressive top

This is not a mean level to be at, but for it to represent the closest that Italy can sum-



AMERICA'S #1 VALUE LEADER STEREO CORPORATION OF AMERICA AND WE' PROVE IT! Our prices are the lowest! Check with us before you buy any stereo equipment. Give us the opportunity to beat the best deal you've been able to find. We weren't rated #1 for nothing. WRITE OR CALL FOR FREE, BRAND NEW 32 PAGE, STEREO PRICE CATALOG! We discount over 60 major brands! TEAC · We're one of the oldest audio 1.0 mail-order houses in the U.S.A. Largest inventory/lowest prices! : **** 000 We get the best deals from the manufactures, you get the best BREAK PAR WRITE US NOW FOR THE LOWEST PRICE QUOTE **EXCLUSIVE!** SHOP BY PHONE! Night Owl Order Line (212) 253-8911 5-9 P.M. Mon.-Thurs. only! Orders/Quotes Only! STEREO CORPORATION OF AMERICA HF - 1629 Flatbush Ave. Brooklyn, New York 11210 CIECLE 40 ON READER-SERVICE CARD



CALL TOLL FREE 1-800-638-3920

Send for our Free Catalog and compare our Selection and Prices. You'll see how we got our name! Over 75 major brand names.

Name		
Addr.		
Cdy		
State	Zip	HF-1
43/83838		
STE	(Sulinn	mm
DISC	OBN'I '	
6730 Santa	Barbara Ct., Balto. M	ld. 21227

FEBRUARY 1978

	5
140211	
8624 Wilshire Blvd., Bev. Hills, Ca. 9	0211
(213) 855-0451	
SPECIAL OF THE MONT SONY BETAMAX	Н
with wireless remote pause	
	7
Sony SL 8200 Modified 1099	
VIDEO RECORDER_PLAYER	_
Sony SL 8200 2 hr. Betamax deck Sony DT 30 timer for above units	\$ 899.00
Sony Betamax Portable and color camera SLO 340/DXC1600 Sony SLO 260 recorder w/luner	4775.00 895.00
Sony SLP 100 player	695.00 1479.00
Sony VO 2600/TT 100 %" VTA + tuner Sony VO 2860 editing/ RM 430 editing system Panasonic NV 8300 2 hr., VHS record/play/tuner	1759.00 CALL
Panasonic NV 9300 %" record/play/tuner Panasonic NV 106/105 (RE ontional)	67.00
Panasonic WV 9100 %" player	1132.00
Panasonic NVA 950 edit contole	4772.00
Sanyo VTC 8203 (or 4) V-Cord II w/tuner, 2 hr. Sanyo VTG 8 timer for above	799.00
Sanyo VTC 8400 indust. V-Cord II, 2 hr	849.00 CALL
Sanyo slow motion portapak system: Camera recorder charger all under 20 lbs	1695.00
RF modulator for Sanyo portapak NC Vidstar 3 hr, VHS w/luner timer RCA Selectavision 4 hr, VHS recorder/timer	195.00 849.00
COLOR CAMERAS	849.00
Sony OXC 1610 battery operated, zoom	
control zoom, built-in color bar gen.	1400 00
Hitachi FP 3030 portable, complete ensemble	3559.00
BLACK AND WHITE CAMERA Panasonic WV 1000 surveillance	5 179.00
Sanyo VCM 2000, viewfinder Sanyo VCM 2000 w/6-1 zoom, mike, tripod Sanyo VC 1600 surveillance	449.00 649.00
Sony AVC 1420 Newvicon low-light cameras	195.00 325.00 CALL
MONITORS-BLACK AND WHI Sanyo VC 4209 9"	TF
Panasonic TA 920M 9" monitor/receiver	138.00
Panasonic TR 195VA 19" monitor/receiver	317.00
COLOR MONITORS Sony CVM 1250 12" monitor/receivers sony CVM 1750 17" monitor/receivers Sony CVM 2150 21" monitor/receivers Sony CVM 2150 21" monitor/receivers	<u>599.0</u> 0
Sony CVM 1/30 1/* monitor/receiver Sony CVM 2150 21" monitor/receiver Panasonic CT 911V 19" monitor/receiver	869.00 1227.00
PROJECTION SYSTEMS	
THE VIDEO CENTER carries virtually every projection system as For information, Please	cailable.
TAPE SALE	
LAVC KCA 60 FAMOUS BRAND	19.95 CALL
Memorex KCA 60	21.50 16.50
Memorex KCS 20	22.95
	16.95 13.95 12.95
Scich 1-500 [Beiamaz] Sanyo V 120 [V-Cord] JVC T 120 [VHS].	16.95
VIDEO GAMES	
Alari CX 2600. computer system. w/Combal cart	159.00 k. Sur-
ADVENT, SONY, JVC, SANYO, PANASO RCA, GBC, HITACHI AND MORE	NIC,
Ask for Mail Orders, call collect Send clipping of ad with order	
GUARANTEE: All mdse, is Brand New Factory Fresh w/mfg Guarantee unles fied otherwise. Nu return without prior approval. 30-day werranty service	s speci- en Used
HCA, GBC, HITACHI AND MORE For placing orders, call collect Ask for Mail Order Oepartment Send clipping of a with order GUANTEE All miss is frank her factory frank wint Garrants unler for alternitis. Are return without pirk aground a with order fewijment. All price will for and order only. PATENTS frank with the without Coll is a databased on CO.D. Muster Dargs and VSA acc cety of the written without on Co.D. Butter. Dargs and VSA acc cety of the written warrantes can be obtained fran upon specific written all orders uniter to reheat and to D.B. Butter. Multi, Catheronic	s Check apted, A request
All prices subject to change and F.O.B. Beverly Hills, California, CIRCLE 50 ON READER-SERVICE CARD	
0	

mon to a great Boccanegra is a sad bit of documentation. There is nothing abhorrent or lackadaisical in Cappuccilli's work, but neither is there more than a suggestion of true vocal glamor, theatrical magnetism. or musical individuality. As I listened to him in this role, I respected his application and competence throughout, without for a moment being stirred. In these respects Cappuccilli is comparable to Cetra's Paolo Silveri. another intelligent, rather dry-voiced baritone who, however, shows greater spoutaneity and vitality (Boccanegra is one of his best recordings, steadier and more relaxed of voice than most of the others). Tito Gobbi, for Angel, is in another league entirely in terms of theatrical canniness and stylistic authority, and brings more voice to bear as well; unfortunately his intentions are frequently sabotaged by the hollow, vibratoless sound of his upper range and the heavily damped crooning of his mezza VOCC

Nicolai Ghiaurov has been caught a bit past his best as Fiesco, a role in which he gave some vocally overwhelming performances a decade back. There is still much that is beautiful and imposing in his singing, and at the least his voice is of the correct sort for the music. Increasingly. though, his lower notes are taking on a shallow sound, with the vowels opened to the verge of whiteness, and the very top (important in this role) does not flow with quite the fullness and freedom it used to. In addition, the softness of his attack has become a consistent mannerism, here sometimes compounded by a tendency to "hook" notes from below in his fat upper-middle range. Withal, I find him far more listenable than RCA's Ruggero Raimondi, who musters some fine forte top notes but otherwise phrases stiffly and vocalizes in a blaring timbre, or than Angel's Boris Christoff, secure and firm in phrasing but shalethroated. Cetra's Mario Petri, with a voice that sometimes turns nasal or ill-focused at the louder dynamics, nonetheless brings more variety and theatricality to his work than any of the others, and his is still the most completely realized Fiesco on disc.

The new set does carry away one blue rihbon, for José van Dam's Paolo is firstrate in all respects. Giovanni Foiani is also an excellent Pietro, and Antonio Savastano a strong Captain.

The Scala orchestra and chorus make splendid contributions under the punctilious, intelligent leadership of Claudio Abbado. Objectively, there is little to criticize in his reading—there are solid justifications behind all the choices, and musically speaking the execution could hardly be better, except where the soloists' technical limitations are the determining factor. Nor is the performance at all lacking in energy or sense of direction.

Still (and I realize this is a subjective matter, in which my feelings may not be shared by many listeners). I am unable to discover much electricity or atmosphere in the proceedings. I do not hear the personal urgencies of these characters, or feel much of the sensuality. the brooding mystery and fire, I know to be in the piece. I hear the performers making all sorts of musical points that appear to be related to these qualities, and I see from the written statements of the participants that they appreciate their presence, but I don't find them embodied in the result.

Like some other recent performances, this one strikes me almost as a piece of thoughtful criticism, a lecture on the work that gets most everything right, but that somehow leaves passion, color, and gut by the wayside. It is a profoundly conservative sort of performance, and for me just doesn't add up to a memorable operatic experience. And by "getting things right" I do not mean to imply a literal quality in the reading-the decisions include many under the heading "Places to be flexible." I hear the decisions. In his short apologia in the accompanying booklet, Abbado speaks of his choice to go with the coronas, the allargandos, and especially the dramatic pauses. But to be dramatic, a pause must be filled with something already prepared-transitions must be from and to something of living significance. Where is it?

Yet as I said at the beginning, it's a serious effort, very well recorded—so listen and decide for yourself. C.L.O.



PHILIP JONES BRASS ENSEMBLE: In Switzerland. Philip Jones Brass Ensemble, Elgar Howarth, cond. HNH RECORDS 4037, \$7.98.

There should be more than the usual nearcaptive specialized audience for this release by what is one of. it not the, finest of all contemporary brass ensembles. First trumpeter Philip Jones and his group (here ranging up to nine other brass players plus a piccoloist and percussionist) play as well as ever and again are recorded to gleaming perfection despite the fact that an anonymous engineer of the Swiss Claves organization has replaced their usual Argo engineer. Stan Goodall.

But in this novel program the ensemble turns from its usual "serious" old and contemporary repertories to pay homage to a batch of trumpeter/conductor/arranger Elgar Howarth's divertissement-settings of Swiss folk and traditional tunes: "Basel March." "The Cuckoo." "Lucerne Song," Zurich March," "The Old Chalet," and Berne Patrol." And these-along with Howarth's maniacally elaborate up-to-date variations on Carnival of Venice and Alan Civil's jeu d'esprit encore piece Tarantango-add up to the most witty, sophisticated, and irresistible instrumental musical entertainment since, say, the orchestral suites drawn from Walton's Facade. As distinct from the broader, sometimes almost slapstick burlesques of the British Hoffnung Festival and the American P.D.Q. Bach concert series, this is strictly musical humor to be inexhaustibly relished by everyone save the most obstinate sourpuss.

There are also a couple of more substantial if still not too serious items: Joseph Horovitz's saucy. gay-Twenties, vaudevillian Music Hall Suite and Jan Koetsier's spicily satirical Petite Suite. But it's the Howarth settings that make this program the best example of music for sheer fun that I've en-

Before Sound Guard, you only played a record in mint condition once.



Magnification shows the record vinyl wearing away.

You can see how the picture has changed.

Independent tests* show that records treated

regularly with Sound Guard preservative keep the same full amplitude at all frequencies, the same absence of surface noise and harmonic

distortion as records played just once in mint condition.

Sound

With its patented drylubricant film, Sound Guard



Same magnification shows no record wear.

preservative maintains sound fidelity by reducing record wear. And with its built-in, permanent antistatic property, it resists dust accumulation.

And now, two new Sound Guard products:

I. Sound Guard™ record cleaner, developed from extensive

ound

research into record cleaning problems and methods, removes all common record contaminants—from dust particles to oily fingerprints.

And whether your records need a light cleaning to remove surface dust or a thorough cleaning to remove deep-seated contaminants, Sound Guard record cleaner does both.

2. Sound Guard[™] Total Record Care System puts Sound Guard record preservative and Sound Guard record cleaner in one

package for the best possible total care for all of your records



Available in audio and record outlets.

*Tests available on

request.

Sound Guard Record Preservation Kit

Sound Guard[®] keeps your good sounds sounding good.

Sound Guard preservative—Sound Guard cleaner—Sound Guard Total Record Care System Sound Guard is Ball Corporation's registered trademark. Copyright © Ball Corporation, 1977. Muncie, IN 47302



Handbook of Multichanne Recording

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

"Handbook of Multichannel Recording" is only one of a wide selection of carefully chosen audio books made available to HIGH FIDELITY readers through Music Listeners' Book Service. (Many of the selections are not readily available in bookstores.) Choose your books from the list, circle the numbers on the coupon, and enclose your check or money order. That's all there is to it.

No. 781 HANDBOOK OF MULTICHANNEL RECORD-ING. F. Alton Everest. A comprehensive volume of 322 pages, with 201

A complementative volume of 322 pages, with 201 illustrations, covering all aspects of live recording in both stereo and four-channel formats. Paperbound: \$7.95. Hardbound: \$10,95.

No. 603 DURABLE PLEASURES, A Practical Guide to Better Tape Recording. Hans Fantet.

Written in nontechnical language by one of the most respected writers in the field, this illustrated volume is a must for all tape recordists, whether beginners or old hands **\$8.95**.

No. 756 FOUR-CHANNEL STEREO FROM SOURCE TO SOUND, 2nd Edition (1974). Ken W. Sessions, Jr.

Complete technical and nontechnical information on all approaches to four-channel sound, both discrete and matrix Paperbound: \$4.95. Hardbound: \$7.95.

No. 640 SELECTING AND IMPROVING YOUR HI-FI SYSTEM. (1973) Harvey Swearer. A handy guide to what to look for, what to expect

A handy guide to what to look for, what to expect, and what to avoid in setting up or expanding your home audio system Paperbound: \$4.95, Hardbound; \$7.95,

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

MUSIC Dept.	HW	NERS	Cincinna	ERVICE ati, Ohio 45214
				Please send rcled below.
	781	603	756	640
Name				
Addre	SS			
City. S	itate. & Z	ip		
L				

countered in years. And among the awesomely virtuosic executant feats, I doubt if I've ever heard anyone match those of tubaist John Fletcher, especially his incredible cadenza passages in the Carnival of Venice Variations. He—indeed the whole program—is not to be missed. R.D.D.



FILM MUSIC BY ALEX NORTH. Alex North, cond. [Tony Thomas, prod.] CITADEL CT 6023, \$6.98.

Unchained: Main Theme, The Racers: Love Theme, Viva Zapatal: Josefa, The Bad Seed: Lullaby, A Streetcar Named Desire: Blanche, The Bachelor Party: Love Theme, The Thirteenth Letter: Denise, Stage Struck; Eve, I'll Cry Tomorrow; Main Theme, Les Miserables: Love Theme, The Rose Tattoo: Bacio, Desiree: Love Theme.

VIVA ZAPATA!: DEATH OF A SALESMAN, Original film score by Alex North. Royal Philharmonic Orchestra, Elmer Bernstein, cond. and prod. FILM MUSIC COLLECTION Album 9, \$8.00 plus 70¢ shipping, to members only (annual membership \$5.00; Elmer Bernstein's Film Music Collection, Box 25198, Los Angeles, Calif. 90025).

With merely two other Alex North recordings available—the landmark Sportacus soundtrack (MCA 2068) and the disappointing Rich Man, Poor Man 'TV score (MCA 2095)—the new Citadel and Film Music Collection releases are welcome, long-overdue samplings of North's fascinating and highly individual oeuvre. Arriving at a time when it seemed that the film-music revival would pass him by entirely, these discs happily reaffirm both his stature as a major figure among film composers and the truth of the platitude "better late than never."

Ironically, only the FMC disc is actually new. The Citadel LP was recorded in 1958 (in true stereo) by RCA, which had intended to release it as a companion volume to its previous "North of Hollywood" (LPM 1445, deleted). However, insufficient sales of that first North album made RCA reluctant to release a second, so the recording remained in the can for nearly twenty years until Tony Thomas acquired the rights to issue it on his Citadel label, which specializes in film music.

Since "North of Hollywood" featured the composer's jazz-influenced themes, the followup disc was intended to showcase his romantic orchestral themes, and this proves to be a serious flaw. North always preferred scoring small-scale, intimate dramas, which allowed him to compose the warmly evocative, introspective sequences he found particularly satisfying, but an anthology of twelve such selections, removed from their original settings and unrelieved by contrasting emotional values, becomes a rather tedious listening experience and gives no indication of the full scope of these scores. Also, the disc's "romantic movie themes" format, so prevalent in the '50s. unavoidably gives the whole affair a background dinner-music quality.

Nevertheless, this album does offer music unobtainable elsewhere, some of which is quite beautiful and characteristic of North's flair for lyrical expression. The delicate, nursery-rhyme-ish theme from Unchained, heard here in its original form rather than as the popularized "Unchained Melody," has a hauntingly serene quality that offers a novel contrast to the film's lifeon-a-prison-farm subject. Also interesting are Josefa's theme from Viva Zapata!, a lovely Mexican-flavored serenade with a disquieting contrapuntal chromatic ascent, and the canonic, coolly disturbing lullaby from The Bad Seed.

The Viva Zopata!/Death of a Salesman LP makes available for the first time two of North's most masterly and often-requested scores. Like all Film Music Collection releases, it presents accurate, near complete re-creations of the film music, in this case prepared for the recording by the composer himself.

Having been a student of ethnic music in general and having studied for two years in Mexico with composer Silvestre Revueltas, North approached Elia Kazan's film biography of Mexican revolutionary hero Emiliano Zapata more sincerely and authentically than perhaps any other composer could have. Avoiding hackneyed "south of the border" cliches, he skillfully integrated indigenous instruments, modal scales, and rhythms with the standard orchestra and his own anguished and frenetic style. He thereby forged a penetrating, dimensionexpanding accompaniment to this 1952 film classic, which is made all the more effective by his brilliant contribution. Boisterous and chaotic lvesian polyphonics ingeniously pit maricachi music against jagged. syncopated orchestral strains, providing the perfect musical equivalent to the depicted political turmoil. Simple folk melodies harmonized in major and minor thirds are used to create a pure, more personal ambience for less frenzied moments. (Incidentally, the "Josefa" sequence heard on the Citadel disc is not included here.)

North's sparse, understated score for the original 1949 Broadway stage production of *Death of a Salesman* worked so beautifully in the theater that it was only natural for him to rework it for the 1951 film adaptation. Heard at the outset of the recording is the famous alto-flute solo of Willy Loman's theme, which suggests throughout the score the character's unhappy longing for the unattainable. This disc includes the "Death Ride" sequence, composed specifically for the film—a neurotic scherzo whose contorted rhythms and strident harmonies make even more harrowing Willy's suicidal car ride.

In Viva Zapata!. Bernstein's conducting may lack some of the bite and precision of Alfred Newman's soundtrack performance, but, considering the score's technical complexities and the short time available for rehearsals, his interpretation is quite admirable. The Death of a Salesman music he handles very well, eliciting suitably intimate playing from the Royal Philharmonic, and as producer he and engineer Eric Tomlinson have provided warm, close-miked sonics.

This first new recording of vintage (and well-chosen) Alex North scores by the Film Music Collection will doubtless delight film-music buffs. I hope it will also stimulate more releases of this composer's sorely neglected works. R.F.

THE NEXT BEST THING TO ORIGINAL SOUND.



Made from selected hardwood veneers

CIRCLE 19 ON READER-SERVICE CARD

Klipsch[®] loudspeakers are a temptation. Once you've heard them, the world of music will never be the same.

No valid test has ever shown any other speaker to be better. Or as good. Overall performance tests of the Klipschorn® show the lowest distortion of any speaker ever tested in our laboratories—and we test them. Klipsch loudspeakers are the ultimate in sound.

But we can't tell you the difference in Klipsch loudspeakers. We can't even show you. After you've read all the specs and heard all the theories, listen. Listen and compare.

Only then will you know what it's like to be bitten by the next best thing to original sound.

klipsch

Please send me your FREE color brochure on the full line of Klipsch loudspeaker systems, along with a list of Klipsch dealers.	
Name	

Address	
City	
State	Zip
	incoh®

Reel Unicorns come horning in. In these days of musicassette domination of the recorded-tape realm, it's a pleasant change in newsworthiness to find the first American tape representations of the enticing British Unicorn catalog appearing in the open-reel format. Barclay-Crocker does the admirable Dolby processing for the nowmodest price of \$7.95 per reel, and the initial program materials are imaginatively diverse.

The great Gervase de Peyer leads off with the first challenge to Benny Goodman's 1964 Columbia proprietorship of the Copland clarinet concerto. De Peyer and Bernard Jacob's London Mozart Players may soften some of the rowdier jazzy elements of this music, but they reveal hitherto unsuspected depths in it. No clarinet aficionado can afford to miss Unicorn/ B-C D 0314 for either the Copland work or its coupled record first: a jolly yet truly Grand Concerto. Op. 5, by the now-forgotten Finnish virtuoso Bernhard Henrik Crusell (1775–1838).

Then, Brucknerians will find novel illuminations in the Master's first major achievement. the 1848-49 Requiem. and his four orchestral-scoring experiments of 1862, all earnestly sung and played by a vocal quartet. the Alexandra Choir. and the London Philharmonic under Bruckner authority Hans-Hubert Schönzeler (D 0210). And anyone who finds more in the music of Samuel Barber than I can will welcome the Measham/London Symphony program comprising the First Symphony, First and Second Essays, and Night Flight, a revamping of the Second Symphony's slow movement (D 0342).

For passionate audiophiles (and Herrmannians as well), the prime Unicorn/B-C attraction is D 0237, in which the composer leads the London Philharmonic in two of his finest filmscore suites: The Devil and Daniel Webster and Welles Raises Kane. The still gleamingly bright 1968 Pye sonics and the prodigal wealth of scoring ingenuities might have been expressly devised to demonstrate the outstanding reel-processing technology involved. (By mail-order only from Barclay-Crocker, 11 Broadway, New York, N.Y. 10004.)

Varied Beethoven sonata slants. Back in the ever-expanding musicassette universe, there are distinctively different Beethovenian contributions by pianists Russell Sherman, Vladimir Ashkenazy, and Vladimir Horowitz. The first, who emerged from provincial Bostonian fame only in Advent's 1975 Liszt Transcendental Etudes, is again mightily impressive for both magisterial eloquence and persuasive per-



sonality in Sonatas Nos. 4, 17 (Tempest), 21 (Waldstein), and 23 (Appassionata), superbly recorded in Advent E 1057 (Nos. 4 and 17) and E 1060 (Nos. 21 and 23), \$7.95 each; notes booklet \$1.00 extra.

Ashkenazy's interpretations are characterized as much by their youthful ardor as by their assured bravura in the early Sonatas Nos. 2 and 3 and the late Nos. 28 and 30 (Opp. 101 and 109), in London CS5 7028 and 7029. \$7.95 each. Of course, hors concours are the incomparable Horowitz readings of Sonatas Nos. 8, 14, and 23, conveniently combined in Columbia MT 34509, \$7.98. The ultra-cool Moonlight and rhapsodic Appassionata have been available before. in 1974's MT 32342 and 31371, respectively, but the grand-scaled 1964 Pathétique, sonically reborn in flawless Dolby processing, is new to cassettes.

The Stokowski legacy, cont. If one of the two posthumous Columbia releases I referred to last month can be given only qualified praise, the other warrants unreserved enthusiasm. The former, with Bizet's two L'Arlésienne and two Carmen Suites (MT 34503. \$7.98), is welcome for the return of some Stokowskian old favorites. But the lack of an idiomatic French accent is more evident nowadays than it once was, and the National Philharmonic members are no Philadelphians! However, not only do they play much more dramatically in "The Great [non-Bach] Transcriptions" (MT 34543). but audio technology exploits far more of the imaginative scoring skills than we ever heard in the earlier recordings. The "Fête-Dieu à Séville" from Albéniz's Iberia and Debussy's "Soirée dans Grenade" are the largest works here, but there is kaleidoscopic variety in the shorter pieces by Chopin. Debussy, Nováček, Rimsky-Korsakov, Shostakovich, and Tchaikovsky. In several of them with morendo endings, the conductor draws out the final chords as if reluctant to say his last farewells.

Serendipping. Every so often one's listening routine is suddenly and unexpectedly enlivened. Among such pleasant musicassette surprises is Everest 3407 (\$5.98), which presents the "legendary" Lazar Berman not only in top virtuoso form in the Liszt "Funéraillies" and Hungarian Rhapsody No. 9, but also in delectable Schubert-Liszt transcriptions: "Der Leiermann," "Täuschung," "Die Junge Nonne," "Ave Maria," and "Wohin?." It is better processed than most recent Everest tapes and better recorded than most oldish Russian Melodiya masters.

Outside the Viennese Light Music Society's activities, I don't think I've ever encountered an all-Johann Strauss I program before the Rapf/ Strauss-Lanner Orchestra's five waltzes, galop, and quadrille-all new to American listeners, at least-by the father of the Waltz King. And they're properly done, too, by a relatively small ensemble featuring concertmaster Anton Straka's solo fiddling (Musical Heritage MHC 5396: no notes: \$6.95 list; \$4.95 to members of the Musical Heritage Society, 14 Park Rd., Tinton Falls, N.J. 07724).

Then I found quite surprising fascinations in the belated tape release of Vol. 1 in a series of Paganini's works for violin and guitar. The music itself often escapes from its presumed salon genre, especially in the Cantabile and Sonata concertante in A in which guitarist Sonja Prunnbauer plays more than a merely accompanying role. But the other six sonatas are disarmingly attractive: György Terebesi proves to be a well-nigh ideal Paganinian virtuoso fiddler; and the recording itself is arrestingly vital (Telefunken 4.41300, \$7.95).

And there are endlessly surprising, as well as expected, delights in the incredibly precocious Mozart Orphanage Mass starring Gundula Janowitz and Frederica von Stade with the Vienna State Opera Chorus and Philharmonic Orchestra under Claudio Abbado (Deutsche Grammophon 3300 777, \$7.98; with texts); the late David Munrow and his London Early Music Consort's piquant combination of authentic little Elizabethan pieces and modern British short pieces by Vaughan Williams, Peter Warlock, Edmund Rubbra, and Clive Richardson, all mostly for recorders (Angel 4XS 37263, \$7.98; no notes); the neglected Sibelius Symphonies Nos. 3 and 6, finally given irresistibly persuasive conviction in the continuing Colin Davis/Boston Symphony Sibelius series (Philips 7300 519, \$7.95); Telemann "Heroic Marches" with Handel, Valentino (Valentini?), and Boismortier sonata transcriptions in magnificent, if nonbaroquian, versions by trumpeter Maurice André with organ (RCA Red Seal FRK/FRS 1-7021, \$7.98 each: no notes).
It looks like the fine instrument it really is ...



the new Realistic[®] STA-78 receiver!

Features

Backlighted Meter

and Clai

SOLD ONLY WHERE YOU SEE THIS SIGN:

A TANDY COMPANY • FORT WORTH, TEXAS 76102 OVER 6000 LOCATIONS IN NINE COUNTRIES

"Dolby" is a trademark of Dolby Laboratories. Inc

There are numerous reasons you should buy the all-new Realistic "78." Because it not only looks fine, it is a fine receiver with professional touches not expected for the money.

Phase locked loop FM multiplex. For very wide stereo separation and distortion that's inaudible. **Operational amplifier** ICs. Newly developed **OP-AMP** integrated circuits in the phono and tone

control preamps assure clean sounding music with wide dynamic range. Switchable 25/75 microsecond de-emphasis. The only way to aet correct equalization (and sound) from all FM broadcasts, Dolby* or standard. Ample power. A true complementary OCL (Output Capacitor-Less) amplifier delivers 22 watts per channel, minimum RMS at 8

Stereo Reverse Switch Switchable De-Emphasis

ohms from 20-20.000 Hz, with no more than 0.5% total harmonic distortion. And that's a conservative ratina! Stereo reverse switch. For interesting effects from some sound sources, Style, Black panel, distinct

lettering and backlighting for easy viewing. Made in Radio Shack's own factory. For precise quality control at a low price. Just 269.95 - even less if you buy the STA-78 in a system.



These two credit cards honored at most Radio Shacks. Price may vary at individual stores and dealers.

Why Micro-Acoustics 2002-e owners enjoy music more than you do.

If you're listening to music with any of the other high-quality stereo phono cartridges on the market today, there's a very good chance you're missing something. Something that's earned us unanimous praise from 2002-e owners: a significant improvement in sound quality which can only come from major advances in cartridge design.

Twin-pivots/dual-bearings. Perhaps the most unique feature of the 2002-e is its direct-coupled transducing system, which was granted U.S. Patent No. 3952171. Unlike conventional singlepivot cartridges, which can only be optimized for tracking or transient ability, our unique twinpivot/dual-bearing design is optimized for both characteristics — which are equally vital for precise reproduction.

Twin pivots insure superior transient ability, enabling the 2002-e to accurately follow even the most complex waveforms. And dual bearings maximize tracking ability, so that even difficult high-level passages can be accurately tracked at very low stylus forces.

Beryllium cantilever. The 2002-e's preciselyformed cantilever is made of beryllium — an exotic space-age substance that is 35% lower in mass than conventional stylus bars. As a result, the cartridge boasts far lower moving mass, contributing further to its superior transient ability and unusually 'transparent' sound. By dramatically reducing moving mass, the 2002-e also reduces

record wear to vanishingly low levels. Low cartridge body weight. More and more tone arm designers are discovering the importance of cartridge weight, especially in tracking warped records. Since over 95% of today's records are warried to some degree, a lighter cartridge means more effective tracking at lower stylus forces. At less than half the weight of most high-end cartridges, the 2002-e enables you to enjoy records that couldn't be tracked by other cartridges. The mismatch problem: solved. Until now, an exact match between phono cartridge and preamp (or receiver) nput impedance was required for flat frequency response. The 2002-e's built in passive microcircuit eliminates mismatch problems by automatically controlling output impedance. This microcircuit also makes the cartridge immune from the effects of cable capacitar ce, so the 2002-e may be used with all types of tone arms—even those lacking low-capacitance caples.

Critical acclaim/popular acceptance. Few contemporary high-ficelity products have received such unanimous critical acclaim. And no other steree phono cartridge has been so successful in satisfying the critical demands of today's sophisticated, dedicated music lovers.

But don't take our word about why 2002-e owners enjoy music more than you do: the proof is wating at your Micro-Acoustics dealer. Or contact us for more information.

Hear the difference. To help you evaluate and compare cartridge tracking and transient abilities, we've developed a unique demonstration/test record which is itself enjoying widespread critical use and acclaim. (For a postpaid

and vering IIII Construction Solution Copy, send \$3.95 to the factory.) Micro-Acoustics Corp., 8 Westchester Plaza, Elmsford NY 10523. In Canada, H. Roy Gray Ltd., Markham, Ont.

"Because good tracking isn't enough"

ma 2002

\$119.00, suggested list. © 1977, Micro-Acoustics Corporation





Michael Derosier, Howard Leese, Steve Fossen, Ann Wilson, Nancy Wilson, Roger Fisher

Heart: The Hassles Paid Off

by Patrick MacDonald

A mid all the attention generated by Heart's phenomenal rise to pop music prominence in the past two years, neither fans nor pundits seem able to get past the fact that two women front the group. Perhaps it was inevitable, since sisters Ann and Nancy Wilson are featured on the covers of the group's two platinum albums "Dreamboat Annie" and "Little Queen." their only releases to date. But the repercussions, as manifested particularly in the media—from the cover of *Rolling Stone* to concert reviews in daily newspapers—have led the Wilsons to insist that, if they had it to do over again, they would not only try to en-

Patrick MacDonald, former program director of KOL in Seattle, is a music journalist on the staff of the Seattle Times. sure that the entire band was shown on the jackets, but retain control over advertising as well. "The guys give as much as we do," Ann said recently during a break at Seattle's Sea-West studio. "It's their band as much as ours. It's like the Stones—it isn't just 'Jagger's band," ..., it's the Stones."

"The more people see us in concert, the more they understand," added keyboard player Howard Leese. "The early press was aimed at the girls. People would look at a news story and think, oh yeah, two girls. The press's view is exploitive, though, you know?" Nancy put it more succinctly: "The sexy image is flattering and all that junk, but it gets dangerous. Damn dangerous."

The point is that it isn't the two female leads that make the band's story so remarkable. It's the fact that

an unknown group recording for a tiny label (Mushroom Records) in the westernmost province of Canada somehow made it to the top of the international LP charts in the course of one year, and with almost no promotion.

That was in 1976 with "Dreamboat Annie." But Heart goes back to the mid-Sixties, when lead guitarist Roger Fisher and bassist Steve Fossen started a highschool band in Seattle called Army. They wore khaki and played psychedelic rock, a response to the Vietnamese war. "But there was a lot of misunderstanding about the name," recalled Fossen. "especially when we played near the Army base. So we changed the name to White Heart—which nobody understood either." That was eventually shortened to Heart, and

"They slept in shifts, stole fruit from . . . trees, and survived through intermittent club dates."

the group became popular on the local dance-hall circuit. Ann first heard them at a roller rink when she was just getting started as a songwriter/guitarist/singer. At the time she was with Tex Blaine and the Skyway Ranch Boys. "We didn't even play real country... because Tex was English!"

After Tex and the Boys broke up, she met Roger and Steve through a mutual friend, and they formed a new band. Hocus-Pocus. Their first gig was in Bellingham, Washington, a college town close to the Canadian border. Roger's brother Michael, who was living in Vancouver, B.C., came down to see the band. "We saw each other and ... BONG!" said Ann. "It was one of those things where you look at each other and you know. That was in 1971. From then on we were marked people."

Since Ann and Mike wanted to be together, the whole band moved up to Vancouver. It wasn't entirely because of the romance, however: The Seattle area had been hard hit with unemployment, and the music business was suffering. It was healthier in British Columbia, where there was a much larger club/dancehall scene. "Also, it would be new-like a clean slate." Ann said. She persuaded her younger sister Nancy, a folksinger and guitarist, to come up and join them. Nancy and Roger repeated the Ann-Michael thing (the two now share a home on Lake Sammamish, outside Seattle, not far from Ann and Mike's house), and the entire band moved into a tiny one-room house in West Vancouver. They slept in shifts, stole fruit from the neighbors' trees, and survived through intermittent club dates and frequent forays into western Washington, where they knew they could always draw a crowd.

But times were tough, and more than once, according to Ann, they thought of quitting. She credits Mike Flicker—the group's partner, producer, and engineer—with keeping them together. "Mike has been one of the driving forces behind this band from the beginning," she said as Flicker sat in the nearby control room editing tape. "He never let us get discouraged. He was the one that quit school, went out and pushed the band, got the equipment, even sold his bicycle so we could eat. I know it sounds melodramatic, but he was the one who held it all together. ... He's an incredibly strong man and motivater."

The fact that Flicker produced and engineered "Dreamboat Annie" in a small, technically old-fashioned sound studio in Vancouver—Can-Base Produc-



The ad that broke the camel's back

tions—certainly attests to his technical prowess. Unlike most of today's transistorized recording equipment. Can-Base is entirely tube-based. Flicker thinks that's the main reason the album has such a full, rich sound. "Dreamboat Annie" was recorded over a three-month period (Ann and Nancy had written most of the material prior to the actual recording) while the band continued to grab every gig it could get between sessions. The lineup was basically Nancy and Roger on acoustic and electric guitar, Steve Fossen on bass. Mike Derosier on drums. Howard Leese on guitar and synthesizer. Ann on flute and—with her sister vocals. "It was great." she said. "We didn't really know what we were doing. so we just went in and tried stuff and whatever worked, we kept."

Howard Leese was a friend of Flicker's who had been called in to add guitar and keyboards, often working at night while the band was gigging. In fact most of the guitar work on the album is Howard's. "I liked what they were doing," he said, "and, after I finally met them, decided I'd like to join." The feeling was mutual, and Howard became a part of the band in 1975 at about the time "Annie" first came out. So did drummer Mike Derosier, after a successful audition in his bedroom. (He still lives at home with his parents.)

The first single Mushroom released from the album was *How Deep It Goes*. It didn't do very well. "Ninety-nine with an anchor," was how Steve described it. The band was a little discouraged, but adding Leese and Derosier had given them new confidence and improved their stage show.

The second single, *Magic Man*, was not an immediate smash—"Mike would call and say some station in Alberta was playing it, and we'd have a party," Ann said. But gradually, with the help of Mushroom's vice president and general manager. Shelly Siegel (the band credits much of their early success to him). it caught on, first in Canada, then in the U.S.

Having a hit record opened many doors for them. including their first big gigs in Canada as the opening act for Rod Stewart, the Bee Gees. Led Zeppelin. and other big names. "The moment we made it big. I think," Howard said, "was when we opened for Rod Stewart in Montreal. We had just been fired from this terrible disco club in Vancouver because we didn't wear matching costumes. Just a few hours later we got this offer to open for Rod! That led to breaking Canada."

Magic Man slowly spread to Seattle's and Portland's airwaves and from there to the rest of the country. But keep in mind that a tiny label has a tiny promotion budget. As Ann put it, "It was a grass-roots thing. ... We didn't get any press at all. The record happened because people liked it."

As if to prove that Heart wasn't an overnight fluke. *Crazy on You* followed closely on the heels of *Magic Man* to become their second smash single. And, to further establish their foothold, in 1976 the Canadian Academy of Recording Arts and Sciences presented them with two Juno Awards, one for Best Group and one for Best Producer. By this time, "Dreamboat Annie" was rapidly gaining ground on the Top LP charts, and it looked like smooth sailing ahead for Heart.

But that was not to be. A series of small squabbles with Mushroom Records came to a head in late 1976 when the group returned from their ten-month tour and saw an ad for themselves they thought degrading

"The issue of whether or not Heart had the legal right to terminate its contract is still in the courts."

and sexist. "It was only our first time," the copy said, under a picture of scantily clad Ann and Nancy. The copy referred to the album, of course, but the Wilson sisters didn't appreciate the joke.

Using a "key man" clause in their contract, they justified their exit from Mushroom since Flicker was no longer employed there—he had quit and was working in Los Angeles. Pursued by several majors, they joined Columbia's West Coast label Portrait in 1977, for an advance that reportedly exceeded \$1.5 million.

The issue of whether or not Heart had the legal right to terminate its contract is still in the courts. Mushroom tried to counter by cutting into lacquer what fragments they had of an album called "Magazine," which the band had been working on at the time they left the company. But the LP's formal release (only press copies have been issued) has been delayed by the courts because of suits brought by the band, contending that the tapes were not ready for release. The record company has almost 2 million orders for "Magazine." which may never be released. "It's the only unshipped platinum album in history," Siegel says.

The legal hassles surrounding the break from Mushroom were draining for the band. "The most wrenching thing of all," Ann said. "the thing that got all of us—especially me and Nance because we had written them—was those songs. We had such high hopes for them, these big ideas on how they were going to sound. It's hard to explain, but when you're an artist and are really hot on an idea, it's almost the most important thing in your whole life."

"They robbed us of the whole project." Howard said dejectedly.

The success of their current platinum album on Portrait, however, has buoyed them considerably. "Little Queen" has turned out to be even more popular than "Dreamboat Annie," and the band is touring constantly to help keep its position on the charts. "The 'Little Queen' concept came about from touring in our bus—some of us prefer not to fly—the idea that we're gypsies, six vagabonds traveling from town to town." said Ann. "It has a different feel from the first LP. It's heavier, it's more alive, not quite so sweet-sounding. Derosier's drumming and Howard's piano and guitar style had a lot to do with it—the character of the band changed once they became full-fledged members."

They like to take their time with an LP, allowing the songs to take proper shape. In fact, the writing for the first one took over a year. "Little Queen." however, was written and recorded over a period of three months, since Portrait wanted to get an album out quickly and all of the material the band had developed for "Magazine" had to be scrapped. (There are signs of haste there—including some "borrowed" ideas from Led Zeppelin. one of their inspirations.)

Currently they are in the writing stages of an album scheduled for spring release. "Nance and I usually write the words, and we take them to Flicker, who's always very open and honest," Ann said. "Then, when we have a good idea of what we want, we work with the whole band on the music." She says they don't know how the next album will sound but maintains it won't be as rushed as the last. "Release an album in the spring, tour in the summer—that's our band's biorhythm," she said.

Having risen from nowhere to become one of the world's top rock bands, after going through a crash course in the less palatable results of media attention and the legal intricacies of the music business, the group has—to say the least—matured. They're still an unassuming, fun-loving bunch that can be impressed by something like meeting Mick Jagger (which they did recently in London). But they've learned—albeit the hard way—to stick to their artistic guns and to hang together. Ann and Nancy may have been the initial attraction and can't help but be a continuing one. But the last couple of years have fused the band's once-disparate elements into an organic unit.



Guild Model B-302 Electric Bass Guitar. Offhand, I would say that 95 percent of the electric basses used in recording are Fender Precisions. And with good rea-

son. They record beautifully, and the sound is consistent from bass to bass, from day to day. Until now, every other bass I've recorded has needed a bit more effort spent to get the sound right—and some never come out right at all. C'est la



Guild B-302 electric bass

guerre. But here's something new that shows a whole lot of promise and could actually give Fender some stiff competition.

To begin with, the Guild B-302 is beautiful to look at. It's cut away to the twentieth fret, so you can climb all the way up there comfortably. It features two separate pickups, each with its own tone and volume controls, each with eight pole pieces. That's two pole pieces for each string. This means that you have much more room to bend and pull the strings without losing volume or punch. The machines are well built and hold pitch very well; the rotary pots for tone and volume feel good, and the sound is clean and full.

The B-302 was field tested by James Mason, late of Roy Ayers' Ubiquity, who found that the sound wasn't as warm as that of Precisions he's played, but we both felt that this could have been due to the instrument's newness. The saddles on the bridge are fully adjustable and exposed (you needn't take the guard offthere isn't one). The instrument uses a ¼inch jack for output, and comes with a double-ended male phone-plug cord (otherwise known as a guitar cord) and a wipe cloth so your sweaty palms don't ruin the strings.

The best part of all, though, is the sound. Mason was impressed by the B-302's ability to deliver lows and highs without sacrificing one for the other. punch without the rubber-band twang, and good clarity on low notes. He attributes most of these assets to the new design of the pickups, which makes a lot of sense. The B-302 costs \$450, can be wired for stereo for an additional \$30, and is available with a fretless fingerboard for no extra charge. It still weighs a ton, but considering the quality, it's well worth staying in shape for. The optional 4529B hard-shell case (\$95) is sturdy and slim. If you're a bass player, this instrument belongs at the top of your check-it-out list.

CIRCLE 123 ON READER-SERVICE CARD

Beyer Dynamic Microphone Model M-101N (C). Back in the "old days," about five or six years ago, Beyer microphones all seemed to have had connectors that required more adapters than I had in the studio. Yet when finally put to work they seemed to perform well, if unspectacularly. But in a time when a condenser microphone was as basic as a toothbrush to the professional engineer, nobody 1 knew got too excited about dynamic microphones. unless they were tried and true. Recently, however, Beyer Dynamic started claiming that their Model M-101N (C) could do wonders for a bass drum. Since the pursuit of a truly satisfying bass drum sound is one of my never-ending quests. I immediately ordered one for review.

When it arrived, we put it to work right away. Now the task of a bass drum, or kick, mike in a modern studio is punishing. It sits near-or right inside-the drum itself, suspended by a shock mount, and hears virtually nothing but the omnipresent thud of the drummer's right foot against an overworked wafer of plastic. Not very romantic work, by any stretch of the imagination, but nonetheless significant. If the bass drum sound isn't right, the track is lost. Imagine a sloppy one on a disco record, or Billy Cobham playing a dull thud instead of a tight snap.

As it turns out, the M-101N (C), despite its rather complex designation, is a straightforward dynamic microphone with unusually pleasing qualities. It has a frequency response of 40 to 20.000 Hz with a rise from 7.500 to 10.000 Hz that seems to give the sound of the drum added character. Most of that sound is in a much lower part of the frequency spectrum, and, considering the absorptive surfaces in and around the instrument. getting some natural highs via that highend-rise adds a nice edge. We had no overload problems (as we have had with some other mikes on the same job) and the 200-Ohm impedance suited our lines just fine.

Just for a change, we tried the M-101 on a solo piano. It didn't yield a particularly special sound, but there were certainly no obvious deficiencies that would make a user think ... "well, back to the bass drum." Aesthetics are another positive factor. The housing of this mike is made of brass (plated black) and the resultant heft feels good in the hand. A windscreen and three-conductor cable are supplied, and an XLR male connector is built into the microphone. No more adapters. Even if this model doesn't rate high on the Richter scale for its world-shaking qualities, it is a product



to be reckoned with. Cost of the M-101N (C) is \$159.95.

CIRCLE 124 ON READER-SERVICE CARD

Frap Model T 3-Dimensional Transducer System. The Frap Model T picks up the sound of your instrument and gets it cleanly to the amplifier and ultimately to your ears-in that sense, it works fine. Although the actual transducer is a standard unit, the Model T preamp is new and has been designed to be "affordable" at a suggested list price of \$135. The transducer attaches to your instrument by means of adhesive wax, which is supplied with the pickup. The housing for the preamp circuit, a metal box about 4 by 2 by 1 inches, contains an input minijack that mates to a miniplug extending from the transducer and a standard ¼-inch phone jack to the amplifier. A volume control is located next to the input jack. The Model T uses two 9-volt cells (for \$5.95 Frap offers an optional keychain battery checker) and has no on/off switch-or need for one-because the output jack is of the switching type: When something's plugged into it. it's on. According to the manufacturer, which infers the specs from calculations and performance, the system is "rulerline flat"-from 40 Hz to 100 kHz for the preamp and from 1 Hz to 1 MHz for the



Frap Model T pickup

transducer itself.

After marveling at the literature enclosed with the Model T, we tested it on a Martin D-28 acoustic steel guitar. We tried five different positions for the transducer, including that recommended by Frap-on the treble side of the bridge. The output was routed to a Fender Twin Reverb amplifier and then to an Ampeg B-15. We observed that the pickup does in fact color the sound of the instrument somewhat (this probably is unavoidable with a pickup of this type), that it picks up string noise (moving from fret to fret), and that it does feed back very easily to both amplifiers. None of these characteristics are desirable, though most are found in varying degrees with all pickups. For that matter, pickups themselves are not all that desirable-just a necessary evil for an acoustic instrument in an electronic context.

Although the Model T is clean and free of hums and buzzes, it fails to deliver the miracles promised. For instance, the flyer claims "No inherent feedback.... Beats mikes hands down!" Yet on page 5 of the instruction manual, there's a paragraph that tells you to move or face away from your speakers if you're getting acoustic feedback. Those sound like the antifeedback procedures to be used with a mike. So how is that winning hands down? And though the promotion folder asserts that a single transducer "can be attached to virtually any resonating instrument," another paragraph in the manual advises, in a roundabout way, that a single Model T may not work for a piano-two may be required.

The point I'm making is that, although this system is better than acceptable, and perhaps even very good at what it does (it is used by a substantial number of bigname pros), the promotional literature and manual make promises that the Model T cannot deliver, even subject to the hedging later on in the instructions. This is a disservice to the owner that may obscure the good points of a perfectly respectable product. FRED MILLER

CIRCLE 122 ON READER-SERVICE CARD



CIRCLE 9 ON READER-SERVICE CARD

The 58th AES: Convention: Digital Is Here

by Fred Miller

uring the first weekend of last November, some 4,500 engineers. producers, station managers, salespeople, and audiophiles crowded the floor of the grand ballroom of the Waldorf Astoria in New York-but not to dance. The occasion was the 58th convention of the Audio Engineering Society, a semiannual gathering that is a combination Old Home Week for industry professionals. sales promotion device for audio equipment manufacturers, and instant university for those of a technical bent. There were many more women attending this convention than ever before, a sign that even in the "technical" world, which was so long dominated by men, understanding and ability have nothing to do with sex.

The "university" segment provides forums for the delivery of scientific papers dealing with a wide variety of subjects: transducers, disc mastering, digital recording, audio in medicine, and electronic music, among others. While these sessions tend to be highly technical, they are sometimes fascinating in their scope. That on digital recording-for which "fascinating" would be an understatement-was filled to capacity, standing room and all. (A detailed look at digital recording-its current state, its potential, and its ramifications for the listener-will be provided by Harold Rodgers in next month's issue.) Briefly, digitally recorded sound is the best you've ever heard, and it will likely revolutionize the audio industry within a few years.

Digital technology was represented at the exhibit section of the convention by 3M Company. which displayed and demonstrated a thirty-two-channel recorder that uses one-inch tape moving at 45 ips, and by Soundstream, Inc., of Salt Lake City, which played a recording of the Boston Pops orchestra on its fourchannel machine. Mitsubishi had a twochannel system using quarter-inch tape, as well as a cassette recorder and a PCM (pulse code modulation) disc player for home use. This disc player and a similar version from Teac spin at 1,800 rpm, instead of 331/3, and read the pits in the record (no grooves) with a beam of laser light. Sony showed a digital-encoding device that can be used with a standard video recorder. Both Ampex and 3M already are marketing digital audio recording tape; 3M is expected to deliver

its first studio models this year, and consumer models may be in extensive use within a couple of years. You won't believe how good it is.

In other news on the exhibition floor, Neve had a constant crowd around its Neve/Necam automated console display. In Neve's system, the mix set up by the engineer is entered into computer memory banks and then updated as necessary by simply moving the faders to the new level positions. By using the Necam console, which sits conveniently on a music rack over the faders, mixes done years before may be retrieved with accuracy. No need to strain your brain to remember how you got that magical blend in the horn section.

Automated consoles also were shown by Harrison, whose excellent reputation among its customers has made it one of the major console manufacturers in recent years. With a price schedule that begins around \$80,000, Harrison's boards had better include some heavy-duty technology, and they do. The console on display was a masterpiece of engineering with enough circuits available on every fader module to do anything you might need to do, from sending eight cue mixes to equalizing an equalizer from another fader.

Allison Research, maker of Memory's Little Helper, was on hand with its outboard automation system that can be used with nonautomated consoles should the owner decide to modernize. Nonautomated consoles from Auditronics, El/Tech, Tangent, Trident, Peavey, Sound West, and several others were very much in evidence. Auditronics featured a console for sound reinforcement with thirty-two inputs and enough outputs for almost any sound-reinforcement application, plus patching facilities for direct recording on location.

Semipro audio, recognized at this convention as being a major and growing force in the industry, was well served by



A sampling of the more than one hundred exhibits



The author drools over the Harrison 4032



Reprogramming the 4032



The MCI JH-500-demonstration in progress



At the Ampex booth: men, women, balloons, and ATR-100s

-

×



Teac's Model 15 mixer is explained to two semipros



3M's 32-channel digital recorder: 45 ips!



Marshall Time Modulator-one of many signal-processing devices on display

some of its top proponents-MXR. Teac. Otari, Peavey, Sound Workshop, Sony, and Yamaha all had displays with friendly, knowledgeable people on hand to explain the tape decks, mixers. phasers. limiters. digital delays, and other accessories now available to a market that five years ago couldn't have cared less. Signal-processing devices were so abundant that it was impossible to see them all. In addition to such perennials as Urei-which now has a digital delay as well as its usual complement of limiters. filters, and equalizers-there were booths for Orange County Electronics, makers of high quality (and high complexity) sound modifiers, and Orban-Parasound. which showed its famous "de-esser" and reverb device

Aside from digital recorders, there weren't many really new tape recorders for the professional market, but Telefunken had a brand new sixteen-track machine—expandable up to thirty-two tracks—using two-inch tape. And there were more Ampex ATR-100s on the floor than ashtrays. This ATR-100 is a beautiful machine and well worth seeing.

Eventide had a prototype of its Model 1066 (wasn't that the year of the Battle of Hastings?), which is a digital-delay system with sixteen output taps and two discrete output channels. A total of thirtytwo programs can be selected by four pushbuttons on the front panel. Eventide plans to market this device "with a catchy name" in the spring.

AKG had a full line of microphones on display, including the C-424, a quadriphonic condenser microphone system. Sony had its "back electret" mikes, and Sennheiser, Beyer, and Electro-Voice all showed their new products. (See "Input Output." December 1977 and this month for reviews of equipment from Electro-Voice and Beyer, respectively.)

Ken Schaeffer Group had long-haired guitarists strolling around the balcony of the ballroom demonstrating the Schaeffer/Vega Diversity system, a wireless device that frees the musician from cords and cables between instrument and amplifier. Ken Schaeffer claims that the system is far ahead of anything available in the field, and it has found popularity with many rock musicians and bands even before being put on the market.

With well over a hundred different exhibitors and several thousand pieces of equipment, it's impossible to describe the breadth of the convention, but for anyone interested in sound, an AES convention is a must. The society publishes a journal and encourages membership, but if you're new to the field you can pay a small fee and attend a single convention. I recommend it; the next one is in Los Angeles in April.

Where, Oh Where Does Your \$7.98 Go?

by Sam Graham

While the figures used in this story are typical of the industry, the Embryo Patrol and their record label are fictitious. The author wishes to thank Jay Cooper. onetime president of the National Academy of Recording Arts and Sciences, for his help in preparing the article.

The song Jackie O. Is a Punk Rocker has gone to the Top 10 in England. Its proud creators, the Embryo Patrol, are the first band to successfully combine disco and New Wave, and they're Europe's hottest new musical property. And now the news is all over the streets of Hollywood: They've just signed with Blank Czech, their first American label, and the long-awaited debut album, "On Maneuvers," will be out in just a few months.

Lured by the propaganda that will precede the record's release, you will probably hustle out to buy it at your local emporium. If you look closely at the jacket's spine, you'll see "0798" near the bottom, indicating a suggested list price of \$7.98 (which, relative to the \$6.98, is now the unfortunate rule, not the exception). Pop records can usually be had for well under list, so you'll pay only \$5.29 or \$4.99, or whatever discount you can find. But do you ever find yourself wondering what that mythical \$7.98 means and where your real \$5.29 goes? How much to the record company, how much to the Patrol, to the distributors who deliver the LPs to the stores, to the individual retailer from whom you bought it?

This is a new band. Do they and Blank Czech expect to make a profit on the first album? They may have wowed 'em at small-club soirees back home, but over here they're just another fresh-faced contender in the big-money record industry. The bottom line is the number of copies eventually sold, naturally, so the results won't be in for some time. There are, however, certain conclusions that may be drawn even before "On Maneuvers" is in the stores.

After signing with Blank Czech, the Patrol made what is known as a production deal with renowned

The author is an editor for Record World magazine.

producer Lance Svelte. Production deals are increasingly common these days: Svelte will be paid off through the band's own artist royalties as they roll in (assuming the record sells). Blank Czech has agreed to advance producer and band an "album fund" of \$75,000 toward the recording costs of "Maneuvers." (That sum is fairly standard even for an unknown quantity: many better-known artists' album funds soar well over \$100,000.) If it costs more than \$75,000. the Patrol foots the extra bill: if it costs less, they pocket the difference.

nsight

It sounds great-lots of support and confidence for the new band from their new label. But there's a hitch. The Embryo Patrol and their producer will actually receive no royalties until the \$75,000 is recouped by Blank Czech. The contracted artist royalty is 10%: 7% for the band and 3% for Svelte. That 10% means 10% of the suggested retail price, which is where that mythical \$7.98 comes in. But it actually amounts to a little less than 9% because the record company first deducts its own 10% or so for a "packaging allowance." So the artist royalty weighs in at about 70c per album sold. Since the entire 70c is first applied to recovering the album fund, the Embryo Patrol will have to sell almost 110.000 records before making any money themselves.*

But by the time they do. Blank Czech will already be in the black, even with its additional \$25,000 upfront investment in advertising and promotional support. It's a system of automatic profits that's built into most contracts, which, as the following breakdown of costs will show, usually insures that the label will make nearly \$1,00 on each album.

Blank Czech records. being only a moderately sized company by American standards. gets its product into the stores through an independent distributor. (Larger companies such as Columbia/Epic

^{*}The Embryo Patrol's contract is typical: a five-year pact divided into one year and four "option years." with one or two albums per year. If the \$75,000 album fund for "Maneuvers" is not fully recovered, the unpaid portion will be added to the obligation of the second album's fund, assuming Blank Czech picks up their option to renew. If not, the record company simply assumes a loss, and the Embryo Patrol goes label shopping.

and WEA-Warner/Elektra/Asylum/Atlantic-have their own branch distribution.) Blank Czech will sell "Maneuvers" to its distributor for about \$3.65 per copy, theoretically. With various deals for free goods-"Tell you what: you buy seven copies, we give you the eighth for nothing"-the actual figure will come down to about \$3.40. Since the company is reasonably sure that the Patrol will hit it big here, they've decided on a first shipment of 100.000 units. (Normally a new act's first pressing order is from 25,000 to 50,000 copies.) But while these records have ostensibly been sold at \$3.40 apiece, every last one of them is "subject to return." The profits are not counted until an album is sold at the retail level, until the Sam Goody customer rids himself of some hard-earned cash. Every copy that isn't sold will be sent back to the distributor by the store and finally to the record company by the distributor. This process has further implications: Gold and platinum albums (those that have sold 500.000 and 1 million units, respectively) are certified by the RIAA on the basis of wholesale, not retail, sales, which are subject to return. For this reason, according to Jay Cooper. "very frequently in the front pages of the trades you'll see somebody smiling with the president of the company, having just received a gold record; and in the back pages you'll read that the artist is suing the company because he only got a royalty statement for 100.000 records "-the number actually sold.

As Blank Czech collects its \$3.40 for each LP sold at retail, the money is distributed roughly as follows:

First, the slightly reduced artist royalty is applied on the first 110.000 units to repaying the album fund. An additional 28¢ worth of royalties goes to publishing, based on an average of 234¢ for each of the album's ten songs. The Patrol writes its own material and owns most of its own publishing rights, so they see the bulk of the publishing royalty.* Then 11/2% of suggested retail (that \$7.98 again), or about 12¢, goes to the musicians' union. so Blank Czech is now looking at a \$2.30 figure.* Record pressing (and more packaging) costs account for another 60¢, which, along with about 45¢ for shipping and in-house salaries and overhead, reduces the \$2.30 to \$1.25. Of course, once "Maneuvers" is on the streets, it must be advertised and promoted (Blank Czech has developed a clever campaign: "The Embryo Patrol-they take you back to the womb") at a further cost of about 27¢ per album.

So Blank Czech's gravy amounts to about \$1 for every copy of "Maneuvers" sold. They will recover their approximately \$100.000 up-front investment (\$75.000 for the album fund and \$25,000 for initial advertising and promotion) after 60,000 units have been sold, since each of those units yields 70¢ from the artists royalty and \$1 from their own gross profits. Keep in mind that only \$42,000 of the recovered \$100,000 goes toward repaying the album fund. So if no more than 60.000 "Maneuvers" are sold, the Embryo Patrol

Low



will still be \$33.000 short on their advance, but the record company will have broken even. If they *do* sell enough to pay it off, Blank Czech will by that time be nearly \$50.000 in the black.

The distributor, the middleman between the manufacturer and the store, typically works on a 15% profit basis: After buying the LP from Blank Czech for \$3.40. he'll sell it to retailers for over \$3.90 (recent increases have resulted in a figure nearer \$4). But only the larger retailers, including such chains as Sam Goody. Tower, and Discount, will pay the under-\$4 amount. The smaller outlets-such as the so-called Mom and Pop stores—will pay almost \$4.25 since they are not high-volume operations and must buy from yet another middleman, the "one-stop" distributor. Unlike WEA or Columbia or Blank Czech's independent, which distributes only one or two record labels. one-stops carry many labels, so a smaller store can take care of all of its needs at a single distributor. as its smaller volume dictates.

One-stops buy their records at basically the same rate as Tower and Sam Goody. so they must make their profit from Mom and Pop. They in turn make So it all comes down to you and your \$4.99 or \$5.29. (It would be your \$7.98 were it a name act.) To be sure. Blank Czech would like to attract enough buyers to not only deplete the first 100.000-copy shipment, but to set the presses rolling again at furious rates. But if "On Maneuvers" sells only 70-80.000 units, it will still be considered a success and a good foundation for future albums by the Patrol. Many companies, in fact, are content to break even on a new acts' first, especially if the act is shaping up as a successful concert tour attraction. But the Patrol probably won't be an overnight sensation here—it will take time and heavy promotion to establish them as the uncontested masters of a form so technically exacting, yet so blissfully ephemeral, as disco/punk.

*Many publishers employ the services of the Harry Fox Agency, which is essentially a collection agency for these so-called "mechanicals" or publishing royalties. (The agency will take about 3% of the amount it procures.) There are also other publishing royalties, outside of those obtained strictly from the sales of this LP: airplay, cover versions by other artists, use of a song on TV or in a movie, sheet music, jukeboxes, etc. These will be discussed in a subsequent article.

*The 12c is split evenly by the union into two separate funds. The first, the Music Performance Trust Fund, covers musicians' fees for free concerts in parks, hospitals, etc. The second, the Special Payments Fund, is paid to the session musicians who performed on a particular record (in the Patrol's case, no session players were employed); it is payment above and beyond the regular union scale wages paid to the musicians.





KEN EMERSON TODD EVERETT TOBY GOLDSTEIN DON HECKMAN JIM MELANSON JOHN STORM ROBERTS SAM SUTHERLAND NICK TOSCHES JOHN S. WILSON

Contemporary Masters Series: Davis, Mulligan, Parker, Young

by John S. Wilson

The Miles Davis/Tadd Dameron Quintet in Paris Festival International de Jazz-May, 1949. Bruce Lundvall & Henri Renaud. producers. Columbia JC 34804, \$7.98. Tape: To JCT 34804, JCA 34804, \$7.98.

Gerry Mulligan, The Arranger. Gerry Mulligan & Henri Renaud. producers. Columbia JC 34803, \$7.98. Tape: ● JCT 34803. ●JCA 34803. \$7.98.

Charlie Parker: Summit Meeting at Birdland. Gary Giddins. producer. Columbia JC 34831, \$7.98. Tape: I JCA 34831, \$7.98.

The Lester Young Story Volume 2, A Musical Romance. Michael Brooks, producer. Columbia JG 34837, \$8.98 (1wo discs). Tape: • JGA 34837, \$8.98.

The Lester Young Story Volume 3, Enter the Count. Michael Brooks. producer. Columbia JG 34840, \$8.98 (1wo discs). Tape: • JGA 34840, \$8.98.

ike all the other major record com-Lipanies, Columbia missed the boat on bebop, not to mention-as CBS Records President Bruce Lundvall candidly admits-most of the jazz flow of the Forties and Fifties, with the notable exception of Miles Davis. To make up for this lapse, the label has come out with a series of LPs that focuses on those years. The Contemporary Masters series draws its material from three sources: air checks (most notably those of the legendary Boris Rose), amateur concert recordings, and recordings in CBS's own files, most of which have not been previously released. The second and third Lester Young volumes are an exception in that most of the material was well distributed initially and has been reissued

in scattershot fashion since.

"Summit Meeting at Birdland" projects the flavor of the early '50s broadcasts from that "Jazz Corner of the World." (Birdland closed in 1965 and was replaced by a Latin disco, Casablanca 2.) We hear, very briefly, the voice of Charlie Parker, as well as that of Symphony Sid Torin doing his effusive introductions and his insistent pitches for the club ("One dollar admission-how could you go wrong?"). Bob Garrity, Sid's stand-in, is also on hand.

One side contains a 1951 broadcast that brings together Parker. Dizzy Gillespie, and Bud Powell, the three outstanding gurus of the bop movement. The cuts are some of the most frequently played standards of the era-Anthropology. Blue 'n Boogie, 'Round Midnight, and Night in Tunisia-and, while all three musicians fly fluently through the uptempo numbers, it is Parker who is the consistent vitalizer, who adds an extra lift to the ensembles, and whose solos have the most finished quality. In general, the sound is thin but not objectionable, although Midnight's slow tempo does emphasize the wobbly nature of the recording.

Side 2 is a 1953 broadcast of a Parker quartet that includes John Lewis on piano and Kenny Clarke on drums. The



Miles Davis circa 1949



Gerry Mulligan circa 1957



Lester Young circa 1945

spotlight is more consistently on Parker here, and his performances are light, airy, and fluent. Lewis at this point already had the strong, insistent piano pulse that later developed into the swinging core of the Modern Jazz Quartet—although he plays a more modest, even role here, especially in his solo work.

The only other live-performance disc that CBS managed to get out in time for the launching of the series is the Miles Davis-Tadd Dameron Quintet at the Paris Festival in 1949. In Davis' case, it's a very revealing set. He was a thoroughly frustrated trumpet player in the mid-Forties, trying in vain (and with much public embarrassment) to emulate the dazzling virtuosity of Dizzy Gillespie. But by 1949 he was coming to terms with his own capabilities and had discovered, in his so-called "Birth of the Cool" nonet, the laidback, low-key manner of his own potent style. These particular performances find him playing with the flashing flair that had eluded him earlier and using a very warm, open, singing attack on ballads. Echoes of Lester Young run through James Moody's tenor saxophone lines, while Dameron plays some two-handed, chorded piano that is unusually full and driving for the basically single-noted bop era. The sound is thin and tubby at best and, in some sections, is on a level with the scratchy old 78s on which we used to listen to the jazz of the Twenties.

The third basic source for the series is represented on "Gerry Mulligan, the Arranger." One side of it is previously unissued material by a fifteen-piece band led by Mulligan in 1957-a predecessor of the Concert Jazz Band he unveiled in 1960. His arrangements are rich, full, and flowing, a colorful backdrop for his bumptious swinging solos, the meditative counterpoint of Bob Brookmeyer's valve trombone, and some very airy saxophone solos by Lee Konitz and Zoot Sims. Other material includes two Mulligan-arranged numbers-How High the Moon and Disc Jockey Jumpplayed by Gene Krupa's band in 1946 with a magnificently crisp, clean sound; and Between the Devil and the Deep Blue Sea and Elevation as arranged for and performed by Elliott Lawrence's orchestra, which used a softer, mellower sound than Krupa's. Mulligan is heard only once with these two bands, on a 1949 solo with Lawrence that has a soft-edged vagueness typical of the sax style of the time and strikingly different from the firmness and assurance of his solos with his own orchestra eight years later.

Despite the fresh material contained in these three discs, the gems of this first batch of releases are in the Lester Young volumes that continue the chronological issue of everything he recorded for Columbia. Vol. 2 focuses on Lester's years as part of the basically Basie groups that backed Billie Holiday, while Vol. 3 represents him and the Basie band when they moved from Decca to Columbia. There are several alternate takes in each set, and, although the Holiday sides will be familiar to most of her followers, there are still surprises. Revealed here are the talents of Countess Margaret "Queenie" Johnson. a pianist who played one delightful solo on You Can't Be Mine at a 1938 session and then went back to Kansas City, where she died, according to Jo Jones. "at twenty-one or thereabouts." (One of the consistent delights of these volumes is Michael Brooks's notes. They defy tradition by taking a totally irreverent attitude toward the drearier aspects of grinding out records for a mass market.)

While Vol. 2 concentrates on the warm, loving Lester, with Basie he comes in all emotions and reaches a peak on the glorious *Taxi War Dance* (two versions) a virtual Basie-Young duet. There is also one more Billie Holiday session and three strange efforts to team Lester and Lee Castle, who plays commendable Buck Clayton-style trumpet, with organist Glen Hardman. It didn't work, and yet in a way it did. As Brooks points out, "Amid the burbling and the hiccuping there is some of the best Lester Young ever put on wax."

David Bowie: Heroes. David Bowie & Tony Visconti. producers. *RCA AFL 1-2522*, \$7.98. Tape: ● AFK 1-2522, ● AFS 1-2522, \$7.98.

David Bowie has consistently been a product of his influences as much as he has often anticipated them. It seemed natural for his "Young Americans" and "Station to Station" LPs to move with a disco beat as he became enmeshed in U.S. pop culture. And "Low," Bowie's last album, deliberately used a shot from his first film, *The Man Who Fell to Earth*, on its cover. The David Bowie of "Low" was an incorporeal creature, a devotee of cinema, writing music that worked better as soundtrack than any obvious listenable form—no *Rebel, Rebel* here.

On "Heroes," he seems to have been somewhat affected by the New Wave. On the black-and-white cover he wears a leather jacket and a modified "fork" haircut—as close to starkness as he has ever positioned himself. The songs are similarly direct. Bowie has split the album into two sides. one vocal and one instrumental. The concept of working through soundtrack still intrigues him, to which end he again gains continuity. as on "Low," with the keyboards of Brian Eno. However, unlike that LP, he



Bowie-New Wave influence

does not allow Eno's droning tendencies the option of taking over and inducing sleep. Thanks to Bowie's raucous saxophone or his tentative steps on the delicate Japanese koto (on *Moss Garden*) and Robert Fripp's welcome adventurous lead guitar, the instrumental side is vital, emotive, and more than a bit mysterious.

But it is on the vocal side that Bowie has most visibly been resuscitated. The title song is performed in a register strikingly reminiscent of Lou Reed, his onetime colleague and the self-styled "godfather of punk." Its words of defiance are in keeping with the challenges posed by politicized New Wave music, asserting "Though nothing will drive them away/we can be Heroes/just for one day." Bowie's message of optimism viewed through a landscape of eventual defeat is a perfect reflection of the "no future" philosophy.

The other vocal tracks flesh out the population of his ever-alert world. Joe the Lion is today's Everyman, drinking in the bar, purchasing a gun, having a preordained path-Archie Bunker fusing into Son of Sam. Distrust awaits the personal relationship as described in Blackout. with its multiple meanings of passing out, lights-out-here-comes-thebomb, and end of scene. Bowie's beauties are neither simple, elegant fantasies nor street urchins. Rather, they haunt and threaten from back alleys. The man who fell to earth must now keep his feet planted on solid ground-he can't just be famous for fifteen minutes. as Warhol. another of Bowie's early counselors, has said. He is a hero if he survives those fif-T.G. teen minutes.



The Emotions: Sunshine. Various producers. *Stax STX 4100, \$6.98. Tape:* 5 4100, 10 8 4100, \$7.98.

This delicious album shows just what we've lost from the production overkill that has afflicted so much black music in the last five years. During the early 1970s. the Emotions were part of the Stax stable. When the label folded. Earth, Wind & Fire's Maurice White steered the group to CBS, where they have made two highly successful albums in the new mass-market vein. Now Fantasy Records has begun reissuing some of the old Stax catalog, and "Sunshine" is part of that venture-a bunch of singles, backed by Stax house musicians, none of them previously released on albums.

The result is pure and amazingly cohesive joy. Without once departing from the classic framework of female group rhythm & blues, "Sunshine" is as rich and varied as anything I've heard in months. With only one exception, Any Way You Look at It, every number positively drips with tasty touches in arrangement, singing, and playing. Constant small references to r&b styles of the past add up not to a pastiche or a nostalgia binge, but to a loving use of what, by the time these tracks were recorded, was a fullblown tradition. Most of the arranging and performance was solid enough to make the songs instant standards, so what could have been a golden-oldie rehash comes across sounding fresher than most of this month's new recordings.

That's partly because of the sheer quality of the tracks, but it also stems from the album's origins. First, singles (real singles, as opposed to "off the album" singles) lend relatively little opportunity for producers' self indulgence. Second, the songs are all by different people-and songwriters at that-from Carl Smith to Bill Withers. Third, different production styles also add to the album's variety of flavor. There's a cultist view, which rings truer as albums get more pompous. that the best r&b is confined to singles. "Sunshine" adds evidence to that viewpoint. LS.R

Mary Kay Place: Aimin' to Please. Brian Ahern, producer. Columbia PC 34908, \$6.98. Tape: • PCT 34908, • PCA 34908 \$7.98.

Many were eager to-and did-attack Mary Kay Place's first album as being false and synthetic. Farmgirls, they reckoned, could become country singers, but actresses could not. I didn't agree, and approached the LP with an open mind. Only to discover that it stunk. Her singing was awkward, the lyrics were too given to cuteness and satire, and the music was mundane. It was the sort of record made by people who have never listened to many records.

The wrongs have been righted here, and this album is as worthy as the last was dismissible. Mary Kay Place isn't posing or indulging herself here; she's just being a girl singer, and she's better at



Place-giant steps of improvement

it than most of Nashville's android sopranos. Dolly's Dive (cowritten, like two others here, with bass player Emory Gordy) is a much more listenable piece of roadhouse swing than those offered by numerous dilettantes of things Texan. Rodney Crowell's You Can't Go to Heaven (If You Don't Have a Good Time) jumps to a surprising degree. Don't Make Love (10 a Country Music Singer). written by Dale Thomas and Bob Morrison, is a cautionary tale that's corny in all the right places, and cool in all the right places. (It is also one of the very few recordings that originated as a set of lyrics mailed in blindly to a Nashville publisher.) Marlboro Man is Mary Kay's

drool hymn to the filter tip that satisfies. All things considered, I'd rather listen to Mary Kay Place than Dolly Parton. N.T.

Queen: News of the World. Queen, producers. Elektra 6E 112, \$7.98. Tape: ● TC5 112, ● ET8 112, \$7.98.

On "News of the World," Queen is finally trapped by its own calculated rock heroism. From the beginning, this English quartet has distinguished itself chiefly through stylized choirboy harmonies and a determined pose of stardom as a fait accompli. But while the harmonies remain as prominent as in the past, the continual reiteration of the will to win sounds increasingly smug or contemptuous, depending on the song. The members *are* stars now, yet they appear to have found little else to sing about.

Of the eleven songs included, at least half are obsessed with fame, often confusing it with freedom, justice, and other states of grace, yet always homing in on recognition as the principal goal. We Are the Champions, released prior to the LP as a single, offers this narcissism in its purest form: A heavy metal plagiarism of My Way, it employs the same ascending melodic shape for its verses, offers similar proud boasts of strength in the face of adversity, and incidentally contradicts the band's earlier identification with its audience. "No time for losers, we are the champions." they sing to a melodic fragment that sounds disconcertingly like the jeering chants cruel children use to torment their victims. If that comparison sounds exaggerated. We Will Rock You, another slice of pure self-assertion provides more evidence. It is an a cappella chant paced by the sort of ominous footstomping tattoo common to blood thirsty crowds at rugby matches or football games.



Queen: Freddie Mercury, John Deacon, Brian May, Roger Taylor

The Dahlquist DQ-10. Time...and Time again.

Critics and audiophiles agree the listening quality of the DQ-10 is unexcelled. What accounts for its superb performance?

Time

Much credit for its smooth coherence must be given to the precisely matched transient characteristics of the five drivers. And, a good deal has been written about the DQ-10 and its extraordinary solution to the problems of time delay or phase distortion. It is not surprising that other high quality speaker designers have followed suit in offering their versions of time delay correction.

... and Time Again

The real 'secret' to the unprecedented performance of the DQ-10 lies in Jor Dahlquist's patented method for reducing *d* ffraction, a more audible and destructive form of *time* distortion. The separate baffle plate on which each driver is mounted is dimensioned to minimize diffraction in the frequency band in which it operates. Thus, the effect of the sound we hear is that of a driver mounted in free space, without obstructions or surfaces to distort the original sound source.

It can be said that the DQ-10 eliminates inaccurate reproduction caused by time elements — inertial time delay, and d ffraction time delay — distortions that limit the performance of conventional speaker systems.

> That's why the more critical listener will select the DQ-10. Time and t_me again.

DAHLQUIST 27 Hanse Ave., Freeport, N.Y. 11520



Lead singer Freddie Mercury has always played off a gauche melodrama against a champagne-and-diamonds delivery that he attributes to traditional pop stars like Frank Sinatra and Liza Minnelli, and here those extremes are typified by familiar Mercury poses-particularly the feverish satyr and the jaded sophisticate. Those are the poles of Queen's rococo heavy metal style and betray their underlying cynicism, especially on the odious Get Down, Make Love, an utterly graceless, loveless view of sexual aggression that makes Led Zeppelin's most preposterous phallic hymns like Heartbreaker and Whole Lotta Love sound like Schubert's Lieder. The other, more traditional facet of Mercury's approach surfaces in the precious. after-hours-cabaret ambience of M_V Melancholy Blues, which embodies the singer's camp apprehension of torch singing while bringing him no closer to an understanding of its emotional imperatives: he sounds appropriately weary, to be sure, but the lyric's vulnerability is just another pose.

Musically, the band attempts to offset its recent fondness for larger-scaled studio epics by including several strippeddown. hard-edged rockers closer in style to their earlier records. That move suggests a new awareness of the emerging punk/New Wave sensibility, especially on drummer Roger Taylor's grinding. pointlessly vituperative Sheer Heart Attack. But given Queen's past obsession with the Big Time, the shift doesn't work. They can't have it both ways, try as they might, and "News of the World" precisely exemplifies the kind of self-importance that the best New Wave artists attack with such relish.

Production, as always, is a canny balance of densely textured multiple overdubs (especially on vocals and guitars) and razor-edged solo highlights. But the content is wearing thinner, the poses are dangerously familiar, and the down side of their trajectory seems imminent. s.s.

Boz Scaggs: Down Two Then Left. Joe Wissert, producer. Columbia JC 34729, \$7.98. Tape: • JCT 34729, • JCA 34729, \$7.98.

Boz Scaggs has been fine-tuning his synthesis of contemporary rhythm and blues with pop and rock elements since the inception of his solo career, and the success of his last album, 1975's "Silk Degrees," has proven the underlying pragmatism of that direction. Its successor, "Down Two Then Left." accordingly preserves the last efforts' smooth mix of crisply rendered rhythm playing and spacious string, horn, and choral coloring.

While the new album is clearly designed to consolidate the commercial appeal enjoyed by "Silk Degrees." neither Scaggs nor producer Wissert can be accused of merely duplicating the earlier work or emphasizing its tasteful integration of strong dance rhythms as an inroad to disco play. If anything, "Down Two" is almost too respectable. There are several attempts to simplify the arrangements in search of a more restrained and explicit r&b style. as on *Hard Times*, the first single and one of the more haunting songs here. Those re-



Boz Scaggs-too polite this time

ductions don't quite work, for while they retain the immaculate production values and lissome pace achieved on "Silk Degrees" they can't replace the color of that record's dramatic arrangements.

Much of the lost impact can be attributed to the one major change in the studio lineup: arranger/keyboard player Michael Omartian replaces David Paich. Like Paich, he collaborates with Scaggs. presumably as melodist, on nearly half the album's songs. But neither his songwriting nor his horn and string arrangements are as consistently exciting as Paich's were.

Scaggs's smooth, soulful crooning remains convincing, but his lyrics move somewhat further away from his earlier balance of romantic testimonies with tough, cleverly plotted street scenarios. While he does return to the latter form on the driving *Gimme the Goods*, which echoes Steely Dan in its tightly paced, obliquely detailed narrative and jazzy melody. Scaggs seems largely concerned with fleshing out his newfound success as an elegant, latter-day matinee idol.

His strength in writing and delivering ballads (We're Waiting and Tomorrow



Never Came) makes that shift seem less utilitarian, though. And the craftsmanship displayed throughout the record has been a constant of Scaggs's career. Some of these songs will probably emerge as radio favorites, putting other records to shame with their classy intelligence. For much of the audience gained during the success of "Silk Degrees," the new album will be just what they hoped for. But for Scaggs's oldest fans, "Down Two Then Left" sounds like a holding action, albeit a respectable one. S.S.

Hank Williams Jr.: The New South.

Richie Albright & Waylon Jennings, producers. *Warner Bros. BS 3127*, *\$6.98. Tape: Image: MS 3127*, *Image: MS 3127*, *\$7.98.*

Hank Williams Jr. made his professional debut in 1958. He was eight years old, and he sang his daddy's songs—the songs of a stranger, for the son had no memory of the father who had died in 1953. The debut was a morbid spectacle, and for years the career that followed was merely a continuation of that spectacle. The Only Begotten Son of Hank recorded for MGM, just like his daddy. The records were not good. Some, like his 1964 duets with Connie Francis, were so bad they could make your flesh crawl.

Then, in the late Sixties, the boy began to sing for real, and to write for real. By the time he turned twenty-one, he was one of the most brilliant artists in coun-



Williams Jr.-further away from Daddy

try music. He is now a far better writer and singer than his overly esteemed father ever was. If such a statement is heresy, so is this album.

Of the many who sing of the South, I can think of only three whose visions transcend tedium: Randy Newman, Delbert McClinton, and Hank Williams Jr. (Lynyrd Skynyrd now gone). In *New South*, Hank rejoices that there is no New South: "the Florida girls still wear no underpants/and we all get drunk at the football game."

Hank's personal reworking of Steve

Young's Montgomery in the Rain-like Hank, Standing in the Shadows, Living Proof, and Daddy in previous albumstells of the curse and the blessing of being Hank Williams' son. But even more telling is a menacing, mean version of his father's 1949 hit You're Gonna Change (Or I'm Gonna Leave), a performance that assaults with wrath the spectacle of those youthful sideshow years. Like much else here, the cut rocks harder than most rock & roll; it's a sort of country music shorn of sweetness and poise. In other words, the real thing. N.T.



Some people use their ears for listening. Our judges make a living with theirs.

American Song Festival[®] judges are pros. Enter your songs in our Fifth Annual Songwriting Competition and we'll GUARANTEE each one will be heard at least twice by the "right" people. Our judges are producers, music business executives, recording artists and music publishers.

All you need is a song. You don't have to write music. There are categories for all types of songs. Amateurs never compete with professionals. Plus you retain all rights to, your songs.

In our first four years, over \$450,000 in cash prizes have been awarded by our judges. But even more important, it's a chance to advance your career. Winning songs have been recorded by superstars like BARBRA STREISAND; BARRY MANILOW; HALL & OATES; HANK WILLIAMS, JR.: TONY ORLANDO; and THE SANFORD-TOWNSEND BAND. Winning entrants are now recording for top labels like WARNER BROS.: A&M; ASYLUM: and UNITED ARTISTS.

THIS YEAR IT COULD HAPPEN TO YOU.

For lyricists, we'll also have the exciting LYRIC COMPETITION IV. designed especially for your special talents.

If you want a good honest shot at starting a successful songwriting career. or if you write songs as a hobby and want recognition, you should let our judges hear them... THEY KNOW A GOOD SONG WHEN THEY HEAR IT.

NAME:	Los Angeles. CA. 90036
ADDRESS:	Phone (213) 937-7370
CITY:STATE:ZIP	***

CIRCLE 3 ON READER-SERVICE CARE



by Sam Sutherland

W ith the Band dismantled as a touring unit and recording plans nebulous at best, the arrival of the first two solo albums from its members tests not only the durability of the quintet's legend, but several assumptions about its evolution. Its emergence in the progressive rock milieu of the late Sixties challenged a number of then-dominant trends, not the least of which was the rock star system. In contrast to its more self-conscious peers, the Band had no stars; its strength emanated instead from a true ensemble approach that sounded revelatory alongside the monolithic dynamics and extended solos of the day. Its five principals weren't paragons of hipness, but maverick adherents to an older tradition that prized experience as much as the energy of youth.

If the group had no front man, its ranks did suggest a subtler hierarchy—at least to critics. Robbie Robertson rarely sang more than a few lines of backing





Levon Helm: stylistic distinction

Rick Danko: too close to the past

harmony, and his brilliance as a guitarist was compressed in brief but bracing solos and delicate ornamental comments on his partners' playing. But the group's thematic concerns and coherence were generally attributed to him. It was Robertson the songwriter who supplied the Band's historical sensibility and its recurrent theme: the vanishing innocence and vitality of America.

That bassist Rick Danko and drummer Levon Helm should embark on separate solo careers challenges the legend of Robertson's supposed control over the ensemble's mood and message. Both albums allude directly to the original arranging style as well as its thematic perspective; it is the degree of variation from that style that sheds new light on how actively each musician contributed to the original process. Both "Rick Danko" and "Levon Helm and the RCO All-Stars" succeed as credible extensions of their respective authors' personalities and further suggest that the Band's seminal arranging approach and song sense were indeed arrived at collectively. At the same time, neither set quite approaches the scope or intelligence of Robertson's best songs as performed by the original quintet.

In Helm's case, that gap is less obvious because he isn't really trying to reincarnate the earlier style. While he has cowritten one song, he isn't a songwriter, and his choices as an interpreter reveal a much more traditional range of interests than either Danko's or Robertson's. The songs are evenly divided between originals by members of the All-Stars and vintage r&b. And it is the down-home wryness and the central topic-romance in the real world-that unify the material. Without the burden of a more serious objective, Helm and the All-Stars-Booker T. and the MGs, a crack horn session, Mac Rebennack's keyboards, Paul Butterfield's chugging harmonica, and Helm's spare, snappy drumming-can focus on playing. The results are predictably close to the Band's later recordings, which likewise balanced concise rhythm arrangements against crisp horn parts, but the overall feel is more relaxed and less mannered. Helm's affable vocals hold the session together without obscuring the band's playing. And the MGs sound particularly tight and energetic as the foundation, working in the classic Memphis style they helped create a decade ago, rather than in the elaborately modernized variants used since their reformation. On the best songs-Rebennack's Washer Woman, Helm's Blues So Bad. Earl King's Sing, Sing, Sing, and Chuck Berry's lesser known and atypical mood piece, Havana Moon-the confidence of the playing more than compensates for the slightness of the material's overall content.

Danko, on the other hand, strives for a more explicit continuation of the old group's style. And while his best songs cut deeper than Helm's, capturing the taut, nearly hysterical energy of Danko's best performances in the Band, his lapses are more jarring. The personnel varies more from song to song than on Helm's set, yet a common reverence for the Band's trademarks inhibits marked stylistic divergence: As Eric Clapton, Ronnie Wood, Doug Sahm, and Blondie Chaplin switch off on lead guitar, each subordinates his own style to follow the Robertson primer. When Robertson himself appears in that capacity, the difference is obvious. On Java Blues, a whimsical rocker whose tone undercuts Danko's anguished singing to comic effect, he drives the session harder and faster than is done at any other point on the album. His wonderfully wired, crackling lead playing is the perfect illustration of the song's feverish worship of the dread toxin, and when Danko desperately endorses "the only pick-me-up that's here to stay," those razor-edged guitar lines are convincing testimony that coffee is the ultimate drug. As a result, a track that likely started as a throwaway becomes the LP's best.

Danko's power as a vocalist and some excellent songwriting by Bobby Charles and Emmett Grogan provide other highlights on What a Town, Tired of Waiting, and New Mexicoe (sic). The first captures some of the Band's early ebullience; the latter two share the restlessness of much of Robertson's writing and Danko's early collaborations with Bob Dylan. A separate identity emerges on those two cuts, one less preoccupied with generational problems and more with private conflicts of the spirit. And on Brainwash, another track that gradually establishes a convincing desperation, Danko lends a certain fractured surrealism to its imagery, despite a somewhat awkward lyric.

Yet those peaks only reinforce the album's overall reliance on the Band's master plan. Whether or not he is trying to compete with those earlier records, Danko's current solo style is in danger of being overshadowed by his past association. While the best songs partially justify the risk, Helm succeeds in separating himself more effectively from the past at the cost of a thematic gravity he appears to care little about.

Rick Danko. Rick Danko, Rob Fraboni, producers. *Arista A B 4141*, *\$7.98. Tape:* ••• *A TC 4141*, ••• *A T 8 4141*, *\$7.98.*

Levon Helm and the RCO All-Stars. Levon Helm and the RCO All-Stars, producers. ABC AA1017, \$7.98. Tape: 5020 1017, • 8020 1017, \$7.95.



CIRCLE 26 ON READER-SERVICE CARD



CIPCLE 49 ON READER-SERVICE CARD



America: Harbor. WBP, 12 songs, \$6.95.

These are three serious young men, deeply in love with life, who are also dedicated craftsmen. Their albums are consistent bestsellers, yet their printed music is overpowered by the arranger's desire to duplicate pianistically every recorded sound, whether it be bass note, accompanying riff, open-string harmonic, or vocal roulade.

The America songbag is soft-sell, tender, and melodious but, at the same time, uncompromisingly swinging. Much of the material features heavy-artillery left-hand sixteenth notes that slug it out with right-hand counterrhythms, and the folio becomes a mined field too dangerous for the average Joe. If America wants to make music, not war, a change of notation strategy is in order.

Best of the Doobies. *WBP*, 11 songs, \$6.95.

This folio contains *Takin' It to the Streets, Listen to the Music,* and nine other chart busters, most of which are notated as rhythmic instrumental figures with the vocalist supplying the melody. It will require the best of your piano technique, especially since the Doobies have seventy fingers and you presumably have the regulation ten.

The Errol Garner Songbook. CLP, 21 songs, \$6.95.

The essential Errol Garner, all natural ingredients, preserved with the artist's own special joie de vivre. *Misty*, of course, but in two forms: as a vocal and as a piano solo beautiful enough to break the heart. There's also a discography, a biography, eleven full pages of photographs, metronomic markings, fingering, and detailed annotations. To play through the *Erroll Garner Songbook* is to be at once transported and transformed. We are indebted to arranger Sy Johnson and editor Martha Glaser for this dazzling package.

Big 3–Big 3 Publications CLP–Cherry Lane Publications UA–United Artists Publishing WBP–Warner Bros. Publications

New York, New York. UA, 16 songs, \$4.95.

New York, New York is not a completely original movie score, but a combination of twelve evocative band-vocalist standards of the '40s (Don't Be That Way, Once in a While. Honeysuckle Rose are a few), with some incidental music by John Kander and Fred Ebb. Those two minstrels have spent a decade at the court of one particular queen; the challenge is to assert your own voice and good taste and avoid becoming Instant Minnelli.



Liza Minnelli

Elvis Presley: Record Breakers. *Big 3, 10* songs, \$3.50.

We're all familiar with these twelve-bar blues-structured songs: Hound Dog,

Continued on page 130



Genesis presents affordable realism

The beauty of street music is the realism. There are no mikes, amplifiers, wires, or speakers. No speakers. Wouldn't it be great if we could hear music all the time without speakers. Genesis would like to bring you the next best thing. Speakers you can't hear. You'll hear the music instead of the speakers. You see, we thought it would be nice to design a speaker line that didn't sound like a line of speakers. And a very affordable speaker line. Speakers for every budget priced from \$75-\$300 depending on how much realism you want.

We design all our speakers with the laws of physics in mind, with superior technology and execution. We sometimes wonder why more speaker manufacturers don't follow these rules. We can't tell you the answer to that, but we can tell you more about Genesis speakers, and how they're built. Visit your nearest Genesis dealer and hear the speakers you can't hear. You may be one step closer to musical reality.

GENESIS

physics corporation newington park, newington, n.h. 03801 CIRCLE 12 ON READER-SERVICE CARD



нісн FIDELITY

CLASSIFIED

130 East 59th St., New York, N.Y. 10022 Phone: (212) 826-8393/94

CLASSIFIED RATES: 1-time \$1.20 per word per issue, minimum \$12. 6 consecutive issues-\$1.10 per word per issue. 12 consecutive issues-\$1.00 per word per issue. Words in caps-10¢ extra each

Box Numbers: \$1.00 additional per insertion to cover cost of handling and forwarding mail. Count 10 extra words for box number and address

DISPLAY CLASSIFIED AND DISCOUNTS: 1 inch by 1 column-\$230. 2 inch by 1 column-\$460. 3 inch by 1 column-\$690. Also 6 and 12 consecutive issue discount rates. Deadline is two months prior to publication date. Full payment must accompany All copy for classified ads.

for sale

3600" New L/N Scotch or Ampex tape, 101/2" metal reel, 5 for \$38.00. 24 page booklet on tape editing 80¢. Soundd POB 338, Dunwoody, Ga. 30338



BUILD STEREO SPEAKERS WITH JUST GLUE AND STAPLES.

Save up to 50% of the cost of ready-built speakers by assembling Speak-erlab kits. We've done the design, car-pentry and wiring, leaving you only the actual installation of the speaker drivers. Most people take less than two hours to assemble a kit. Illustrated, easy-to-follow Instructions check you each step of the way. (And if you still can't finish the kit, we'll do it for you for just the cost of return freight.)

still can't finish the kit, we'll do it for you tor just the cost of return freight.) When you're through, you have a high quality, multi-element stereo speaker with a resonance-free enclo-sure, fiberglass damping, a crossover with real L-pads, and drivers that are some of the best in the industry. Send for our free 52-page catalog. It's practically a manual on speaker building and acoustics.

Dept. HF-H 5500 35th N.E., Seattle, WA 98105

PERFECTIONISTS PREFER *DYNAKITS. BEFORE Purchase You Owe Yourself Our Quote. MAINLINE IIH, 971 Fronheiser, Johnstown, Pa. 15902

PROTECT YOUR RECORDS POLY SLEEVES for jackets 9¢ Roundbottom record sleeves 7¢ Poly lined paper sleeves 15¢ White Jackets 35¢ Postage \$1.50. Record Supply House, Hillburn, New York 10931

AUDIOPHILES WANTED!! Put your knowledge to use, earn an excellent spare time income. We need campus Dealers to sell name brand stereo equipment at substantial discounts In your area. No investment necessary. For information and application please write: ABCO, Dept. CR, 1201 East Main Street, Meriden, Conn. 06450. Call (203) 238-7979

STEREO REPRESENTATIVES NEEDEDI!! LOWEST POSSIBLE PRICES!!! OVER 100 BRANDS!!! KRASCO. 998 Orange Ave., West Haven, Conn. 06516.

THE ABSOLUTE SOUND, in Its new issue (#10) takes a critical look at two new "super-speakers," the Metronome 2 and the Infinity QLS-1. There's an in-depth analysis of a direct-coupled amp from Kenwood and four car-tridges, Sleeping Beauty; the Pickering XSV-3000; the Supex SD-900e Super; the Grado Signature I-A. Dozens more components are reviewed, for instance, the Bravura preamp; the Swiss-made FM Acoustics 800A amp; the Advent receiver; the Elac SLS-555E cartridge; the Satin Advent receiver; the Elac SLS-SSE caringle, the Sath M-18 moving coll cartridges; the Dynaco Mk VI tube amp; the Dahlquist passive crossover. We take a second look at the Linn-Sondek turntable and compare the two "Formula D 4" arms, the J.H. & the Mayware. For students of sound, we have a long interview with Robert Ludwig, America's best master-disc cutter. The Price: \$12 (four Issues); \$13, Canada. Add \$2 for first-class mailing. Outside North America, \$16 (air). The Absolute Sound, Box 5, Northport, N.Y., 11768.



TAPE HEAD CLEANER, 8 OZ., AND RECORD CLEAN-ING kit. Send \$4.00 to KIT, BOX 176, Whitewater, WI 53190

Hi-FI reps needed. Excellent Stock, Lowest Prices, Friendly Service. No investment or obligations! Hi-Fi Sales, Box 348 Dept H, Bryn Mawr, Pa. 19010 (215) 544-1465

STEREO COMPONENTS and SONY TV's at rock bottom prices. Why pay up to 40% more? Nedco Distributors, 68-D Watertown Street, Watertown, Mass. 02172.



Order famous British loudspeaker components direct at discount prices. Build your own top quality hi-fi and disco speakers. Save 50-70%. Send loday for free catalogue and free constructional details of 5/7/10 element speakers.

WILMSLOW AUDIO EXPORT DEPARTMENT A. SWAN WORKS. BANK SQUARE WILMSLOW CHESHIRE. ENGLAND SK9 1 HF.

HI-FI ENTHUSIASTS WANTED!! Earn more than just spare money in your spare time. We need campus representatives to sell name brand stereo components at discount prices in your area. No investment required. Serious inquiries only please. Contact: Mail Order Dept., K&L Sound Services Co., 75 No. Beacon St., Watertown, Mass. 02172. (617) 926-6100.

SAVE 50% BUILD YOUR OWN SPEAKER SYSTEM. Write McGee Radio Electronics. 1901 McGee Street, Kansas City, Missouri 64108.

The \$1.95 Tape Encyclopedia

The 1978 BUYING GUIDE TO TAPE SYSTEMS is a complete up-to-date directory of all the major 8-track, openreel and cassette recorders; microphones; tapes; 4-channel equipment; headphones and accessories.

Pros and Cons of each type of recorder, how to select the proper tape for your machine, what to look for in headphones and when to use certain accessories. The BUYING GUIDE also contains technical articles on how a tape recorder works, using basing microphone techniques and a glossary of recording terminology.

Send payment to:

High Fidelity 1978 Buying Guide to Tape Systems 1 Sound Ave Marion, Ohio 43302 DYNACO, SHURE, SME-large inventory, fast service-PAT-5 FET \$198K, \$268A, Stereo 416 \$430K, \$567A, FM-5 \$132K, \$190A, 3009/series II \$100. Write or call for details. Underground HiFi Sales, 324b Broadwater Road, Arnold, MD 21012. (301) 647-0919. MC,VISA

CORNER HORN SPEAKER ENCLOSURE Build your own for under \$50.00. Send 14.95 for complete plans and as-sembly instructions. Kneller Audio Cabinets 'Dept. H, 6428 W. 27th Place, Berwyn Illinois 60402.

ATTENTIONI NEW JERSEY AUDIOPHILES. A real no-nonsense audio place exists!!! CONTEMPORARY SOUND ASSOCIATES handles and evaluates some of the Inest names in audio. · FRIED + RAM · LINN SONDEK · DB SYSTEMS · SUPEX · Van Alstine · Luxman · 3A · Tran-scriptor · Keith Monks · Stax · Crieghton Labs · Sound Concepts - Grace - Hegeman Sub. A Truly Personalized Service. 35 Little Falls Rd., Fairfleld, N.J., (201) 575-1135.

WHOLESALE STEREO. Lowest possible prices. 180 + brands. Esoteric, Atarl, Fairchild, VTR's, Calculators, Appliances, TV's. For quotes, write Stellar Sound, POB 49285, Austin, Texas 78765.

BUY FROM MANUFACTURER. SEND US \$10 for 10 C-60 Chromium Dioxide blank cassettes. PolyArt Company, P.O. Box 5170, Tsimshatsul, Hongkong.

miscellaneous

DIAMOND NEEDLES and Stereo Cartridges at Discount prices for Shure, Pickering, Stanton, Empire, Grado and ADC. Send for free catalog. All merchandise brand new and factory sealed. LYLE CARTRIDGES. Dept. H, Box 69, Kensington Statlon, Brooklyn, New York 11218. For Fast Service, call TOLL FREE 800-221-0906.

CONGRATULATIONS! YOU ARE NOW READING ONE OF HIGH FIDELITY'S best read pages! Use It yourself when you want to sell equipment, or a service, or want to let the avid music listener know about anything. High FIdelity Classified, 130 East 59th St., N.Y. 10022

PROTECT YOUR ALBUMS. WHITE CARDBOARD RE-PLACEMENT JACKETS 35c. PLASTIC LINED INNER SLEEVES 15c. POSTAGE \$1.25. OPERA BOXES, 78 SLEEVES AVAILABLE. FREE CATALOG. CABCO 301-3. BOX 8212, COLUMBUS, OHIO 43201

The Best New Stereo Systems Deserve The Best New Stereo Records (Tapes tool) You need the Monthly SCHWANN RECORD CATALOG available from record shops everywhere or, for a sample copy PP, Send \$2.50 to: ABC-SCHWANN Publications, Inc., 130 East 59th St., New York N X 10002 New York, N.Y. 10022.

"Most fabulous pipe you ever smoked. Free brochure. Brial Pipe, Box 581H, Musekegon, Mich."

new equipment for sale

SAVE UP TO 69% ON OVER 100 TOP BRAND AUDIO components from Carston Studios, New England's audio supermarket, one of the oldest mail order firms (est. 1962) and certainly one of the most reliable. All orders shipped from stocked warehouse. Send for price quote and price list. Carston Studios, Old Brookfield Road, Danbury, Connecticut 06810

The **Comfortable** Alternative to Headphones Stereopillow Model 900-reviewed in High Fidellty, \$7995 Stereo Review



Yeaple Corp., Dept. HF, 1255 University Ave., Rochester, NY 14607

FREE revie

BRITISH AND EUROPEAN EQUIPMENT DIRECT TO YOU. Most quality makes of equipment available at advantageous prices. Price list and price quotes send International Reply Coupon. For specific brochures send \$2.00 bills. Audio T, Dept A, 190 West End Lane, London NW6, phone 01-794 7848. Visitors welcome.

BUY DIRECT from England's Hi-Fi Mall Order Specialists? Save on British and European Hi-Fi components. Ariston, Armstrong, Celestion, Decca, JR149, Lecson, LS3/4A, Radford, Revox, SME, Tandberg, Tannoy, Transcriptors, Michell Electronic/Hydraulic, etc. Shlpping list free or send \$3, cash bills only please, to include literature Goodwins, 7 The Broadway, Wood Green, London N22. Phone 888-0077. Visitors welcome. Mastercharge, Bank Americard accepted.



LOWEST PRICES ON STEREO-ESOTERIC components !!! Over 150 brands. Audio Unlimited, 3386-C Golf, San Jose, CA 95127 (408) 985-2285.

BBC Designs, Audiomaster LS3/5A speakers, direct export from England. \$299. (Canada \$329) per pair, post free. K.J. Leisuresound, Dept. HF, 48, Wigmore Street. London, W.1., U.K.

tapes & records

RARE OPERA, SYMPHONIC MUSIC ON OPEN REEL TAPE. Historic performances. EUROPEAN, DOMESTIC. Free Catalogue. Underhill, Box "U," Bellport, NY 11713.

GOLDEN AGE RADIO—YOUR BEST SOURCE for radio tapes. Free catalog. Box 26215-J, Portland, Oregon 97225.

"SOUNDTRACKS, SHOW, NOSTALGIA & JAZZ-FREE Catalog & Offering List-A-1 Record Finders, P.O. Box 75071-H, L.A. CAL. 90075."

SCOTCH RECORDING TAPE, LOWEST PRICES. TAPE CENTER. Box 4305C, Washington, D.C. 20012.

CLASSICAL LP'S CURRENT/OOP. BI-MONTHLY LIST. ARS, Musica 13 Dante Street, Larchmont, N.Y. 10538.

CUT-OUT RECORDS. HUGE STOCK. ALL NEW. No catalog, Cohn, 2205 Marylane, Broomall, Pa. 19008.

RAREST CLASSICAL, SOUNDTRACKS, SHOWS, PERSONALITY LPs. Huge catalog 50c. Grammy's Attic, Box 181, Blufton, SC 29910.

"HISTORICAL OPERA DISC & TAPE-Magnificent quality, speedy service. Greatest live performances of past 50 years. Reel, cassette, disc. Free Catalog. Historical Recording Enterprises, Box 12, Kew Gardens, N.Y. 11415."

"LIVE OPERA TAPES. Reels—Cassettes. Unbelievable treasures since 1926. Over 2,500 selections. Free DELUX Catalog: MR. TAPE, Box 138, Murray Hill Station, NYC 10016."

BASE TAPE: All widths 40-50% off. All tapes guaranteed! INTERGALACTIC, 1043 Kirts, Troy, Michigan 48084.

YOUR MAIL-ORDER TAPE SPECIALIST IN WASH. D.C. SAME DAY SHIPMENT-DISCOUNT PRICES. BASF, SCOTCH, MAXELL, TDK & CAPITOL. FREE PRICE LIST. SAXITONE TAPE SALES, 1776 COLUMBIA RD. N.W. WASHINGTON, D.C. 20009.

RARE RECORD/TAPE COLLECTOR'S DIRECTORY. Treasury of over 100 addresses—annotated—for collectors. Send \$4.95 COLLECTORS DIRECTORY, 550 E. Rustic Road, Santa Monica, Calif. 90402.

THRILLING LIVE OPERA TAPES, CASSETTES. THOU-SANDS OF PERFORMANCES SINCE 1930'S. PERSONAL SATISFACTION GUARANTEED. SPECIAL BONUSES. MAGNIFICENT FREE CATALOGUE. LIVE OPERA, BOX 3141. STEINWAY STATION, L.I.C. N.Y. 11103.

BLANK	TAPE SALE
MAXELL: UDXL-C60 (i or li) 3. UDXL-C90 (i or li) 3. UD-C90 2. LN-C90 1. UD-35-90 4. UDX-35-90 5.	09 SA-C90 2.85 53 AD-C90 2.39 78 D-C90 1.54
sales tax. Shipping \$2.50 catalog.	a. All tapes can be assorted. PA add 0 per order. Or write for complete spring St., Butler, PA 16001

SOUSA RECORDS. Free catalog upon request. Stafford, Box 36163, Grosse Pointe, Mich. 48236. Dealer inquiries invited.

VIENNESE LIGHT MUSIC SOCIETY WALTZES, POL-KAS, Overtures on Imported Dolby cassette. Most Non Schwann, K.C. Company, Box 793, Augusta, Maine 04330.

DISCONTINUED RECORDS, CLASSICAL, POPULAR, Ilsts. Steinmetz. One Seaview, Massapequa, NY 11758.

OPERA TAPES. 3000 from world wide sources. Some available on cassettes. Corey, Box 1123, Malibu, California 90265.

INDIRECT DISCS with Burwen fidelity. DICK WELL-STOOD-Jazz Plano, PETTY TRIO-Dance. \$15 each postpaid. DECIBEL RECORDS, Dept. 7, P.O. Box 631, Lexington, Mass. 02173.

TIMINGS OF THE CLASSICS. Guide lists average performance time in minutes of over 1,250 works from the classical repertoire from 115 composers. Includes 98 operas. A MUST FOR HOME TAPE RECORDISTS. Send \$4,95 check or money order to HBC Agency, Box 57, Matawan, NJ 07747.

TDK, MAXELL, MEMOREX, CASSETTES, REELS, & Track Free Catalog, New Guaranteed. S&S AUDIO, P.O. BOX 56039, Harwood Heights, IL 60656.

SEARCHING? WRITE DISContinued RECORDS, 444 South Victory, Burbank, California 91502.

SHOW ALBUMS—Rare, out-of-print lps, 64-page list \$1.00. Bakers Wife cast LP \$9.95. Broadway-Hollywood Recordings, Georgetown, CT. 06829.

EVERYTHING ON OPEN REEL! Classical, Popular, Dolby, Quadraphonic, Latest releases. For "Reel News," send \$1.00. Barclay-Crocker, Room 857 H, 11 Broadway, New York 10004.

JAZZ records, new and used. Domestic and imported. Quality service since 1958. Free monthly lists from Coda, Dept, H, Box 87, Station J, Toronto, Ontario M4J4X8 Canada.

RARE SOUNDTRACK, original cast, personality LP Record Auction. Free List. Records, P.O. Box 154, Astor Statlon, Boston, Mass. 02123.

RECORDING TAPE—OUTSTANDING VALUES! Cassettes, 8-tracks, open reels, video, data tapes, bulk cassettes, accessories. New, Fully guaranteed. Free catalog. Write: Magne House, 2015-D, 17th Street, San Francisco, CA 94103.

1930-1962 RADIO PROGRAMS. PROFESSIONAL 200 page catalog, \$1.25. AM TREASURES, Box 192HF, Baby-Ion, NY 11702.

OLDIES ON OPEN REEL TAPE, FREE BROCHURE. Rock N' Reel Rental Dept. HF, 4 Prescott Ave., Dix Hills, N.Y. 11746.

78 COLLECTORS: FREE LISTS. RECORDS GRADED BY sound, not appearance. State classical or non-classical. Lane Audio & Records, Box 29171, Los Angeles, CA 90029.

HIGH FIDELITY

Classified Advertising Department

130 East 59th St., New York, N.Y. 10022 212-826-8393/94 Michael Littleford, Classified Advertising Manager

 Please run the following classified advertisement in the next available

 issue

 Name

 Address

 City
 State

 Telephone

 RATE: For Regular and Display, see schedule above. *CASH MUST

 ACCOMPANY ORDER. Closing two months prior to issue.

NOTICE: Record Raters Wanted

(No experience required) Each month you will receive nationally released albums to rate. There is no extra charge for the LP's you receive — all you pay is a small membership fee which covers all costs of the LP's including postage and handling. In return for your opinion you will build a substantial album collection - "first come basis." For application write:

bstantial aloum collection - linst con sis." For application write: E.A.R.S. INC. Box 10245 Dept. HF 5521 Center St., Milwaukee, WI 53210 "Guaranteed" © 1975 E.A.R.S. INC.

SELL YOUR USED RECORDS. AUCTION LISTS published every three months with your records listed. Send 50¢ for details. Record Researcher R.R. 3, Box 24, Bowling Green, KY 42101.

RARE VOCALS, CLASSICAL, POPULAR, LIST 50¢, P.O. Box 127, Coventry, Conn. 06238.

CLASSICAL CASSETTES. Quality Guaranteed. Stereo-Dolby. Credit Cards Accepted. FREE Catalog. EKR Classlcs, GPO Box 1977H, New York, N.Y. 10001.

DELETED JAZZ ALBUMS. Complimentary Catalogue: CHARISMA, Box 455, Adelaide P.O., Toronto, Canada.

EAGLES TO JOLSON FOR THE TRADE. RKNROL TRADER, Send for list Box 18083, E. Hartford, CT 06118.

FREE AUCTION LISTS O.C.'s, SOUNDTRACKS, PER-SONALITIES, JAZZ SPECIFY LIST. "Want Lists" filled send to: AGM Records LTD, 1619 Broadway, N.Y.C., N.Y. 10019

services

COLLEGIATE RESEARCH PAPERS. Thousands on file. All academic subjects. Send \$1.00 for mail order catalog. Box 25916-R, Los Angeles, Calif. 90025 (213) 477-8474.

publications

BEST AMERICAN CLASSICAL SECTION . . . also Jazz, Rock. . . RECORD REVIEW Magazine . . . Sample \$1.00; Twelve Issues \$8.00 . . . Box 91878-HF, Los Angeles, CA 90009.

business opportunities

ADD \$500 TO \$1000 TO YOUR INCOME PER WEEK without giving up your present job. Little known Business is making people wealthy. Send \$3.00 for details to MBM Inc., PO Box 139, Whitestone, N.Y. 11357.

Continued from page 126

Blue Suede Shoes, Jailhouse Rock. But don't dismiss this modestly-priced, purple-bordered folio as just another souvenir-book/tribute, attempting to capitalize on our collective grief. Think of it, instead, as a mini course in successful songwriting. These ten selections made millionaires out of fifteen professional and amateur writers, some of whom have never written another note (not that they have to). Why couldn't it happen to you? There will never be another Elvis, nor another Camelot, but the music is his legacy, and it is yours for playing, singing, analyzing, or just plain remembering.

Linda Ronstadt Songbook: Volume Two. WBP, 21 songs, \$6.95.

The reigning queen of country and pop achieved her title by recording mawkish ballads more appropriate for an Edith Piaf. No one else could successfully bring off the Sweeta-laced lyrics of J. D. Souther's *Faithless Love* or J. B. Coats's *The Sweetest Gift*. But *Heart like a Wheel* and *You're No Good* provide a little contemporary balance, and the piano-vocal arrangements are simple and clean.

Stairway to Heaven Plus 24 Heavy Hits. WBP, 25 songs, \$4.95.

A hard-rock transcription is a good find, and here are twenty-five of them in varying degrees of playability. Most of these songs need orchestral companionship—a division of labor between your piano and a few friendly guitars would do the trick. But if you are a really swinging single, you can make out all right alone. One word of warning: still more reprints of Beatle songs.

Neil Young: American Stars 'n Bars Songbook. WBP, 9 songs, \$5.95.

Mr. Young may have written this material seriously, but I doubt it. And if he is putting on the world, he has a pretty expensive way of playing games. I think you get the point: This American star is burned out, incoherent, jaded, and faded. Of that heart of gold, all that remains is tuneless senility. Do not buy this folio; permit the artist to disintegrate in private. ELISE BRETTON



To find out how much better <u>our</u> cartridge sounds, play <u>their</u> demonstration record!

There are some very good test and demonstration records available. Some are designed to show off the capabilities of better-thanaverage cartridges...and reveal the weaknesses of inferior models. We love them all.

Because the tougher the record, the better our Dual Magnet™ cartridges perform. Bring on the most stringent test record you can find. Or a demanding direct-to-disc recording if you will. Choose the Audio-Technica cartridge that meets your cost and performance objectives. Then listen.

Find out for yourself that when it comes to a duel between our cartridge and theirs...we're ready. Even when they choose the weapons!

What you'll hear is the best kind of proof that our Dual Magnet design and uncompromising craftsmanship is one of the most attractive values in high fidelity. For their records...and yours!

AUDIO-TECHNICA U.S., INC. Dept. 28H, 33 Shiawassee Avenue, Fairlawn, Ohio 44313 In Canada: Superior Electronics, Inc.

CIRCLE 5 ON READER-SERVICE CARD

Ultimately It's Marantz. Go For It.

Marantz goes beyond <u>THD to lower TIM</u> (transient intermodulation distortion).

Because TIM doesn't show up on conventional amplifier testing equipment, most manufacturers and their engineers aren't even aware that it exists in their amplifiers. Even if they were, they probably wouldn't know what to do about it.

But because Marantz builds for the music and not just the specs we know how destructive TIM can be to pure sound reproduction. And we've devel-

oped a revolutionary new circuit design to eliminate it.

The reduction of TIM can be the single most important element in making an amplifier sound better. For instance, two amplifiers with identical total harmonic distortion (THD) specifications should sound the same when compared...but the one with low TIM will sound audibly better! That's because TIM adds an unnatural harshness to the music. It's not only detrimental to pure sound reproduction, but it can have an emotional effect that you experience as "listening fatigue!"

TIM is caused by an improper design of "negative feedback circuitry," by other manufacturers. Every modern amplifier uses it to lower THD. But *excessive* negative feedback coupled with an insufficient slew rate* can lead to gross internal overloads under the constantly changing transient and sound levels of music. That distortion is TIM.



The gentle slopes of continuous sine wave test signals normally used to test an amplifier simply cannot detect TIM distortion. It requires the type of extremely sophisticated spectrum analysis equipment developed by the space industry to analyze radio frequencies.

Our answer to TIM is a circuit design that ensures the widest bandwidth and the lowest obtainable THD before negative feedback is applied. The Marantz 170DC Stereo Power Amplifier (the 1152DC

and 1180DC also use this circuitry), for instance, needs only 1/100th (- 40 dB) the amount of negative feedback commonly required by other amplifiers to yield the same low THD figures.

Incredibly, Marantz amplifiers with low TIM design can deliver flat frequency response from 0 Hz to 20 kHz without the use of negative feedback. And this same circuit design provides the optimum slew rate for minimum TIM and maximum reliability.

Result: Marantz reduces TIM to an inaudible level, which means you get clear, clean sound from all your records and tapes. Think of Marantz with low TIM as a window to the original performance.

If you truly want the best reproduction of musical sound available anywhere—and are willing to spend a little more to get it—then go for it.

Go for Marantz.



*The maximum change of voltage per unit time. © 1978 Marantz Co., Inc., a subsidiary of Superscope, Inc., 20525 Nordhoff St. Chatsworth, CA 91311. Prices and models subject to change without notice. Your Marantz dealer has the full line of Marantz amplifiers. Look for him in the Yellow Pages.



The 1980 Kenwoods.

No. We're not kidding. By 1980, the kind of performance these new Kenwoods deliver will be considered commonplace. Here's a summary:

1. The KA-7100 is an integrated DC amplifier with dual power supplies delivering 60 watts per channel, minimum RMS at 8 ohms from 20-20k Hz, with no more than 0.02% total harmonic distortion. Not only is that the lowest THD of *any* integrated amp, the KA-7100 is the lowest priced DC integrated amp on the market. (\$300*)

2. The KT-7500 marks the next plateau for FM tuners. For optimum reception under any condition it has two independent IF bands: the narrow band virtually eliminating interference when stations are close together, the wide band for lower distortion and maximizing stereo separation. In addition, we've developed new circuitry which eliminates the high

frequency beat distortion (that is, swishing noises) thought to be inherent in stereo FM broadcast. Even we're impressed that it costs only \$275*

This combination of separate amp and tuner not only gives you performance unheard of in other separate components, it gives you performance that will remain elusive in receivers for quite a while.

The Kenwood KA-7100 and KT-7500. Solid evidence that the breakthroughs occurred ahead of schedule, and available to you now for a truly remarkable price. \$575* for the pair.

*Nationally advertised value. Actual prices are established by Kenwood dealers. Handles optional.

